

AMPS Proceedings Series 32

# Representing Pasts Visioning Futures

---

## AMPS PROCEEDINGS SERIES 32

---

AMPS, Queen's University Belfast, Cape Peninsula University of Technology,  
National University of Singapore. 1-3 Dec, 2022

### Representing Pasts – Visioning Futures



EDITOR:

Dr Gul Kacmaz Erk

EXECUTIVE PRODUCTION EDITOR:

Amany Marey

© AMPS

AMPS PROCEEDINGS SERIES 32. ISSN 2398-9467

---

# INTRODUCTION

---

## Representing Pasts – Visioning Futures

One century ago the City Symphony was at the cutting edge of visual representation. It was the site of some of the most challenging concepts and ideas the art world had ever seen. Its ruptures in spatiotemporal representation were seen as natural extensions of the avant-garde: cubist painting in the mode of Braque, the architectural visions of Vladimir Tatlin, the spatio-sculptural works of Aleksandr Rodchenko, the photography of Moholy-Nagy and later Florence Henri, to name but a few.

The intervening 100 years have seen periodic reengagements with spatial reframing in these media. They have also witnessed the emergence of new modes of representation in the worlds of art, design, heritage, cultural studies and the social sciences more broadly. Today, artists, architects, painters, sculptors and designers from various fields can work seamlessly across a plethora of fields: video, digital photography, 3D printing, parametric architecture, algorithmic animation, projection mapping, photogrammetry, virtual reality, and more.

If we look specifically at spatial design, virtual reality is increasingly seen as ‘everyday’ for architects and urban designers. For artists, ‘the digital’ is now a typical mode of operation. If we consider film, algorithmic video editing, motion capture and image digitization are now all ‘run of the mill’ technologies. In museology, the experiential interactive installation accompanies static exhibitions. Indeed, the moving image, both analogue and digital, is now a standard area of historical study in itself – the city symphony included.

Taking the City Symphony, and its historic moment in time as a starting point, this conference seeks to explore of the past, present and future of how we visualise people, places, cities and life. It welcomes insights into the history of painting from a spatiotemporal standpoint; the influence and evolution of the photographic representation of place; the role of sculpture in exploring and integrating space. It invites filmmakers exploring city representation, architects, urban planners and designers engaged in the visualisation of buildings, cities.... and more

.

---

## TABLE OF CONTENTS

---

<b>Chapter 1</b>	
THE DIGITAL AGENCY, PROTEST MOVEMENTS, AND SOCIAL ACTIVISM DURING THE COVID-19 PANDEMIC	1
Asma Mehan	
<b>Chapter 2</b>	
THE FUTURE OF DWELLING: THE KITCHEN	8
Camilo Cerro	
<b>Chapter 3</b>	
EXAMINING THE BEST PRACTICES OF CURATING IN A NONTRADITIONAL BOTANICAL GARDEN SETTING: A CASE STUDY AS MARIE SELBY BOTANICAL GARDENS	15
Anneliese Hardman	
<b>Chapter 4</b>	
THE SPACE OF VISTAVISION	31
Marshall Deutelbaum	
<b>Chapter 5</b>	
THE REALITIES OF FRAGMENTS	37
Wonseok Chae	
<b>Chapter 6</b>	
INTERPRETATION AND SIGNIFICANCE OF ARCHITECTURAL HERITAGE: THE CASE STUDY OF THE FALUN HALL, IN THE YONGHE TEMPLE, BEIJING.	48
Siqi Li, Alba Soler Estrela, Joaquin Angel Martinez Moya	
<b>Chapter 7</b>	
MAPPING ENTROPY: HISTORICAL SETTLEMENTS DESTRUCTION DOCUMENTATION IN WENZHOU, CHINA	59
Vincent Peu Duvallon, Tieru Huang, Kun Bao	
<b>Chapter 8</b>	
THE IMAGE OF THE TERRITORY: LANDSCAPE PERCEPTION AND INFRASTRUCTURAL PALIMPSEST IN WENZHOU, CHINA	68
Vincent Peu Duvallon, Xinyi Ye, Yue Bi	
<b>Chapter 9</b>	
FROM PAINTING TO INSTALLATION: PAINTERS' EXPERIMENTS IN THE MID-1980s AT THE SAGACHO EXHIBIT SPACE, TOKYO	76
Toyoko Ito	
<b>Chapter 10</b>	
RENDERING AS PROTO-PHOTOGRAPH: SITUATING CONTEMPORARY IMAGE-MAKING	87
Johan Voordouw	
<b>Chapter 11</b>	
DISRUPTIVE CONSERVATION IN THE MATERIAL TRANSMISSION OF PAST TO FUTURE	100
Eleanor Sweetnam, Jane Henderson	

<b>Chapter 12</b>	
VISUALISING STORYTELLING THROUGH A LOCALLY BASED DIGITAL WAYFINDING EXPERIENCE	112
Sarah Jane Jones	
<b>Chapter 13</b>	
CITY AS DATA: URBAN ANALYTICS AS CONTEMPORARY FORM OF RHYTHMANALYSIS	124
Katja Knecht, Olaf Mumm, Vanessa Miriam Carlow	
<b>Chapter 14</b>	
DIGITAL STORYTELLING FOR PUBLIC ATTRACTIONS: THE EFFECT OF VIRTUAL REALITY ON MUSEUM EXPERIENCES	137
Eric Mcnamara, Séamus Ó Ciardhuáin, Denise Mcevoy	
<b>Chapter 15</b>	
MAPS OF IMAGINATION: A CITY METAPHOR.	149
Irene De Natale, Ayla Schiappacasse	
<b>Chapter 16</b>	
UNITING SPACE AND TIME IN THE DOCUMENTATION OF URBAN SETTING THROUGH CINEMA	157
Caecilia Wijayaputri, Amyra Salsabila, Yeira Sadak, Tadisa Margayu	
<b>Chapter 17</b>	
THE UNREPRESENTED CHICAGO OF 1893	167
Hamza Aziz	
<b>Chapter 18</b>	
THE SCREEN, INTIMACY AND THE ATTENTION ECONOMY: ARE WE EVER TOGETHER	175
Lingxiang Wu, Erica Cristobal, Kristi Poole-Adler	
<b>Chapter 19</b>	
THE INCOMPLETE RESULTS OF AN ACT OF MAPPING	185
Marta Labastida, Eulàlia Gómez-Escoda, Maarten Gheysen, Miguel Hernández-Quintanilla	
<b>Chapter 20</b>	
PARK HILL SHEFFIELD: UNDERSTANDING REPRESENTED PLACE THROUGH VISUAL ARTS PRACTICE	196
Tim Machin	
<b>Chapter 21</b>	
RETHINKING THE SITES OF THE DITCHLEY PORTRAIT THROUGH NOTIONS OF POLYVOCALITY: DRAWING UPON NARRATIVES OF PLACE, TIME AND MEDIUM	207
Constance Lau	
<b>Chapter 22</b>	
ANALOGICAL DISTRACTION IN LIVED SPACE OR UNCANNY ANALOGIES ACROSS FILMIC AND PRO-FILMIC SPACE.	220
Eleanor Suess	

<b>Chapter 23</b>	
EXPERIENCING LAYERED CONTEXTS BETWEEN VIRTUAL AND PHYSICAL SPACES	231
Matthew Lewis	
<b>Chapter 24</b>	
THE ROLE OF SCREEN SPACE IN ARCHITECTURE AND FILM AS MULTIMEDIUM	242
Radosław Achramowicz, Maja Piechowiak	
<b>Chapter 25</b>	
MOBILE PERSPECTIVE: A POST-PRESCRIPTIVE JOURNEY THROUGH TIME AND SPACE	251
Louise Martin	
<b>Chapter 26</b>	
VISIONARY RUMOURS: LOST IN SPACE – BETWEEN RATIONALE AND REASON, ITS TIME TO REALIGN OUR CREATIVE PERSPECTIVES	265
Fabrizio Cocchiarella	
<b>Chapter 27</b>	
THE ARCHITECTURE OF THE MUSÉE VISIONNAIRE IN ZÜRICH - OUTSIDER ART, SPACE & COMMUNITY (VIDEO, 12 MINUTES, DIR. NINA ZIMNIK, 2023)	274
Nina Zimnik	
<b>Chapter 28</b>	
(UN)MONUMENTS OF THE EVERYDAY. MARKING THE JOURNEY FROM HOME TO WORK THROUGH THE EXPERIENCE OF VENETIAN WEAVING FACTORY'S WORKERS	283
Elena Cologni	
<b>Chapter 29</b>	
EITHER YOU STAY OR GO: PACIFCTION BY ALBERT SERRA AS A PERFECT LOOP	296
Alexandra Semenova	
<b>Chapter 30</b>	
VISUALIZATION AND PARAMETRIC DESIGN OF SUSTAINABLE DOMES, INSPIRED BY HISTORICAL PERSIANATE GEOMETRY	304
Atefeh Amraei, Soroush Saffari, Sepideh Saffari	
<b>Chapter 31</b>	
'ZOOM-WALKS' AND CYANOTYPES: MATERIALIZING SCREEN ONTOFONIES	317
Alyssa Grossman	
<b>Chapter 32</b>	
DRAWING FOR INCLUSION: ARCHITECTURAL REPRESENTATION THROUGH COMICS AS ACCESSIBLE COMMUNITY DESIGN PRACTICE	327
Inge Roecker, Andrea Hoff	
<b>Chapter 33</b>	
FROM FILLING TO FEELING: RE-READING THE ANTILLEAN CITY	336
Doris Duhennois	

<b>Chapter 34</b>		346
PHYGITAL MUSEUM EXPERIENCES: THE SITUATED AND INVISIBLE DIMENSION OF TECHNOLOGY AS A SENSITIVE ACTIVATION OF CULTURAL HERITAGE		
Alessandra Miano		
<b>Chapter 35</b>		355
IMAGES ON 1975.		
Adria Guardiola-Rius		
<b>Chapter 36</b>		366
SOCIO-TEMPORAL PARADOXES BETWEEN SCREENS AND SPANS: AVERAGE DURATION OF MOVING VISUAL WORKS, TECHNICAL LIMITATIONS, AND SOCIAL DEMANDS FROM THEATRE TO TIKTOK.		
Vassilis Galanos		
<b>Chapter 37</b>		374
TECHNOLOGIES EVOLVE: VISUALIZING MIXED REALITY OVERTIME IN CINEMA PRODUCTION		
Samah Nassar		
<b>Chapter 38</b>		381
A DISCOURSE BETWEEN THE FORMER AND THE PROSPECT		
Saman Malik, Aiman Rahman		
<b>Chapter 39</b>		393
BILINGUALISM IN SPATIAL DESIGN; RESTRUCTURING THE ARCHIVE FOR THE ELUSIVE OBJECT		
Ifigenia Mari, George Parmenidis		
<b>Chapter 40</b>		405
ENCODING MATERIAL EMPATHY: A REVIEW OF PHYSICAL MATERIALS AND DIGITAL GEOMETRIES		
Tay Yu Jie		
<b>Chapter 41</b>		416
DEBRIS AND DATA; USING PHOTOGRAMMETRY FOR MAPPING REMNANTS IN HONG KONG		
Nikolas Ettel		
<b>Chapter 42</b>		426
ALGARVE- MEMORY AND IDENTITY REPRESENTATIONS FOR A SUSTAINABLE FUTURE		
Ana Pereira Neto		
<b>Chapter 43</b>		436
EDGELANDS TWISTS: PERFORMING LIMINAL FISSURES IN EDGELANDS REPRESENTATIONS		
Joanna Leah		
<b>Chapter 44</b>		447
GODZILLA: THE BIG JAPANESE MONSTER, THE MONSTROUS BODY AND NATIONAL IDENTITY		
Kuo-Wei Lan		

<b>Chapter 45</b>	
DESIGNING A DYNAMIC SCOOTER DISTRIBUTION SYSTEM FOR EFFICIENT AND SUSTAINABLE URBAN TRANSPORTATION: THE DYMO SYSTEM	458
Carlos De Aguiar, Zezhi Guo, Yuhe Cui	
<b>Chapter 46</b>	
AFFORDANCES OF VISUALISED FUTURE ENVIRONMENTS DO WE NEED OR WANT SUCH PLACES?	470
Damian Rogers, Linus Tan, Anita Kocsis	
<b>Chapter 47</b>	
UNDOCUMENTED HISTORY: ACCESSING THE INTANGIBLE PAST THROUGH LOCATIVE MEDIA	477
Diane Derr, Sadia Mir	
<b>Chapter 48</b>	
NOTES ON PUBLIC PLACES IN MADIBA'S MEMORY: USING ARCHIVAL RESOURCES FOR GRAPHIC HERITAGE INTERVENTIONS IN URBAN DEVELOPMENT	485
Robert Harland, Yolandi Burger, Everardt Burger	
<b>Chapter 49</b>	
FUTURE HISTORIES: (RE)CONSTRUCTING THE INFRASTRUCTURES OF RITUAL IN AUSTRALIA'S NEW WORLD CITY	496
Shane Sugrue	
<b>Chapter 50</b>	
TEMPOROSPATIAL MEDIATOR: SITE-SPECIFIC THEATER WITHIN CULTURAL HERITAGE	511
Ching-Pin Tseng	
<b>Chapter 51</b>	
A MOTHER'S PLACE: EXPLORING SPATIAL EXPERIENCES OF EARLY MOTHERHOOD	519
Maretha Dreyer	
<b>Chapter 52</b>	
A SPLICE OF LIFE (HOME, LAPTOP, WI-FI)	527
Shellie Holden	
<b>Chapter 53</b>	
HOW HAS THE EMERGENCE OF NFT TECHNOLOGY IN THE MUSIC INDUSTRY AFFECTED HOW A GENERATION Z AUDIENCE CONSUMES A MUSICAL ARTISTS WORK?	535
Mark Ashmore	
<b>Chapter 54</b>	
ALTERNATIVE FUTURES – ENVISIONING BOLZANO, ITALY	542
Mustapha El Moussaoui, Kris Krois	

---

# THE DIGITAL AGENCY, PROTEST MOVEMENTS, AND SOCIAL ACTIVISM DURING THE COVID-19 PANDEMIC

Author:

**ASMA MEHAN**

Affiliation:

HUCKABEE COLLEGE OF ARCHITECTURE, TEXAS TECH UNIVERSITY, USA

---

## INTRODUCTION

The technological revolution and appropriation of internet tools began to reshape the material basis of society and the urban space in collaborative, grassroots, leaderless, and participatory actions. The protest squares' representation on Television screens and mainstream media has been broad. Various health, governmental, societal, and urban challenges have marked the advent of the Covid-19 virus. Inequalities have become more salient as poor people and minorities are more affected by the virus. Social distancing makes the typical forms of protest impossible to carry out. Under social distancing, some state-led policies took advantage of social media to focus on the Covid-19 pandemic to silence social and political activities, censor criticism, and control the press. However, during the pandemic era, the movements for social justice have been particularly active, focusing on defending workers' rights, mutual aid and solidarity, monitoring policymakers, and popular education. These progressive movements combined concrete practices and experiences to confront the reactionary, capitalist, and governmental actors that sought to shape and envision the world. Through different case studies of protest movements during the pandemic in Europe, the UK, and Asia, this paper argues that at the time of rising racial, social, and economic inequalities, the social activities adapted to the circumstances determined by the social distancing and the impossibility of people gathering in physical spaces. Subsequently, the people in different countries had various individual and collective responses to the support of health workers, systemic inequalities, loss of jobs, and other societal and financial challenges imposed by the governments. It means that, rather than disappearing, the social movements have adapted to the unexpected situations during the pandemic outbreak. The pandemic broke the new digital global wave of protests in this sense.

## Social Activism during the Pandemic

Environmental challenges, forced immigration, pandemic outbreaks, and economic inequalities are deepening the democracy crisis across the globe. As Jeffery Hou highlights: “unsanctioned, unscripted, and seemingly undesirable activities have long appropriated urban spaces in routine and sometimes unexpected ways, bringing new meaning and unforeseen functions to those spaces. They occupy or appropriate urban spaces in routine and sometimes unexpected ways, bringing new meanings and unforeseen functions to those places. In many cities around the world, these activities are an integral part of the quotidian urban landscapes and systems of everyday life. Together, they encompass both short-term, temporary actions and lasting struggles and contestations.”<sup>1</sup>

The Occupy movement of 2011 provides an example of the new wave of social unrest and protest movements. Occupy emerged in a period of crisis for Liberal democracy. One of the most visible signs of this crisis is the widespread disengagement of the citizenry from institutional political processes in developed countries.<sup>2</sup> The increasing disaffection of youth with liberal politics, and voting, the rise of consumer culture, and the explosion of social media, such as Facebook, Instagram, and Twitter, can be seen as the intensifying the alienation that operates under a market capitalist ethos rather than a democratic one.<sup>3</sup>

The advent of the recent Covid-19 pandemic outbreak has resulted in a profound transformation of society, with technology playing a crucial role in the way people respond to the challenges posed by the virus. The technological revolution and the appropriation of internet tools have reshaped the material basis of society and the urban space, leading to the emergence of collaborative, grassroots, leaderless, and participatory actions. As a result, the protest squares' representation on television screens and mainstream media has been broad.<sup>4</sup>

During the COVID-19 pandemic, social activism has taken on new forms and become even more important in many ways. Before the pandemic, social movements and protests were often organized in physical spaces, with people gathering in public squares, marching in the streets, and engaging in direct action.<sup>5</sup> With the advent of social distancing measures, however, these forms of protest became impossible, leading activists to turn to digital tools to continue their activism. However, the pandemic has brought with its various health, governmental, societal, and urban challenges, exacerbating existing inequalities and affecting poor people and minorities the most.<sup>6</sup>

Social distancing has made traditional forms of protest impossible, leading some state-led policies to take advantage of social media to silence social and political activities, censor criticism, and control the press. Despite these challenges, the movements for social justice have continued to thrive during the pandemic, with a focus on defending workers' rights, mutual aid and solidarity, monitoring policymakers, and popular education.<sup>7</sup> With large gatherings and protests being limited due to health concerns, many activists have turned to virtual and decentralized organizing, leveraging social media to spread their messages and build movements. Issues related to the pandemic, such as healthcare access, workers' rights, and systemic racism, have become key focal points for activism. Additionally, the pandemic has amplified existing social and economic inequalities, further fueling activism and calls for systemic change. These progressive movements have combined concrete practices and experiences to confront reactionary, capitalist, and governmental actors, and to shape and envision the world.<sup>8</sup>

### **Digital Protest Movements during the Pandemic**

The pandemic has inspired a wave of digital social activism, with people turning to technology to mobilize and coordinate collective action. Case studies of protest movements in Europe, the UK, and Asia show that at a time of rising racial, social, and economic inequalities, social activities have adapted to the circumstances determined by social distancing and the impossibility of people gathering in physical spaces. People in different countries have had various individual and collective responses to support health workers and address systemic inequalities, loss of jobs, and other societal and financial challenges governments impose (See Figure 1).<sup>9</sup>

Although the Covid-19 pandemic has broken the new digital global wave of protests, it has not diminished social activism. Instead, social movements have adapted to the unexpected situations posed by the pandemic, proving they are resilient and capable of responding to the moment's challenges. The Covid-19 pandemic has put a tremendous strain on health workers worldwide, and social media has been used to support and advocate for their rights. The hashtag *#ThankYouHealthWorkers* shows appreciation for their sacrifices, while the *#ProtectOurCare*

movement highlights demanding better working conditions and access to personal protective equipment.<sup>10</sup>

The recent antiracism protests and Black Lives Matter movement with the use of hashtag #BLM have reignited decentralized transnational political and social campaigns to fight racism, discrimination, and inequality. The Black Lives Matter (BLM) movement has been one of the most significant social justice movements in recent history, and the pandemic has only amplified its impact. With the advent of social distancing measures, the BLM movement turned to social media to coordinate protests, share experiences, and mobilize large numbers of people. People used platforms like Twitter, Instagram, and Facebook to share information, coordinate protests, and call for justice and systemic change. Through the use of hashtags such as #BlackLivesMatter and #JusticeForGeorgeFloyd, the BLM movement was able to spread its message and gain widespread support, resulting in a global movement for racial justice.<sup>11</sup>

Grassroots reactions and protests to colonial remnants in the urban landscape were as important. In Europe, one of the most prominent examples of digital activism during the pandemic has been the Black Lives Matter protests, which took place in response to the death of George Floyd in the United States. Despite the restrictions imposed by the pandemic, thousands of people across Europe came together online to protest against systemic racism and police brutality. Through social media, people can coordinate actions, share information, and mobilize large numbers of people in a virtual demonstration of solidarity (See Figure 2).<sup>12</sup>

In the United Kingdom, the Covid-19 pandemic has been marked by a growing movement of workers fighting for their rights. Despite the restrictions imposed by the pandemic, workers have used social media to organize and coordinate their actions, sharing information about strikes, protests, and other forms of direct action. These workers have been particularly active in defending the rights of those who have been hardest hit by the pandemic, including gig workers, careers, and those working in low-paid jobs.<sup>13</sup>

In Asia, the Covid-19 pandemic has had a significant impact on the movements for social justice. The Hong Kong protests were another example of digital social activism during the Covid-19 pandemic, as people used technology to mobilize and coordinate in the face of government repression. The protests were sparked by a proposed law that would allow the extradition of Hong Kong citizens to mainland China, and quickly gained traction as people across the city took to the streets to protest against the erosion of their rights and freedoms. The Hong Kong protests were notable for their use of technology, with protesters using encrypted messaging apps and social media to coordinate and share information. The use of technology was critical in the face of government censorship and repression, providing protesters with a way to organize and communicate despite the challenges posed by the pandemic.<sup>14</sup>



*Figure 1. Protest Movement during the pandemic, 8 Oct 2020, photographer: Edrece Stansberry, Credit: unplash,*

The #MilkTeaAlliance emerged as a digital activist movement, bringing together young people from across the region to protest against authoritarianism and censorship. The movement, which was initially sparked by protests in Thailand, quickly gained momentum and spread to other countries, with people using social media to coordinate actions and to share information.

The Indian farmers' protests were a significant example of digital social activism during the Covid-19 pandemic, as farmers used technology to organize and mobilize against a controversial set of agricultural reforms. The protests were sparked by new laws that would deregulate the agriculture sector and remove protections for farmers, leading to widespread protests across the country. The Indian farmers' protests leveraged social media to coordinate and mobilize, with farmers and supporters using platforms like Twitter and Facebook to share information and coordinate actions. The movement also used social media to challenge government narratives and to hold policymakers accountable for their actions.<sup>15</sup>

The pandemic has highlighted the importance of mutual aid and solidarity, and social media has been used to coordinate these efforts. Across the world, people have used social media to organize food and supply drives, create online communities to support their neighbors, and promote mutual aid initiatives. The hashtag #MutualAid has been used to promote these efforts and to encourage people to get involved. The COVID-19 pandemic has had a devastating impact on workers, with millions losing their jobs and facing economic insecurity. The workers' rights movement has been using social media to organize, mobilize, and demand better treatment for workers. The hashtag #WorkersRights has been used to promote these efforts and to raise awareness about the struggles of workers during the pandemic.

The digital agency has proven to be an incredibly powerful tool for social activism, with the internet and social media providing a platform for people to share their experiences, coordinate actions, and mobilize large numbers of people. During the pandemic, social media has been used to support health workers, defend workers' rights, promote mutual aid and solidarity, monitor policymakers, and engage in popular education. In addition to its role in supporting social activism, the digital agency has also provided a way for people to express their grievances and to hold governments and corporations accountable. During the pandemic, the digital agency has been used to protest against systemic inequalities, censorship, and the suppression of free speech. These case studies demonstrate the power of the digital agency and the role it can play in shaping the world and promoting social justice.<sup>16</sup>



*Figure 2. Black Lives Matter Protest during the Pandemic, 20 Oct 2021, Downtown Los Angeles, US  
photographer: Mike Von, Credit: unplash,*

## CONCLUSION

The pandemic has resulted in a paradigm shift, exemplified by the increased prominence of digital activism and the utilization of technology to organize and coordinate activism efforts. Despite the challenges posed by the pandemic, social activism has continued to thrive, adapting to the new circumstances and using digital tools to coordinate and mobilize. The digital agency has proven to be a powerful tool for social activism, providing a platform for people to voice their concerns, organize collective action, and shape the world.

The pandemic has had an essential impact on the way people mobilize and engage in social activism. It has broken the new digital global wave of protests but has not diminished social activism. Instead, social movements have adapted to the unexpected situations posed by the pandemic, proving they are resilient and capable of responding to the moment's challenges. The digital agency has emerged as a powerful tool for social activism, providing a platform for people to express their grievances, coordinate collective action, and hold those in power accountable. As the pandemic persists, digital activism remains a crucial factor in determining the trajectory of future social activism.

The COVID-19 pandemic has been a significant point in social activism, inspiring the rise of digital activism and the adoption of technology to coordinate activism efforts. The digital agency and the appropriation of internet tools have reshaped the material basis of society, leading to a new wave of protest movements and social activism that is adaptable and capable of responding to the challenges posed by the pandemic. Despite the difficulties posed by the pandemic, social activism remains resilient and continues to thrive, adapting to new circumstances and utilizing digital tools to mobilize and voice their concerns. The digital space has become a crucial platform for social activism, empowering people to shape the world and hold those in power accountable.

## ACKNOWLEDGEMENTS

I am grateful for the opportunities and resources provided by the Huckabee College of Architecture, which have been instrumental in shaping and enriching this study.

## NOTES

- <sup>1</sup> Jeffrey Hou, "Guerrilla urbanism: Urban design and the practices of resistance," *Urban Design International* 25 (2020): 117.
- <sup>2</sup> Dylan Taylor, *Social Movements and Democracy in the 21st Century* (Cham: Palgrave Macmillan, 2017), 2-3.
- <sup>3</sup> Taylor, *Social Movements and Democracy*, 4. Also Michael Hardt and Antonio Negri, *Empire* (Harvard University Press, 2000).
- <sup>4</sup> Bruce Bimber, Andrew J. Flanagin, and Cynthia Stohl, *Collective Action in Organizations: Interaction and Engagement in an Era of Technological Change* (Sage Publications, 2012).
- <sup>5</sup> Zeynep Tufekci, *Twitter and Tear Gas: The Power and Fragility of Networked Protest* (Yale University Press, 2020). Also Tufekci, "Big Questions for Social Media Big Data: Representativeness, Validity, and Other Methodologic Challenges," in *Big Data & Society*, ed. Kate Crawford and Jason Schlozen (SAGE Publications Ltd, 2014), 1-12.
- <sup>6</sup> Asma Mehan, Hilde Sennema, and Saskia Tideman, "Port City Heritage: Contested Pasts, Inclusive Futures?" *The Port City Futures Blog*, Leiden. Delft. Erasmus (LDE) Initiative, 2020. Also Asma Mehan, "The City as the (Anti) Structure: Fearscape, social movement, and protest square," *Lo Squaderno: Explorations in Space and Society*, no. 57 (2020).
- <sup>7</sup> Paolo Gerbaudo, *Tweets, and the Streets: social media and Contemporary Activism* (Pluto Press, 2012). Also Manuel Castells, *Networks of Outrage and Hope: Social Movements in the Internet Age* (Polity, 2012).
- <sup>8</sup> Thomas Karppi and Sami Helmiö, "Deathstreams: The pandemic and the politics of mortality," *social media + Society* 6, no. 1 (2020): 2056305120907289. Also Castells, *Networks of Outrage and Hope*.
- <sup>9</sup> Asma Mehan, "EUKN webinar 'Port Cities and Mega-Trends: Glocal Approaches to Sustainable Transitions,'" *The Port City Futures Blog*, Leiden. Delft. Erasmus (LDE) Initiative, 2020. Also Asma Mehan and Sina Mostafavi, "Building Resilient Communities Over Time," in *The Palgrave Encyclopedia of Urban and Regional Futures*, ed. Robert C. Brears (Cham, Switzerland: Palgrave Macmillan, Springer, 2022).
- <sup>10</sup> "Hashtag activism: How #ProtectOurCare is mobilizing US healthcare workers." *Al Jazeera*, 2021. also "Coronavirus: Social media amplifies support for health workers." *BBC News*, 2020; "How the Covid-19 Pandemic is Impacting Social Activism." *Forbes*, 2020.
- <sup>11</sup> David Wills and Michael X. Delli Carpini, eds., *Civic Engagement in the Digital Age* (Oxford University Press, 2017). Also Jeroen Van Laer, Nico Carpentier, and Marijke de Lange, eds., *Mediated Interactions: Communication Technology and the Restructuring of Public Sphere Participation* (Routledge, 2017).
- <sup>12</sup> Howard Rheingold, *The Virtual Community: Homesteading on the Electronic Frontier* (MIT Press, 2000). Also Alice Marwick and danah boyd, "I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience," *New Media & Society* 13, no. 1 (2011): 114-133.
- <sup>13</sup> Clay Shirky, *Here Comes Everybody: The Power of Organizing Without Organizations* (Penguin, 2008).
- <sup>14</sup> Molly M. Wasko and Samer Faraj, "It Is What One Does": Why People Participate and Help Others in Electronic Communities of Practice," *The Journal of Strategic Information Systems* 9, no. 2 (2000): 155-173.
- <sup>15</sup> "COVID-19 is changing the face of protest, but activism remains resilient." *The Conversation*, 2020. And "The pandemic has shifted the terrain of protest – but activism endures." *The Guardian*, 2020.
- <sup>16</sup> Jan A. van Dijk, *The Network Society: Social Aspects of New Media* (Sage Publications, 2013). Also Marek Kozłowski, Asma Mehan, and Krzysztof Nawratek, *Kuala Lumpur: Community, infrastructure, and urban inclusivity* (Routledge, 2020).

## BIBLIOGRAPHY

- Bimber, Bruce, Andrew J. Flanagin, and Cynthia Stohl. *Collective Action in Organizations: Interaction and Engagement in an Era of Technological Change*. Cambridge: Sage Publications, 2012.
- Castells, Manuel. *Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge: Polity, 2012.
- "Coronavirus: Social media amplifies support for health workers." *BBC News*, 2020
- "COVID-19 is changing the face of protest, but activism remains resilient." *The Conversation*, 2020.
- Gerbaudo, Paolo. *Tweets and the Streets: social media and Contemporary Activism*. London: Pluto Press, 2012.
- Hardt, Michael, and Antonio Negri. *Empire*. Cambridge: Harvard University Press, 2000.

- "Hashtag activism: How #ProtectOurCare is mobilizing US healthcare workers." Al Jazeera, 2021.
- Hou, Jeffrey. "Guerrilla urbanism: urban design and the practices of resistance." *Urban Design International* 25 (2020): 117-125.
- "How the Covid-19 Pandemic is Impacting Social Activism." *Forbes*, 2020.
- Karppi, Thomas, and Sami Helmiö. "Deathstreams: The pandemic and the politics of mortality." *Social Media + Society* 6, no. 1 (2020): 2056305120907289.
- Kozłowski, Marek, Asma Mehan, and Krzysztof Nawratek. *Kuala Lumpur: Community, infrastructure, and urban inclusivity*. New York: Routledge, 2020.
- Marwick, Alice, and Danah Boyd. "I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience." *New Media & Society* 13, no. 1 (2011): 114-133.
- Mehan, Asma. "The city as the (Anti) Structure: Fearscape, social movement, and protest square." *Lo Squaderno: Explorations in Space and Society*, no. 57 (2020).
- Mehan, Asma. "EUKN webinar "Port Cities and Mega-Trends: Glocal Approaches to Sustainable Transitions," The Port City Futures Blog. Leiden. Delft. Erasmus (LDE) Initiative, 2020.
- Mehan, Asma, Hilde Sennema, and Saskia Tideman. "Port City Heritage: Contested Pasts, Inclusive Futures?" The Port City Futures Blog. Leiden. Delft. Erasmus (LDE) Initiative, 2020.
- Mehan, Asma, and Sina Mostafavi. "Building Resilient Communities Over Time." In *The Palgrave Encyclopedia of Urban and Regional Futures*, edited by Robert C. Brears. Cham, Switzerland: Palgrave Macmillan, Springer, 2022.
- Rheingold, Howard. *The Virtual Community: Homesteading on the Electronic Frontier*. Cambridge: MIT Press, 2000.
- Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations*. New York: Penguin, 2008.
- "The pandemic has shifted the terrain of protest – but activism endures." *The Guardian*, 2020.
- Tufekci, Zeynep. *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. New Haven: Yale University Press, 2020.
- Tufekci, Zeynep. "Big Questions for Social Media Big Data: Representativeness, Validity, and Other Methodologic Challenges." In *Big Data & Society*, edited by Kate Crawford and Jason Schlozen, 1-12. London: SAGE Publications Ltd, 2014.
- Taylor, Dylan. *Social Movements and Democracy in the 21st Century*. Cham: Palgrave Macmillan, 2017.
- Van Dijk, Jan A. *The Network Society: Social Aspects of New Media*. Cambridge: Sage Publications, 2013.
- Van Laer, Jeroen, Nico Carpentier, and Marijke de Lange, eds. *Mediated Interactions: Communication Technology and the Restructuring of Public Sphere Participation*. New York: Routledge, 2017.
- Wills, David, and Michael X. Delli Carpini, eds. *Civic Engagement in the Digital Age*. Oxford: Oxford University Press, 2017.
- Wasko, Molly M., and Samer Faraj. "It Is What One Does: Why People Participate and Help Others in Electronic Communities of Practice." *The Journal of Strategic Information Systems* 9, no. 2 (2000): 155-173.

# THE FUTURE OF DWELLING: THE KITCHEN

Author:

**CAMILO CERRO**

Affiliation:

AMERICAN UNIVERSITY OF SHARJAH, UAE

---

## INTRODUCTION

Cooking machine, experimental home laboratory, status symbol, domestic prison or the brain and soul of the home? The role of the kitchen has had considerable changes over the years. At its core, the consequential change affecting this interior space have been both social and functional in nature. And as we look towards the near future it will remain a catalyst for the evolution of the dwelling, and by association the community it belongs to. How the kitchen adapts to take the burden of sustainability will define how cities confront the environmental crisis. The sustainable kitchen will help solve basic problems related to living in the Anthropocene. Food security being the most important challenge due to the dependence on agriculture in a time of climate variability. This is particularly true as it affects the livelihood of low-income communities which normally have less capacity for adaptation.<sup>1</sup> With the aid of emerging technologies, the future kitchen will produce energy, water, and food towards an off the grid self-sufficiency. It will also compost its organic waste minimizing the need of waste management. And it will remain the central, most used room in the house. Providing a space where people can congregate, work, and socialize. The UN estimates that 68% of the world population will live in urban areas by 2050.<sup>2</sup> This means that urban density will force dwellings to down-size. This reality will hybridize, more than ever before, the kitchen, dining room and living room with the implementation of open plan typologies, creating a hybrid space where most of the home life will take place. This space will be further transformed by lessons learned from the pandemic, giving this space multiple areas where different members of the family could work, study, or take classes while providing a level of privacy and detachment. The kitchen which started as a place for cooking, will now take on a number of alternate activities not related to its original premise, forcing a level of adaptability and versatility, to be inherent in its design. As it remains the center of home life, most of its evolution will aid in the process of bringing about a sustainable revolution by making the kitchen and by default the dwelling self-sufficient.

## KITCHEN DESIGN BASICS: FIVE ZONES AND A LITTLE MORE

In 1929 the idea of the work triangle was proposed (by Lillian Moller Gilbreth) as a way to design an efficient three-zone kitchen, mixing aesthetics and function was unveiled at a Women's Exposition in New York City. The work triangle of the three-zone kitchen was composed of the imaginary lines between what was believed where the primary tasks in the kitchen linking the cook top, sink and refrigerator. The idea was that when these three elements are close (but not too close) to each other, the kitchen would be easy and efficient to use.<sup>3</sup> Today, the three-zone kitchen comprised of a cooking, cleaning, and consumables zones, has expanded to a five-zone kitchen that makes

allowances for a functional evolution, by adding two new zones for non-consumable and a preparation. In total, the five-zones of the kitchen stand as follows: Consumables, non-consumables, cleaning, preparation, and cooking. The *Consumables* zone is used to store all our day-to-day consumer goods. These are items that are used for cooking and baking that need to be replenished. This includes both chilled and un-chilled foodstuffs and is why the refrigerator and freezers are both located in this zone. The *Non-consumable* zone is used to store non-foodstuffs. It is mainly used for kitchen small appliances, cutlery, dishes, containers, pots, pans and glasses. Because of the number of items and their frequent use, comfortable access to them stored in lower and upper cabinets is very important. Normally this zone is placed adjacent to the *Cleaning* zone so as to be able to move clean dishes easily from the dishwasher and the sink to their storage areas. The *Preparation* zone requires clear work surfaces since it contains the main work area of the kitchen. And is located between the *Cleaning* and *Cooking* zones. This zone stores the kitchen utensils required for food preparation, and some open foodstuffs required for food preparation (like spices). The *Cooking* zone houses the stove top, oven, extractor and in some cases the microwave oven. The *Consumables*, *Cleaning* and *Cooking* zones are interdependent from each other creating a triangle between them designed to simplify motion between them. This kitchen zones have evolved out of need and functionality, and as the kitchen continues to adapt to societal changes it is to be expected that new zones will arise. Due to a need for versatility and adaptability to the present climate crisis we propose three new zones (figure 1) to this system: The *Food Production* zone, the *Composting* zone, and the *Home Working & Entertaining* zone. The Food Production zone will house a hydroponic farm, a fungi culture unit, an insect farm, and an atmospheric water generator. This unit will help produce a percentage of the vegetables and mushrooms and consumed in the household. Incorporating insects as a source of protein and nutrition to our diet. And it will produce water from atmospheric vapor to be used in the kitchen and the house as a whole. The *Composting* zone consists of a vermicompost (worm composting) unit used to transform all organic waste into compost. These two new zones are additions that bring a sustainable and self-sufficient element to the pre-existing kitchen layout system previously presented. The *Home Working & Entertaining* zone is an adaptable area which has as a main function to provide a space where adults and children can work, study, socialize, or participate in online activities. This area will also serve as transition withing an open plan between the kitchen and the living room unifying this two gathering social spaces into a larger more versatile area.

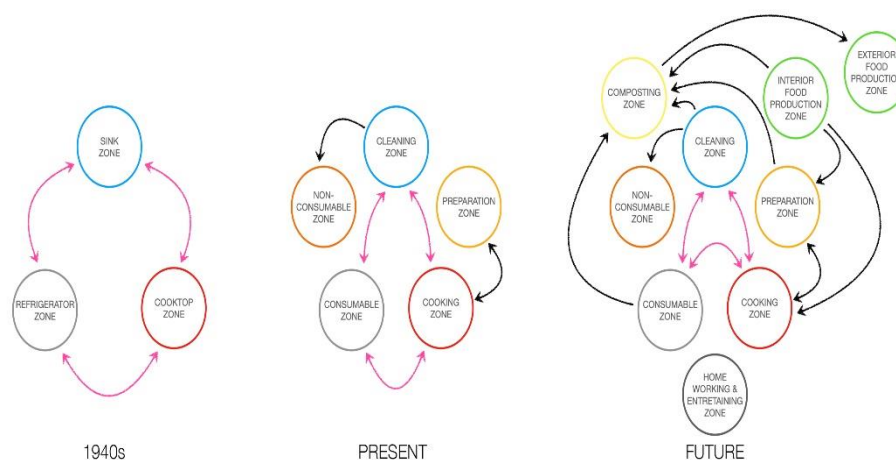


Figure 1. Kitchen zone relationships: Past, present, and future

## THE NEXT STEP ON THE EVOLUTION OF THE KITCHEN

According to a study by Near Future Laboratory for IKEA, as more of the world's increasing population moves into urban areas (68% by 2050), a pressing need for efficiency will lead to smaller, multipurpose kitchen spaces which in turn will usher new food-preparation technologies. Our dependence on digital connectedness will turn the kitchen into a media center, combining the need for entertainment and social networking. While an increasing desire to live in rural and rural-like communities, combined with a growing environmental consciousness will promote the wide-scale creation of private and local food gardens and urban farms. The kitchen of the future will help make the dwelling sustainable by being self-sufficient, generating its own energy, producing, filtering, and reusing water, growing a percentage of the household's vegetable and mushroom consumption, composting organic waste, using energy-efficient (energy star) appliances, sustainable materials and having digital connectedness. And (as we learned from the pandemic) it will also need to become a social space for activities not related to cooking nor eating. All these reasons point to open plan design to maximize the space after the area of the dwelling downsizes due to an urban need for an increase in density. But more importantly, the next step in the evolution of the kitchen is not about design aesthetics, furniture ergonomics nor overall craftsmanship. The secret in designing an effective kitchen focuses on having a compact cooking zone, because this allows enough space to fulfill the room's expanded role as a living space. A space that historically started as the center of the house, to later be pushed to the side in anonymity, is now a heavily used social area. The busy life of a contemporary family results in having a limited amount of time at home together, making the need for a common room where encounters can be turned into effective exchanges, and versatile enough to accommodate multiple activities, more important than ever. Today as it will be tomorrow, psychology and ergonomics are the main components in the design of a kitchen environment. The anxiety of contemporary life requires that emotion and function work side by side to create a relaxing space in a home that more than ever will become kitchen centric.

## NEW TECHNOLOGIES COMING SOON TO A KITCHEN NEAR YOU

The kitchen of the near future will be all about connectivity. Smart appliances talking to each other via the internet of things (IoT), a network of objects embedded with electronics, software, sensors (Arduino), and network connectivity that allows them to collect and exchange data about its users. But there will be other innovations that are currently under development as well. Additive manufacturing (3D printing) will find its way into the kitchen as the most important future appliance. In the near future, every kitchen will have a food 3D printer which will serve as a food manufacturing plant. Additive manufacturing will give everyday consumers more choice and accessibility to the foods of their choice, opening the door to a new level of creativity for both the user and the food industry. Chloe Rutzerveld (Future Food Designer) has been using additive manufacturing in food production on a project named *edible growth*<sup>4</sup> where fully natural, healthy, and sustainable food is made possible by combining natural growth, 3D printing technology and design. And while there are a number of challenges many food printers must overcome, such as speed of printing, texture, taste, and complexity, the technology is already moving to solve these issues. Across multiple industries, one of the greatest appeals of 3D printing is the fact that it is highly customizable to users' needs and preferences, allowing for hyper-customization.

We will also see the appearance of the induction cooktops as a replacement for the stove. These countertop cooking surfaces use magnetic energy and compatible pans to heat up only the area occupied by the pan placed on it; the rest of the surface remains cool to the touch, allowing it to be used as a touchscreen where to browse the Internet, measure ingredients, talk to a friend, or to be used as a cutting board. In IKEA's Concept Kitchen 2025,<sup>5</sup> an induction cooktop table is presented as the

central element of the kitchen. IKEA's vision includes video projections and sensing technology, that together can guide the user on how to prepare the food placed on the cooktop table, while cooking directly on its surface. While simultaneously others connect to the internet using the touchscreen surface right next to where the cooking is taking place. In a similar way, vertical surfaces will also have touchscreen interactive capabilities. Human environments are typified by walls, which until now have remained mostly inactive. But what if walls could be a smart infrastructure? Could walls enhance rooms with sensing, interactivity, and computation capacities? The idea is to transform the wall into an interface and through it control the workings of the kitchen and the dwelling, while also providing connectivity and entertainment. The oven will evolve into a an automated, connected, multifunctional appliance. Miele has developed the first oven that uses radio frequency technology to cook with electromagnetic waves. The result is a process 70% faster than any other on the market presently.

With the population more interested in environmental and sustainable issues, urban gardens will become the norm. Providing easy access to fresh produce, cleaning the air of the dwelling and community, serving as sound insulators, and helping in the recycling of grey water. It's expected that big names in home appliances will soon be adding kitchen hydroponics to their repertoire. In 2014, Panasonic started growing leafy greens inside a warehouse in Singapore and selling them to local grocers and restaurants.<sup>6</sup> By 2017, the vertical farm was producing 80 tons of green leafy lettuce; mini red radish; mustard wasabi; a range of microgreens and other veggies per year. The success of this endeavor proved that plants could be grown anywhere, so why not in the kitchen? In 2020, the company came up with a small kitchen garden (33.4"Hx23.6"Wx15"D) as a first prototype moving in the direction of bringing hydroponic technology into the kitchen. Samsung followed with their *Indoor Gardening Appliance* prototype presented at the Consumer Electronics Show (CES) in the same year. The prototype looks like a refrigerator, designed to grow herbs and garden produce all year around. As the farm moves into the kitchen, will be presented with the potential of food security which as the population increases, will be of concern to communities across the world. Hydroponics in the kitchen and a seasonal produce garden in the terrace or backyard will help make the dwelling have a level of self-sufficiency and food stability. The exterior garden will also house a beehive to help propagate bee populations, pollinate the community, preserve biodiversity, and produce honey for the dwelling. With smart kitchen technology in its beginning stage, there is an opportunity for food manufacturers to get into this game early on to collaborate with appliance makers making sure that their ingredients and products continue to have a place in the kitchen of the future.

We also have to consider that today about a third of all food produced is wasted.<sup>7</sup> Preventing this waste will be very necessary to feed the ever-increasing world population. In the kitchen, appliances will need to implement technologies able to extend the freshness and shelf life of foods. In today's marketplace, companies like Sub-Zero and KitchenAid are already producing refrigerators equipped with filters that remove the ethylene gases that are responsible for produce decaying. In the future, refrigerators will continue to focus on conserving resources and preventing food from being wasted. GE is developing magnetic refrigeration technology, a water-based system that uses no refrigerants or compressors and will be 20% more energy efficient than today's refrigerators.<sup>8</sup> Russian designer Yuriy Dmitriev created a zero-energy freestanding fridge filled with a biopolymer gel that food is simply submerged in.<sup>9</sup> Whirlpool, IKEA and Electrolux are working on independent small refrigerator units with temperature controls customized to the specific food placed in them. But eventually, organics will go bad giving way to a need for composting technologies. While there are many technologies being produced to fulfill this need, I am most interested in composting with worms. Worm composting is a passive system, using worms to recycle food scraps and other organic material into a soil amendment called vermicompost, or worm compost. Worms eat food scraps,

which become compost as they pass through their bodies and then are excreted.<sup>10</sup> This compost can then be used in the dwelling's garden to grow produce, creating a closed loop from waste to food production.

Also, in the kitchen the sink has evolved, and it will be more than just a place where to wash vegetables. It will also detect and measure bacteria and chemical levels in the food, letting you know when they have been washed away.<sup>11</sup> The sink will also serve as a mini dishwasher, able to take care of small amounts of dishes, living heavier loads to a larger dishwasher somewhere else in the kitchen. A smart faucet will add versatility to the sink by becoming multifunctional. A touch of its screen will provide chilled, boiling, or sparkling water, make its own ice and through additives in the filtering process will be able to add vitamins or flavoring to the water.<sup>12</sup> The grey water produced by the dwelling will be cleaned and filtered into a pond where it will be kept waiting to be reused. This pond will serve as a natural filter to clean water, a water reserve, a rain catchment system, and a backyard swimming pool.<sup>13</sup> As global warming makes some regions drier, the dwelling will also benefit from the use of atmospheric water generators to produce water from the moisture in the air. As the line between the kitchen and the living room continue to blur, versatility will be key in the kitchen of the future, and all these technologies will help the user have piece-of-mind and a better quality of life.

## CONCLUSION

As we look into the near future, homes will become more kitchen centric, of all the spaces in a house, the kitchen is and will remain the heart of the dwelling. A place buzzing with activity, comfort, and interaction. In the coming decade, as climate change forces environmental change we will need to follow suit and change our habits too. As more people move into the city, urban density will make our living spaces smaller. Natural resources will become scarcer, food more expensive and waste a problem that cities are ill prepared to handle. As we move from the macro to the micro, communities, neighborhoods, and dwellings will need to have agency on shepherding the planet. It all starts with the kitchen, the lowest denominator of change in a larger system. This space needs to become interdependent with itself, the home, and the world around it. The ideas presented above are attempting to do this by making us have a closer relationship with what we eat, the carbon footprint our homes produce, and the waste we generate. The move to self-sufficiency must start in the kitchen as it fragments and hybridizes with the areas around it, leaving behind ideas of spatial segregation. We have been waiting for the kitchen of the future to be a romanticized version of a futurism that never was and instead we are confronted with a forced adaptability due to problems we have created and are too late and too slow to resolve. I doubt the kitchen of the future will solve our environmental problems, but I think it will help us become versatile as we adapt to the new realities of our times. And by turning the home into carbon positive system, it will define in this way the future of dwelling.

## ACKNOWLEDGEMENTS

This paper has been produced through researched funded by the American University of Sharjah.

## NOTES

- <sup>1</sup> Josef Schmidhuber and Francesco N. Tubiello, *Global Food Security under Climate Change* (Proceedings of the National Academy of Sciences of the United States, 2007), 19703–8.
- <sup>2</sup> United Nations, *68% of the World Population Projected to Live in Urban Areas by 2050*, (United Nations Department of Economic and Social Affairs, 2018).
- <sup>3</sup> National Post, *Alexandra Lange on Lillian Gilbreth: The Woman Who Invented the Kitchen* (National post, 2012).
- <sup>4</sup> Chloe Rutzerveld, *3D Printed Food: The Future of Healthy Eating* (TEDx talks, 2015).
- <sup>5</sup> IDEO, *Designing the Future Kitchen* (IDEO, 2022).
- <sup>6</sup> Leanna Garfield, *Panasonic's First Indoor Farm Can Grow over 80 Tons of Greens per Year*, (Business Insider, 2017).
- <sup>7</sup> UN Environment Program, *UNEP Food Waste Index Report 2021* (UNEP, 2021).
- <sup>8</sup> General Electric, *Not Your Average Fridge Magnet: These High-Tech Magnets Will Keep Your Butter (and Beer) Cold* (GE News, 2014).
- <sup>9</sup> Jackson Chung, *Another Look at the Futuristic Bio-Robot Refrigerator That Keeps Food Cool with Gel* (TechEBlog, 2023).
- <sup>10</sup> Nell Geraets, *Apartment Composting: More Challenging than What You Read on the Back of the Box at Bunnings* (The Guardian, 2021).
- <sup>11</sup> Center, Cy.R.I.C Cyprus Research and Innovation, *GRACED–Next Generation Sensors as Part of a Holistic Solution for Food Quality Monitoring* (Zenodo, 2021).
- <sup>12</sup> David Szondy, *GE Reveals Vision for Homes of the Not-Too-Distant Future*, (New Atlas, 2015).
- <sup>13</sup> Camilla Ghisleni, *Natural Pools: Small Ecosystems for Leisure*, (ArchDaily, 2022).

## BIBLIOGRAPHY

- Center, Cy.R.I.C Cyprus Research and Innovation. *GRACED–Next Generation Sensors as Part of a Holistic Solution for Food Quality Monitoring*. Zenodo, February 19, 2021. <https://doi.org/10.5281/zenodo.6962512>.
- Garfield, Leanna, *Panasonic's First Indoor Farm Can Grow over 80 Tons of Greens per Year — Take a Look Inside*, Business Insider, February 23, 2017. <https://www.businessinsider.com/panasonic-indoor-farm-photos-2017-2>.
- General Electric, *Not Your Average Fridge Magnet: These High-Tech Magnets Will Keep Your Butter (and Beer) Cold*. GE News, n.d., February 07, 2014. <https://www.ge.com/news/reports/not-your-average-fridge-magnet>.
- Geraets, Nell, *Apartment Composting: More Challenging than What You Read on the Back of the Box at Bunnings*, The Guardian, January 30, 2021. <https://www.theguardian.com/lifeandstyle/2021/jan/31/apartment-composting-more-challenging-than-what-you-read-on-the-back-of-the-box-at-bunnings>.
- Ghisleni, Camilla, *Natural Pools: Small Ecosystems for Leisure*, ArchDaily, April 11, 2022. <https://www.archdaily.com/979979/natural-pools-small-ecosystems-for-leisure>.
- IDEO, *Designing the Future Kitchen*, July 10, 2022. <https://www.ideo.com/case-study/designing-the-future-kitchen>.
- Special to National Post, *Alexandra Lange on Lillian Gilbreth: The Woman Who Invented the Kitchen*, National post, October 26, 2012. <https://nationalpost.com/opinion/alexandra-lange-on-lillian-gilbreth-the-woman-who-invented-the-kitchen>.
- TEDx Talks, *3D Printed Food: The Future of Healthy Eating* | Chloe Rutzerveld | TEDxYYC, August 18, 2015. <https://www.youtube.com/watch?v=hw321SwC6kA>.
- Schmidhuber, Josef, and Tubiello, Francesco N., *Global Food Security under Climate Change*, Proceedings of the National Academy of Sciences of the United States of America 104, no. 50 (December 11, 2007): 19703–8. <https://doi.org/10.1073/pnas.0701976104>.
- Szondy, David, *GE Reveals Vision for Homes of the Not-Too-Distant Future*, New Atlas, May 2, 2015. <https://newatlas.com/ge-future-home-2025/29282/>.
- United Nations, *68% of the World Population Projected to Live in Urban Areas by 2050, Says UN* | UN DESA | United Nations Department of Economic and Social Affairs, n.d.

<https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>.

UNEP - UN Environment Programme, *UNEP Food Waste Index Report 2021*, n.d.

<https://www.unep.org/resources/report/unep-food-waste-index-report-2021>.

Chung, Jackson, *Another Look at the Futuristic Bio-Robot Refrigerator That Keeps Food Cool with Gel*, TechEBlog (blog), January 2, 2023. <https://www.techeblog.com/bio-robot-refrigerator-gel/>.

# **EXAMINING THE BEST PRACTICES OF CURATING IN A NONTRADITIONAL BOTANICAL GARDEN SETTING: A CASE STUDY AS MARIE SELBY BOTANICAL GARDENS**

Author:

**ANNELIESE HARDMAN**

Affiliation:

THE UNIVERSITY OF ILLINOIS AT CHICAGO, USA

---

## **EXAMINING THE BEST PRACTICES OF CURATING IN A NONTRADITIONAL, BOTANICAL GARDEN SETTING**

In 2005, the International Council of Museums (ICOM) modified the definition of a museum to include a wide-reaching number of heritage sites, including botanical gardens. The inclusion of previously unincorporated museum settings begs the question of how botanical gardens at large accomplish some of the same responsibilities—including curation—which is generally regulated to in-door, gallery-like settings.<sup>1</sup> A certain shift can be tracked at this time of breaking away from “tradition” to “nontraditional.” Tradition is defined as “adhering to past practices or established conventions,” while nontraditional is defined as “not adhering to past practices or conventions.”<sup>2</sup> The year, 2005, marked a progression in the definition of a museum and a progression in curatorial practices away from the traditional practices of only using display cabinets and gallery hanging techniques. Instead with the incorporation of gardens, new methods of hanging and displaying art in outdoor spaces have been experimented with. The rest of this paper will focus on examples of curating in nontraditional settings and how approach, and setting can be perceived in innovative ways as a result.

This paper draws on case study experience gained while interning at Marie Selby Botanical Gardens with their exhibition team from January 2022 to May 2022 to specifically examine the concept of curating in nontraditional settings in more detail.<sup>3</sup> A new understanding of the best practices of curating in a nontraditional setting has been achieved by working on and interacting with two exhibitions curated for the Marie Selby campuses of Historic Spanish Point and Downtown Sarasota. The case study exhibitions, “Rainforest Masks of Costa Rica,” and “Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light” each push the limits of approach and setting. Consequently, analysis of “Rainforest Masks” will focus on approach; and the analysis of “Robert Mapplethorpe and Patti Smith” will focus on setting. Although each exhibition does creatively play with both elements, the exhibitions will be examined most closely in conjunction to the stated concept and in order of their chronological implementation. By examining the contexts of these exhibitions, new understanding of how to curate in a nontraditional setting will be achieved.<sup>4</sup>

## INTRODUCING SELBY MARIE BOTANICAL GARDENS

Before discussing the specific exhibitions of Marie Selby Botanical Gardens's locations, it is necessary to discuss the institution in general. This will provide context for understanding the mission of the Garden and the type of projects undertaken. Marie Selby Botanical Gardens was established in 1935 by Marie Selby for the purpose of "connecting people with air plants of the world, native nature, and [the] region's history."<sup>5</sup> The Marie Selby Garden locations are split into 15 acres at the Downtown Campus on the Sarasota Bay and 30 acres at Historic Spanish Point, located in Osprey, Florida. Because the Downtown Campus is the only garden in the world dedicated to the display and study of bromeliads, epiphytic orchids, gesneriads, ferns, and other tropical plants, there is a significant focus on botany, horticulture, environmental education. In contrast, Historic Spanish Point is one of the largest preserves showcasing native Florida plants, interpreted to be celebratory of Florida's 5000-year-old archeological records

One way that Selby upholds its mission statement of connecting visitors to the heritage of their properties is through their exhibition and education programming. The exhibition program was started five years ago for the purpose of creating reasons for new first-time visits and repeat visits from tourists and local permanent or part-time residents.<sup>6</sup> Selby's exhibition efforts are part of their trademarked program called the "Living Museum," (copyrighted in 2015). The Living Museum<sup>®</sup> model "mirrors the operation of traditional art museums by featuring a changing schedule of rotating exhibitions featuring horticultural and garden displays."<sup>7</sup> The Jean & Alfred Goldstein Exhibition Series is the cornerstone of this program through its effort to examine major artists and their relationships to nature in the context of a botanical garden.<sup>8</sup> Since implementing The Living Museum<sup>®</sup> model, Selby Gardens has experienced a 55 percent increase in admissions and membership has increased by 67 percent, to nearly 14,000 households.<sup>9</sup> As a result, Selby engages in a rotating exhibition calendar containing up to four different shows a year at its Downtown Campus and one to two shows a year at its Historic Spanish Point Campus.<sup>10</sup> Selby is a noncollecting institution, meaning that it does not own a personal collection of fine art. Instead, Selby borrows objects from other lenders in the area to display in the Museum and creates interpretive elements to show in their gardens.<sup>11</sup>

## ANALYZING THE EXHIBITIONS

### "Rainforest Masks of Costa Rica" (January 7, 2022-February 7, 2022)

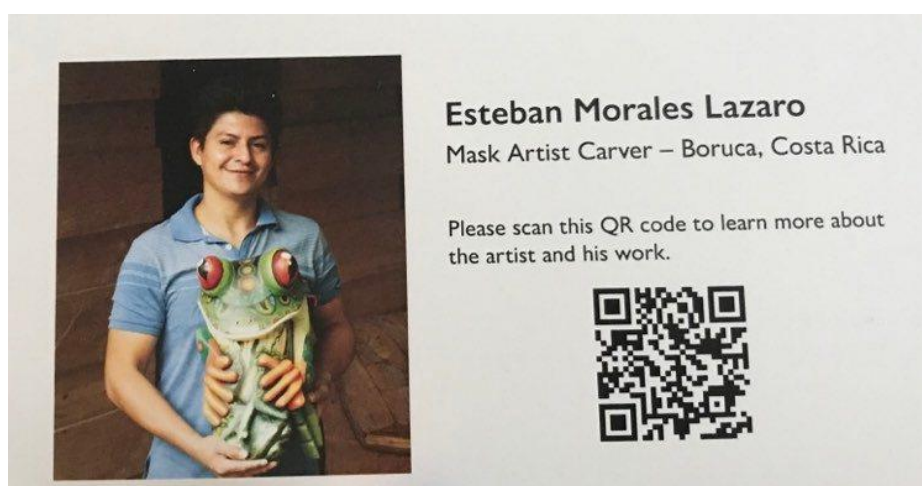
Each January for the last 18 years, Marie Selby Botanical Gardens has hosted the "Rainforest Masks of Costa Rica" exhibition. This exhibition examines the approach of curation in a botanical garden setting. The exhibition highlights the artistry of the Indigenous Boruca tribe of Costa Rica by displaying hundreds of hand-carved and painted balsa wood masks in the Museum of Botany and the Arts. Each mask features flora and fauna designs inspired by the tropical rainforests of Costa Rica.<sup>12</sup> Last year, along with showing the masks, the curatorial team also created descriptive panels and interpretive materials describing the process of the Borucan mask carvers and painters. In the North and South Galleries, center room display cases housed replicated fruits and nuts that would have been used to create the paint pigments, as well as some of the tools used for carving. Additional displays added contextual information concerning the coloration and shapes of the masks, which allowed visitors to better understand the artistic value that Borucan heritage holds. These additional measures give visitors a knowledge base of the Borucan people by supplementing such information through interpretive materials.<sup>13</sup>

Text panels located in the gallery spaces also highlight the historic origins of the masks, which were originally created by native peoples in defense against Spanish colonizers.<sup>14</sup> Modernly, most of the artists are residents of the Boruca Village and make their living as mask and textile artisans.<sup>15</sup> The masks combine the talents of wood carving and painting—blending two distinct artistic traditions

together. Each mask is made from a single log of balsa wood, which is carved by one artist and painted by another. “The most popular masks are now representations of the rainforest and its inhabitants, such as hummingbirds and panthers.”<sup>16</sup> Figure 1 gives a closeup of some of these designs.<sup>17</sup> In the “Rainforest Masks” exhibition, masks were organized based on the carver with labels giving biographical information about the appropriate artists. Linked via QR code, a photo and information about the artist’s inspiration was also given on Selby’s website (Figure 2).<sup>18</sup>



*Figure 1. Hung Masks by Esteban Morales Lazaro*



*Figure 2. Artist label featuring Esteban Morales Lazaro*

In past years, some of the Borucan artists have visited Selby and given classes, workshops, and lectures on their artistic practices in the Museum. These interactive programs transformed the

museum setting from “a standalone container of housing art, [to a] hub of human interaction.”<sup>19</sup> This unique approach of working directly with indigenous artists also extended to working with fair-trade business, Lucuma Designs, (or “Lucuma”).<sup>20</sup> Lucuma owners handled the logistics of working with the Borucan artists in Costa Rica to organize the shipment of Borucan art over 3,500 miles to Sarasota, Florida.<sup>21</sup> Lucuma staff also worked with Selby’s team to hang and design the mask display on the walls and in the cases (Figure 3).<sup>22</sup> By allowing community partners, like Lucuma, to co-curate content on behalf of the Borucan people, the exhibition became community centered and a space where marginalized voices were heard.<sup>23</sup>



*Figure 3. Display Case of Mini Masks*

Lucuma staff also priced and oversaw the sale of the masks—a nontraditional practice in the museum world. As a botanical garden, Selby is technically considered a museum but treads a fine line of visitors not always assuming that a botanical garden will act in the same ways as that of a typical museum. This lack of expectation allows Selby to partake in nontraditional approaches when it comes to curating exhibitions. These approaches include the sale of the displayed masks, which yielded a commission for Selby, Lucuma Designs, and the Borucan artists. “The economic gain the art form has brought to the village has allowed former farmland to regrow naturally, bringing more biodiversity to the area.”<sup>24</sup> Additionally, as visitors perused the gallery space, they also learned about Borucan traditions, and ultimately felt encouraged to purchase a mask or two to hang in their personal space. Following the month-long exhibition, purchasers then either returned to Selby to pick up their masks or opted to have them shipped to their home for a fee. By taking home a mask, the education of the exhibition continues as owners share the story of their mask with visitors to their home. According to Henry Jenkins, taking home a totem from an exhibition is an extractive way to continue connecting visitors with an experience even after they have had it.<sup>25</sup>

### **“Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light” (February 13-June 26, 2022)**

Selby’s Spring 2022 exhibition at its Downtown Sarasota Campus featured some of the foremost works of photographer, Robert Mapplethorpe, displayed alongside the words of rock-and-roll legend, Patti Smith.<sup>26</sup> This exhibition captures the innovative ways that setting can be utilized in an exhibition

staged at a botanical garden. The exhibition is described on the Selby website as an immersive, multisensory experience. “[T]he exhibition features several of Mapplethorpe’s exquisite photographs of flowers, Smith’s haunting lyrics and poetry about flowers and nature, and stunning new horticultural vignettes in [the] Tropical Conservatory and Gardens that reflect their intertwined work through living art.”<sup>27</sup> The referenced vignettes, original photographs by Mapplethorpe, and paraphernalia of Smith are displayed as part of the “Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light” exhibition, displayed throughout the 15 acres of Selby’s Gardens and inside the Museum of Botany and the Arts (Figure 4).<sup>28</sup>

The Museum of Botany and the Arts tells the story of Mapplethorpe and Smith’s early days of living in New York City together. Visitors enter the Museum through the Sun Porch and are greeted by a docent. Here, visitors are introduced to the story of Mapplethorpe and Smith’s chance meeting and immediate connection. Following the Sun Porch Gallery is the South Gallery, which holds pictures of Mapplethorpe and Smith’s time living in the Chelsea Hotel. Displayed photographs also reveal intimate moments of Mapplethorpe and Smith embracing each other or at an event (Figure 5).<sup>29</sup> These first two rooms are meant to set the stage for the strong bond that Mapplethorpe and Smith built together as creative soulmates, and then how this creative partnership inspired each of their later on successes.



*Figure 4. Scrim of Patti Smith; Originally taken by Lynn Goldsmith, 1977*



Figure 5. *Scrim of Patti Smith and Mapplethorpe*; Originally taken by Lynn Goldsmith, 1977

Before entering to the garden space of the exhibition, visitors are encouraged to enter the third and last room of the Museum of Art and Botany's display. In this room, six of Mapplethorpe's works are displayed; they were loaned to Selby from the University of South Florida and the GraphicStudio, Tampa. These photogravures were originally printed by Mapplethorpe at the GraphicStudio as part of his portfolio of *momento mori*, flower still lifes.<sup>30</sup> "Many of his finest still lifes feature cut flowers in vases from his own glass and pottery collections. His images made floral still life a significant contemporary genre, heightening the status of photography as an art form in the process."<sup>31</sup> As seen in Figure 6, of the six photogravures on display, one is of irises.<sup>32</sup> Dr. Carol Ockman describes his works as each being "a perfect shot" which captures the essence of his subject matter.<sup>33</sup>



*Figure 6. Mapplethorpe's Irises*

To aid in visitor understanding of the exhibition, docent volunteers are also placed strategically in each room to answer exhibition related questions. Docents engaging with audiences create a personal experience based one-on-one interactions. Each volunteer is trained in Visual Thinking Strategies (VTS), allowing the docent to ask visitors questions related to what they are seeing, comment on their impressions of art, or express any other opinion they might have about the art in the gallery.<sup>34</sup> Museologists, John Falk and Lynn D. Dierking, attribute the learning that occurs through human interaction as part of the sociocultural approach of learning. The sociocultural context of a museum is rooted in its ability to implement educational material while adhering to the social and cultural norms of the audience.<sup>35</sup> For example, as visitors have conversations with docent guides, they come to their own conclusions.<sup>36</sup> An appropriate sociocultural application in education aids visitors in more effectively learning and remembering the exhibition material. Other aspects of Falk and Dierking's Contextual Model of museum education include the personal and the physical spaces.<sup>37</sup> These contexts play a large role in conveying greater amounts of information about Mapplethorpe's subject matters as visitors continue their exploration throughout the Garden portion of the exhibition. This Garden aspect of the exhibition includes nine different horticultural vignettes (separate from eight Poetry Walk stations). Each of these mini stories utilize floral landscaping to interpret an element of photography used by Mapplethorpe in his art. For example, when visitors approach the Welcome Center, they are met with a Trumpet Tree (*Tabebuia aurea*) enclosed inside of a boxlike structure on three sides (Figure 7).<sup>38</sup> This opening vignette introduces visitors to the concept of

frames. In the exhibition brochure, frames are mentioned as useful for focusing attention on a particular subject by offering a two-dimensional perspective of a three-dimensional subject.<sup>39</sup> As the visitor experiments with angles of viewing, the Trumpet Tree seems to flatten or heighten as the viewpoint of the tree changes. Ultimately this allusion to frames “reference the frames used to hang Mapplethorpe’s photographs on the walls of a gallery.”<sup>40</sup>



*Figure 7. Vignette titled, ‘Frames’*

Similarly, the vignettes titled “Aperture” and “Self-Portrait” also explore concepts of photography related to Mapplethorpe’s works. “Aperture” features a cube-like structure with a circular opening, referencing the aperture of a camera. In the center of this display are three standalone pedestals holding a display of flowers. As Figure 8 illustrates, light is cast on these botanical subjects, forming shadows of geometric patterns like those created in Mapplethorpe’s own black and white photography.<sup>41</sup> “Self-Portrait” (Figure 9) also references Mapplethorpe’s black-and-white photographs that made use of shades of gray in the plants’ foliage.<sup>42</sup> This Mapplethorpe-inspired photo opportunity enables the visitor “to enter the frame for a portrait of [their] own.”<sup>43</sup> After taking a photo, the visitor is then encouraged to share it on social media by using the handles, #SelbyGardens #BlackAndWhite.



*Figure 8. Vignette titled, 'Aperture'*



*Figure 9. Vignette titled, 'Self-Portrait'*

The whole exhibition has a low barrier for entry, allowing children and adult visitors alike to engage with the exhibition material.<sup>44</sup> This participatory culture is further fostered through multimedia interpretations of recordings and sensory experience that enhance interpretation.<sup>45</sup> For example, the vignette, “Tropical Conservatory,” evokes a photographer’s studio and gallery. This immersive

experience displays air plants suspended in floating frames paired with the sounds of Smith’s iconic *Horses* album (Figure 10).<sup>46</sup> In the same way, the vignette “23<sup>rd</sup> Street Fig” evokes the urban landscape of New York, “particularly the area along West 23<sup>rd</sup> Street in Manhattan near the Chelsea Hotel where Mapplethorpe and Smith once lived.”<sup>47</sup> On the pathway under the Lofty Fig (*Ficus altissima*) also plays an audio recording of Smith reading her memoir *Just Kids*. These vignettes work to answer museum curator, Ellen Lupton’s question of “[w]hat if we made an exhibition that engaged with the senses beyond the eyeball?”<sup>48</sup> The question is answered by utilizing multimodal means to communicate across platforms. As a result, the Selby staff engages audiences through many different platforms of communication.



Figure 10. Vignette titled “Floating Frames”

## CONCLUSION

After reviewing the case studies of “Rainforest Masks” and “Robert Mapplethorpe and Patti Smith,” the process of planning an exhibition in a botanical garden setting is shown to be like curating in a gallery-based setting. However, the treatment of approach and setting prove to be more flexible and open to innovation. For example, in the exhibition “Rainforest Masks,” the approach of selling the displayed Borucan masks following exhibition is forward-thinking. While displaying the masks as art with object labels and text panels speak to a museum-like approach of didactic learning, the sale of the masks reference activity that typically occurs in a commercial art gallery. Despite this more business informed model, mask purchases encourage Selby patrons to become invested in a multicultural exhibition to the point of incorporating a mask into their interior decoration design. While the purchasing aspect of the “Rainforest Masks” exhibition allows visitors to connect with the content on a deeper level, the “Robert Mapplethorpe and Patti Smith” exhibition relies upon unique approaches to setting—specifically setting as it relates to building a story through the principles of

transmedia storytelling. Jenkins principles of transmedia storytelling define story as a high concept able to sharpen understanding by showing it in context of something else.<sup>49</sup> Amongst the elements of storytelling is the ability to disperse information across multiple sections, thus allowing visitors to have the free-choice to delve deeper in a subject if they so choose.<sup>50</sup> Splitting the “Robert Mapplethorpe and Patti Smith” exhibition across the venues of the Gardens and Museum of Botany and the Arts allows visitors the ability to chunk materials and break them into smaller digestible concepts.<sup>51</sup> By placing the exhibition in a botanical garden setting, visitors also feel immersed in a world of performance dedicated to the learning of Mapplethorpe’s photography and Smith’s music. Vignettes make use of musical components to facilitate learning aurally while also making use of the sense of sight and potentially smell by being in a fragrant garden. Finally, visitors are also allowed an extractive element of the exhibition by being provided ideal photo-op spots tied to Mapplethorpe’s own tendency of taking portraits. After taking a photograph of their visit, garden guests are more likely to remember their visit and return or encourage someone else to attend. By examining these two exhibitions curated at Selby, endless possibilities for experimenting with approach and setting is revealed.

## **ACKNOWLEDGEMENTS**

This paper has been produced through research conducted at Marie Selby Botanical Gardens. Without the generous support of the head curator, botany team, and head of exhibitions, none of this research could have been possible.

## NOTES

<sup>1</sup> “Museum Definition,” International Council of Museum, ICOM, access date, 8 Apr. 2022.

<https://icom.museum/en/resources/standards-guidelines/museum-definition/>.

<sup>2</sup> “Nontraditional,” Merriam-Webster Online Dictionary, Merriam Webster, revised in 2022, <https://www.merriam-webster.com/dictionary/nontraditional>.

<sup>3</sup> Elena Gonzalez, “Introduction,” in *Exhibitions for Social Justice*, (New York: Routledge, 2009), 1-14. Daniel, “10 Steps to Curating an Exhibition” *Medium* (blog), December 15, 2017, <https://medium.com/@politicscurator/10-steps-to-curating-an-exhibition-cad585da471b>. Note: The importance of curatorial work, itself, is accomplished when social and environmental sustainability of human life is positively contributed. This goal of curating in a botanical garden setting is arguably accomplished with the same planning phases as would be executed in a more traditional gallery setting. For example, the five stages of the exhibition process entail the stages of planning, researching interpretation, design, production, and installation.

<sup>4</sup> The Executive Committee of CurCom, *Code of Ethics for Curators*, (American Association of Museums Curators Committee, 2009), <https://www.aam-us.org/wp-content/uploads/2018/01/curcomethics.pdf>. Note: The role and responsibility of museum curators have recently come under extensive scrutiny as questions of how to make the position more inclusive have arisen. While topics of multivocality and co-curation are important regarding the future expansion and accessibility of the field of curating, this paper is intended to focus more on the implication of approach and setting when it comes to curating in a botanical garden. The role of a curator is vital to the execution of these elements; thus, this paper's understanding of the position has been shaped by the American Alliance of Museum's (AAM) Code of Ethics for Curating. AAM designated curatorial roles include general responsibilities of researching the objects under their care and maintaining objectivity when compiling reference materials. The AAM definition of a curator also includes roles of developing museum collections and creating verbal and written interpretive materials located outside in a botanical garden or inside a gallery space.

<sup>5</sup> “Mission,” About Us Marie Selby Botanical Gardens, Marie Selby Gardens, 2020, revised in 2022. <https://selby.org/about/mission-vision-values/>.

<sup>6</sup> Selby Garden Receives Trademark: The Garden has Received “The Living Museum®” Trademark from the U.S. Patent and Trademark Office,” *Sarasota Magazine* (2019): <https://www.sarasotamagazine.com/news-and-profiles/2019/12/selby-gardens-receives-trademark>.

<sup>7</sup> Selby Garden Receives Trademark: The Garden has Received “The Living Museum®” Trademark from the U.S. Patent and Trademark Office,” *Sarasota Magazine* (2019): <https://www.sarasotamagazine.com/news-and-profiles/2019/12/selby-gardens-receives-trademark>.

<sup>8</sup> Marie Selby Botanical Gardens, “Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light,” (Sarasota, FL: Selby Gardens), 2. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>9</sup> Selby Garden Receives Trademark: The Garden has Received “The Living Museum®” Trademark from the U.S. Patent and Trademark Office,” *Sarasota Magazine* (2019): <https://www.sarasotamagazine.com/news-and-profiles/2019/12/selby-gardens-receives-trademark>.

<sup>10</sup> Kamien, Polly And Polly McKenna-Cress. “Advocacy For The Institution.” In *Creating Exhibitions: Collaboration In The Planning, Development, And Design Of Innovative Experiences*. Hoboken, New Jersey: John Wiley & Sons, 2013. Note: This concept of rotating exhibitions borrow from Polly McKenna-Cress's theory that exhibitions and programs drive attendance and aid in the museum's mission fulfillment. This initiative began in part by making accommodations necessary to the historic Spanish Point property and by transforming the historic Christy Payne mansion into the museum of botany and the arts—a space, equipped with displaying art exhibitions that bridge concepts of fine art and horticulture. The museum of botany and the arts is a renovated space that at one time was the home of the Payne family. Presently, Selby hosts part of its exhibitors on the first floor of the Payne mansion where the family would have had its dining room, living room, sun porch, and mother-in-law suite.

<sup>11</sup> Note: While Marie Selby Botanical Gardens does not own its own art collection but does preserve a large number of botanical species in their horticultural archives.

<sup>12</sup> Figure 6. Anneliese Hardman, iPhone photograph, “Hung Masks by Esteban Morales Lazaro” from the “Rainforest Masks of Costa Rica” exhibition,” Marie Selby Botanical Garden, Museum of Botany and the Arts, Sarasota, FL, 14 Jan. 2022.

<sup>13</sup> Marcella Wells, Barbara Butler, and Judith Koke, *Interpretive Planning for Museums: Integrating Visitor Perspectives in Decision Making*, (London, England: Routledge, 2013), <https://www.instituteforlearninginnovation.org/wp-content/uploads/2019/10/R4.pdf>

<sup>14</sup> “Rainforest Masks Of Costa Rica Exhibition Returns To Selby Gardens’ Downtown Sarasota Campus For 18th Year,” *Sarasota Magazine* (2020): <http://www.scenesarasota.com/magazine/rainforest-masks-of-costa-rica-exhibition-returns-to-selby-gardens-downtown-sarasota-campus-for-18th-year/>

<sup>15</sup> “Rainforest Masks of Costa Rica Exhibition Returns to Selby Gardens’ Downtown Sarasota campus for 18th Year,” *Sarasota Magazine* (2020): <http://www.scenesarasota.com/magazine/rainforest-masks-of-costa-rica-exhibition-returns-to-selby-gardens-downtown-sarasota-campus-for-18th-year/>

<sup>16</sup> Niki Kottmann, “Rainforest Masks of Costa Rica’ Conserves Culture at Marie Selby Botanical Gardens” *The Observer* (2019):

<https://www.yourobservers.com/article/rainforest-masks-of-costa-rica-marie-selby-botanical-gardens>.

<sup>17</sup> Figure 1. Anneliese Hardman, iPhone photograph, “Hung Masks by Esteban Morales Lazaro,” from the “Rainforest Masks of Costa Rica” exhibition, Marie Selby Botanical Garden, Museum of Botany and the Arts, Sarasota, FL, 14 Jan. 2022.

<sup>18</sup> Figure 2. Anneliese Hardman, *Esteban Morales Lazaro*, photograph of artist label, 14 Jan. 2022.

<sup>19</sup> Mike Murawski and Jackie Armstrong, “Museums Must Become More Trauma Informed,” *Museum Teaching: A Forum for Reflecting on Practice*, 3 Aug. 2020. <https://artmuseumteaching.com/2020/08/03/museums-must-become-more-trauma-informed/>

<sup>20</sup> For more information on Lucuma Designs, see their website: <https://lucuma.com/pages/fair-trade>

<sup>21</sup> Niki Kottmann, “Rainforest Masks of Costa Rica’ Conserves Culture at Marie Selby Botanical Gardens” *The Observer* (2019):

<https://www.yourobservers.com/article/rainforest-masks-of-costa-rica-marie-selby-botanical-gardens>.

<sup>22</sup> Figure 3. Anneliese Hardman, iPhone photograph of the display case of mini masks in the “Rainforest Masks of Costa Rica” exhibition, Marie Selby Botanical Gardens, Museum of Botany and the Art, Sarasota, FL, 14 Jan. 2022.

<sup>23</sup> Murawski, Mike, “Museums Are Us” in *Museums as Agents of Change: A Guide to Becoming a Change Maker*, (Washington D.C: Rowman and Littlefield Publishers, 2021).

<sup>24</sup> “Rainforest Masks of Costa Rica Exhibition Returns to Selby Gardens’ Downtown Sarasota campus for 18th Year,” *Sarasota Magazine* (2020): <http://www.scenesarasota.com/magazine/rainforest-masks-of-costa-rica-exhibition-returns-to-selby-gardens-downtown-sarasota-campus-for-18th-year/>

<sup>25</sup> Henry Jenkins, “Transmedia Education: The Seven Principles Revisited,” *Confessions of an ACA-Fan* (blog), June 10, 2010. [http://henryjenkins.org/blog/2010/06/transmedia\\_education\\_the\\_7\\_pri.html](http://henryjenkins.org/blog/2010/06/transmedia_education_the_7_pri.html)

<sup>26</sup> “Robert Mapplethorpe And Patti Smith: Flowers, Poetry, And Light (Now On View At Downtown Sarasota Campus),” Exhibition And Special Events, Marie Selby Botanical Gardens, Revised In 2020, <https://selby.org/dsc/dsc-exhibitions/jean-alfred-goldstein-exhibition-series/>

<sup>27</sup> “Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light (Now on View at Downtown Sarasota campus),” Exhibition and Special Events, Marie Selby Botanical Gardens, revised in 2020, <https://selby.org/dsc/dsc-exhibitions/jean-alfred-goldstein-exhibition-series//>

<sup>28</sup> Figure 4. Anneliese Hardman, iPhone photograph of scrim of Patti Smith, originally taken by Lynn Goldsmith, 1977, from “Robert Mapplethorpe and Patti Smith,” exhibition, Marie Selby Botanical Gardens, Museum of Botany and the Arts, Sarasota, FL, 4 April 2022.

<sup>29</sup> Figure 4. Anneliese Hardman, iPhone photograph of scrim of Patti Smith and Robert Mapplethorpe, originally taken by Lynn Goldsmith, 1977, from “Robert Mapplethorpe and Patti Smith,” exhibition, Marie Selby Botanical Gardens, Museum of Botany and the Arts, Sarasota, FL, 4 April 2022.

<sup>30</sup> Note: *Memento mori* is Latin for “remember that [have to] die.” This phrase has come to represent the artistic trope of the inevitability of death in artwork. Photogravure is a process for printing photographs, also sometimes used for reproductive intaglio printmaking.

<sup>31</sup> Marie Selby Botanical Gardens, “Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light,” (Sarasota, FL: Selby Gardens), 5. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>32</sup> Figure 6. Anneliese Hardman, iPhone photograph of a photographuvre of irises by Mapplethorpe, from the “Robert Mapplethorpe and Patti Smith,” exhibition, Marie Selby Botanical Gardens, Museum of Botany and Art, Sarasota, FL, 4 Apr. 2022

<sup>33</sup> Marie Selby Botanical Gardens, “Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light,” (Sarasota, FL: Selby Gardens), 5. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>34</sup> Abigail Housen and Philip Yenawine, “Basic VTS at a Glance,” VTS , 2016.

<file:///Users/apple/Downloads/Visual%20Thinking%20Strategies%20at%20a%20Glance.pdf>.

<sup>35</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*, (Lanham, MD: AltaMira Press, 2000) 65.

<sup>36</sup> Richard Sandell, "Museums as Agents of Social Inclusion," *Museum Management and Curatorship* 17, no. 4 (1998): 401-418.

<sup>37</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*, (Lanham, MD: AltaMira Press, 2000) 65. Note: The physical context of museum education refers to learning not just being defined by a physical context, but also in relation to a situated position within the physical context. Dierking and Falk (2000) explain it as "[s]patial learning [that] is not just a specialized and isolated type of learning but is integrated with all types of learning; all learning is influenced by the awareness of place."

<sup>38</sup> Figure 7. Anneliese Hardman, iPhone photograph of vignette titled, "Frames," from the "Robert Mapplethorpe and Patti Smith," exhibition, Marie Selby Botanical Gardens, Museum of Botany and Art, Sarasota, FL, 4 Apr. 2022.

<sup>39</sup> Marie Selby Botanical Gardens, "Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light," (Sarasota, FL: Selby Gardens), 7-8. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>40</sup> Marie Selby Botanical Gardens, "Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light," (Sarasota, FL: Selby Gardens), 7-8. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>41</sup> Figure 8. Anneliese Hardman, iPhone photograph of vignette titled, 'Aperture,' from the "Robert Mapplethorpe and Patti Smith," exhibition, Marie Selby Botanical Gardens, Museum of Botany and Art, Sarasota, FL, 4 Apr. 2022.

<sup>42</sup> Figure 9. Anneliese Hardman, iPhone photograph of vignette titled, "Self Portrait," from the "Robert Mapplethorpe and Patti Smith," exhibition, Marie Selby Botanical Gardens, Museum of Botany and the Art, Sarasota, FL, 4 April 2022.

<sup>43</sup> Marie Selby Botanical Gardens, "Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light," (Sarasota, FL: Selby Gardens), 7-8. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>44</sup> Henry Jenkins, "Participatory Culture," TEDxNYED, 2010, YouTube video, [https://www.youtube.com/watch?v=AFCLKa0XRlw&ab\\_channel=TEDxTalks](https://www.youtube.com/watch?v=AFCLKa0XRlw&ab_channel=TEDxTalks).

<sup>45</sup> M. Pegno and C. Brindza, "Redefining Curatorial Leadership and Activating Community Expertise to Build Equitable and Inclusive Art Museums" *Curator* 64, no. 2 (2021): 343-362.

<sup>46</sup> Figure 10. Anneliese Hardman, iPhone photograph of vignette titled, 'Floating Frames,' from the "Robert Mapplethorpe and Patti Smith," exhibition, Marie Botanical Gardens, Museum of Botany and Art, Sarasota, FL, 4 Apr. 2022.

<sup>47</sup> Marie Selby Botanical Gardens, "Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light," (Sarasota, FL: Selby Gardens), 7-8. [https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).

<sup>48</sup> Ellen Lupton, "Museums Should Activate Multiple Senses, Not Just the Eyeball, TEDxMidAtlantic, 2017, YouTube video, [https://www.youtube.com/watch?v=m1-r7CR6Fsl&ab\\_channel=TEDxTalks](https://www.youtube.com/watch?v=m1-r7CR6Fsl&ab_channel=TEDxTalks).

<sup>49</sup> D. Pink, "Introducing the 6 Senses" in *A Whole New Mind: Why Right-Brainers will Rule the Future*, (New York: Riverhead Books, 2006).

<sup>50</sup> Henry Jenkins, "Transmedia Education: The Seven Principles Revisited," *Confessions of an ACA-Fan* (blog), June 10, 2010. [http://henryjenkins.org/blog/2010/06/transmedia\\_education\\_the\\_7\\_pri.html](http://henryjenkins.org/blog/2010/06/transmedia_education_the_7_pri.html)

<sup>51</sup> Eric Morse, "Falk and Dierking The Museum Experience Continues to Inspire," *Museumtopia*, 2017, <https://museumtopia.wordpress.com/2017/01/24/falk-and-dierkings-the-museum-experience-continues-to-inspire/>

## BIBLIOGRAPHY

Butler, Barbara, Judith Koke, and Marcella Wells. *Interpretive Planning for Museums: Integrating Visitor Perspectives in Decision Making*. London, England: Routledge, 2013.

<https://www.instituteforlearninginnovation.org/wp-content/uploads/2019/10/R4.pdf>

Daniel. "10 Steps to Curating an Exhibition." *Medium* (blog). December 15, 2017.

<https://medium.com/@politicscurator/10-steps-to-curating-an-exhibition-cad585da471b>

- Falk, John H. and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*. Lanham, MD: AltaMira Press, 2000.
- Gonzalez, Elena. "Introduction." In *Exhibitions for Social Justice*. New York: Routledge, 2009.
- Housen, Abigail and Philip Yenawine. "Basic VTS at a Glance." VTS. 2016.  
file:///Users/apple/Downloads/Visual%20Thinking%20Strategies%20at%20a%20Glance.pdf.
- Jenkins, Henry. "Participatory Culture." TEDxNYED. 2010. YouTube video.  
[https://www.youtube.com/watch?v=AFCLKa0XRIw&ab\\_channel=TEDxTalks](https://www.youtube.com/watch?v=AFCLKa0XRIw&ab_channel=TEDxTalks).
- Jenkins, Henry. "Transmedia Education: The Seven Principles Revisited." *Confessions of an ACA-Fan* (blog). June 10, 2010. [http://henryjenkins.org/blog/2010/06/transmedia\\_education\\_the\\_7\\_pri.html](http://henryjenkins.org/blog/2010/06/transmedia_education_the_7_pri.html)
- Kamien, Polly And Polly Mckenna-Cress. "Advocacy For The Institution." In *Creating Exhibitions: Collaboration In The Planning, Development, And Design Of Innovative Experiences*. Hoboken, New Jersey: John Wiley & Sons, 2013.
- Kottmann, Niki. "Rainforest Masks of Costa Rica' Conserves Culture at Marie Selby Botanical Gardens." *The Observer* (2019): <https://www.youobserver.com/article/rainforest-masks-of-costa-rica-marie-selby-botanical-gardens>.
- Lupton, Ellen. "Museums Should Activate Multiple Senses, Not Just the Eyeball. TEDxMidAtlantic. 2017. YouTube video. [https://www.youtube.com/watch?v=m1-r7CR6Fsl&ab\\_channel=TEDxTalks](https://www.youtube.com/watch?v=m1-r7CR6Fsl&ab_channel=TEDxTalks).
- Marie Selby Botanical Gardens. "Visitor Guide of Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light." Sarasota, FL: Selby Gardens.  
[https://selby.org/wp-content/uploads/Mapplethorpe-Smith\\_Visitor-Guide\\_FINAL.pdf](https://selby.org/wp-content/uploads/Mapplethorpe-Smith_Visitor-Guide_FINAL.pdf).
- "Mission." About Us Marie Selby Botanical Gardens. Marie Selby Gardens, 2020. Revised in 2022.  
<https://selby.org/about/mission-vision-values/>.
- Eric Morse, "Falk and Dierking the Museum Experience Continues to Inspire," *Museumtopia*, 2017,  
<https://museumtopia.wordpress.com/2017/01/24/falk-and-dierkings-the-museum-experience-continues-to-inspire/>
- Murawski, Mike, "Museums Are Us" in *Museums as Agents of Change: A Guide to Becoming a Change Maker*, (Washington D.C: Rowman and Littlefield Publishers, 2021).
- Murawski, Mike and Jackie Armstrong. "Museums Must Become More Trauma Informed." *Museum Teaching: A Forum for Reflecting on Practice*, 3 Aug. 2020. <https://artmuseumteaching.com/2020/08/03/museums-must-become-more-trauma-informed/>
- "Museum Definition." International Council of Museum." ICOM. Access date, 8 Apr. 2022.  
<https://icom.museum/en/resources/standards-guidelines/museum-definition>.
- "Nontraditional." Merriam-Webster Online Dictionary. Merriam Webster. Revised in 2022. <https://www.merriam-webster.com/dictionary/nontraditional>.
- Pink, D." Introducing the 6 Senses" in *A Whole New Mind: Why Right-Brainers will Rule the Future*, (New York: Riverhead Books, 2006).
- Pegno, M and C. Brindza, "Redefining Curatorial Leadership and Activating Community Expertise to Build Equitable and Inclusive Art Museums." *Curator* 64, no. 2. 2021.
- "Rainforest Masks of Costa Rica Exhibition Returns to Selby Gardens' Downtown Sarasota campus for 18th Year," *Sarasota Magazine* (2020):  
<http://www.scenesarasota.com/magazine/rainforest-masks-of-costa-rica-exhibition-returns-to-selby-gardens-downtown-sarasota-campus-for-18th-year/>
- "Robert Mapplethorpe and Patti Smith: Flowers, Poetry, and Light (Now on View at Downtown Sarasota campus)," Exhibition and Special Events, Marie Selby Botanical Gardens, revised in 2020,  
<https://selby.org/dsc/dsc-exhibitions/jean-alfred-goldstein-exhibition-series/>
- Sandell, Richard. "Museums as Agents of Social Inclusion." *Museum Management and Curatorship* 17, no. 4. 1998. 401-418.
- "Selby Garden Receives Trademark: The Gardens has Received 'The Living Museum®' Trademark from the U.S. Patent and Trademark Office." *Sarasota Magazine* (2019): <https://www.sarasotamagazine.com/news-and-profiles/2019/12/selby-gardens-receives-trademark>.
- The Executive Committee of CurCom. *Code of Ethics for Curators*. American Association of Museums Curators Committee, 2009. <https://www.aam-us.org/wp-content/uploads/2018/01/curcomethics.pdf>.

## IMAGE BIBLIOGRAPHY

Figure 1. Hardman, Anneliese. iPhone photograph of “Hung Masks by Esteban Morales Lazaro.” From the “Rainforest Masks of Costa Rica.” Exhibition. Marie Selby Botanical Garden, Museum of Botany and the Arts. Sarasota, FL. 14 Jan. 2022.

Figure 2. Hardman, Anneliese. iPhone photograph of artist label featuring Esteban Morales Lazaro. From the “Rainforest Masks of Costa Rica.” Exhibition. Marie Selby Botanical Garden. Sarasota, FL. 14 Jan. 2022.

Figure 3. Hardman, Anneliese. iPhone photograph of the display case of mini masks. In the “Rainforest Masks of Costa Rica.” Exhibition. Marie Selby Botanical Gardens, Museum of Botany and the Arts. Sarasota, FL. 14 Jan. 2022.

Figure 4. Hardman, Anneliese. iPhone photograph of scrim of Patti Smith. Originally taken by Lynn Goldsmith. 1977. Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Selby Botanical Gardens, Museum of Botany and the Arts. Sarasota, FL. Accessed 4 Apr. 2022.

Figure 5. Hardman, Anneliese. iPhone photograph of scrim of Patti Smith and Robert Mapplethorpe. Originally taken by Lynn Goldsmith. 1977. Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Selby Botanical Gardens, Museum of Botany and the Arts. Sarasota, FL. Accessed 4 Apr. 2022.

Figure 6. Hardman, Anneliese. iPhone photograph of a photographuvre of irises by Mapplethorpe. Originally taken by Robert Mapplethorpe. From the “Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Selby Botanical Gardens, Museum of Botany and Art. Sarasota, FL, 4 Apr. 2022

Figure 7. Hardman, Anneliese. iPhone photograph of vignette titled, ‘Frames.” From the “Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Selby Botanical Gardens, Museum of Botany and the Arts. Sarasota, FL. 4 Apr. 2022.

Figure 8. Hardman, Anneliese. iPhone photograph of vignette titled, ‘Aperture.” From the “Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Selby Botanical Gardens. Museum of Botany and the Arts. Sarasota, FL. 4 Apr. 2022.

Figure 9. Hardman, Anneliese. iPhone photograph of vignette titled, ‘Self-Portrait.” From the “Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Selby Botanical Gardens. Museum of Botany and the Arts. Sarasota, FL. 4 Apr. 2022.

Figure 10. Hardman, Anneliese. iPhone photograph of vignette titled. ‘Floating Frames.” From the “Robert Mapplethorpe and Patti Smith.” Exhibition. Marie Botanical Gardens, Museum of Botany and Art. Sarasota, FL. 4 Apr. 2022.

## THE SPACE OF VISTAVISION

Author:

**MARSHALL DEUTELBAUM**

Affiliation:

PURDUE UNIVERSITY, USA

---

In the years following World War II many Americans stopped going to the movies. Movie attendance fell from an all-time high of 90 million admissions in the years immediately after the war to less than half of that number by 1953. Much of the decline was caused by the great migration to the suburbs that left urban theaters behind. Returning veterans took advantage of the benefits of the G. I. Bill to purchase small tract homes with little or no money down. The move to the suburbs coincided with a baby boom as couples set about starting families. The home became the center of focus, especially once television sets became available. For many families, television's "free" entertainment took the place of movie going.

The Hollywood studios looked for ways to attract audiences back to the theaters. In 1952, the spectacular box office success of Cinerama captured the studios' attention even though the process was not suited for feature film production. Cinerama employed three 35mm projectors to create a single composite image virtually as wide as human vision. Projected on a deeply curved screen and accompanied with a stereo soundtrack, the format offered viewers an immersive experience. The studios sought a simpler version of Cinerama, a format compatible with existing theatrical projection that would provide a wide image with stereo sound on a single strip of film.

One simpler format developed by Paramount Pictures was VistaVision. Because VistaVision employed a much larger negative, its projected image was capable of sharper focus and a greater depth of field. "Depth of field" in motion picture photography refers to the distance, from how close to how far away, a subject in front of the camera will be in focus. VistaVision's depth of field was quite expansive, able to hold objects from very close to the camera to very far away from it in equally sharp focus. To emphasize its superior visual quality, Paramount touted VistaVision as "motion picture high fidelity."<sup>1</sup>

This essay explains how VistaVision's superior depth of field is consistently incorporated into the design program of *The Tin Star* (Paramount Pictures, 1957; director, Anthony Mann; set designers, Hal Pereira and Joseph MacMillan Johnson; cinematographer, Loyal Griggs).

The design of the sheriff's office, the arrangement of action that simultaneously fills the foreground, middle ground, and background of the frame, and the movement of characters toward and away from the camera, rather than laterally, illustrate how the filmmakers' aesthetic decisions were made with the potentialities of VistaVision's depth of field at the center of their planning. Storytelling is perfectly matched to the potentialities of the VistaVision format.

*The Tin Star* is a story of redemption in which Morgan Hickman (Henry Fonda), a disillusioned former sheriff turned bounty hunter, regains his faith in law keeping by mentoring a novice sheriff, Ben Owens (Anthony Perkins), in the skills he needs to succeed in his job.<sup>2</sup> At the beginning of movie

Hickman rides into an unnamed town where he stops at the sheriff's office to claim the reward for a wanted outlaw that he has killed. The sheriff's office is designed with unusually tall, wide windows that look out onto the goings on in the town. Thus at the same time Hickman looks for the sheriff inside the office, we can see outside that the town elders, led by the mayor, are making their way to the office to express their displeasure at the presence of a bounty hunter in their town. From the details of the office desk in the foreground of the shot to the towns-people visible through the windows in the background, the entire scene is in sharp focus. This unusually deep depth of focus enables the filmmakers to present simultaneous action in multiple planes of depth.



*Figure 1. The View from the Sheriff's Office*

Depth of field is central to the two dramatic showdowns whose measure the town's young sheriff's competence in facing the town's bully, Bart Bogardus (Neville Brand). The first showdown begins when Bogardus chases a half-breed from the town saloon and shoots him to death in the street. The action is staged in depth and carefully composed to be visible through the windows of the Sheriff's Office through which Hickman, Sheriff Owens, and his sweetheart, Millie Parker (Mary Webster) watch the killing. The design of the Sheriff's Office, with more windows than solid walls, perfectly frames the action that takes place in the distance. Because of VistaVision's great depth of field, there is no need to cut to a closer shot to show the shooting.



*Figure 2. The killing of the Half-breed*

Walking away from his Office, Ben Owens stops to examine the body of the man Bogardus shot. Hickman and Millie Parker, are visible in the background standing on the sidewalk outside the Sheriff's Office.



*Figure 3. The Sheriff Approaches Bart Bogardus*

The Sheriff walks on to confront Bogardus. Millie and Hickman, even further in the background, remain visible on the sidewalk. The Sheriff draws his gun. As Bogardus raises his hands, Hickman leaves the sidewalk and moves to his right. Bogardus suggests that he and the Sheriff have a drink and talk the situation over. Bogardus wipes his brow and removes his hat, lowering it to front of his holster. Engaged in the conversation, the Sheriff lowers his gun. Hickman moves further to his right.



*Figure 4. Hickman moves to his right as The Sheriff Lets His Guard Down*



*Figure 5. Hickman Shoots the Gun from Bogardus' Hand*

Composition in depth makes the staging of simultaneous action possible in both the foreground and the background. The audience sees that the bully is using his hat to hide his drawing his gun on the unsuspecting sheriff. Shielding the action with his hat, Bogardus slowly begins to draw his revolver. However before he can level it to shoot the Sheriff, Hickman shoots Bogardus' hat and gun out of his

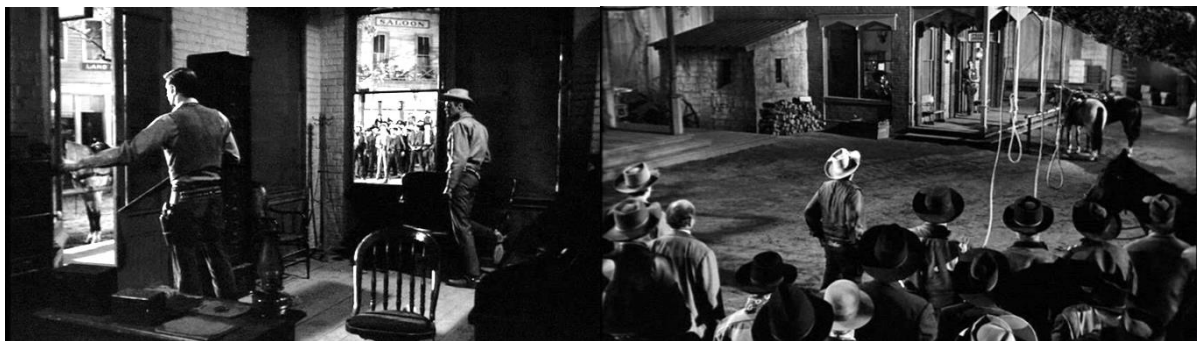
hand. Owens quickly raises his gun and takes Bogardus into custody. Hickman begins to mentor the novice Sheriff in the job of being a lawman.

The second showdown between Sheriff Owens and Bart Bogardus later in the movie illustrates how well the young Sheriff has learned to handle his job under Hickman's tutelage. It occurs after Owens has arrested and jailed the two men who killed the town's doctor. While he means for them to have a fair trial, Bogardus leads a mob that threatens to lynch the men. Owens and Hickman wait in the Sheriff's Office to see what the mob will do.



*Figure 6. Hickman and the Sheriff Wait to See What the Mob Will Do*

A rock thrown through the window sends the shade up to reveal the mob out on the street outside the jail. As in the earlier showdown, in a confrontation staged in great depth, the Sheriff leaves the Office to face Bogardus and the mob. Holding a shotgun, Owens confronts Bogardus who says he'll tear him apart if he puts the gun down. Owens hands the shotgun to Hickman and walks toward Bogardus. Hickman watches from the sidewalk. Standing close to Bogardus, Owens calls the bully's bluff. By staying on the sidewalk instead of moving closer to Bogardus as he did earlier, Hickman signals his confidence in Owen's competence. Bogardus turns his back to Owens and walks away.



*Figure 7. The Sheriff Confronts Bogardus and the Mob*



*Figure 8. Borgadus Threatens to Tear the Sheriff Apart if He Puts his Gun Down*



Figure 9. *The Sheriff Calls Bogardus' Bluff*



Figure 10. *The Sheriff Kills Bogardus*

The lynch mob lines his path. Hickman continues to watch from the sidewalk. Bogardus suddenly turns, draws his guns, and fires at the Sheriff. Owens drops into a crouch and returns fire, killing Bogardus. The Sheriff has matured enough in his job to handle the town bully by himself.

The preceding confrontations illustrate how carefully the filmmakers designed the sets and the action in *The Tin Star* to incorporate the spatial potentialities of VistaVision. Thanks to the format's exceptional depth of field, characters are shown in the context of their surroundings. Additionally, action extends in space from the foreground to the background in sharp clarity and exact framing, as when the Sheriff, Millie, and Hickman, witness Bogardus' killing of the half-breed. The shooting is framed in one office window, while the half-breed's fall is framed in another. Similarly, Hickman's move to the side in deep space during the first confrontation as the Sheriff and Bogardus converse in the foreground shows how VistaVision's depth of field makes it possible to depict two simultaneous actions in different plains of depth. Conversely, the continuous view of Hickman's fixed position on the sidewalk in the depth of the frame during the second confrontation announces his confidence in the Sheriff's judgement. In realizing the potentialities of VistaVision's depth of field, *The Tin Star* offers viewers a rare opportunity to experience the fullness of depicted space beyond the screen.

## NOTES

<sup>1</sup>For an explanation of the VistaVision process, see Lenny Lipton, “Widescreen and VistaVision,” in *The Cinema in Flux: The Evolution of Motion Picture Technology from the Magic Lantern to the Digital Era*. (New York: Springer, 2021), 561-565.

<sup>2</sup> For a discussion of the film’s themes, see Jeanine Basinger, *Anthony Mann: New and Expanded Edition*. (Middletown: Wesleyan University Press, 2007): 111-118.

## BIBLIOGRAPHY

The American Widescreen Museum. “VistaVision” Wing.

<http://www.widescreenmuseum.com/widescreen/wingvv1.htm>. Accessed April 22, 2023.

Belton, John. *Widescreen Cinema*. Cambridge: Harvard University Press, 1992.

Basinger, Jeanine. *Anthony Mann: New and Expanded Edition*. Middletown: Wesleyan University Press, 2007.

Bordwell, David. *On the History of Film Style*. Cambridge: Harvard University Press, 1997.

Bordwell, David. “CinemaScope: The Modern Miracle You See Without Glasses.” In *Poetics of Cinema*, 281-325. New York: Routledge, 2008.

Keating, Patrick. *The Dynamic Frame: Camera Movement in Classical Hollywood*. New York: Columbia University Press, 2019.

Lipton, Lenny. *The Cinema in Flux: The Evolution of Motion Picture Technology from the Magic Lantern to the Digital Era*. New York: Springer, 2021.

Neale, Steve. “The Art of the Palpable: Composition and Staging in the Widescreen Films of Anthony Mann.” In *Widescreen Worldwide*, edited by John Belton, Sheldon Hall, and Steve Neale, 91-106. New Barnet: John Libbey, 2010.

Rhodes, John David. “White Christmas, or Modernism.” *Modernism/modernity* 13.2 (2006): 291-308.

Roberts, Steven F. “High Fidelity Widescreen Cinema: VistaVision Film Production and Style in Britain and the USA.” Doctoral dissertation, The University of Bristol, 2020.

## THE REALITIES OF FRAGMENTS

Authors:

**WONSEOK CHAE**

Affiliation:

THE UNIVERSITY OF WUPPERTAL, GERMANY

---

### INTRODUCTION

In architectural discourse, the concept of fragments has often represented the concept of reality in a historical sense. In this case, the form of fragments or process of fragmentations belonged to archaeological studies such as *Forma Urbis*. The marble fragments from ancient Rome were considered as “fragments”<sup>1</sup> with their broken, imperfect, weathered, or deformed forms partially discovered on historical sites. Extending the meaning, the traditional forms also have been considered as fragments since they are discovered as an archaeological fashion.<sup>2</sup> They are also found broken, fractured, or damaged from history yet attempted to be revitalized with the original meanings by historians in the same view point.

In the 21<sup>st</sup> century, on the one hand, the concept of fragments seems to be used for representing virtual realities over the factual one. In the case of AI driven applications, it is difficult to find an image without multiple fragments seamlessly collaged in possible or virtual manners. In the case of 3d scanning technology, a single architecture or an entire city is constructed in 3d models from the numerous fragments of aerial or street photos. These models cannot come out of conventional compositions or principles but out of multiple incongruent fragments which might be against reality or external space as we knew before.

On the other hand, these virtual realities are more recognized and acknowledged by digital tools but not by contents. They become hollow software vessels which merely represent new digital technologies. In many cases, the concept of reality is used without reasonable narratives and contents about what is real or reality in the first place. It is not difficult to experience this problem of reality such as virtual reality, augmented reality, and extended reality, or mixed reality. There are many different realities yet, most of them seem to either avoid specifying what the quality of reality is or predetermine reality as a whole external space as Lacanian definition:

reality is external reality, our social and material space to which we are used and within which we are able to orient ourselves and interact with others, while the real is a spectral entity, invisible and for that very reason appearing as all-powerful.<sup>3</sup>

### THE CITY SYMPHONY

The city symphony could be seen as a genre of architectural representation from the early 20th century. It represents the concept of reality through fragmentation techniques in films. The fragments contain disconnected, destabilized, and defamiliarized forms from the conventional stylistic representation such as techniques of perspective and effect of picturesque from the 19th century. The fragmentation reveals the hidden reality behind the conventional representation of the city in the past.<sup>4</sup>

For example, in the Berlin City Symphony, a wide variety of architectural forms are arrayed in unique sequences or compositions that define as well as question what real or reality is in fragments. The fragments do not alienate the city entirely from the previous representation of reality. On the contrary, they aim at emphasizing the status of fragments slightly off the conventional representational method of the city in a critical perspective.<sup>5</sup> Some scenes from the city symphony have similar compositions and sequences to the 19th century's representation of the city with spectacular perspectives and effervescent silhouette in picturesque ambience such as JMW Turner's typical urban drawings.<sup>6</sup> Although the subject is the same as the cities, city symphonies rely less on the familiar techniques of perspective and picturesque effect but more on the technique of fragmentation.<sup>7</sup> This could be because of the growing awareness of reality and the discrepancies between changing reality and conventional representation methods of reality since the beginning of the 20th century.<sup>8</sup>

### **FRAGMENTS AGAINST PERSPECTIVE AND PICTURESQUE**

In 1976, Italian architect Manfredo Tafuri presented the concept of fragments in his book "Architecture and Utopia". Tafuri briefly theorized the fragmentation technique as a critical tool against the natural realism of the 19th century. According to Tafuri, in the history of urban architecture, realism had been formulated largely based on natural realism in which the meaning of the real was conceived as what is natural through the technique of perspective and effect of picturesque.<sup>9</sup>

First of all, the idea of perspective has been a dominant technique of realism in art and architecture majorly since the Renaissance. The perspective technique simulates a natural phenomenon of vision by manipulating horizon, focal point, or dimensions between objects. Since a perspective drawing implies a singular viewpoint, it often signifies a totalitarian ideology of power which is closely linked to political or institutional problems such as archetypes, orders, or even rationalism.<sup>10</sup> Tafuri coined the term "antiperspective"<sup>11</sup> to signify the growing criticism in representing reality of architectural forms and modern cities. The anti-perspective or "anti-institutional"<sup>12</sup> criticisms refuted mannerism where architectural forms are fixed to certain meanings and representations in formalism as well.

Since 1979, American architect Peter Eisenman's arguments have been similar to Tafuri when it comes to representing reality apart from naturalistic realism. In "Aspects of Modernism: Maison Dom-ino and the Self-Referential Sign," Eisenman criticized "superficial stylistic"<sup>13</sup> representations of the most modern architectures. Eisenman claimed that if the modernism architectures claim the new forms, they have to disconnect the previous representation methods such as perspective and look for another one.<sup>14</sup> Eisenman represented Le Corbusier's Maison Dom-ino with axonometric drawings to overcome the conventional representation from the original drawings on the naturalistic realism borrowed from the Renaissance.<sup>15</sup> In "The Representations of Doubt", Eisenman also stated that "With the introduction of perspective, architecture was no longer merely a form of reality itself, but also imitated reality."<sup>16</sup>

Second, Tafuri also argued that the aesthetics of the picturesque limits architectural design in the mannerism of natural realism. In the 18th to 19th century, the picturesque framed the idea of what the natural is, mostly with organic and material quality as a whole.<sup>17</sup>

It is not so surprising that the meaning of picturesque itself was also facing a "crisis"<sup>18</sup> in Tafuri's nuisance. For example, "In defence of the Picturesque" 1954, Nikolaus Pevsner also insisted that the idea of the picturesque could be not only based on Romanticism and Mannerism of the high Renaissance and the Baroque but also based on the aesthetics of industrialism and functionalism of the 20th century.<sup>19</sup> Here, the criteria of the picturesque is how natural the scenes are composed in a harmony. The meaning of the natural was attempted to retrofit from organic nature to human nature in the 20th century.<sup>20</sup>

Tafuri presented Piranesi's Campo Marzio (Figure 1) as a critical form of anti-perspective and anti-picturesque. The technique of “fragmentation”<sup>21</sup> of Campo Marzio aims at departing not only from totalitarianism and universalism but also from technique of perspective in representing reality. Campo Marzio shows a critical interpretation of “classical derivation[s]” and returns “deformed symbols”<sup>22</sup>. It eventually emphasizes a act of removal from architectural signification and conventional criticisms of architecture built on top of natural realism.<sup>23</sup>

In “Rules, Realism, and History” 1976, English architect Alan Colquhoun problematized the concept of reality in a similar way to Tafuri's criticism. Colquhoun observed that there are two antithetical realisms from two opposite formalisms in the late 19th century. On the one hand, the principle of imitating nature has built a type of formalism as a ““classical” repertoire”.<sup>24</sup> On the other hand, the modern movement guided architects to “discover essences”<sup>25</sup> as elementary forms constructed another formalism by substituting all the stylistic representations from history to a total invention.



Figure 1. *Il Campo Marzio dell'Antica Roma*, Giovanni Battista Piranesi (Italian, 1720–1778), etched by Francesco Piranesi (Italian, about 1756 - 1810), etching on off-white laid paper (Image Credit: Cooper Hewitt Smithsonian Design Museum).

### Representation of modern cities

Tafuri observed that a part of the modern movement tried to revive historical forms in urban disorder. This was seen as a regression to the past in “nostalgic ideologies”<sup>26</sup> which merely aggregated what was factually real. It was not more than a stylistic relocation of archaeological forms which did not fit

the modern cities.<sup>27</sup> As a reaction, the concept of fragments like in Piranesi's drawings criticizes nostalgic realism with fictionalization, defamiliarization, and disaggregation rather than literal resurrection of historical forms.<sup>28</sup> Fragments result in challenging conventional realism based on European significance, bourgeois science, and historical meanings yet keeping some portions as architectural reminders.<sup>29</sup> Ironically, this is why fragmentation of historical forms saves architectural quality out of the conventional preservation and representation of urban reality in "crisis."<sup>30</sup> Furthermore, fragments foresaw modern cities will soon give up the natural realism and its conventional representations such as perspective and picturesque.<sup>31</sup>

### Fragments of the incomplete duality

In "Form and figure" 1978, Colquhoun suggested the fragmentation technique as a remedy for the biased formalisms toward either stylistic revival or modern invention. Fragmentation was introduced as a figurative syntax which is literally zeroing-out architectural value and turning itself into a new vessel for the new use.<sup>32</sup> That is why the form of Fragments often has figurative forms from history yet charged with possible or virtual narratives.<sup>33</sup> In "Palladio Virtuel" 2015, Eisenman defined the character of fragments in a similar fashion as duality. Fragments keep dual forms and meanings since they are found in a transitional position or moment from two different entities.

fragments appear to be incongruent parts belonging to two entirely different wholes at different scales.<sup>34</sup>



Figure 2. *Berlin die Symphonie der Großstadt*, Walter Ruttmann, 1927, movie clip at 05:31 (Youtube, Old Films Revival Project, <https://www.youtube.com/watch?v=DHsbBgJAmQY&t=1s>).

### Fragments in the city symphony

In the Berlin City symphony, there seem to be many of those fragments out of the city such as squares, people, shops, schools etc... They are shown as incongruent and zeroed-out fragments belonging to multiple wholes. For example, at 05:30, one of the futuristic architectures is zoomed in partially. This is a remodelled building by Erich Mendelsohn from 1921-1923 on top of a couple of existing buildings. (Figure 2) This type of building is famous and familiar with the dramatic perspective and picturesque effect: the fluid forms in a dramatic vanishing focal point in perspective on the horizon and harmonious aggregation of elements which are endlessly repeating. This linear and swooping building was cut up by the director Walter Ruttmann who briefly studied architecture in Zurich 1906.<sup>35</sup>

Actually, this building consists of 4 parts: left wing, right wing, top, and border between them. (Figure 3) Each part is different in forms, materials, and colours accordingly. However, Ruttmann presented not the whole perspective in a conventional way but a fragment which is incongruent, incomplete, defamiliarized out of the whole. This fragment now is fully opened for many interpretations in form and ready to be merged with other fragments in the city. Moreover, different from other scenes, this short scene seemed to be reduced with contrast as if Ruttmann even tried to remove materiality.



*Figure 3. Mossehaus renovation project, Eric Mendelsohn, 1928  
(Image Credit: Eva Goula).*

Later on, this fragment merges with other fragments in the city from random facades which look like parts of the building but it is not, to the factory lines look like the program of the building but it is not, to the streets, to the shops, to the other fragments of Berlin beyond the conventional representation of the city in the conventional realism. This principle applies not only to building objects but also to all the contents in the film.

### **Design application**

The technique of fragmentation has been run by author in an experimental studio in the University of Wuppertal. This studio is a part of 6-year-long collaborative research supervised by Prof. Holger Hoffmann in the research laboratory DME (Darstellungsmethodik und Entwerfen / Design and Representation Methodology). To begin with, the fragmentation requires digital reconstructions of reference buildings in details. Each year, DME choose different cities. Students need to choose an ordinary building to analyse in both conventional and conceptual ways through the fragmentation process.

*Finnstadt Wulfen* and *Grimme Institute Marl* were reconstructed in 3d by a group of students<sup>36</sup> in 2021 from the experimental studio. This could be a purely didactic model to teach how to communicate in architectural design with the concept of fragments as a formal language. (Figure 5)

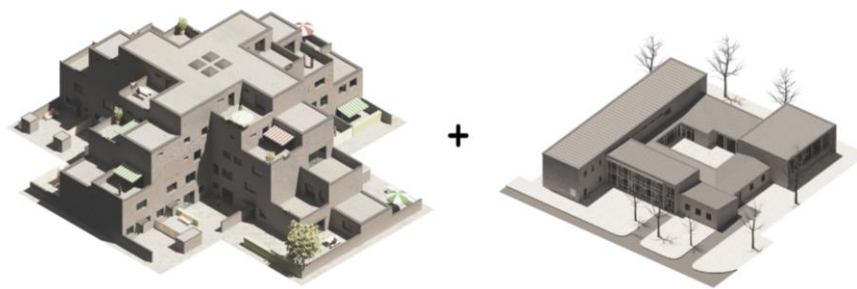


Figure 4. 3D Reconstruction of Finnstadt Wulfen (left) and Grimme Institute Marl (right), 2021  
(Image Credit: DME, The University of Wuppertal).

Eventually, the buildings are fragmented and merged again based on the conceptual framework which students define throughout their research. It is necessary to frame the reference buildings with a concept. This “concept” is critical in extracting fragments as a formal language beyond the conventional and elementary analysis on buildings such as floors, columns, walls, windows...in a simplistic manner. There is nothing taken for granted in them. None of preconception is allowed in signifying forms. They remain as zero-ed out or “nullified”<sup>37</sup> forms. (Figure 6)

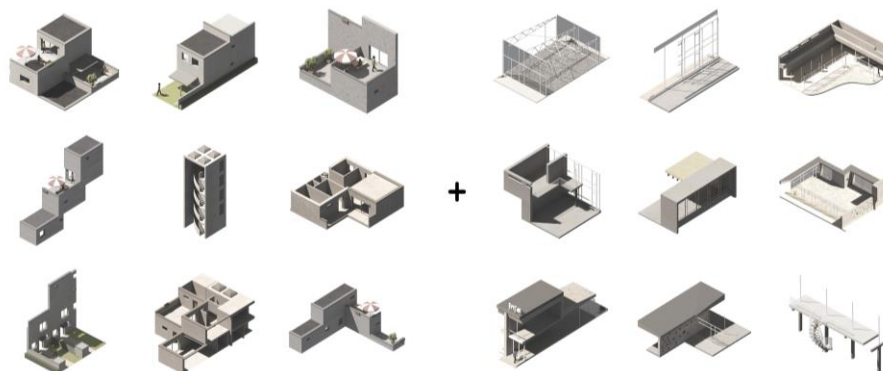


Figure 5. Fragments' matrix from Finnstadt Wulfen (left: Mass) and Grimme Institute Marl (right: Void) by conceptual framework (Mass and Void), 2021  
(Image Credit: DME, The University of Wuppertal).

### Detail samples

In the first case, a fragment of stepped balcony as mass and a fragment of open entrance as void merge in a virtual situation. Both are departed from their contextual background such as program, historical meaning, or significance. Although the real challenge of the work appears when the fragments reveal their previous contexts resisting to be wiped out, they become empty vessels at the end in a critical stance. The previous contexts are still lingering to the forms. In one way, a form loses its previous quality as mentioned. In another way, a new form comes out. Nevertheless, not meant to be, the two different languages are merged into one possible or virtual formal language. (Figure 7)

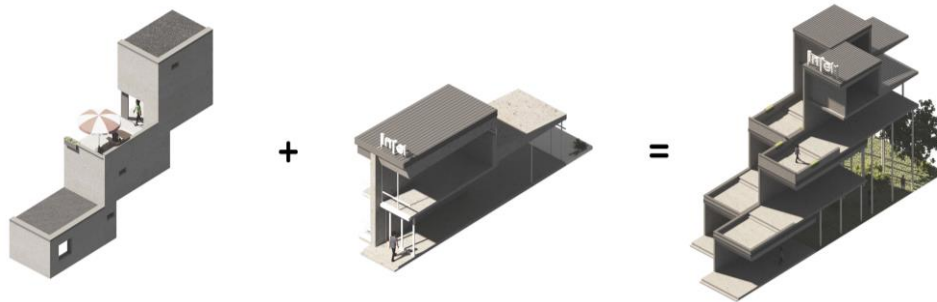


Figure 6. Fragments from Finnstadt Wulfen (left: Mass, Stepped Balcony) and Grimme Institute Marl (middle: Void, Opened Entrance), and merged Fragment (right) by conceptual framework (Mass and Void), 2021 (Image Credit: DME, The University of Wuppertal).

In the second case is to merge between stacked rooms as mass and layered frames as void. Massive concrete blocks are in a contradiction to a thin and transparent set of layers. They become a stacked and layered fragment in a possible or virtual situation. (Figure 8)



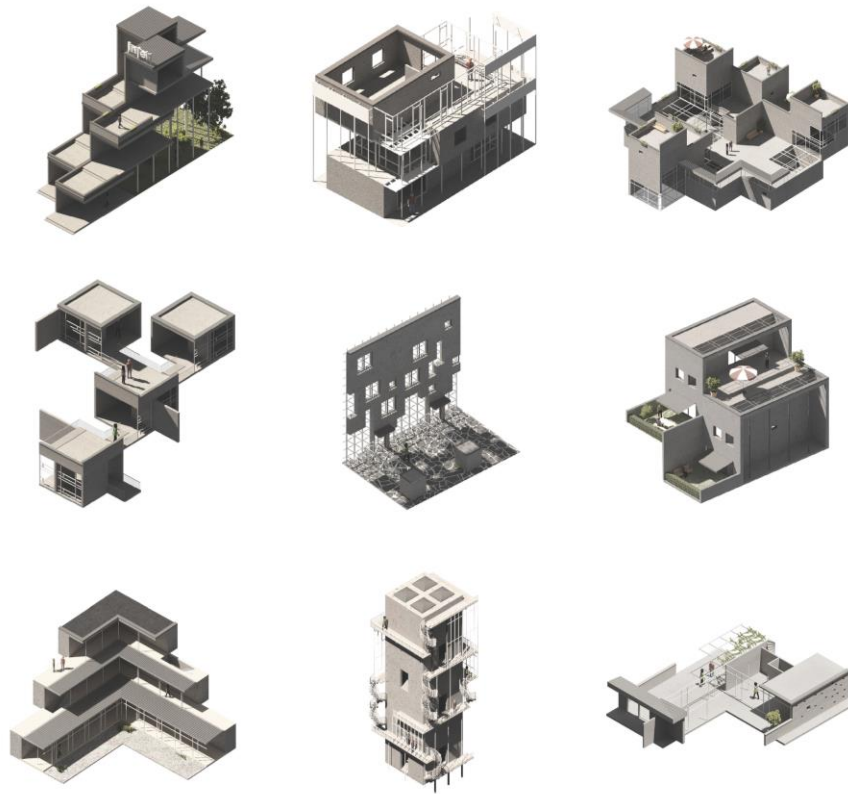
Figure 7. Fragments from Finnstadt Wulfen (left: Mass, Stacked Rooms) and Grimme Institute Marl (middle: Void, Layered Frames), and merged Fragment (right) by conceptual framework (Mass and Void), 2021 (Image Credit: DME, The University of Wuppertal).

In the third case, a vertical movement in a massive concrete tower is contradicting to a horizontal movement. Both fragments are for movement or circulation but, its composition, material, or function are different. Partially overlapped and swapped, an incompletely opened or closed fragment is created. (Figure 9)



Figure 8. Fragments from Finnstadt Wulfen (left: Mass, Vertical Movement) and Grimme Institute Marl (middle: Void, Horizontal Movement), and merged Fragment (right) by conceptual framework (Mass and Void), 2021 (Image Credit: DME, The University of Wuppertal).

In the same method, 9 couples of fragments are created and scattered on the ground. (Figure 10)



*Figure 9. 9 Merged-fragments' matrix from Finnstadt Wulfen and Grimme Institute Marl, 2021  
(Image Credit: DME, The University of Wuppertal).*



*Figure 10. The city of Mass & Void, virtual diorama, 2021  
(Image Credit: DME, The University of Wuppertal).*

This is a virtual diorama, the city of mass and void. (Figure 11) It is an aggregation of a lot of disaggregated fragments which are withdrawn from conventional representation of a city-scape. No

perspective, no picturesque, but only specific, situational, and conceptual. Defamiliarized, destabilized, and detached from how we learned to execute architectural forms. Highly saturated and contrasted in visual effect as well as content in representing a city. It is a small world of reduced or edited forms bridging the external reality and artistic reality isolated out of the whole.

### **CONCLUSION**

It is not clear that the anti-modernism of architecture was influenced by the city symphony. However, it seems more than certain that the city symphony was ahead of architecture when it comes to the fragmentation technique for representing reality. The form of reality from the city symphony could be located between total abstract experimental drama and physically grounded documentary.<sup>38</sup> Likewise, the one from postmodern architectural discourse also could be located between genius invention and fixed tradition. The concept of fragments as a critical design tool, could benefit the fields of contemporary art and architecture by crossing over a wide range of realities in a virtual crisis without a comprehensive grasp.

### **ACKNOWLEDGEMENTS**

All the image contents have been produced from in-depth research conducted by the studio experimental design and students in the University of Wuppertal. Moreover, the idea of scientific analysis on architectural fragments was able to be materialized in a huge support of professor Holger Hoffmann and his insight.

## NOTES

- <sup>1</sup> William Stenhouse, "The Forma Urbis Romae before Jnolli: Antiquarian Scholarship in the sixteenth and Seventeenth Centuries" in *Giambattista Nolli and Rome* (Rome: Studium Urbis 2013, 2013), 15 (Conference proceeding publication: ed. Ian Verstegen and Allan Ceen: Rome, 2003).
- <sup>2</sup> Manfredo Tafuri, *Architecture and Utopia, Design and Capitalist Development* (Cambridge, Massachusetts, and London: The MIT Press, 1976), 14.
- <sup>3</sup> Slavoj Žižek, *Pandemic! COVID-19 Shakes the World* (New York: Polity Press, 2020), 132.
- <sup>4</sup> Steven Jacobs, Anthony Kinik, and Eva Hielscher, "introduction" in *The City Symphony Phenomenon* (New York and London: Taylor & Francis, 2019), 4.
- <sup>5</sup> Jacobs et al., "introduction" in *The City Symphony Phenomenon*, 21.
- <sup>6</sup> See Joseph Mallord William Turner's *The High Street, Oxford*, Watercolour on paper, c.1825-39, Tate Museum for example. J.M.W. Turner produced a tremendous number of urban drawings in the 19th century.
- <sup>7</sup> William, Turner's *The High Street, Oxford*, i.
- <sup>8</sup> William, Turner's *The High Street, Oxford*, 46.
- <sup>9</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 4.
- <sup>10</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 4.
- <sup>11</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>12</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 70.
- <sup>13</sup> Peter Eisenman, "Aspects of Modernism: Maison Dom-ino and the Self-Referential Sign" in *log Magazine* 30, (New York: Anyone Corporation, 2014), 141. (Originally in *Oppositions* 15/16, ed. Kenneth Frampton, 1979), 189.
- <sup>14</sup> Eisenman, "Aspects of Modernism", 139.
- <sup>15</sup> Eisenman, "Aspects of Modernism", 144.
- <sup>16</sup> Peter Eisenman, "A Critical Analysis: Andrea Palladio", in *Peter Eisenman: Feints* (Milano: Skira Editore S.p.A., 2006), 50. (Originally in "The Representations of Doubt: At the Sign of the Sign", in *Eisenman Inside Out: Selected Writings 1963-1988*, 2004)
- <sup>17</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 5.
- <sup>18</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>19</sup> See Nikolaus Pevsner, "In defense of the Picturesque", in *The Architectural Review Magazine* (Metropolis International: London, 1954; 2012).
- <sup>20</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 5.
- <sup>21</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 10.
- <sup>22</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>23</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>24</sup> Alan Colquhoun, "Rules, Realism, and History" in *Essays in Architectural Criticism: Modern Architecture and Historical change*, pref. Kenneth Frampton, (Cambridge, Massachusetts, and London: The MIT Press, 1981), 67.
- <sup>25</sup> Colquhoun, "Rules, Realism, and History", 67.
- <sup>26</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>27</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>28</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 16.
- <sup>29</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>30</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>31</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>32</sup> Alan Colquhoun, "Form and Figure" in *Essays in Architectural Criticism: Modern Architecture and Historical change*, pref. Kenneth Frampton, (Cambridge, Massachusetts, and London: The MIT Press, 1981), 197. (Originally in *Oppositions* 12, 1978)
- <sup>33</sup> Colquhoun, "Form and Figure", 202.
- <sup>34</sup> Peter Eisenman and Matt Roman, *Palladio Virtuel*, (Yale University Press: New Haven and London, 2015), 16.
- <sup>35</sup> See *The German Avant-Garde Film of the 1920's* (Goethe-Institut: Munich, 1989).
- <sup>36</sup> Maïke Bach + Lukas Krüer, Master 1<sup>st</sup> year students from The University of Wuppertal, 2022
- <sup>37</sup> Tafuri, *Architecture and Utopia, Design and Capitalist Development*, 14.
- <sup>38</sup> Jacobs et al., "introduction" in *The City Symphony Phenomenon*, 11.

## BIBLIOGRAPHY

- Colquhoun, Alan. "Rules, Realism, and History" in *Essays in Architectural Criticism: Modern Architecture and Historical change*, pref. Kenneth Frampton. Cambridge, Massachusetts, and London: The MIT Press, 1981.
- Colquhoun, Alan. "Form and Figure" in *Essays in Architectural Criticism: Modern Architecture and Historical change*, pref. Kenneth Frampton. Cambridge, Massachusetts, and London: The MIT Press, 1981.
- Eisenman, Peter. "Aspects of Modernism: Maison Dom-ino and the Self-Referential Sign" in *log Magazine* 30. New York: Anyone Corporation, 2014. (Originally in *Oppositions* 15/16, ed. Kenneth Frampton, 1979)
- Eisenman, Peter. "A Critical Analysis: Andrea Palladio", in *Peter Eisenman: Feints*. Milano: Skira Editore S.p.A. 2006. (Originally in "The Representations of Doubt: At the Sign of the Sign", in *Eisenman Inside Out: Selected Writings 1963-1988*, 2004)
- Eisenman, Peter and Roman, Matt. *Palladio Virtuel*. Yale University Press: New Haven and London, 2015.
- Jacobs, Steven, Kinik, Anthony, and Hielscher, Eva. "introduction" in *The City Symphony Phenomenon*. New York and London: Taylor & Francis, 2019.
- Pevsner, Nikolaus. "In defense of the Picturesque", in *The Architectural Review Magazine*. Metropolis International: London, 1954; 2012.
- Schobert, Walter. *The German Avant-Garde Film of the 1920's*. Goethe-Institut: Munich, 1989.
- Tafuri, Manfredo. *Architecture and Utopia, Design and Capitalist Development*. Cambridge, Massachusetts, and London: The MIT Press, 1976.
- Žižek, Slavoj. *Pandemic! COVID-19 Shakes the World*. New York: Polity Press, 2020.

# INTERPRETATION AND SIGNIFICANCE OF ARCHITECTURAL HERITAGE: THE CASE STUDY OF THE FALUN HALL, IN THE YONGHE TEMPLE, BEIJING.

Authors:

**SIQI LI, ALBA SOLER ESTRELA, JOAQUIN ANGEL MARTINEZ MOYA**

Affiliation:

JILIN INTERNATIONAL STUDIES UNIVERSITY, CHINA; JAUME I UNIVERSITY, SPAIN

---

## INTRODUCTION

Chinese architecture expands not only across a vast territory, but also in time throughout the centuries. This causes it to have some variations, while at the same time, maintaining identifiable common features.

The use of wood is remarkable: structures follow a system that is repeated with variations, such as a modular system that regulates everything from the configuration of the spaces to the finer details. In general, the buildings sit on a platform, on which the wooden structure is developed. Also noteworthy are the tile roofs, generally glazed and with finishes and decorative elements. On a larger scale, representative places such as temples are generally made up of a set of separate pavilions arranged along an axis. A sequence of closed spaces with open areas or courtyards is thus formed.

Yonghe Temple (Beijing) is one of the largest and most important Tibetan Buddhist temples in North China. It is located in the Dongcheng district of northeast Beijing. Dongcheng District has many old buildings, such as the Hutong,<sup>1</sup> which are among the best preserved. Construction of Yonghe Temple began in 1694 during the Qing Dynasty. It was the palace of Yin Zhen, who was later the Yongzheng Emperor. In 1744, Qianlong Emperor changed its use to a Tibetan Buddhist temple.<sup>2</sup>

It is the most important temple and monastery of the Gelug order of Tibetan Buddhism in China. The styles of the temple combine Tibetan elements (with Mongolian influence) and Chinese elements (Han), which gives it a special architectural and iconographic value. Therefore, it is very relevant to investigate within the context of ancient Chinese Buddhist architecture.

## Interpretation and significance of architectural heritage

Studies and research on historical architecture respond to different objectives and points of view within the broad field of Art History. Research can focus on historical, stylistic, or construction, among others. In many cases, the study is justified by the need for interventions required to ensure their conservation.<sup>3</sup> In accordance with international charters, strategies for the protection and conservation of architectural heritage must consider not only technical aspects but also others such as the social impact.

Scientific and scholarly methods of analysis and interpretation can be applied to extract the values and recognition of significance.<sup>4</sup> This allows the public to appreciate and understand heritage within the cultural assets on offer in advanced societies.

Furthermore, the most relevant buildings in different places thus become part of the tourist offer. This makes it necessary to analyze them from the visitor's point of view, in order to favor the recognition of significant characteristics so as to promote public involvement. Tourism programs should include high quality information to improve visitors understanding of the place, and the existence of selected information also contributes to a more satisfactory visitor experience.<sup>5</sup>

The process of assessing heritage sites must include both the acquisition of knowledge and dissemination strategies to improve society's perception of them.<sup>6</sup> The cultural context and architectural theory must be properly explained to the public. Hence, the proposed case study is a representative one, since, in addition to its architectural interest, the building also receives a large number of visitors.

The purpose of the study is to carry out a complete analysis of the characteristics, including the architectural form, construction techniques, materials and finishes, as detailed in the analysis section. The process of recording a monument can be considered the best way to give meaning, understanding, definition and recognition of the values.<sup>7</sup>

In the subsequent phase, this will allow the generation of dissemination materials about this architectural heritage that can help the public understood and recognize it. Prior knowledge of the monument is necessary since there are different strategies and methods to be applied taking into account the specific characteristics of the case and visitors' demands.<sup>8</sup>

## Yonghe Temple

The temple is composed of a group of five great buildings: Yonghe Gate Hall, Yonghe Gong Hall, Yongyou Hall, Falun Hall and Wanfu Pavilion.

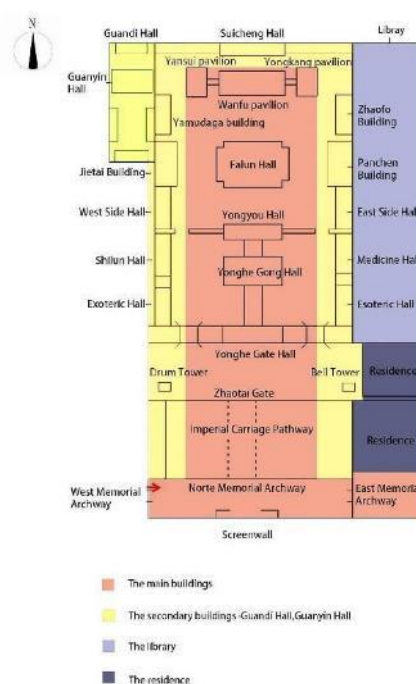


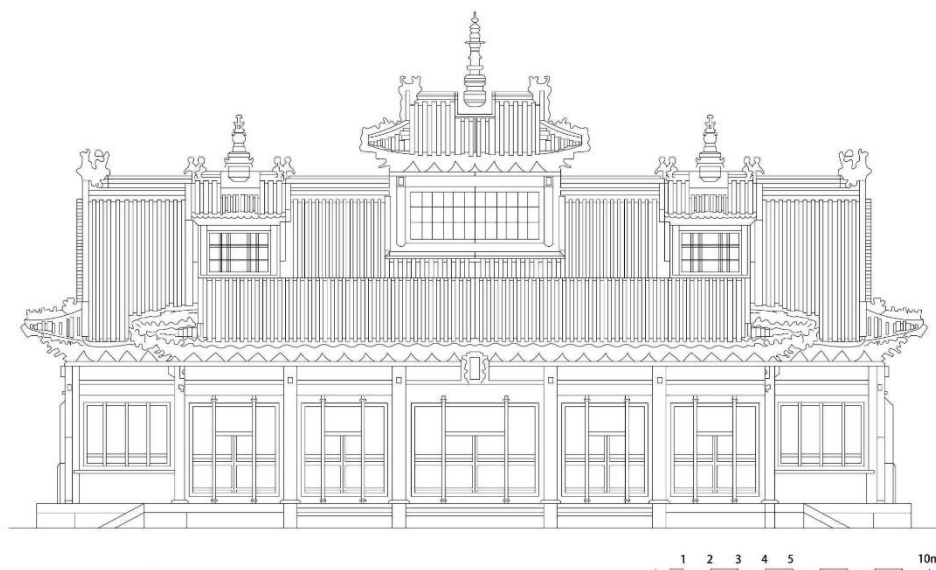
Figure 1. Plan and function organization of Yonghe Temple

Buddhist temples essentially adopt the court design of secular traditional Chinese architecture. They usually start from the main gate, which was called "the mountain gate" and they are arranged along a north-south axis of symmetry. The main buildings are located some distance from each other, and are surrounded by corridors and side buildings. The size and scale of these temples depend on their

importance. The most important building is frequently after the third or fourth one, and it called "the main shrine hall".<sup>9</sup> In Yonghe Temple, the main building is the fourth one: Falun Hall.

### Falun Hall

The Falun Hall is where the monks of the monastery carry out important Buddhist activities, and the largest of the Yonghe Temple palaces with a surface area of 616 m<sup>2</sup> and a maximum height of 10.2 m. At the center of the room is the statue of the founder of the Gelug sect, Tsongkhapa, which belongs to Tibetan Buddhism. This is the place where the Lama is venerated. The roof of the temple is of the "Gable and hip roofs" type,<sup>10</sup> finished with yellow glazed tiles. It has five skylights each topped with a small tower, which give it a unique character in relation to the other buildings. Falun Hall has seven jian<sup>11</sup> (bay) wide and has five gates (one main gate and four side gates). The main gate is the principal entrance to the building and is located centrally.



*Figure 2. Elevation of the Falun Hall*

This Hall had a dual function: it was the house of the teachers, and also the place where the religion and values of Tibetan Buddhism were taught. In the Falun Hall there are many elements that express Tibetan religious and symbolic themes: for example, as mentioned above, there are five skylights, the biggest of which is located in the center of the roof and there are two small ones on each of the roof slopes. Each skylight is topped with a gilded tower that reflects the architectural style of Tibetan Buddhist monasteries.

The building also has other characteristics related to the traditional style of the Han-style palaces, such as, the Tou-Kung, the pavements, glazed tiles and its wooden structure. Therefore, the architectural style of this building not only certain elements of Tibetan temples, but also the features of Han palaces. This architectural style is very rare in China and reflects the importance of national integration at that moment.

### The ground plan

In Chinese architecture, the orientations are very characteristic and significant in buildings. From the maps of Beijing and the plans of the Yonghe Temple it can be observed that the layout of the city and the traditional buildings have an alignment that coincides exactly with the north-south axis and the city gate or the gate of the buildings usually opens to the south.

Another characteristic is its symmetry. The palace has two axes of symmetry: north-south and east-west. The ground plan of the Falun Hall is cross-shaped, which increases not only the stability of the building but also its internal surface area, and distinguishes it from other temples. The cruciform ground plan in traditional Chinese culture also represents the four cardinal points. These directions are represented by symbolic animals: the turquoise dragon (east), the vermilion bird (south), the white tiger (west) and the black tortoise that continues fighting with the snake (north). This way of thinking is associated with the theory of feng shui.<sup>12</sup>

The Falun Hall is seven jian (bays) wide. A jian is a standard unit that expresses the basic area of ancient Chinese buildings. The organization and planning of the architectural space are developed base on the jian, and independent buildings can be formed by enlarging or replicating jian<sup>13</sup>. A rectangular space (or room) can be enclosed by walls, or separated from adjacent spaces (or rooms) by pillars, and a building can be formed by extending a vertical or horizontal axis.<sup>14</sup>

In his thesis, Chiou (1996) wrote that each space (jian 间) in the main building has a unique name: the central space is ming jian (明间, meaning light), the two rooms next to ming jian are ci jian (次间, meaning secondary), the rooms next to ci jian are shao jian (梢间, meaning tip or end), and the rooms next to shao jian are jin jian (尽间, meaning finished). The widths of each jian are not necessarily the same. In general, ming is at least as wide as ci, which in turn is at least as wide as shao, which is at least as wide as jin. The ming jian is thus the spatial unit by which the width of a building was determined.<sup>15</sup> In Figure 3, we can see in these different areas on the Falun Hall ground plan.

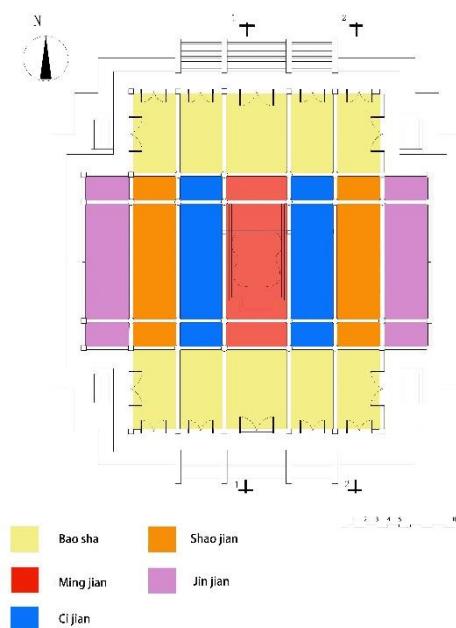


Figure 3. Ground plan of Falun Hall and diagram of bao sha

During the process of transforming the building from a palace to a temple in 1744, the craftsmen added two new areas, one at the front and the other at the back.<sup>16</sup> They are called “bao sha” and their main function is to increase the inside area of the main building and its stability. In figure 4 we can see the original building that was built in 1694 (bright color) and the “bao sha” added later (dark color).

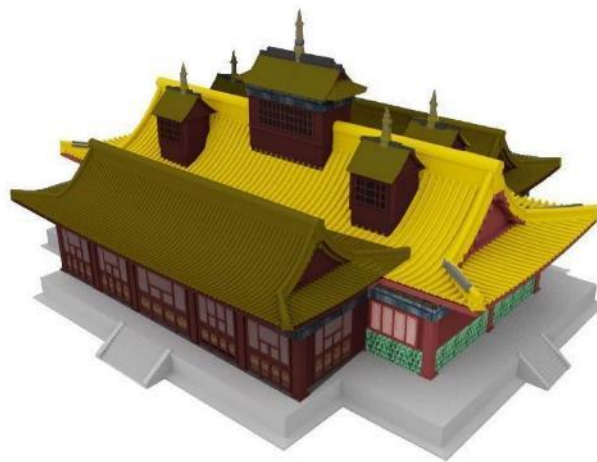


Figure 4. 3D Model of Falun Hall

## MAJOR WOODWORK

In ancient Chinese architecture, pillars located under the eaves are called eaves columns (orange points is eaves columns of original building), and the ones that support the ceiling beams inside are called golden columns (red points is golden columns of original building). There are two rows of gold columns on the front and back of the interior of Falun Hall.

The wooden columns rest on the stone bases which have a transition from their circular upper face, to their square base, nested with the rest of the roadway. This base is called a plinth and its function is to distribute the weight of the column on the base in over a larger area in order to prevent damp from rising from the base to the top of the wood; it also serves a decorative function.

The size of the column base was normalized in Yingzao Fashi<sup>17</sup> during the Song dynasty. For example, the length of the side of the base of the column is twice the diameter of the column and the thickness cannot exceed half the length of the side.

In China, the system for connecting wooden building parts is highly characteristic. The traditional Chinese timber structure is a flexible construction system that allows wood to easily deform under the action of an external force, thanks to its flexibility. This system for joining timber is called a “mortise and tenon” joint.

In traditional Chinese construction, wooden structural systems range from simple curved roofs with three beams to the most complex forms, consisting of nine beams with double front and back porch. The complexity of the timber frame depends on the rank of the building.

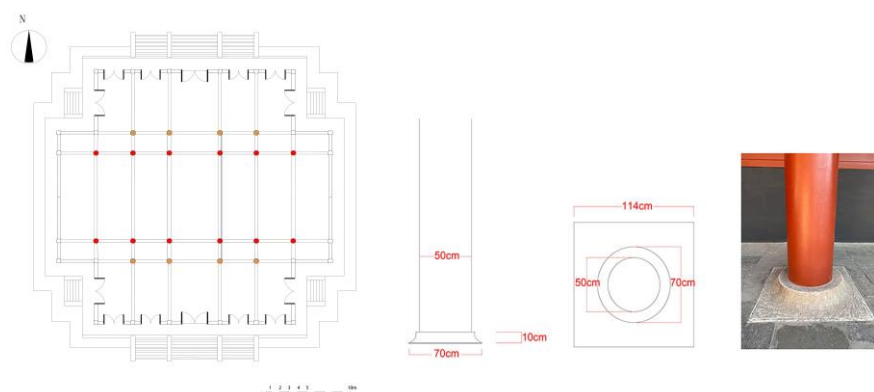


Figure 5. Gold columns of Falun Hall

### ***Tou-Kung and Tou-kou***

Tou-Kung is a representative building element of typical ancient Chinese architecture. It is a transition from column to roof. Its purpose was to provide the horizontal beams with better support to distribute the weight they bore towards the pillars. It also helps the eaves to extend further, thereby avoiding rain and humidity, and increasing resistance to shocks, such as earthquakes. It also plays a very important decorative role in the design of the buildings, as part of a particular building paradigm of the ancient Chinese buildings. The bigger the Tou-Kung is, the higher the level of the building and the richer the decoration will be.

To facilitate their rapid construction, and establish a construction modulation system for buildings, modular construction systems were developed in ancient China, thus giving rise to the "Cai-Fen" system (standard wooden module for all constructions), and later, the "Tou-kou" system.<sup>18</sup> The proportions both the Cai-Fen and Tou-kou systems are based on the height of the cross-section of the building beams.<sup>19</sup>

The proportions of the Cai-Fen system are developed in the Chinese architectural treatise Yingzao Fashi published in 1103 (Song Dynasty). The Tou-kou was recorded in the Gongcheng Zuofa Zeli treatise, which was published in 1734 (Qing Dynasty). Therefore, consistent with the period of its construction, Falun Hall is modulated with the Tou-kou system.

Gongcheng Zuofa Zeli, edited in the Qing Dynasty, divides the Tou-kou into 11 sizes. The size of the Tou-kou serves to measure and modulate the size of the building (see Figure 6). A proportional relationship exists between the diameter of the column and the Tou-kou, which determines the size of the building.

The bigger the Tou-Kung, the higher the building's level and the richer the decoration. Through this modular system, the logic of ancient Chinese architecture can be analyzed mathematically.

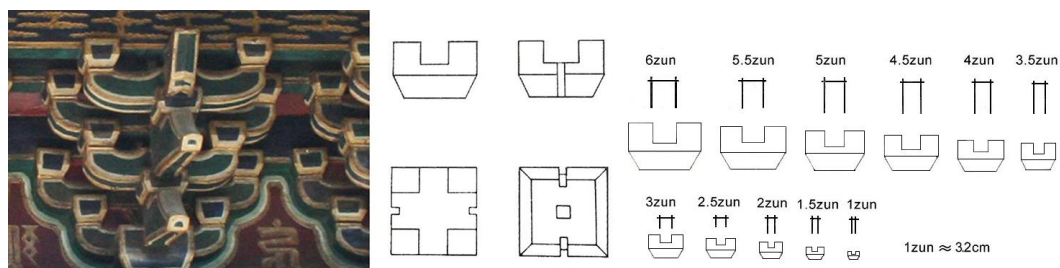


Figure 6. Image of Tou-Kung and standards of Tou-kou

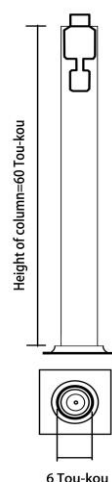


Figure 7. The relationship between Tou-kou and column diameter and column height.

According to on-site measurements, applied to our case, the diameter of the golden column of Falun Hall is 0.50 m, and the eaves column it is 0.40 m and its height is 5.8 m and the distance between two columns is 8.85 m (see Figure 8).

Furthermore, known by measurement, the diameter of eave column is 40 cm,  $40 \text{ cm} \div 6 \text{ Tou-kou} \approx 6.7 \text{ cm} = 2,08 \text{ zun} \approx 2 \text{ zun}$ . According to Figure.6, the Tou-kou of the Falun Hall is 2 zun.

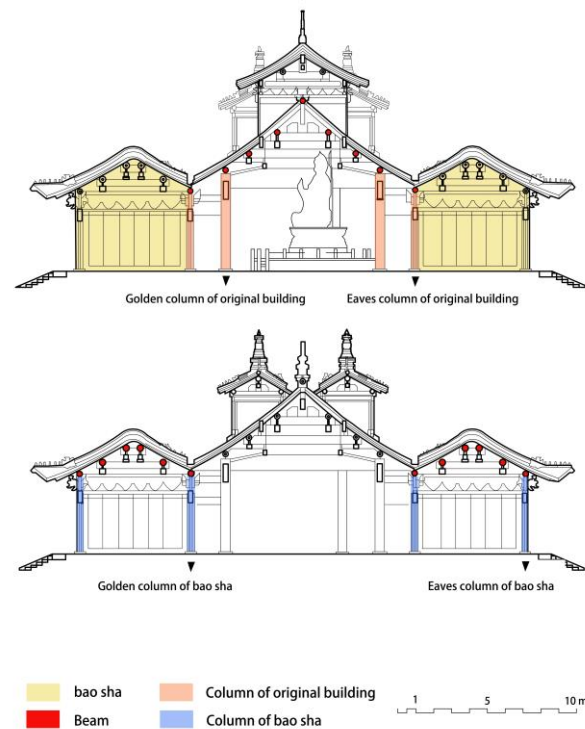


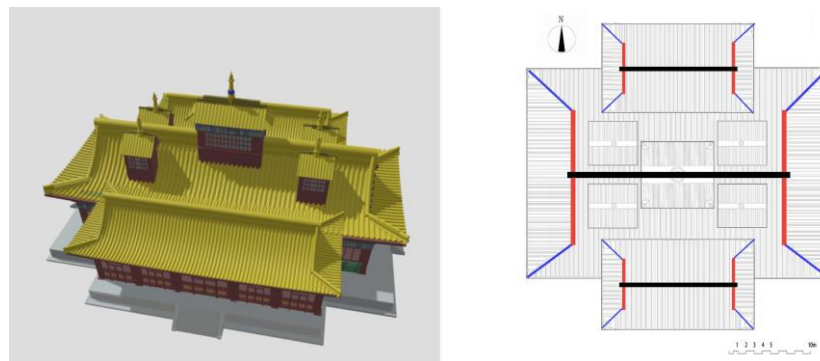
Figure 8. Sections of Falun Hall.

### Curved roof

In ancient China, the roofs of buildings were divided into three basic types: simple sloping, multi sloping and curved. Single-slope roofs were the most economical type, and hence also the most common, this type of roof was called a Flush gable roof. Its main characteristic is that it has two faces and the walls on both sides of the house are flush with the roof or higher than it. This type was used very frequently to build houses during the Ming and Qing dynasties.<sup>20</sup>

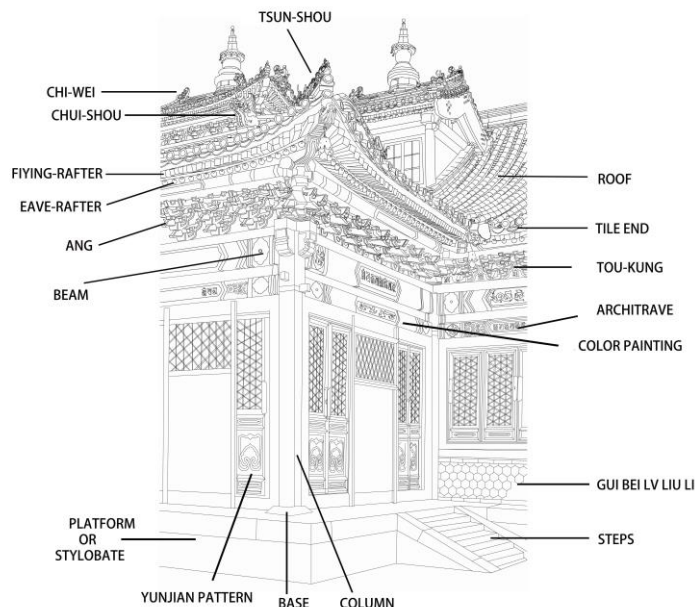
The multi sloped roof was called a Gable and hip roofs and was made up of the main ridge and eight secondary ridges. This kind of roof combines straight and diagonal lines to provide a clear and visually distinctive structure. Their level was higher than the Flush gable roof, but lower than the Hip roof, and they were normally reserved for temples and palaces. It consists of a main trestle with four secondary trestles and four thirdly trestles (see Figure 9). It is characterized by its four sides and its smooth shape. This is the typology used in Falun Hall (main building), and bao sha is same too.

The curved shape is the highest level and is called a Gable hip roof. Only royal palaces and temples and the Confucius Palace could use it during the Ming and Qing dynasties.



*Figure 9. Roof and roof plan of Falun Hall (Gable and hip roofs).  
Main trestles (black), four secondary trestles (red) and four thirdly trestles (blue).*

In Figure 10, an English glossary of the various components of the roof has been developed, adapted to our case study based on Liang, 1984.<sup>21</sup>



*Figure 10. Glossary of Falun Hall.*

## CONCLUSION

The analysis performed makes it possible to highlight the most significant characteristics of this relevant architectural case:

The set of buildings and outdoor spaces that make up the Yonghe Temple are remarkable at an urban level.

The buildings follow the traditional principle of running along a north-south axis.

All buildings are enclosed by walls, thus creating restrictive gateways and courtyards.

The architecture Falun Hall is of great value in the north of China for the quality of the spaces, the building techniques, and the materials and finishes used.

The building, in general, follows the rules of the Gongcheng Zuofa Zeli treatise in terms of the height and distance of the columns, but not in terms of their diameter; it establishes the construction module of the Tou-kou as 2 zun.

It highlights more specifically the interest of the wood construction and its elements, together with the decorative details and paintings.

From the point of view of the architectural style, it is an exceptional case that combines the characteristics of Han palaces with those of Tibetan temples. It is a reflection of the importance of national integration at that time. The study facilitates the interpretation of the original palace and the subsequent modifications to a Tibetan Buddhist temple, through the introduction of the bao sha and the skylights.

In conclusion, this architectural complex reflects the history and modes of construction of 17th and 18th centuries China. Its traditional form of construction has awakened great deal of interest in Western cultures, due to its originality, and the balance and harmony in its spaces and decorations. Another remarkable feature is the method of construction by means of a modular system of wooden elements.

Indirectly, the observation of the temple also serves to learn about the Tibetan Buddhist religion and culture, especially because of its great symbolic value.

Through the analysis that has been carried out, the study has generated, an orderly body of documentation that allows its architectural characteristics to be valued. The use of a case study an approach that makes it possible to further our knowledge and understanding of Chinese architecture.

As has been said, this temple is a tourist attraction. In the next phase, the work carried out will allow the generation of specific materials to enrich the visits, and thus to improve the cultural offer. The study opens up a range of possibilities to make this asset known, as a means of enhancing public appreciation and understanding of architectural heritage.

## **ACKNOWLEDGEMENTS**

The authors would like to thank the Professor Linlin Fan for his generous participation in this research work, Engineer Shiyu Zhang for his valuable support during the collection of information, and Researcher Kaixiong Wu (Guangxi Arts University) for his contributions.

## NOTES

- <sup>1</sup> Youbin Hou and Wanzhen Li, *Chinese ancient architecture history diagram*(Beijing:Editorial Chinese Construction Industry,2002),186.
- <sup>2</sup> Lan Ma and Lixiang Li, *Yonghe Temple* (Beijing:Sino-Culture Press,2004),54.
- <sup>3</sup> UNESCO, The General Conference of UNESCO adopted on 16 November 1972 the *Recommendation concerning the Protection at National Level, of the Cultural and Natural Heritage*.
- <sup>4</sup> ICOMOS Charter on the Interpretation and Presentation of Cultural Heritage Sites (2008) Building on the Venice Charter, this charter seeks to establish guidelines for the interpretation of cultural heritage sites. It emphasizes the role of public communication and education in heritage preservation.
- <sup>5</sup> International Cultural Tourism Charter, approved by the ICOMOS General Assembly, in Mexico, October 1999.
- <sup>6</sup> Lino Bianco, "Architecture, values and perception: Between rhetoric and reality,"*Frontiers of Architectural Research* volume 7, no.1 (2018):93,accessed May 16, 2022,doi.org/10.1016/j.foar.2017.11.003.
- <sup>7</sup> The Declaration of San Antonio was the result of a symposium held in Texas in 1996 on the subject of authenticity in the conservation and management of the cultural heritage of the Americas.
- <sup>8</sup> Ying Liu and Huiwen Lin,"Construction of Interpretation and Presentation System of Cultural Heritage Site: An Analysis of the Old City, Zuoying ,"*heritage* volume 4, no.1(2021):318, accessed May 16 2022, doi.org/10.3390/heritage4010020.
- <sup>9</sup> Sicheng Liang,"Chinese Buddhist architecture,"*Tsinghua University Magazine* volume 4, no.2 (1961):54.
- <sup>10</sup> Lan Ma and Lixiang Li. *Yonghe Temple* (Beijing:Sino-Culture Press,2004),35.
- <sup>11</sup> jian is a standard unit that expresses the basic area of ancient Chinese buildings.
- <sup>12</sup>José Manuel Almodóvar Melendo,Yingying Xu,"CHabitar la naturaleza en armonía con el universo. Metafísica, geometría cósmica y orden social en la tradición arquitectónica china / Inhabiting Nature in Harmony with the Universe. Metaphysics, Cosmic Geometry and Social Order in the Chinese Architectural Tradition,"*Araucaria* volume 18,no.35(2016):153.
- <sup>13</sup>Youbin Hou and Wanzhen Li, 185.
- <sup>14</sup>Shangchia Chiou,*Computational Considerations of Historical Architectural Analysis – A Case Study of Chinese Traditional Architecture*.(Pittsburgh:Carnegie Mellon University ProQuest Dissertations Publishing,1996),100.
- <sup>15</sup>Shangchia Chiou,100.
- <sup>16</sup> Song Niu. *Yonghe Temple* (Beijing:Contemporary China Press,2002),54.
- <sup>17</sup>A first consideration within the general context of Chinese architecture is the Yingzao Fashi, which is the oldest extant Chinese technical treatise on architecture and craftsmanship, compiled by Li Jie. The emperor had the book published in 1103 in order to provide a unified set of architectural standards for builders, architects, and literate craftsmen as well as for the engineering agencies of the central government.
- <sup>18</sup> Chuang Sun,"Measurement and analysis of the ancient Chinese timber-frame building,"(2011).
- <sup>19</sup> Jin Liu,"Component-driven procedural modeling for ancient Chinese architecture of the Qing Dynasty,"*International Journal of Architectural Heritage* volume 12, no.2 (2018):285.
- <sup>20</sup> Youbin Hou and Wanzhen Li,185.
- <sup>21</sup> Sicheng Liang. *A Pictorial History of Chinese Architecture* (Beijing:The Joint Publishing Company,2011),89.

## BIBLIOGRAPHY

- Almodóvar Melendo,José Manuel, and Yingying Xu."CHabitar la naturaleza en armonía con el universo. Metafísica, geometría cósmica y orden social en la tradición arquitectónica china / Inhabiting Nature in Harmony with the Universe. Metaphysics, Cosmic Geometry and Social Order in the Chinese Architectural Tradition." Araucaria: ES, 2016.
- Bianco, Lino. "Architecture, values and perception: Between rhetoric and reality."Frontiers of Architectural Research. CN, 2018.
- Chiou, Shangchia. *Computational considerations of historical architectural analysis: A case study of chinese traditional architecture*.Carnegie Mellon University: USA, 1996.
- Hou,Youbin, and Wanzhen Li. *Chinese ancient architecture history diagram*. Beijing:Editorial Chinese Construction Industry, 2002.

- Liang, Sicheng. "*Chinese Buddhist architecture*." Beijing: Tsinghua University Magazine, 1961.
- Liang Sicheng. *A Pictorial History of Chinese Architecture*. Beijing: The Joint Publishing Company, 2011.
- Liu, Jin. "*Component-driven procedural modeling for ancient Chinese architecture of the Qing Dynasty*." International Journal of Architectural Heritage: SG, 2018.
- Liu, Ying, and Huiwen Lin. "*Construction of Interpretation and Presentation System of Cultural Heritage Site: An Analysis of the Old City, Zuoying*." heritage: USA, 2021.
- Ma, Lan, and Lixiang Li. *Yonghe Temple*. Beijing: Sino-Culture Press, 2004.
- Niu, Song. *Yonghe Temple*. Beijing: Contemporary China Press, 2002.

# MAPPING ENTROPY: HISTORICAL SETTLEMENTS DESTRUCTION DOCUMENTATION IN WENZHOU, CHINA

Authors:

VINCENT PEU DUVALLOON, TIERU HUANG, KUN BAO

Affiliation:

WENZHOU-KEAN UNIVERSITY, CHINA

---

## INTRODUCTION

In an interview from 1973, American land artist Robert Smithson described his documentation of landscape transformation as "entropy made visible".<sup>1</sup> Referring to Carnot's second law of thermodynamics about the irreversibility of physical phenomenon and their tendency toward disorder, Smithson built on its interpretation in economics and its impact on the built environment. Looking at the construction of central park and its disruptive nature, he talks about entropic architecture or de-architecturization.<sup>2</sup> By the same logic, in his conclusion of "Tristes Tropiques," anthropologist Claude Levi-Strauss coined the term "entropology" to describe human history in terms of destructive and transformative impact on the environment and other milieus.<sup>3</sup>

Chinese recent urban history has been marked by the impact of the Dacai-Dajian policies (Large scale demolition and construction) during its market-oriented phase, which saw historical settlements located on the urbanization frontline being demolished. Wenzhou region, a former third-tier city known for its small-scale, privately driven economy, was affected later by this urbanization wave. However, many of Wenzhou's pre-industrial settlements have been demolished during the last ten years, with an acceleration of the phenomenon since 2018,<sup>4</sup> despite the recent interest in their historical value.<sup>5</sup> Our research looks at this demolition process in the last ten years on the north-south urbanization axis of the Wenzhou urban area. Building on Caitlin Desilvey's "Curated Decay",<sup>6</sup> Levi-Strauss's "entropology," and Smithson's interpretation of Entropy in term of landscape studies, our paper explores and document these processes in terms of social, environmental, and cultural transformation and how they redefine our relationship to heritage and preservation. First, we will analyze the demolition mechanism. In as second part, we investigate the demolition industry and question the role of the architect within the

social framework during the demolition process. And the last part will present a design proposal called "Demolition Recital," which explores spatial narratives around this entropic phenomenon, looking at villagers' experience reusing architectural elements and materials.

## DEMOLITION MECHANISM

Over the past decades, Chinese urban history has been characterized by large-scale demolition and construction to transition from an agricultural country to a modern one. Stemming from the wave of land-based urbanization, a type of demolished landscape has emerged. The process of "creative destruction"<sup>7</sup> has nurtured the prosperity of capital while it has a restructuring impact on humanity.

The transition from "production in space to production of space"<sup>8</sup> has been generating a socioeconomic war at the local level in China today.

Understanding this new form of space as the incubator of new forms of life is a key responsibility of architecture. While the dynamic forms of social mechanisms have inherently created different elements, relationships, and crises. For instance, land property and use transition generate two of the most vulnerable groups during urbanization: migrants and disposed farmers. Four hundred thousand lost their homes and could not settle in a city with a permanent base.<sup>9</sup> Meanwhile, Government, building industry, and commodity markets determine the economic transitions to a greater extent than architects can. Under these circumstances, this project investigates how to reclaim the value during demolition.

## System

The analysis begins with understanding the demolition mechanisms, which are tentatively analyzed through pairs of seemingly contradictory systems. The first pair of considerations is the legislation and political framework in relation to a sociological study. Since 1991 the state council has established regulations regarding urban housing removal and developed a tax distribution system, appraisal guidelines, and reimbursement standards. Among the legislative guidelines, after the tax sharing reform, the role of local governments changed from asset owners to tax collectors, where they have been discovering the value of land and organizing illegal land taking to make revenues. The resident's passive resistance further intensified the divisions, dissociations, and loss of belonging.



Figure 1. The evolution of urban housing removal-related policy, the economic development (GDP and three main industries) (Drawing by Tieru Huang)

The second pair of contradictions involve the tensions between ecological and economic systems. Design objectives favor the contamination or destruction of the environment in service of the economy. All localities essentially deal with manufacturers and service providers. The regional competition in manufacturing and investment has led to the investment-driven use of cheap land in recent decades. This distorted structure has led to an over-industrialized economy, where the investment also has a relatively low return.

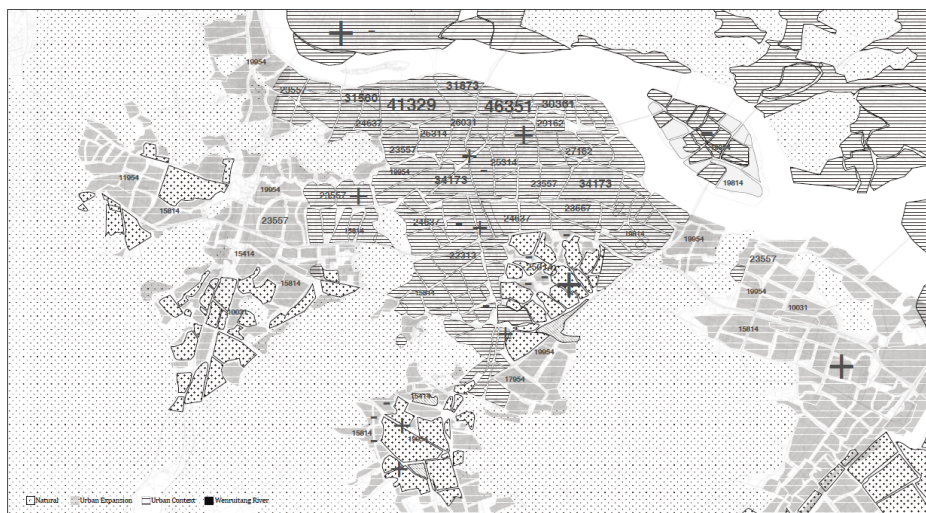


Figure 2. Expansion of the urban area in Wenzhou, Land value, and demolition/ development zones  
(Drawing by Tieru Huang)

In figure 2, we can see the demolition and redevelopment of urban cores have been raising the land price and how the land price varies with different zoning. The power of the top-down political structure seems to be overtaken.

## DEMOLITION INDUSTRY

Based on interviews and all the analyses above, the demolition mechanism analysis is concluded with an actor's engagement diagram (Figure 3). The government releases biddings and works directly with investors who subcontract the design to design institutes; their mutual interest has been a guideline for demolition and redevelopment. The university was synthesizing all aspects of the economy, culture, environment, and so on and had been carrying out advanced research, which is referenced during the decision-making process. In parallel with inequality, overbalance, and divisions, it's the loss of everyday life where people lived, conceived, and perceived. The loss of place is inevitable and is hard to be reclaimed with the demolition methodologies that make a clean break with history. This part of the proposal investigates the possibility of introducing the demolition industry, where the preservation works as the process of destruction, and the architects potentially work as a mediator between local governments, material providers, investors, and the public, instructing sensitive demolition, demolition material recycling, and recreation of architectural moments in everyday life.

To promote urbanization, the Wenzhou government started a significant demolition policy in 2016, tearing down old settlements, houses, villages, factories, and what was considered illegal construction in Wenzhou's urban areas, replacing them with new high-rise residential communities, commercial developments, and business districts. Figure 2 shows the distribution of commercial and resettlement housing in Wenzhou in 2022, developed either by the private sector or the local government, with the support of the large overseas Chinese who agree to the demolition of their Wenzhou assets in the belief that they will receive proper compensation and that it will improve their hometown. However, many villagers are still not appropriately compensated and must pay an additional fee to obtain relocation housing. The government has taken land use and production rights away from the peasants, leaving them to rent their houses as their primary income.

Due to the development of the Chashan Dream Town, industrial area building between 1980 and 2000 were demolished by the local street (Jiedao) government in a controversial process leading to legal disputes. The main reason for the government to renovate these lots was to attract new companies

they invested in. Some of the factories were demolished without their owner knowing the grounds, and the compensation received was far below the construction cost, causing considerable losses to the building owners.

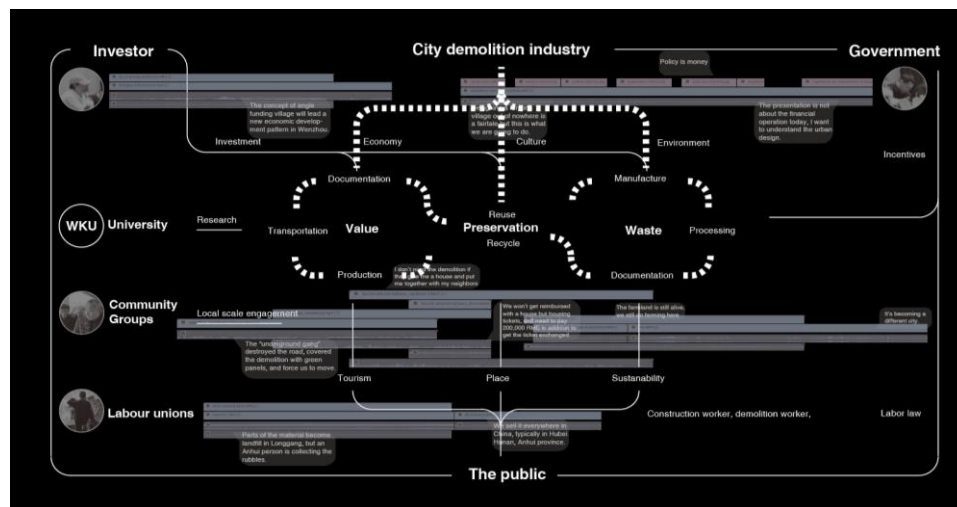


Figure 3. Redesign of stakeholder engagement diagram, demolition industry as a mediator of competing interests in economy, ecology, and culture (Drawing by Tieru Huang)

In research led in the late 2010s, researchers have looked at the impact of the Wenzhou-Kean University campus construction on the three villages it aimed to replace.<sup>10</sup> Our previous research on these villages has shown the local communities' social disruption, particularly in uncertain evolution cases. Local inhabitants keep using the farmland of a village abandoned five years ago, living in relocation housing and unable to afford the new housing under construction.

Our investigation of the demolition industry started with tracking the demolition materials at a regional scale, from the demolition site, usually covered by green fabric and surrounded by hoarding walls. In the Ouhai district, the materials are transported and sold in Ouhai, to the adjacent neighbourhoods, or other provinces for lower prices, sometimes being transported to the seaside to be used as landfills.



Figure 4. Demolition materials path (Left) Demolition materials sample (Right) (Drawing and pictures by Tieru Huang)

Figure 4 and 5 shows the analysis of how to take part of a house in a demolished village and what we can get during the process. Begin with identifying the valuable components, including materials, ornament, furniture, or related architectural elements. Understanding their color, texture, and so on is a way to describe what's making this place.

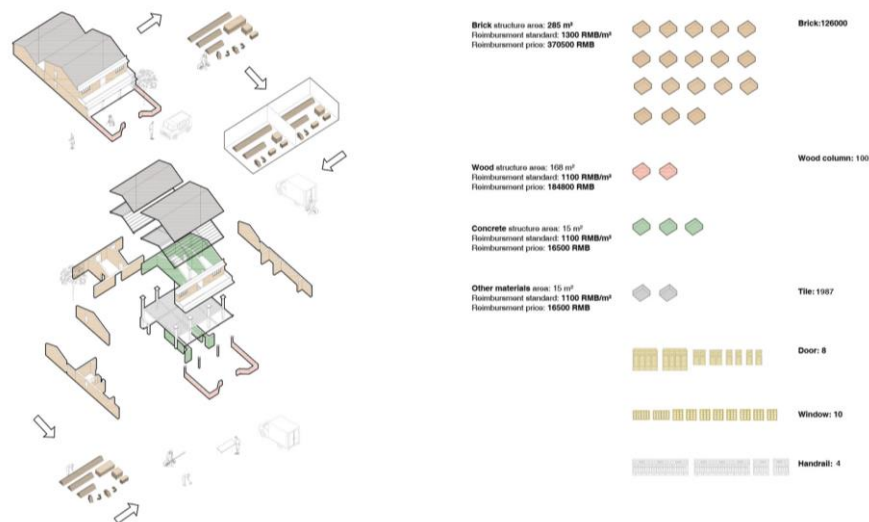


Figure 5. Demolition materials from a single house (Drawing by Tieru Huang)

The brick structure is around 285 square meters. It has 126 000 bricks, around a hundred rafters and purlins, 2000 tiles, eight doors, ten windows, and four handrails. By taking apart a house like this, the relocated resident can get around 400 000 RMB for reimbursement.

## DEMOLITION RECITAL

Starting from this analysis, we questioned the economic and symbolic value of the demolition materials. "Demolition recital" proposes using the demolition material and new materials to reinterpret architectural moments in one villager's life. Based on the interviews with many villagers, we were able to understand their life, and for these villagers, their life trajectory always seems to be similar and overlapping. Figure 6 demonstrates the local inhabitant's relocation process; they were removed to resettlement towers, to downtown, or sought survival in other provinces or countries, in this case, especially Italy and France.



Figure 6. Interview and relocation trajectories of local inhabitants (Drawing by Tieru Huang)

Figure 7 shows how we use demolition elements and new elements to create scenes and spatial narratives connecting our experience to a moment of the past, like a symbol or a personal imprint.

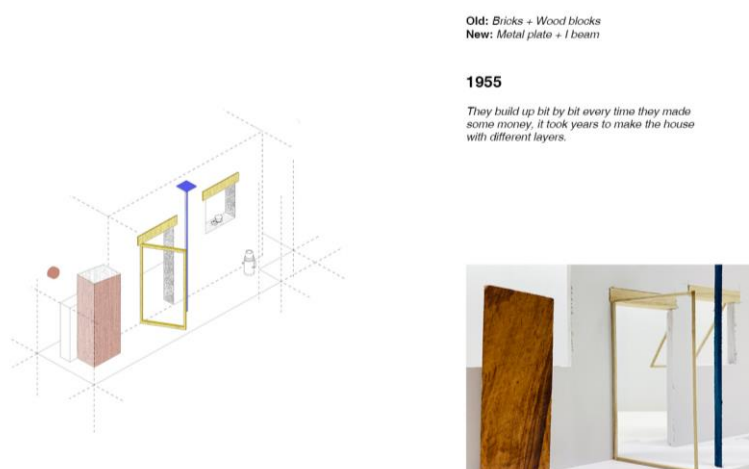


Figure 7. Example of the scene (Model and Drawing by Tieru Huang)

The recital is based on the story of one of the villagers, which embodies the evolution of Wenzhou during the last seventy years.

1943

He has lived in the village since he was born and grew up near the farmland with six sisters and brothers; he started farming when he turned twelve, just like his parents did.

1952

The little house he lived in started to seem crowded as he grew up; he extended the house with his father, brothers, and neighbours.

1955

They built up bit by bit every time they made some money; it took years to make the house with different layers.

1959

His sister married and moved to the North side of the village to live with her husband's family; her room became storage.

1969

His daughter turned eight; she joined the newly built primary school at the village entrance. He cleaned up his sister's room for her to live in, and since then, she has lived separately with his son. He opened a window for more light to enter so she could read better.

1975

He and his kids built the second floor preparing for his son's marriage. They would live on the second floor.

1986

Like some of the villagers in Wenzhou, they went to France and Italy to do clothes business. His daughter left, and she only came for the new year.

1995

His kids have grown, and many of his kids have left. He and his wife had more spare time and decided to open the facade of the side room and use it as a village shop.

2004

His wife passed away, All the kids left together with their kids, and nobody's hanging around in the house anymore. He does farming every day, and many of their room became storage.

2018

His farmland no longer belongs to him; the local demolition institute came to the village to demolish the village and persuade them to sign agreements and leave their house.

2019

During our last talk with him, he was sick, his children had gone abroad for business, and he was taken care of by migrant workers from Anhui province. He got beaten by the demolition crew for not being willing to leave his house. Since then, I have never been able to find him sitting in his courtyard anymore.

Old: Door +Wood frame  
New: Paint

2004

*His wife passed away. All the kids left together with their kids, and nobody's hanging around in the house anymore. he does farming every day, and many of their room became storage.*

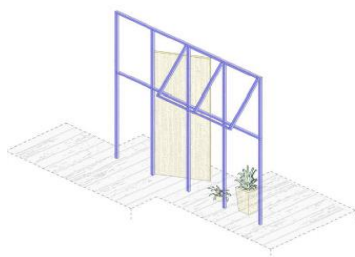
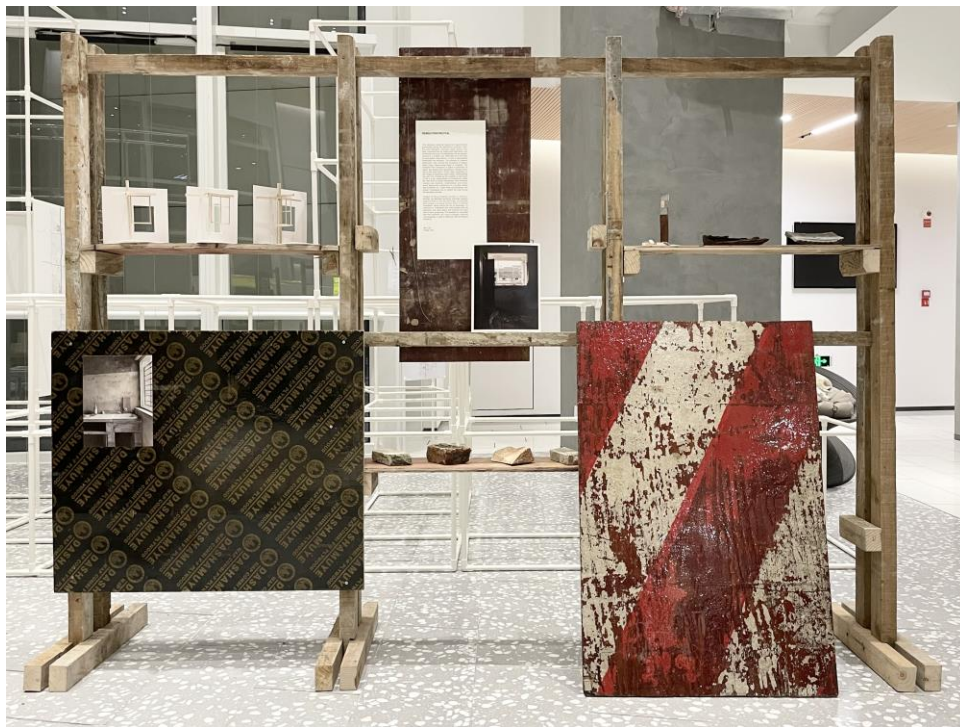


Figure 8. Example of the scene (Model and Drawing by Tieru Huang)

## CONCLUSION

In 2012, the jury citation of the Pritzker prize described Wang Shu's work's significance through the massive use of recycled materials from demolished villages in his architecture,<sup>11</sup> stressing the environmental benefits and cultural importance of material reuse. Around the same time, the interior design projects of Neri and Hu, reusing massively wood and bricks, significantly impacted design practices in China. But despite this short moment of environmental and cultural awareness, the question of demolition material and demolition representation vanished in the architectural practice and theory in China, having retreated into the picturesque boudoir of the countryside, driven by political motives. However, the two key questions raised by the never-ending large-scale demolition process, the loss of cultural heritage and social disruption on the one hand, and the environmental impact of mass demolition and mass construction, are more relevant than ten years ago and need to be explored by architectural practice and academia. Moreover, material reuse redefines what French historian Pierre Nora calls the "Site of Memory"<sup>12</sup> at the age of mass recycling while producing socially and environmentally significant architecture.



*Figure 9. Exhibition of the Demolition Recital, December 2022, Wenzhou-Kean University  
(Exhibition design by Tieru Huang)*

## NOTES

- <sup>1</sup> Robert Smithson, "Entropy Made Visible" in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley: University of California Press, 1996), 301.
- <sup>2</sup> Smithson, *Entropy*, 304
- <sup>3</sup> Claude Lévi-Strauss, *Triste Tropiques* (Paris : Plon, 1955), 496.
- <sup>4</sup> Sainan Lin, and Zhigang Li. "City Profile: Wenzhou - A Model City of Transitional China." *Cities* 95. (2019) <https://doi.org/10.1016/j.cities.2019.102393>. 9
- <sup>5</sup> If preservation plans have been first drafted in 2005 for Wenzhou historical downtown, and if the interest for rural villages by the tourism industry has grown exponentially since the early 2010s, we had to wait the late 2010s to see suburban villages, located on the urbanization frontline and on high real-estate value land, being preserved and transformed. See Vincent Peu Duvalon et al. "The Productive Village: Vernacular Forms of Preservation and Reuse in Suburban Village, Wenzhou, China" (paper presented at the AMPS/ University of Kent "(In)Tangible Heritage(s)" Conference, Canterbury, UK, June 15-17, 2022).
- <sup>6</sup> Caitlin DeSilvey, *Curated Decay: Heritage beyond Saving* (Minneapolis: University of Minnesota Press, 2017)
- <sup>7</sup> David Harvey, *Paris, Capital of Modernity* (New York: Routledge, 2003), 254.
- <sup>8</sup> Henri Lefebvre, *The Production of Space* (Oxford, OX, UK : Blackwell, 1992), 90.
- <sup>9</sup> Ran Tao, "The issue of land in China's Urbanization and growth model", in *Deepening Reform for China's Long-Term Growth and Development* Ross Garnaut et al. eds. (Canberra: ANU Press, 2014), 336.
- <sup>10</sup> Chen Chen, Frank Vanclay & Terry Van Dijk, "How a new university campus affected people in three villages: the dynamic nature of social licence to operate", *Impact Assessment and Project Appraisal*, 39:1 (2001), 2-10, DOI: 10.1080/14615517.2020.1769403
- <sup>11</sup> "2012 Pritzker Prize Laureate Wang Shu Jury Citation", The Pritzker Architecture Prize, accessed February 10, 2023, <https://www.pritzkerprize.com/jury-citation-wang-shu>
- <sup>12</sup> Pierre Nora, "Between Memory and History: Les Lieux de Mémoire." *Representations*, 26 (1989): 7–24. <https://doi.org/10.2307/2928520>.

## BIBLIOGRAPHY

- 2012 Pritzker Prize Laureate Wang Shu Jury Citation", The Pritzker Architecture Prize, accessed February 10, 2023, <https://www.pritzkerprize.com/jury-citation-wang-shu>
- Chen Chen, Frank Vanclay & Terry Van Dijk, "How a new university campus affected people in three villages: the dynamic nature of social licence to operate", *Impact Assessment and Project Appraisal*, 39:1 (2001), 2-10, DOI: 10.1080/14615517.2020.1769403
- DeSilvey, Caitlin, *Curated Decay: Heritage beyond Saving*. Minneapolis: University of Minnesota Press, 2017.
- Harvey, David, *Paris, Capital of Modernity*, New York: Routledge, 2003.
- Henri Lefebvre, *The Production of Space*. Oxford, OX, UK : Blackwell, 1992.
- Lévi-Strauss Claude, *Triste Tropiques*, Paris : Plon, 1955.
- Lin, Sainan, and Zhigang Li. "City Profile: Wenzhou - A Model City of Transitional China." *Cities* 95 (2019): 102393. <https://doi.org/10.1016/j.cities.2019.102393>.
- Pierre Nora, "Between Memory and History: Les Lieux de Mémoire." *Representations*, 26 (1989) <https://doi.org/10.2307/2928520>
- Peu Duvalon, Vincent, Cai Nuoying, Dou Jiawei, Li Yanqi, Zhao Ruzhen, "The Productive Village: Vernacular Forms of Preservation and Reuse in Suburban Village, Wenzhou, China", paper presented at the AMPS/ University of Kent "(In)Tangible Heritage(s)" Conference, Canterbury, UK, June 15-17, 2022.
- Smithson Robert, "Entropy made Visible (1973) ." in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley: University of California Press, 1996), 301-309.
- Tao, Ran, "The issue of land in China's Urbanization and growth model", in *Deepening Reform for China's Long-Term Growth and Development*, Edited by Ross Garnaut, Song Ligang, Fang Cai (Canberra: ANU Press, 2014), 336-377.

# THE IMAGE OF THE TERRITORY: LANDSCAPE PERCEPTION AND INFRASTRUCTURAL PALIMPSEST IN WENZHOU, CHINA

Authors :

VINCENT PEU DUVALLOON, XINYI YE, YUE BI

Affiliation:

WENZHOU-KEAN UNIVERSITY, CHINA

---

## INTRODUCTION

On the occasion of the exhibition "Air de Paris" in 2009, in a text inspired by the famous novel of Italo Calvino, the late Bruno Latour coined the term "Oligopticon" to describe our fragmented perception of the city, both in *concreto* and in *abstracto*.<sup>1</sup> He defines the term as "narrow windows through which, via numerous narrow channels, we can link up with only some aspects of beings (human and non-humans) which together comprise the city". On top of maps, control rooms, lists, and directories, he shows how transportation infrastructures are part of these oligopticons, which shows "a lot, from very close up." In other words, there is not one image of a territory but a series of images located within a territory. The direct perception of space is bounded by the framework, which allows the viewer to roam and perceive it. There is no raw space without mediation, no flâneur without boulevards, and no *dérive* without infrastructures. To the synoptic pretention of the western landscape tradition, the belvedere, a mode of representation that separate the observer from the object observed and that anthropologist Phillippe Descola calls "naturalist",<sup>2</sup> Latour proposes a new form of landscape model, located and performative. In another essay on mobility,<sup>3</sup> Latour stresses the relationship between transportation and transformation. "History of transportation," he says, is the "history of the relationship between the transformation we endure - or we impose – when we move" when mobility increase, the footprint of the still infrastructures grows.

In the 1950s, urbanist Kevin Lynch's research project on the city led to two seminal books: "The Image of the City"<sup>4</sup> in 1960 and "A View from the Road"<sup>5</sup> in 1964. During this research, Kevin Lynch described the perceptual impact of transportation infrastructure on the city's imageability. He identified two primary ways infrastructures influence our perception of the city: as a point of view to see the city from the infrastructures themselves, developed in "The View from the Road," and as dominant elements in our cities, that should be expressive forms with an emotional and symbolic value as mentioned in "The Image of the City."

Our research builds on Latour's oligopticons and transformations and Lynch's project to explore the interaction between infrastructures and landscape in the urban fringes of Wenzhou, south of Zhejiang, China. Its suburban landscape is shaped by two infrastructural networks: the historical Wenruitang water system, on top of which a series of contemporary transportation grids are overlapped. This infrastructural palimpsest results in a fragmented landscape where traditional settlements along the Wenruitang are juxtaposed with tower clusters and surrounded by highways and rail tracks floating

above the ground. Seen from above, this landscape is illegible. Seen from the infrastructure, we can understand its logic. Our study examines the fringes conditions across different scales, speeds, and times. It argues that the perception of urban changes is not only due to the morphological transformations but also a combination of formal and infrastructural evolution. In the first part, we will introduce the infrastructural network in Wenzhou, the second part will look at the historical transformation of transportation along a north-south axis from the urban area of Wenzhou to the rural area of Rui'an, and the last part will look at infrastructures running east-west along the urban edge.

## INFRASTRUCTURAL PALIMPSEST

Wenzhou is located in the mountainous region of South Zhejiang. Like many cities on the east coast of China, its primary transportation system was, until the late twentieth century, its network of canals, and its primary connection to the rest of China and the world was its harbor. The historical city is located on the Oujiang river bank. The Wenruitang, a hybrid waterways system of rivers and canals, links Wenzhou to Rui'an in the south. Its main stem runs north-south while tributaries and branches run perpendicular to the trunk, creating a gridiron covering most of the plain around Wenzhou. Looking at a satellite picture from 1960, we can see that it is the primary transportation system. Parallel to the north-south axis, a road links Wenzhou to Rui'an along the foothills. This road is part of a larger itinerary, the Han-Wen route that links Hangzhou north of Zhejiang and Wenzhou. Both the Han-Wen route and the Wenruitang, linking Wenzhou to Rui'an, are part of what the archeogeographer Sandrine Robert calls the flow (or the circulation) (*le flux* in French), which is "the relationship between two poles leading to the movement of people or goods, and creating an itinerary".<sup>6</sup> She adds, "the flow enables the synchronization of elements with very different temporal origins into a network that operates in the present." The flow is the most resilient element of an infrastructural network. The Han-Wen route and the Wenruitang are part of a flow of more than 2,000 years. The Wenruitang is one of the ground footprints (or *tracé* in French) of this flow and goes back to the Eastern jin dynasty, where the Han-wen route is a footprint dating from 1934.

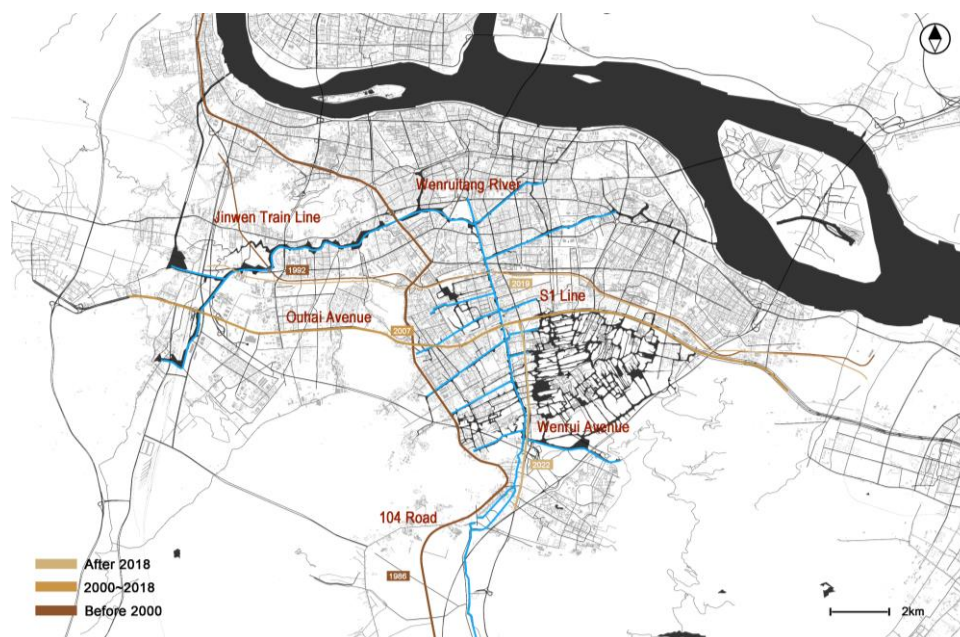


Figure 1. Circulation Infrastructures in Wenzhou. (Map by Xinyi Ye)

Looking at the current conditions, we can see a new road running along the Wenruitang trunk, built in early 2000, called Wenrui avenue, and linking Wenzhou and Rui'an on a straighter footprint compared to the sinuous Han-Wen road. This road answered the large influx of cars in Wenzhou following the fast economic development of the 1980s. During the last two years, Wenrui Avenue underwent a profound transformation with the addition of an elevated avenue and a light rail train, the S3, still under construction. As shown below, the perceptive break brought by these transformations is as important as the shift from the Wenruitang to the Wenrui avenue. The Hang-Wen route has also been profoundly transformed during the last forty years, becoming part of the national road 104 in 1985 and being replaced by a two by two lanes avenue in the previous five years. The current Wenrui avenue transformation and the improvement of the Han-Wen road are an evolution of what Sandrine Robert calls the *serviceability* or the construction of the infrastructure (in French: le *modélé*, a term coming from geomorphology to name the shape). For a given flow, transformations of the footprint and the construction will impact the perception of space.

The East-west flow, without the regional importance as the sea bounds it on one side and the mountain on the other, has been primarily served by the Ouhai river on the north, linking to Lishui in the west, a tributary of the Wenruitang. The Jin-Wen train line, which opened in 2000, linked Wenzhou to the hinterland and was the primary east-west connection built in Wenzhou urban area, ending at Wenzhou harbor on the east, now demolished, followed by the Ouhai Avenue, under construction at that time. The Ouhai Avenue opened in sections from 2005 to 2015, linking Wenzhou airport to the new High-Speed Rail station Wenzhou South on the west. In 2021, after three years of construction, the light rail train line S1, following partially the footprint of the Jin-wen train line and linking the airport to the train station, opened. Our research focuses on the Urban-Rural transition on the Han-Wen road, the Wenrui Avenue, and the Wenruitang River for the north-south itinerary and the S1 and the Ouhai avenue on the east-west connection, parallel to the urban fringe.

## **NORTH-SOUTH CIRCULATION**

As mentioned previously, we followed in our research the methodology developed by Kevin Lynch on urban imageability in "The Image of the City".<sup>7</sup> The primary data consisted of asking city users to list and briefly describe the most unique places in their minds and compare them to the researcher's field survey to help develop some urban design suggestions. The field survey consists of sending observers to the field and drawing the regional map, indicating the presence, visibility, and interrelations among the landmarks, nodes, paths, edges, and districts, and noting these elements' image strengths and weaknesses. Comparing these two data, the researchers found that the field survey is very accurate for predicting images, while the results obtained from the interview, although not highly predictive, will highlight the essential features of districts that can reflect social status.

Using Lynch's method for mapping the "view from the road",<sup>8</sup> we mapped a series of urban transportation infrastructures based on our field surveys, from the oldest to the more recent. The figures below show the main route, the infrastructures that intersect it, the surrounding buildings, and the landscape features. The yellow arrow represents the field of vision, while the visible distance is shown according to the length of the arrow.

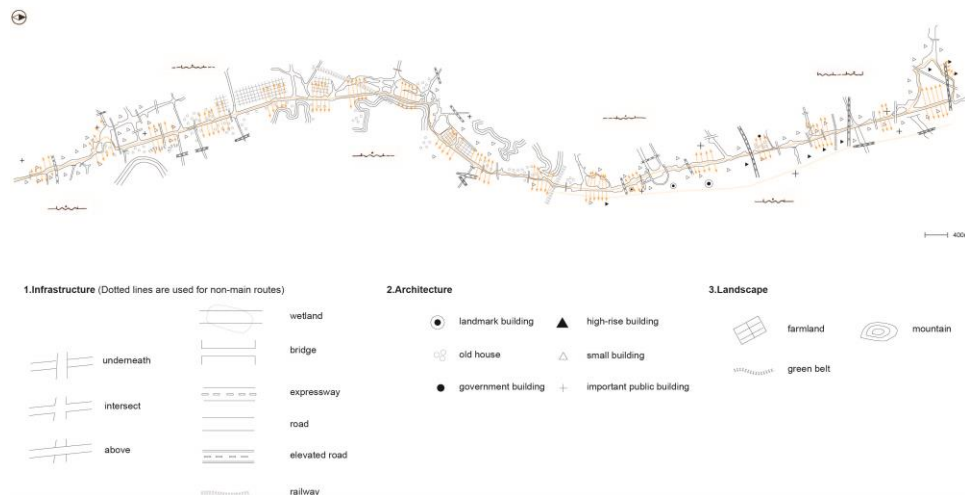


Figure 2. Map of the Wenruitang trip (Drawing by Xinyi Ye)

The Wenruitang River, with its crisscrossing river system, is the first route of our journey. Along the river, many infrastructures, such as bridges, wharves, and old residential buildings, show the city through a temporal cross-section where elements of the pre-industrial landscapes are juxtaposed with new infrastructures. As one of the few plains in Wenzhou, it serves as a key north-south connection of the few liveable and productive areas across mountains and rivers; the Wenrui plain receives exceptional attention from the Wenzhou government, especially the Wenruitang River and its adjacent Sanyang Wetland considered at the "mother river" of Wenzhou. A viaduct was built along the main channel of the Wenruitang River to protect the river and wetland and alleviate the traffic pressure. Ships on the Wenruitang river were the main route from Wenzhou to Ruian; however, cars gradually replaced ships after the reform and opening up. During our journey, we carry cameras, video recorders, and sketchbooks to document the view from the river, not unlike the methods of Ed Ruscha or Denis Scott Brown. We started near Wenzhou-Kean University and headed north to Yinxiang Nantang; then, we went south to approach Rui 'an. At the northernmost end of the route, new buildings and pseudo-classic architecture are emerging between leftovers from the agricultural landscape. At midpoint between Nantand in downtown Wenzhou and the rural fringes of Rui'an is the most recent construction of the Ouhai district, surrounded by demolished villages waiting to be redeveloped. At the southern end of the road, near Rui'an, are closely arranged residential areas and factories, with more ancient buildings facing the Wenruitang River, built in the late 1980s.

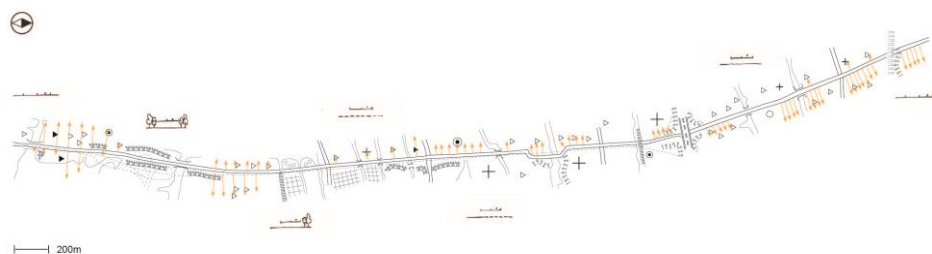


Figure 3. Map of the Wenrui Avenue trip (Drawing by Xinyi Ye)

Since the construction of the first phase of the elevated Wenrui Avenue took place in September of this year, the surrounding buildings have been built before the road; thus, few advertisements for vehicles are placed facing the elevated highway, and the building's main facades are bellow the drivers' eyesight. Only some high-rise buildings, such as the MixC Mall and the Municipal

Procuratorate, can be seen on the elevated road, and some have anticipated being seen from the new road. With the gradual completion of the Wenrui Avenue Expressway, it will become the "main artery" running north-south of the metropolitan area, where the Ouhai Avenue Expressway is the east-west rapid transit axis. Together they form the cardo and the decumanus of this new urban development. During our journey, we enter Wenrui Avenue from the viaduct entrance at Nanbaixiang Street and proceed north until we reach the junction of Wenrui Avenue and Ouhai Avenue. Driving from south to north, the surrounding urban architecture landscape becomes more prosperous. The visible buildings on both sides of the road are equally different. On our right are Sanyang wetlands, known as the "lungs of Wenzhou," which make it almost difficult to find high-rise buildings in this area because of the government's protection of these wetlands.

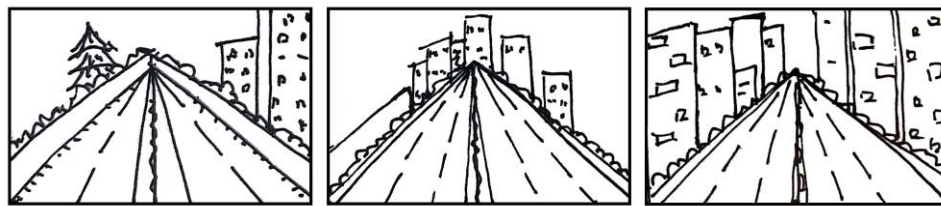


Figure 4. Views from the Wenrui Avenue (Drawing by Xinyi Ye)

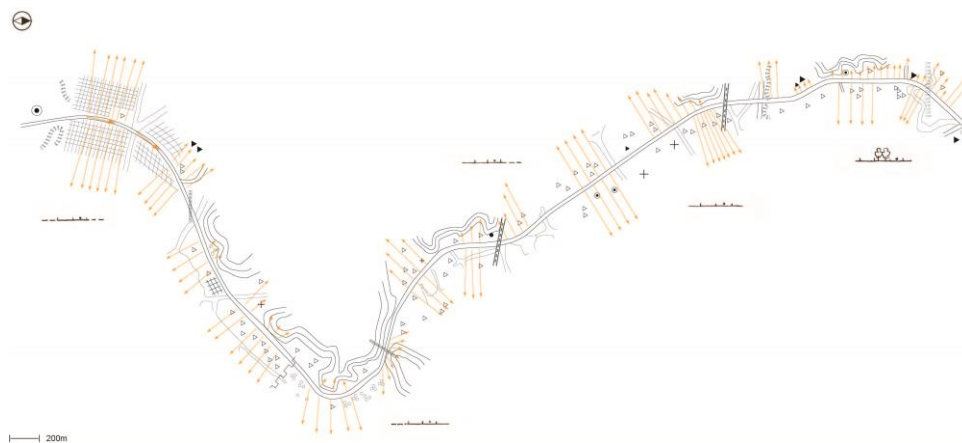


Figure 5. Map of the 104 National Road trip (Drawing by Xinyi Ye)

The 104 National Highway, formerly known as the Hang-wen Line, has been built from Yueqing to Rui'an since 1953. Due to its north-south direction, this road has witnessed the pace of urban development. Located in the north of this route is Lucheng District, this region was the first to get urbanization development. In the 1960s, the city was limited to this district. This interwinding of rural and urban landscapes that has defined these districts for the last forty years is slowly disappearing. At the southernmost end of this route is Rui'an, and the part we see in figure 5 is the area connecting the main urban area of Wenzhou (on the right) to Rui'an (on the left). In 1987, Rui'an became the first county-level city in Wenzhou due to its rapid development of economy and urbanization. While Rui'an is making significant efforts to develop, the 104 National Highway, which links Lucheng District to Rui'an, keeps being enlarged and rebuilt. This area is still dominated by farmland, but there are sporadic high-rise buildings and clustered low buildings newly built in recent years. In the middle of this route is Ouhai District. Twenty years ago, Ouhai was described as "a district without a city." The protection of wetlands and the rise of new buildings have become the most significant changes in Ouhai District in the last decade, gradually breaking the boundary between urban and rural.

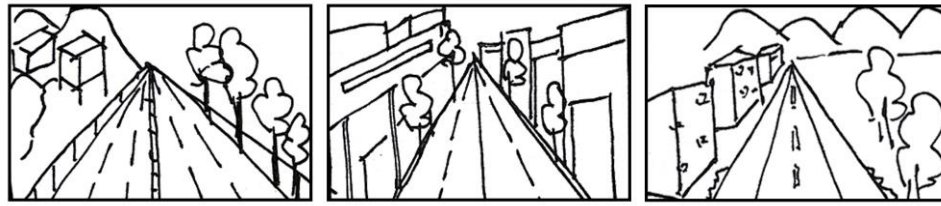


Figure 6. Views from the G104 Road (Drawing by Xinyi Ye)

## EAST-WEST CIRCULATION

Wenrui Avenue and the S1 Light Rail train line are Wenzhou's main east-west circulation, showing a different urban landscape. The S1 Light Rail train line is the first urban light rail line built and operated in Wenzhou and links Wenzhou airport on the west to Wenzhou high-speed train line on the east. Our field survey focused on the most urban part of the line, from Tongling Station in the west to Shuangou Avenue station in the east. The line deserves Ouhai District, Lucheng District, Longwan District, and Dongtou District, the Ouhai high-speed railway New City, the central Green Axis area, south Zhejiang Science and Technology City, Longwan central district and Oujiang New District, greatly easing the traffic pressure of Wenzhou. The partially abandoned railroad track along S1 in the surrounding area is the Jinwen train line. The new railroad created new vistas on the old railroad, which is being transformed into a park. At the same time, the elevated railroad became a new landmark for the people in the neighborhood. High-rise buildings surround the S1 stations as real estate speculation anticipated the completion of the train line. As the trains enter the station, the speed decreases, but sound barriers obscure the view from the train.

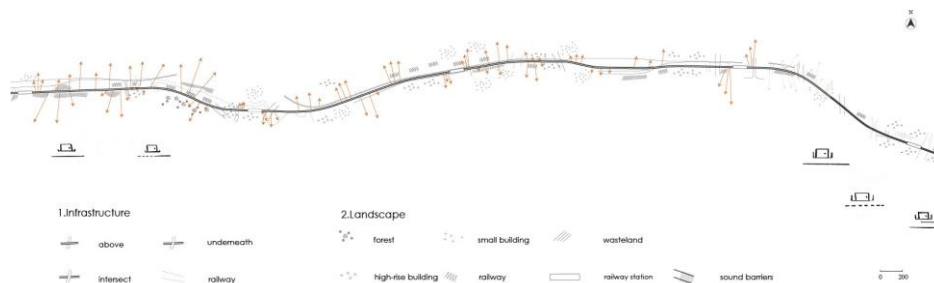


Figure 7. Map of the S1 Light Rail Train trip (Drawing by Yue Bi)

The presence of the station affects the development of the surrounding area. Areas close to stations have a wider variety of transportation options. Along the S1, the wasteland contrasts with the high-rise buildings. The user's visual range is constantly changing as the train moves along. The land has not changed completely, and the vast expanse of wasteland reminds us the urban fringes where the Jingwen trainline used to be. The Wenrui River is interspersed between the buildings and the land. Most of the railroad is located above the Wenrui River.

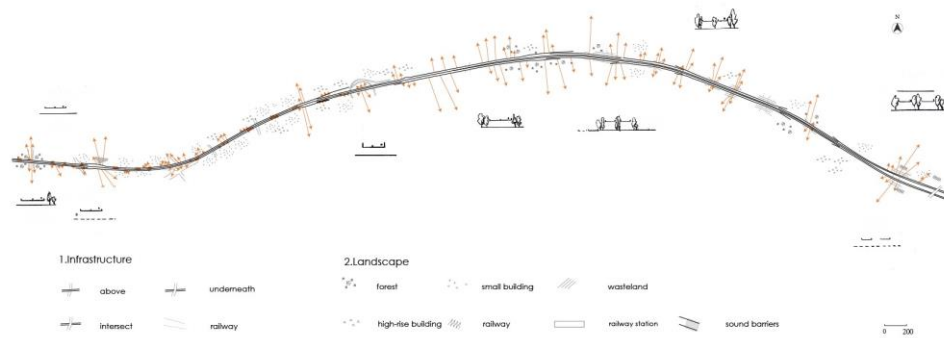


Figure 8. Map of the Ouhai Avenue trip (Drawing by Yue Bi)

Similarly to the S1 lien, Ouhai avenue is surrounded by sound barriers to keep the noise away from the residential area it crosses. It makes the view framed like a picture. Ouhai Avenue serves as the main east-west highway in Wenzhou city and, similarly to the S1, connects Longwan International Airport to the bullet train Wenzhou South Station. The completion of Ouhai Avenue in the early 2000s has dramatically improved Wenzhou circulation. The whole line is partially enclosed. The elevated road system reduces the traffic pressure of the original path. When driving on Ouhai Avenue, we can see many large signs built on top of the three to four stories industrial buildings from the 1990s. In addition, and particularly since the completion of the train station, many iconic buildings have been built along the road, adding the decoration of the billboards the new office buildings' duck architecture making Ouhai Avenue Wenzhou's strip.<sup>9</sup> These buildings become the new landscape of Ouhai avenue. Part of Wenrui Road runs along a mountainside on the south, bringing unbuilt forest areas into the urban landscape. But compared to the S1 Light Rail train line, the wasteland is reduced, and there are taller buildings.

## CONCLUSION

Looking at this new infrastructural landscape under construction, we would be tempted to retreat to positions adopted by architects during the second half of the twentieth century in America and Europe. From Nairn's "Outrage"<sup>10</sup> to Black's "God's Own Junkyard,"<sup>11</sup> passing by the aesthetic attitude of Koolhaas praising the terrifying beauty of the twentieth century in a sublime vision of infrastructures, not unlike Piranesi's drawing of Rome's ruins.<sup>12</sup> But this would reduce infrastructures to what Sandrine Robert calls the "Road-Monument",<sup>13</sup> discarding the "longue durée" history of which transportations are part and how the transformation of the infrastructure construction impact both the territory they are integrated into and our way of perceiving it. Beyond aesthetics, landscape studies inform us about man's relationship with its milieu, which French geographer calls the "mediance"<sup>14</sup> unique to any species and culture. Looking at infrastructural transformations is to dig into the deep cultural changes operating during this transitional period. It helps us develop a critical discourse on territorial transformation through its imageability.

## NOTES

- <sup>1</sup> Bruno Latour, "Introduction: Paris, invisible city: The plasma", *City, Culture and Society*, 2012, 3 (2), 91 - 93.
- <sup>2</sup> Philippe Descola, "La Fabrique des images," *La lettre du Collège de France*, April 28, 2010, <http://journals.openedition.org/lettre-cdf/1034>
- <sup>3</sup> Bruno Latour, "Préface : Les moteurs immobiles de la mobilité, " in *De l'Histoire des Transports à l'Histoire de la Mobilité*, eds. Vincent Guigueno et al. (Rennes: Presse universitaires de Rennes, 2009), 7.
- <sup>4</sup> Kevin Lynch, *The Image of the City*, (Cambridge: Harvard University press, 1960).
- <sup>5</sup> Donald Appleyard and Kevin Lynch, *The View from the Road* (Cambridge, MA: MIT Press, 1971).
- <sup>6</sup> Sandrine Robert, *Resilience: Persistence and Change in Landscape Forms* (London, UK: ISTE, Ltd., 2022), 75.
- <sup>7</sup> Lynch, *The Image of the City*, 9.
- <sup>8</sup> Appleyard, Lynch, *A View from the Road*.
- <sup>9</sup> Robert Venturi, Denise Scott Brown, and Steven Izenour. *Learning from Las Vegas* (Cambridge, MA: The MIT Press, 2017), 88.
- <sup>10</sup> Ian Nairn, *Outrage*, (London: Architectural Press, 1955).
- <sup>11</sup> Peter Blake, *God's Own Junkyard: The Planned Deterioration of America's Landscape*, (New York: Hold, Rinehart and Winston, 1964).
- <sup>12</sup> Rem Koolhaas, "The Terrifying Beauty of the Twentieth Century", in *SMLXL*, eds. OMA/Rem Koolhaas and Bruce Mau (Rotterdam: 010 publishers, 1995), 204-209
- <sup>13</sup> Sandrine Robert, "De la Route-Monument au Réseau Routier", *Les Nouvelles de l'archéologie* 115 (2009) : 8-12.
- <sup>14</sup> Augustin Berque, *Médiance: De Milieux En Paysages* (Paris: Belin, 2000).

## BIBLIOGRAPHY

- Appleyard, Donald and Lynch, Kevin. *The View from the Road*. Cambridge, MA: MIT Press, 1971.
- Berque, Augustin. *Médiance: De Milieux En Paysages*. Paris: Belin, 2000.
- Blake, Peter. *God's Own Junkyard: The Planned Deterioration of America's Landscape*. New York: Hold, Rinehart and Winston, 1964.
- Descola, Philippe, "La Fabrique des images," *La lettre du Collège de France*, April 28, 2010, <http://journals.openedition.org/lettre-cdf/1034>
- Koolhaas, Rem. "The Terrifying Beauty of the Twentieth Century", in *SMLXL* edited by OMA/Rem Koolhaas and Bruce Mau. Rotterdam: 010 publishers, 1995. 204-209
- Latour, Bruno. "Préface : Les moteurs immobiles de la mobilité, " in *De l'Histoire des Transports à l'Histoire de la Mobilité*, edited by Vincent Guigueno and Mathieu Flonneau, 7-10. Rennes: Presse universitaires de Rennes, 2009.
- Latour, Bruno. "Introduction: Paris, Invisible City: The Plasma," *City, Culture and Society* 3-2 (2012): 91-93.
- Lynch, Kevin. *The Image of the City*. Cambridge: Harvard University press, 1960.
- Nairn, Ian. *Outrage*. London: Architectural Press, 1955.
- Robert, Sandrine. "De la Route-Monument au Réseau Routier". *Les Nouvelles de l'archéologie* 115 (2009) : 8-12.
- Robert, Sandrine. *Resilience: Persistence and Change in Landscape Forms*. London, UK: ISTE, Ltd., 2022.
- Robert Venturi, Denise Scott Brown, and Steven Izenour. *Learning from Las Vegas*. Cambridge, MA: The MIT Press, 2017.

# FROM PAINTING TO INSTALLATION: PAINTERS' EXPERIMENTS IN THE MID-1980s AT THE SAGACHO EXHIBIT SPACE, TOKYO

Author:  
**TOYOKO ITO**

Affiliation:  
KINGSTON UNIVERSITY, UK

---

## INTRODUCTION

In her seminal book *From Margin to Center: The Space of Installation Art*, Julie H. Reiss observes that: “In the late 1980s some artists began to specialize in constructing installations with the result that a specific genre – ‘Installation Art’ – came into being.”<sup>1</sup> In defining installation art, Reiss states that it “can be abstract or pictorial, controlled or spontaneous,” and can include “separate objects . . . or no object at all.” She emphasizes “reciprocal relationship of some kind between the viewer and the work, the work and the space, and the space and the viewer.” She also claims among others that “the artist treats an entire indoor space . . . as a single situation rather than as a gallery for displaying separate works.”<sup>2</sup>

This paper considers new modes of presentation by painters in exhibitions held at the alternative arts space Sagacho Exhibit Space (1983–2000) in Tokyo between 1984 and 1986, where attempts to expand painting to installation can be observed in photographic records held at the Sagacho Archives.<sup>3</sup> The photographs show that these exhibitions were frequently presented with a unique display system as if to become part of the environment of the gallery space, oscillating between exhibition design and installation art or synthesizing the two. In addition, archival documents such as lists of works and sales records curiously indicate that these installation-like presentations were, in fact, composed of “separate works” or individually titled paintings unlike the criteria proposed by Reiss.<sup>4</sup> My intention in this paper is to clarify the factors and the processes underlying such hybrid presentations by the selected painters to provide a coherent view on the phenomena of painting as installation. This analysis has three aspects. Firstly, the gallery’s architectural and spatial features are examined; secondly, the painters’ methods of devising new modes of presentation are explored through four exhibitions; and thirdly, the oscillation or synthesis mentioned above is discussed in relation to the interpretation of the newly arrived word “installation” as well as the gallery’s curatorial focus on spatial compositions. The research is part of my on-going AHRC-funded research-based PhD project focusing on the Sagacho Exhibit Space in relation to Japan’s post-war cross-disciplinary arts movements.<sup>5</sup> The archival material is held by the Sagacho Archives in Tokyo.

## THE SAGACHO EXHIBIT SPACE AND ITS SPATIAL FEATURES

The Sagacho Exhibit Space opened in November 1983 at the height of postmodernism in the downtown area near the Sumida River, Tokyo, which was a fifteen-minute drive away from Tokyo's established gallery district Ginza.<sup>6</sup> The building it inhabited was the Food Building (Shokuryo Building), the former site of the Tokyo Wholesale Rice Market (Tokyo Kaimai Tonya Shijō) until 1941, from where rice was distributed throughout Japan.<sup>7</sup> The gallery occupied one room on the top floor of the three-storey building with basement, which used to be the auditorium for rice merchants.<sup>8</sup> Its founder, Kazuko Koike, who came from advertising, fashion journalism, and curatorial backgrounds among others,<sup>9</sup> opened it with a "self-managed alternative space" in mind.<sup>10</sup> The focus of this paper is on its inception years characterized by cross-disciplinary curatorial programs, which featured individuals from design, architecture, performing arts, and fine art.<sup>11</sup>



*Figure 1. Sagacho Exhibit Space*

Historically, the gallery's space was unique in three respects. Firstly, measuring roughly thirty by eight by five meters, it was a vast single space far beyond the conventional standards in Tokyo's gallery spaces at the time.<sup>12</sup> Secondly, it was not a so-called "white cube,"<sup>13</sup> and inhabited a Western-style period building, which was also rare as a gallery space in Japan. Known for "the essence and gracefulness of the Showa Modernism,"<sup>14</sup> the 1927 reinforced concrete building was characterized by Western stylistic influences from the Renaissance to Art Deco with a quadrangle surrounded by arched arcades and facades, lined with arched glass doors and windows with steel lattices accentuating geometric forms.<sup>15</sup> The gallery space was in two-tones of gray and white, reminiscent of European schools and hospitals, with an imposing proscenium arch adorned with the stucco relief of rice flowers near the entrance.<sup>16</sup> However, of all architectural features, the most prominent were the three-meter-tall largely-arched windows and doors, totalling as many as twenty-four, which lined three walls of the space.<sup>17</sup> Further heightening the space's exotic nature or what Koike called the "aura of space" in her 1992 autobiography,<sup>18</sup> they also created the space's third distinctive feature: the lack of a continuous wall space. The perimeter of the gallery was seventy-two meters but there were only two modest uninterrupted wall spaces: one eight-meter-long furthest wall (next to the exit) and a four- or five-meter-long area at the end of one long wall behind the proscenium, which together accounted for one sixth of the total perimeter.<sup>19</sup> The obvious lack of continuous wall spaces in the vast space created a challenging condition for painters. Hence, I propose that the combination of this spatial constraint as well as the exotic and inspiring architectural features were preconditions for painters to venture into the new modes of presentation.

## FROM MOVABLE WALLS TO INSTALLATION

How did the journey from painting to installation take place? Unexpectedly, it took the course that accords with what Brian O'Doherty described in his 1976 seminal essays, *Inside the White Cube: The Ideology of the Gallery Space*. Referring to the Minimalist painter, Frank Stella's 1964 exhibition held at the Leo Castelli Gallery, O'Doherty pointed out the potential of gallery walls to assume the role of works of art by becoming part of them: "Once the wall became an esthetic force, it modified anything shown on it. The esthetics of the wall . . . will inevitably 'artify' the works in a way that frequently diffuses its intentions."<sup>20</sup> Photographic records of Sagacho painters' exhibitions reveal that their journey from painting to installation was also indebted to the use of movable walls, dividers, or screens, to achieve structural, sculptural, and formative effects. Here, the custom-made movable-walls or room-dividers, which were created when the galley opened, were utilized in the first two exhibitions of the four explored below.<sup>21</sup> The compact, near-square, modular movable walls with a detachable metal stand – each measuring slightly larger than two meters on both horizontal and vertical sides and finished in the same gray as the surrounding lower walls – were flexible enough to be incorporated into their installations or exhibition displays.<sup>22</sup>



Figure 2. Jerry Kamitaki Exhibition

The first example where room-dividers were used in this context was in June 1984 in the exhibition of the Japanese American artist Jerry Kamitaki (1943–, California, USA).<sup>23</sup> Kamitaki had previously participated as a drafter in a Sol LeWitt drawing project in 1968,<sup>24</sup> which allows us to assume he was familiar with discourses on Minimalism, now regarded as the precursor to installation art.<sup>25</sup> For the Sagacho exhibition, Kamitaki showed only seven two-dimensional works of geometric forms, modest in number and size, but they were displayed on one or combined gray divider(s), which he re-painted partially in white,<sup>26</sup> and perhaps a darker gray too, to comply with the color scheme of the gallery. The dividing walls were used as a display system for his paintings, but also as an autonomous sculptural object standing without paintings on them to augment his sparse works or, to borrow O'Doherty's phrase "context as content,"<sup>27</sup> establishing a formal relation between the works, the dividers, and the space.

A similar experiment with the same dividers was made by Satoshi Hata (b. 1960, Hokkaido, Japan) in his exhibition, *Solid Black*, three months after Kamitaki's.<sup>28</sup> Hata showed twenty monochromatic paintings executed either in black or white,<sup>29</sup> each placed on top of a single or combined divider(s), without any metal stands, and all re-painted in white.<sup>30</sup> The effect is of the layered structure casually appearing to lean on the gallery walls or to lie on the floor (either flat or sloping) with supports hidden underneath. Here he achieved a higher level of installation-like qualities by creating a chaotic but

controlled, theatrical but strongly unified composition or “situation,” to borrow Reiss’s word, through the arrangements of each element in “an entire indoor space.”<sup>31</sup> In fact, the exhibition was the first time the gallery used the word “installation” in its newsletter.<sup>32</sup>



Figure 3. Satoshi Hata: *Solid Black* Exhibition

The third and fourth exhibition examples differ from the former two in that they both featured figurative paintings and over forty art works, which contributed to a strong sense of display. They also presented an alternative or a vernacular atmosphere unlike the sleek Minimalist or internationalist tone of the first two but incorporated a form of situation in the installations. Sanae Takahata (b. 1959, Gunma, Japan), whose exhibition, *Peaceful Place*, was held two months after Hata’s exhibition in December 1984,<sup>33</sup> negotiated Sagacho’s spatial challenge by appropriating interior decoration, which in turn gave her exhibition a unique display system and created the situation of a mock living space. To achieve this, Takahata literally brought in elements from traditional and modern Japanese houses and showed her sliding door paintings fitted into their imposing joinery rather than using the existing dividers and displayed her small objects on an acrylic glass table. She also arranged her smaller oil paintings on the gallery’s walls and even on windows as if to decorate a manor house, while one area was used to reproduce her former Paris studio with a ceiling-high Christmas tree, music, and cushions where viewers were able to sit and relax.<sup>34</sup> This can be interpreted as a way to achieve the “reciprocal relationship of some kind between the viewer and the work, the work and the space, and the space and the viewer,” as quoted earlier from Reiss’s definition of installation art.<sup>35</sup>

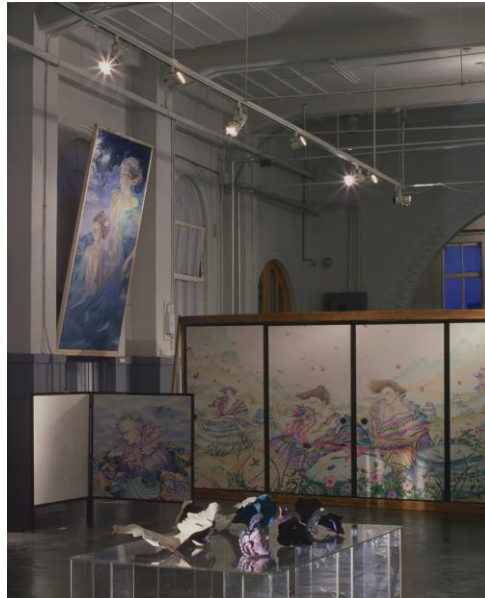


Figure 4. Sanae Takahata: *Peaceful Place* Exhibition

In contrast, the situation created by the paintings of imaginary buildings by Minoru Nomata (b. 1955, Tokyo, Japan) in his exhibition, *Still – Quiet Garden*,<sup>36</sup> appears more abstract and subtle to express in a single phrase, and here we should first focus on the fact that Nomata took a bold step of freeing his paintings from walls by hanging them from the ceiling which created the effect of the paintings floating in the air. This surreal effect seems to have been further emphasized by the bizarre encounter between the numerous arched forms depicted in the paintings and the gallery's arched windows and the proscenium. In other words, a high level of site-specificity was achieved which is another important feature of installation art.<sup>37</sup> Through the highly ordered arrangement of the paintings,<sup>38</sup> Nomata's exhibition has a strong sense of display while the concept of hanging the paintings enhanced the imaginary aspect of the depicted buildings,<sup>39</sup> an aspect further emphasized by ambient music.<sup>40</sup> In this sense, we can deduce that Nomata's exhibition had a strong sense of a unified single situation, a necessary prerequisite for much installation art.

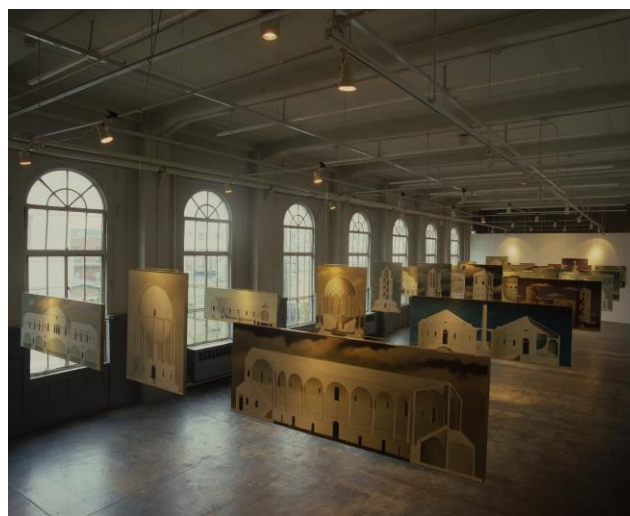


Figure 5. Minoru Nomata: *Still – Quiet Garden* Exhibition

It should be noted, however, that by the time Nomata had his exhibition in October 1986, nearly two years after that of Takahata's, the Sagacho Exhibit Space had seen its first wave of installations through the exhibitions of designers, sculptors, and multimedia artists, and the gallery was becoming known for large-scale "installation", though the word was not in common use. This is best represented by Hiroshi Mikami's exhibition held May 1985:<sup>41</sup> a durational performative installation with the artist staying at the gallery and making the work throughout the period of the exhibition.<sup>42</sup> For the installation, ninety stones weighing 12.6 tons in total were delivered from a quarry and laid out.<sup>43</sup> In fact, exhibition records show that by 1985 installation had become a new trend in the art world in Japan beyond the Sagacho Exhibit Space.<sup>44</sup> However, Nomata's situation was different from those of the three painters explored earlier. Coming from a design field, Nomata has recently claimed that he had never heard of the word, installation, until the gallery asked him to present his paintings specifically as installation,<sup>45</sup> which suggests the word was not in wider circulation.

## **SYNTHESIS OF EXHIBITION DESIGN AND INSTALLATION**

I have just explored four exhibitions by the Sagacho painters which oscillated between display and installation. According to Reiss's definition, a display of separate works is not regarded as installation art, but importantly, all four presentations were composed of individually titled works.<sup>46</sup> Should we therefore regard them not as installation but as exhibition display? Here, I take the position that they were both installation and exhibition display, but it is first important to point out that Reiss also mentioned that the word "installation" started being used by artists as a synonym to "exhibition" in the early 1970s in New York to describe the "work produced at the exhibition site."<sup>47</sup> This was a period when artists started making works on site and developed their spatial and site-specific consciousness. In other words, they became in charge of presenting their own works. This allows me to hypothesize that the meaning of the word "installation" could have also extended to "exhibition making" at this time in America.

In this wider context, my research shows a similar interpretational tendency among the creative circle of the Sagacho Exhibit Space in Tokyo in the mid-1980s. Interestingly, all three artists I interviewed, Hata, Takahata, and Nomata, interpreted the relatively new word of "installation" at that time more or less as "something to do with the gallery space,"<sup>48</sup> or to be more precise, as creative activities to achieve certain spatial effects by arranging their works in a gallery space that they also saw as an artistic medium.<sup>49</sup> In short, they interpreted "installation" as the arrangement of their works in a three-dimensional site-specific space. This view was also shared by the gallery's influential founder, director, and curator, Koike, who described "installation" as "the way the work is placed and is presented in a space" in an article published in 1985. In the same article she emphasized the importance of any experimental artist paying attention to their "installation" when they plan an exhibition.<sup>50</sup>

In relation to this, my research also reveals that the word "installation" seems to have been used almost interchangeably with phrases such as "space making" (*kūkan zukuri*) and "spatial composition" (*kūkan kōsei*) among the same group of people.<sup>51</sup> In fact, "space making" was one of the important curatorial concerns of the Sagacho Exhibit Space from the beginning and the phrase appeared as early as in the third issue of their exhibition newsletter, published to coincide with their third exhibition in March 1984 by Takayuki Mori, the then young fashion designer.<sup>52</sup> This curatorial concern was well reflected in some of the earliest exhibitions by designers and architects such as Mori, Hiroshi Hara, Junichi Arai, all held in 1984,<sup>53</sup> as well as the group exhibition *Trois Unites* by Rei Kawakubo, Takashi Sugimoto, and Tadao Ando in April 1985.<sup>54</sup> Viewing photographs of these exhibitions now, they too cannot easily be described without the word "installation," although "display" or even "exhibition design" are also relevant because of their highly designed or composed appearances.

All of these suggests that the word “installation” was used almost synonymously with “exhibition design” at the Sagacho Exhibit Space from at least 1984. This further allows me to assert that their views on “installation” – as opposed to “installation art” that Reiss claimed was defined in the late 1980s – were not particularly bound by the idea that installation could not be composed of separate works: hence, the arrival of the new mode of presentation by painters that registered the hybridity or the synthesis of installation and exhibition display.

## CONCLUSION

The journey from painting to installation, observed in the archival photographs taken in the mid-1980s at the Sagacho Exhibit Space, took place under the specific spatial conditions of the gallery and the interpretation of the word, “installation” among the gallery’s milieus. As I have proposed, the lack of wall spaces and the exotic Western architectural features inspired the painters to enter the territory of exhibition display. On the other hand, the heightened interest in spatial compositions among artists across all genres with the arrival of the new word “installation” encouraged painters to experiment with their display by incorporating spatio-temporal elements into their exhibitions. Contributions by designers, sculptors, and multimedia artists whose installations were concurrently exhibited at the gallery must have also encouraged them to explore a new presentation form. What is significant here is that these painters and the curators of the gallery interpreted installation vaguely as “spatial composition” and “space making,” and there was no idea that an installation should not be made with separate works. The oscillation or synthesis of exhibition display and installation art I have observed in the photographs was the result of such interpretations, and here we can see one condition of “installation” in mid-1980s Tokyo before “installation art” was firmly established as an artistic genre, as we now know it globally. It is important to emphasize, however, that the starting point of the journey was the spatial conditions of the gallery and the “aura of space” to borrow Koike’s phrase, which mesmerized the painters and the gallery’s curators alike. Allan Kaprow once deplored the constraints of architecture on the exhibiting of art works by claiming that architecture ‘have [has] dominated the shape of the art almost since the origins,’<sup>55</sup> but the Sagacho painters’ examples tell us that the deep relationship between the two disciplines, which Kaprow also emphasized, was still not only relevant but also positively transformative in mid 1980s Tokyo to the flourishing of the new genre, installation with site-specificity at its core.

## ACKNOWLEDGEMENTS

All images featured in this paper were reproduced with the generous support of the Sagacho Archives, Tokyo, unless otherwise indicated.’

## IMAGE COPYRIGHTS

Figure 1: Kozo Miyoshi

Figures 2–5: Masayuki Hayashi

## NOTES

<sup>1</sup> Julie. H. Reiss, *From Margin to Center: The Spaces of Installation Art* (Cambridge MA: MIT Press, 1999), xii.

<sup>2</sup> Reiss, *Margin to Center*, xii–xiii.

<sup>3</sup> Sagacho Archives, Room 306, 3331 Arts Chiyoda, 6–11–14 Sotokanda, Chiyoda City, Tokyo 101–0021, Japan [hereafter SA in citations of research materials]. The Sagacho Archives were founded as a private archive by former director of the Sagacho Exhibit Space, Kazuko Koike in April 2011 to store materials pertaining to gallery’s activities as well as to organize exhibitions of the former Sagacho artists. The Archives will leave the premises by the end of March 2023.

<sup>4</sup> Such materials were found in the folders pertaining to the three artists, Satoshi Hata, Sanae Takahata, and Minoru Nomata at the Sagacho Archives. See note 46 as well. For Reiss’s comments, see *Margin to Center*, xiii.

<sup>5</sup> Entitled *Sagacho Exhibit Space in 1980s Tokyo: A Mediation of Post-War Cross-Disciplinary Arts Movements in Japan*, the project intends to explore the gallery’s activities in the mid-1980s from the viewpoints of curatorial programs, gallery space, and business/network, by placing the subject in the larger context of Japan’s post-war cross-disciplinary arts movements.

<sup>6</sup> For details on the Sagacho Exhibit Space, see: Emotional Site Executive Committee, Miyako Takeshita and Izumi Torii, eds., *Emotional Site* (Tokyo: Emotional Site Executive Committee, 2003) Exhibition catalog; and Sagacho Archives and HeHe, eds., *Sagacho Exhibit Space 1983–2000: Fixed-Point Observation of Contemporary Art* (Tokyo: Mizue Nakamura HeHe, 2020) Exhibition catalog.

<sup>7</sup> “Shokuryo Building,” trans. Yoko Hayashi and Ken Frankel, in *Emotional Site*, 7. The Shokuryo building was built in 1927 after the previous building was destroyed in the 1923 Great Earthquake of Kanto. The Tokyo Wholesale Rice Market was established in 1886 and was renamed as Fukagawa Shōmai Market in 1931. The building was demolished in 2003 due to the dilapidation and an apartment building was constructed at the site. See “Shokuryō Birudingū ga 75-nen no rekishi ni maku” [The End of the Seventy-Five-Year History of Food Building], *Tōtō Yomiuri*, November 8, 2002, <http://t-yomiuri.co.jp/食糧ビルが75年の歴史に幕/>.

<sup>8</sup> “Shokuryō Building,” 7.

<sup>9</sup> For details on Koike, see: Kazuko Koike, *Kūkan no aura* [The Aura of Space] (Tokyo: Hakusuisha, 1992); Kazuko Koike, *Bijutsu/Chūkanshi: Koike Kazuko no genba* [Art/A Middle Child: Workplaces of Kazuko Koike] (Tokyo: Heibonsha, 2020); and Kazuko Koike, *Koike Kazuko: Hajimari no tane o mitsukeru* [Koike Kazuko: Finding the Seeds of Beginning] (Tokyo: Heibonsha, 2021).

<sup>10</sup> Kazuko Koike, “Pentimento: Things that Have Come to Emerge,” trans. Kei Bengert, in *Sagacho Exhibit Space 1983–2000*, 18.

<sup>11</sup> Exhibitors between 1984 and 1985 include: fashion designers, Issey Miyake and Rei Kawakubo; textile designer, Junichi Arai; commercial interior designer, Takashi Sugimoto, who also supervised the initial refurbishment of the gallery; architects, Hiroshi Hara and Tadao Ando; Butoh dancer, Uno Man; and fine artists, Hiroshi Tomura, Gulliver Shuzo Azuchi, Katsuya Komagata, Hiroshi Mikami, Shoichiro Higuchi, and Aijiro Wakita among others.

<sup>12</sup> Floorplan by Atelier KS, “Sagacho Exhibit Space: S 1:50,” SA, fol. “Shokuryo biru heimenzu” [Food Building Floorplan]. As the floorplan does not include the height of the space, this article was consulted: “Komeshiyō kara gyarā e” [From Rice Market to Gallery], *Yomiuri Shimbun* [Yomiuri Newspaper], February 8, 1984, press cutting, accessed through SA, fol. “Reviews on Sagacho #1.”

<sup>13</sup> Brian O’Doherty, *Inside the White Cube: The Ideology of the Gallery Space* (Santa Monica: The Lapis Press, 1986), 15. The essays were originally written in 1976. In defining the notion of “white cube,” O’Doherty wrote: “The outside world must not come in, so windows are usually sealed off. Walls were painted white. The ceiling becomes the source of light. . . . Unshadowed, white, clean, artificial – the space is devoted to the technology of esthetics. Works of art are mounted, hung, scattered for study.”

<sup>14</sup> “Shokuryo Building,” 7.

<sup>15</sup> See: Kazuhiro Yamamoto, “Shokuryo Building,” in *Tokyo Kenchiku Kaikoroku* [Memoir of Architecture in Tokyo], ed. Yoshichika Shinohara (Tokyo: Yomiuri Shimbunsha, 1988), 101–104. The building was designed by Watanabe Kenchiku Jimusho [Watanabe Architecture Firm] led by Toraichi Watanabe.

<sup>16</sup> See *Emotional Site*, 91, 102–03. The original floorplan shows that there was a stage underneath the proscenium arch when the room was used as the auditorium for rice merchants.

<sup>17</sup> Floorplan by Watanabe Architecture Firm, a photocopy of the original floorplan, c.1925, SA, fol. “Shokuryo biru,” and Floorplan by Atelier KS, SA, fol. “Shokuryo biru.” The original floor plan shows eleven and three windows on the south and east walls facing streets respectively, and five windows and doors each on the north

wall facing the courtyard and a balcony. The new floorplan by Atelier KS shows the left most window on the south wall was blocked. Earlier photographs show this window was not blocked indicating that the gallery made the modification. For the measurement of the windows, I consulted: “Komeshijyō.”

<sup>18</sup> Koike’s first autobiographical book published in 1992 was entitled *Kūkan no aura* [Aura of Space]. The cover featured a photograph of her standing in the Sagacho Exhibit Space. This symbolically connects the idea of ‘aura of space’ and the gallery. There is a short section given the same title within the first chapter “Toshi to Kūkan no Aura” [Aura of City and Space]. See note 9 above as well.

<sup>19</sup> Floorplan by Watanabe, SA, fol. “Shokuryo biru.”

<sup>20</sup> O’Doherty, *White Cube*, 29.

<sup>21</sup> Kazuko Koike and Miyako Takeshita, interview by the author, Sagacho Archives, Tokyo, February 19, 2020. The movable-walls were made by the design office, Super Potato, led by the interior designer, Takashi Sugimoto, for the pre-opening exhibition, *Magritte and Advertising*, November 15 – December 5, 1983.

<sup>22</sup> Koike and Takeshita, interview. The measurements of the movable walls are estimate based on my observation of the archival photographs that show the walls.

<sup>23</sup> *Jerry Kamitaki Exhibition*, 16 June – 8 July, 1984.

<sup>24</sup> Lindsay Aveilhé, “Long Live the Ephemeral: Cataloguing Sol LeWitt’s Wall Drawings,” in *Locating Sol LeWitt*, ed. David S. Areford (New Haven: Yale University Press, 2021), 209. Kamitaki participated in “the first installation of *Wall Drawing #2*” of LeWitt with other drafters Tony Day, Guy Dill, Jim Ganzer, and Michael Maglich at Ace Gallery, Los Angeles in 1968. Kamitaki was a student at Chouinard Art School in Los Angeles between 1966 and 1969. Sagacho Tsūshin [hereafter Sagacho Newsletter], “Jerry Kamitaki,” n.p. [2 of 2], SA, fol. “Jerry Kamitaki.”

<sup>25</sup> Reiss, *Margin to Center*, 50. She writes: “Although not all of the sculpture that came to be known as minimalism relates to the Installation art idea . . . a significant portion of it does. Important theoretical issues raised by some of the artists associated with Minimalism and by contemporaneous critics are germane to Installation art.”

<sup>26</sup> Miyako Takeshita, email message, November 11, 2022. Takeshita, first an assistant and subsequently one of the curators at the Sagacho Exhibit Space, confirmed that Kamitaki used gallery’s custom-made dividers and repainted them.

<sup>27</sup> O’Doherty, *White Cube*, 65–86. In the third chapter, titled “Context as Content,” O’Doherty addressed how context or the container of art works such as gallery walls were transformed into content in the late modern and postmodern period. (79)

<sup>28</sup> *Satoshi Hata: Solid Black*, 23 September – 14 October, 1984.

<sup>29</sup> Satoshi Hata, interview by the author, by phone between Tokyo and Sapporo, March 2, 2020; and Price List, “Satoshi Hata ‘Solid Black’ Sept.23 (Sun) – Oct.14 (Sun)”, SA, fol. “Satoshi Hata.”

<sup>30</sup> Takeshita, email.

<sup>31</sup> Reiss, *Margin to Center*, xiii.

<sup>32</sup> Sagacho Newsletter, “Solid Black: Satoshi Hata Exhibition,” n.p. [2 of 2], SA, fol. “Satoshi Hata.”

<sup>33</sup> *Sanae Takahata: Peaceful Place*, 7 – 23 December, 1984.

<sup>34</sup> Sanae Takahata, interview by the author, Studio of Takahata, Tokyo, February 25, 2020.

<sup>35</sup> Reiss, *Margin to Center*, xiii.

<sup>36</sup> *Minoru Nomata: Still – Quiet Garden*, October 7 – 26, 1986.

<sup>37</sup> Reiss, *Margin to Center*, xiii. Making connections between installation art and its precursors such as Minimalism, she writes: “Site specificity, institutional critique, temporality, and ephemerality are issues shared by many practitioners of these genres.”

<sup>38</sup> Setsuko Nomata, email message, September 21, 2022. Thirty-five paintings out of the forty-two shown were presented as an installation. Of the thirty-five paintings presented in eight rows, twenty-nine in seven rows were hung from the ceiling and six were displayed on the furthest wall near the exit. Visitors were able to walk between the rows.

<sup>39</sup> Minoru Nomata, interview by the author, Home and studio of Nomata, Tokyo, February 24, 2020. Nomata: “I came up with the method of floating my works in the gallery space, as I thought this would make my non-existent architectures stand out.” He repeated the idea in his online talk organized by De La Warr Pavilion, Bexhill, UK on August 19, 2022.

<sup>40</sup> Nomata, interview. Nomata was fascinated by Brian Eno’s music at the time and his work has been influenced by it thereafter. For his Sagacho installation, he used Dominique Lawalrée’s *Clandestine*.

<sup>41</sup> Hiroshi Mikami: *Evolution – Work in No. 11*, Project Quau No. 6, May 7 – June 6, 1984.

<sup>42</sup> “Ima Bokutō ni geijutsu no hanaga” [The Arts in Full Bloom in Bokutō Now], Tōto Yomiuri, June 28, 1985, press cutting, accessed through SA, fol. “Reviews on Sagacho #1.”

<sup>43</sup> “Tokyo no shitamachi: moto ‘kaimai ton’ya shijō’ deno pafōmansu no Nankai” [Downtown Tokyo: Mystery of Performance at Former ‘Wholesale Rice Market’], *Shūkan Yomiuri* [Weekly Yomiuri], June 9, 1985, press cutting, accessed through SA, fol. “Reviews on Sagacho #1”

<sup>44</sup> Installation as the extension of sculpture existed from the late 1960s onwards or even earlier in Japan, but installation as spatial art, where the unity of the work and gallery’s entire space was encouraged, appears to have started attracting attention around this period. The increasing popularity of the genre can be seen in the August 1985 issue (no. 542) of *Bijutsu Techo*, an art magazine, where a large-scale feature on installation art was published for the first time comprising nearly fifty pages.

<sup>45</sup> Nomata, interview. This point was further indicated in the De La Warr Pavilion online talk in August, 2022. The press release issued for his Sagacho exhibition acknowledged Nomata was going to present his paintings as his own installation. Press Release, no title but signed by Koike on page 2, A4 photocopy, stapled, hand-written in Japanese, n.p. [2 or 7], SA, fol. “Minoru Nomata.”

<sup>46</sup> Digitized archival photographs provided by the Sagacho Archives were used to confirm Kamitaki’s exhibits. For others, price lists were used: Price List, “Satoshi Hata ‘Solid Black’ Sept.23 (Sun) – Oct.14 (Sun),” A4 original, typed in English with Hata’s full-name stamped in Japanese, 20 works listed, SA, fol. “Satoshi Hata”; Price List, “‘Kōfuku na basho’ Takahata Sanae ten [‘Peaceful Place’ Sanae Takahata Exhibition]: Price List,” A3 photocopy, typed in Japanese, forty-six works listed, SA, fol. “Sanae Takahata”; and Price List, no title, A4 two pages, no stapled, typed in English, forty-two works listed, SA, fol. “Minoru Nomata.”

<sup>47</sup> Reiss, *Margin to Center*, xi. She writes: “Installation began to be used interchangeably with exhibition to describe work produced at the exhibition site.”

<sup>48</sup> Nomata, interview; and Takahata, interview. Nomata cited the quoted expression as well as “juggling with space” as his interpretation of “installation,” while Takahata’s reference to the quoted phrase suggests she was using the word synonymous with “spatial compositions.” See also note 51 below.

<sup>49</sup> Hata, interview. His interpretation of the word “installation” agrees with that of Takahata. There was a strong sense that he used it as a synonym for *kūkan kōsei* [spatial composition] and *kūkan zukuri* [space making], which, together with what Nomata, Takahata, and some more exhibitors recalled, informed my interpretation. See also note 51 below.

<sup>50</sup> Kazuko Koike, “Shitamachi no kūkan nite: Wakai āchisuto no katsudō no ba o mezasu” [At Gallery in Downtown: Trying to be the Space for Emerging Artists], *Yomiuri Shimbun* [Yomiuri Newspaper], June 15, 1985, accessed through SA, fol. “Reviews on Sagacho #1.”

<sup>51</sup> Hata, interview; and Takahata, interview. Both artists used the phrases “space making” and “spatial composition” often, by which they vaguely meant installation. Hata said: “What I wanted to do was making a space with my two-dimensional works,” while Takahata was told by Koike about the importance of space making and the presentation of works.

<sup>52</sup> Sagacho Newsletter, “Takayuki Mori: Warming Up,” n.p. [2 of 2], SA, fol. “Takayuki Mori.” As part of a report on the previous exhibition, Hiroshi Tomura: 1<sup>st</sup> with Tom (February 4 – March 4, 1984), the editor wrote: “We are planning to develop the space making specifically suited for the Sagacho Exhibit Space as well as the activities as the space of communication.”

<sup>53</sup> The three exhibitors’ programs were: *Takayuki Mori: Warming Up*, March 17 – April 15, 1984; *A Message from Eastasia: “Festival in a 1984 Shelter” – A Commemoration of the George Orwell Novel*, June 1 –10, 1984; and *Junichi Arai: Nuno Kūkan, Nuno Ningen* [Fabric Space, Fabric Human], July 14 – 29, 1984. Hara and Arai’s occupation, see note 14.

<sup>54</sup> *Trois Unites*, April 17–30, 1985.

<sup>55</sup> Allan Kaprow, *Assemblage, Environments, and Happenings* (New York: Harry N. Abrams, 1965), 151–52. Kaprow’s publication emphasized that the new art forms, which emerged in the 1960s, were free from the long artistic tradition in which art forms were restricted by the house/room where works were exhibited. He argued radical artists in the 1960s began leaving the “typical room” and “working out in the open.” (155)

## BIBLIOGRAPHY

Aveilhé, Lindsay. “Long Live the Ephemeral: Cataloguing Sol LeWitt’s Wall Drawings.” In *Locating Sol LeWitt*, edited by David S. Areford, 203–30. New Haven: Yale University Press, 2021.

- Emotional Site Executive Committee, Miyako Takeshita and Izumi Torii, ed. *Emotional Site*. Tokyo: Emotional Site Executive Committee, 2002. Exhibition catalog.
- “Ima Bokutō ni geijutsu no hanaga” [The Arts in Full Bloom in Bokutō Now]. *Tōto Yomiuri*, June 28, 1985. Press cutting. Accessed through SA, fol. “Reviews on Sagacho #1.”
- Floorplan by Atelier KS. “Sagacho Exhibit Space: S 1:50.” Sagacho Archives, fol. “Shokuryo biru heimenzu” [Food Building Floorplan].
- Floorplan by Watanabe Architecture Firm. A photocopy of the original floorplan, c.1925. Sagacho Archives, fol. “Shokuryo biru.”
- Hata, Satoshi. Interview by the author, by phone between Tokyo and Sapporo, March 2, 2020.
- Price List. “‘Kōfuku na basho’ Takahata Sanae ten [‘Peaceful Place’ Sanae Takahata Exhibition]: Price List.” A3 photocopy, typed in Japanese, forty-six works listed. Sagacho Archives, fol. “Sanae Takahata.”
- Price List. “Satoshi Hata ‘Solid Black’ Sept.23 (Sun) – Oct.14 (Sun).” A4 original, typed in English with Hata’s full-name stamped in Japanese, 20 works listed. Sagacho Archives, fol. “Satoshi Hata.”
- Price List. No title. A4 two pages, no stapled, typed in English, forty-two works listed. Sagacho Archives, fol. “Minoru Nomata.”
- Press Release. No title. Signed by Koike on page 2, A4 photocopy, stapled, hand-written in Japanese. Sagacho Archives, fol. “Minoru Nomata.”
- Kaprow, Allan. *Assemblage, Environments, and Happenings*. New York: Harry N. Abrams, 1965.
- Koike, Kazuko. “Shitamachi no kūkan nite: Wakai āchisuto no katsudō no ba o mezasu” [At Gallery in Downtown: Trying to be the Space for Emerging Artists]. *Yomiuri Shimbun* [Yomiuri Newspaper], June 15, 1985. Press cutting. Accessed through SA, fol. “Reviews on Sagacho #1.”
- Koike, Kazuko. *Kūkan no aura* [The Aura of Space]. Tokyo: Hakusuisha, 1992.
- Koike, Kazuko. *Bijutsu/Chūkanshi: Koike Kazuko no genba* [Art/A Middle Child: Workplaces of Kazuko Koike]. Tokyo: Heibonsha, 2020.
- Koike, Kazuko. “Pentimento: Things that Have Come to Emerge.” Translated by Kei Benger. In *Sagacho Exhibit Space 1983–2000: Fixed-Point Observation of Contemporary Art*, edited by Sagacho Archives and HeHe, 18–23. Tokyo: Mizue Nakamura HeHe, 2020. Exhibition catalog.
- Koike, Kazuko. *Koike Kazuko: Hajimari no tane o mitsukeru* [Koike Kazuko: Finding the Seeds of Beginning]. Tokyo: Heibonsha, 2021.
- Koike, Kazuko and Miyako Takeshita. Interview by the author, Sagacho Archives, Tokyo, February 19, 2020.
- “Komeshijyō kara gyararī e” [From Rice Market to Gallery]. *Yomiuri Shimbun* [Yomiuri Newspaper], February 8, 1984. Press cutting. Accessed through SA, fol. “Reviews on Sagacho #1.”
- Nomata, Minoru. Interview by the author, Home and studio of Nomata, Tokyo, February 24, 2020.
- O’Doherty, Brian. *White Cube: The Ideology of the Gallery Space*. Santa Monica: The Lapis Press, 1986.
- Reiss, Julie H. *From Margin to Center: The Spaces of Installation Art*. Cambridge MA: MIT Press, 1999
- Sagacho Archives and HeHe, ed. *Sagacho Exhibit Space 1983–2000: Fixed-Point Observation of Contemporary Art*. Tokyo: Mizue Nakamura HeHe, 2020. Exhibition catalog.
- Sagacho Tsūshin [Sagacho Newsletter]. “Jerry Kamitaki.” Sagacho Archives, fol. “Jerry Kamitaki.”
- Sagacho Tsūshin [Sagacho Newsletter]. “Solid Black: Satoshi Hata Exhibition.” Sagacho Archives, fol. “Satoshi Hata.”
- Sagacho Tsūshin [Sagacho Newsletter]. “Takayuki Mori: Warming Up.” Sagacho Archives, fol. “Takayuki Mori.”
- “Shokuryō Building.” Translated by Yoko Hayashi and Ken Frankel. In *Emotional Site*, edited by Emotional Site Executive Committee, Miyako Takeshita, and Izumi Torii, 7. Tokyo: Emotional Site Executive Committee, 2003.
- “Shokuryō Birudingū ga 75-nen no rekishi ni maku” [The End of the Seventy-Five-Year History of Food Building]. *Tōto Yomiuri*, November 8, 2002. <http://t-yomiuri.co.jp/食糧ビルが75年の歴史に幕/>.
- Takahata, Sanae. Interview by the author, Studio of Takahata, Tokyo, February 25, 2020.
- “Tokyo no shitamachi, moto ‘kaimai ton’ya shijō’ deno pafōmansu no Nankai” [Downtown Tokyo, Mystery of Performance at Former ‘Wholesale Rice Market’]. *Shūkan Yomiuri* [Weekly Yomiuri], June 9, 1985. Press cutting. Accessed through SA, fol. “Reviews on Sagacho #1.”
- Yamamoto, Kazuhiro. “Shokuryo Building.” In *Tokyo Kenchiku Kaikoroku* [Memoir of Architecture in Tokyo], edited by Yoshichika Shinohara, 101–104. Tokyo: Yomiuri Shimbunsha, 1988.

# RENDERING AS PROTO-PHOTOGRAPH: SITUATING CONTEMPORARY IMAGE-MAKING

Authors:

**JOHAN VOORDOUW**

Affiliation:

AZRIELI SCHOOL OF ARCHITECTURE & URBANISM, CARLETON UNIVERSITY, CANADA

---

## INTRODUCTION

The prefix *post-* has become a convenient hook to hang our present concerns. But as we consider post-digital, drawing, and orthographic<sup>1</sup> this paper argues that it is the prefix *proto-* that better defines the present structural foundation of image-making. Here I use the term *proto*, not in terms of an original, but as a precursor. I focus this precursor to examine the act of rendering as a *proto-photograph* – an imagined real visually captured prior to construction – to articulate the intent and theoretical implications on authorship, authority, and audience.

I situate rendering as proto-photograph to subvert the rupturing of time as the prefix *post-* indicates, to argue for an oscillation with the past that vibrates through architectural image-making and continually implicates past practices for renewal.

I first experienced the render as proto-photograph in 2005, when I saw Ali Rahim's proposal for the Reebok Store in Shanghai. I was completely enamored with both its sinuous forms of the architecture and the reflective quality of its image. For years I believed the project was built. In hindsight it was strange that the store was so empty, but I wanted Ali Rahim's store to be real, so I simply accepted the photographic quality of the renderings as built. Almost twenty years later, I now reflect on how I was so voluntarily deceived.<sup>2</sup>

For expediency, I set out some ground rules: *drawing* can be any mode of analog or digital representation. I use *image* to convey any type of digital representation.

*Photography* is an image captured through a chemical, and now digital process. To highlight difference, I focus on the veracity of the photographic image with a full acknowledgement that photographs since their inception have been highly curated and altered.<sup>3</sup> I understand that neither photography or drawing are that simplistic, but this position aims to better articulate their lineage and difference to relation to digital *rendering*.

*Rendering*, is different from *render* – which is the act of applying material texture and shading to an image. Rendering is used solely to describe the production and composition of architectural images as related to computer graphics.<sup>4</sup> I use rendering and proto-photograph interchangeably but preference proto-photograph to situate renderings as a historical extension of photographic practices, and to clarify the process of image production – that *proto-* precedes the photograph.

All three modes of architectural visualization: drawing, photography and renderings share a plural history that ebbs and flows through our profession's past; however, photographs and renderings focus on perspectival compositions – not orthographic drawing.

Perspective compositions were from the onset situated outside of architectural drawing.<sup>5</sup> Where orthographic practice gave measured information, perspectives were vignettes to convey the spatial and material arrangement. Perspective drawings struggled to translate from sheet to site but offer a critical role to both architect and client to 'see' the proposal.<sup>6</sup>

This original mode of 'seeing' is different from the 'seeing' that pervades photography.<sup>7</sup> As a proposal, perspectival drawings stem from the imagination as a scene prior to construction. Rendering shares a similar intent, but sees this imagined space through the photographic lens, mimicking the real, and shifting contemporary image-making practices from an imagined art towards a realized mechanical practice.<sup>8</sup>

This focuses on a rendering's inherent contradiction. As a proto-photograph it conveys a real that is not yet constructed.<sup>9</sup> As a digital image, their technical translation lies in code, the ineffable binary that supports not just the image, but our entire contemporary condition,<sup>10</sup> however, it remains a twenty-first century technique simulated through a nineteenth-century lens. This historical lens placates its structural underpinnings to homogenize the digital image towards commodity. As an image of commodity, it must convey uniqueness to generate an object of desire while simultaneously offering an object that is established and normative in that desire.

## AUTHORSHIP

Neil Levine writes, architecture's relationship with photography was originally as a documentary tool, and the recording of historic monuments.<sup>11</sup> In this relationship, photography served a key role in disseminating important architecture of the past, and as a resource to safeguard built work for the future.

As architectural photography became its own medium it began to actively disseminate new ideas, and to build a portfolio of recently completed built work.<sup>12</sup>

The use of the photographic image was eventually pluralised towards speculative image-making by architects such as Le Corbusier, as a method of curation, and Ludwig Mies van der Rohe's as collage in his Friedrichstrasse project.<sup>13</sup> This hybrid relationship continued in earnest with the advent and subsequent popularization of the computer as many early digital images were as much 'drawing' as post-processed collage. With the development of rendering software, this plural history began to coalesce around a singular photographic mode of production.

This mode of production requires a specific set of skills. At its most basic, one places a camera in the digital model to find a viewpoint.<sup>14</sup> Settings such as focal length, lighting, atmosphere, and materials are iteratively manipulated. Once the desired settings have been achieved a process is set in motion.

Like other creative vocations, it has a range of users from the casual novice to the professional.<sup>15</sup> Professionals are on par with other forms of established art, studying programmatic and technological developments, conducting extensive explorations of possible outcomes, and pushing the field forward through sustained, critical practice. Rendering is a novel medium, a practice that invites interpretation and sustained personal engagement.<sup>16</sup> It requires astute technical awareness of a series of interrelated settings and their effects. The distinction is that an architectural drawing is understood to represent a speculation of the future. An architectural rendering must already be that future, with the digital model already constructed, its surfaces simulated, its light rays traced.<sup>17</sup> This construction, expressed through a process of technical procedure, photographically captures a phantom.<sup>18</sup>

As Andrew Atwood describes:

*“In the production of a rendering, a 3-D model must be turned into a 2-D image on the raster screen; this is not simply what we see - it is the only thing we see. We take for granted that the raster screen represents the picture plane. The computer must have a means of assigning each point on the model to a pixel, which is larger than a point, but the smallest unit of the raster image. Most importantly, the computer must assign depth to that pixel, despite the absence of any depth or physical distance in reality.”<sup>19</sup>*

This depth is two-fold. It is the perspective depth of the image but also the depth of the author’s intent. Architectural authorship comes in many forms from ideas spoken, written, drawn, recorded, interpreted, and reconsidered; this cycle contains a number of related medias.<sup>20</sup> Each of these media enables a varied reading of a project, each describes its own form of speculation. The rendering as photograph, however, shifts its allegiances a little more from speculation, toward a veil of photographic ‘truth’.

Renderings as proto-photographs are rarely abstracted, or sketched.<sup>21</sup> Architects may develop preliminary renderings of a project, but these procedures have a different intent. When an architect decides on rendering their work, they must reify their ideas to prepare for, and facilitate the photographic lens when those ideas may still be ambiguous and nascent. This technological filter offers a narrow representational range. While post-processing expands this field, the base renderings themselves are typically more limited.<sup>22</sup>

Furthermore, renderings, like photographs, are rarely unfinished. While one can stop a drawing at any point, a rendering, as a procedure, can only be initiated. A rendering can be cancelled but this leaves an unprocessed image. The usable range of drawing stretches from a single line to a meticulously shaded picture. If a photograph is unprocessed, it is unusable.

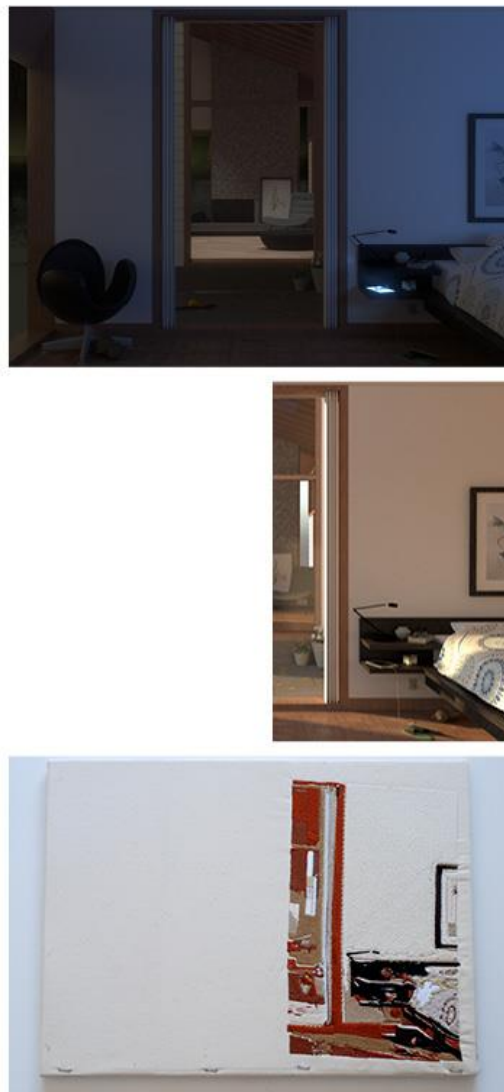
Agency can be retained if a rendering is post-processed, but this can undermine the photographic procedure.<sup>23</sup> Renderings, like photographs cease to have veracity if added information is discontinuous, undermining its seamless representation.

The disconnect between process, intent, and representation questions the agency of the author if architecture’s pluralistic process ends at the same representational end point. The main crux of authorship is the critical intent behind the content of the image - the distortions, scrutiny, and resistance both to the context in which the image is situated, and to practice of the image itself. As Swati Chattopadhyay writes:

*“Buildings can be seen to represent an idea or ideology... In this approach to the problem of representation, the building or urban ensemble is seen as an emblem or a symbol of a dominant set of social relations, even if imperfectly realized in practice. Underlying such analyses is the assumption that only some people and institutions have the language, resources, and authority to make themselves or their ideas manifest in public. In other words, not everyone wields the power of representation.”<sup>24</sup>*

This power to represent is an ethic towards the wider public. It is the recognition that architecture is socially situated, and that the built environment exists in a deep social matrix. Photographs are critical because they historically expose this matrix, offering compelling insights to its inequities and exposing the margins as they relate to a continually shifting center. Proto-photographs visualize a narrow, privileged world. They do not expose, they reinforce.

If renders simulate the intentional lineage of the photograph, they should aim to expose. They should make comment on the intractable social discourse that flows through our communities and expand representation.



*Figure 1. Johan Voordouw, New Image of Home, Bedroom Diptych, 2019. The project addresses contemporary domesticity through a series of novel, digital rendering techniques. In the Diptych series, embroidery (bottom) layers commentary by connecting the renderings with historic modes of handiwork.*

## **AUTHORITY**

Robert Kronenburg writes: “Buildings are powerful barometers of almost every aspect of human achievement, capable of expressing ideas about society, culture, religion, government, education, economics and, of course, technology.”<sup>25</sup>

The architectural image preludes these achievements prior to construction. It premeditates progress and holds authority until the image is actualized.

Authority is the weight of the image, the burden it carries in delivering visual information, and the duration this information is relevant. The architect has the authority to produce the image, but it is others that hold the authority to accept it.

In his introduction to *Designing for a Digital World*, Neil Leach states that we not only have the digital realm mimicking the analogue world, but the analogue world is mediated through the digital

world that is mimicking it.<sup>26</sup> This doubling further dislocates architectural representation. At the start of the digital turn the virtual space of the computer was a parallel universe. Today, this virtual space is increasingly simulating our real world. But what does the proto-photograph convey?

In Susan Sontag's book *On Photography*, Sontag states that photographs appropriate, and that they relate not only to knowledge, but to power; that photographs form miniature realities that a viewer acquires only through seeing.<sup>27</sup> Sontag, critiques this condition by stating that the photograph is paradoxical to understanding. A photograph implies seeing the world how the camera records it. However, understanding develops by not accepting the world simply by how it looks.<sup>28</sup> If this is true for photographs, it is doubly true for renderings. If we only *see* renderings, it imposes the act of looking as the only road to architectural understanding.<sup>29</sup> This either places an undue burden on the proto-photograph or shortchanges pluralistic ways of knowing.

The authority of the digital image, therefore, has a shelf life; one that is increasingly shortening as renderings become more easily produced, transported, and consumed. With so many images, how might one rendering visually describe the contemporary condition more successfully than the images that preceded its dissemination or those that follow?

Sarah Chaplin states: "sight is not only a social fact, but a culturally situated social fact occurring at a specific juncture in time and space."<sup>30</sup> This juncture is inundated with photographic images. At issue is that renderings rarely capture 'culturally situated social facts.' These facts are wickedly difficult to simulate, and often too real to include. Renderings are poor, and unwilling, to express the full breadth of life, inclusive of its margins. Therefore, while digital images become increasingly adept at visualizing our material world, proto-photographs increasingly lag behind socially situating architecture. The very aspect that gives photography its force is the very quality that proto-photographs lack. This thinness of social depth describes renderings as images of commodity and slips architectural rendering from representations of space to representations of capital, expressing architecture not as a social place for occupation, but as objects of investment and locations of consumption.

Renderings, if they want to maintain authority must move in two directions. Firstly, it must move outward towards pluralizing its representational expression, moving away from the photographic image towards the multiplicity of drawing. This would require a better acknowledgment of the social shortcomings of the image and aim to more faithfully express human, non-human, and environmental actors in a more inclusive manner. Secondly, it must move inward, expressing the content that gives photography its weight, its capacity to capture, to stir emotion, to elicit feeling.

## AUDIENCE

In William J. Mitchells book *What Images Want*, Mitchel describes the difference between an image and a picture – an image is a mental thing, a picture is that thing on a support.<sup>31</sup>

To make an image consumable, it needs a media. In the past, this media as supporting structure was fixed. With the advent of the printing press, and varied image reproduction methods this support started to move. With photography, global media and now the internet, images are made for dispersion. The appetite for architectural images is enormous. The computer can quench that insatiable want, but how the audience ascribes value when images flow so freely requires architects to better frame the purpose of their pictures, beyond merely showing 'the good life'.

Today, a rendering is the primary mode of exchange as technical drawings are too abstract, and sketches too conceptual. Here falls the third translation - rendering as an image of publicity.<sup>32</sup>

An audience confers authority and values authorship. Here architectural representation slips from the drawing board into the marketplace.<sup>33</sup> There are many audiences that consumes architectural images:

client, stakeholders such as city officials, members of the architectural and related building professions, and the public. Each consumes, interprets, and translates the rendering for their own ends. Like my own experience with the Reebok Store, I wanted the image to be real. The audience chooses to accept the deception of the rendering. This is a critical difference with photographs. In photography, the audience maybe shocked,<sup>34</sup> reluctant,<sup>35</sup> or actively interrogate to find fault with why the photograph might not be telling the full picture.<sup>36</sup> With renderings this participation is a longing for the real, the anticipation of its actualization. This does not mean that renderings come without critique, but renderings can shed critique by transferring from the real to an idealized image of desire. Proto-photographs are comparable to David Hickey playfully description of the *fake real*.<sup>37</sup> The knowing participation of accepting the rendering; of visually occupying a place surrounded by the idealized individuals, free from social, political, historical constraint. This condition speaks to a second duality; the double consciousness of the image.<sup>38</sup> The paradox that renderings are materially alive, in that they make us desire, but are dead and devoid of the real. Renderings are a copy, an imitation,<sup>39</sup> but not as considered by Walter Benjamin.<sup>40</sup> It is a counterfeit of us; we become avatars that exist in the digital image, fulfilling our virtual lives.<sup>41</sup> If the photograph conflates the real as true, then the rendering conflates the fake as real. This desire is what makes the rendering not simply an architectural representation, but a commodity.

Architectural visualization has strengthened a shift from architect as author to architect as producer.<sup>42</sup> It continues the path of architecture from culture, towards commerce. This commercial frame limits the socially situated practice of building.

John Berger writes: “Publicity is, in essence, nostalgic. It has to sell the past to the future.” Berger continues that the image would lack both confidence and credibility if it used a strictly contemporary language.”<sup>43</sup> This past to future is not the technological lineage that I described at the beginning of this essay, it is a lineage which situates the novel within an established and normative frame of wanting. This contemporary language, however, offers opportunity to confront our most pressing social, and environmental concerns. In this respect, drawings, photography, and renderings bare similarities. What is different, however, is that rendering represents this commodity in such a homogenous manner. Renderings rarely aims to beautify the underbelly of society or call out the mundane as a new subject of artistic consideration. The rendering sells.

In the end, who is the audience of the render? Where will they be stored, collected, archived, and exhibited? In the *Itinerant Languages of Photography*, Eduardo Cadava writes that photographs are always moving, allowing us to reconsider and recontextualized their agency to lend an old voice to new ideas.<sup>44</sup> Currently renderings are equally mobile. Hopefully in time they can become equally as articulate. To speak to new audiences, to give voice to emerging architectural ideas, and to make visible the rich breadth of our social milieu.



*Figure 2. Johan Voordouw, New Image of Home, Media Series, 2019. The flat background is a novel, computationally developed CYMK halftone. The perspectival pixels on the laptop screen use the RGB matrix of an Apple MacBook. The screen is the primary window into the home - a mise en abyme of the dining room, articulating the difference between the analog halftone and digital pixel.*

## CONCLUSION

Architecture remains a wonderfully messy business. In the translation of image to building, history matters. We should not express technological evolutions as hallmarks of our time if they have nothing new or interesting to say. What makes architecture powerful is how it synthesizes environmental, economic, social forces in material form to capture the intent of a society in simultaneously expressing needs, and at architecture's best, its wants.<sup>45</sup>

The computer holds many critical opportunities for the profession. But these opportunities must be critically appraised.<sup>46</sup> Images should continue to strive forward, to stake a position for the continued relevancy of the profession as we communicate to the broader world.

Therefore, if we are going to appropriate a process such as photography to define the technical means by which we develop our visual work, we should retain the central characteristics of what gives photography authority. It is to understand its technical history of bringing light to an image, but more importantly to bring light to the social discourses that brought that image to life.

As a point of departure, we can consider Karen Kurczynski beautiful defense of drawing (in relation to painting), not as a way of looking back, but as a pluralising route forward:

*“Drawing reveals process... Drawing is marginal. Drawing is ~~hand~~made and expressive without being outmoded or too commercial. Drawing defies mass mediation... Drawing is free from convention and therefore it is the ultimate expression of freedom. Drawing is unpretentious and partial. It is a fragment of a new world, or it is a partial memory of the past.”*<sup>47</sup>

So, what is our defense of renderings?

We must interrogate the content of the image, and the technical and institutional structures that generates the image itself. We have fought and thought hard over the architectural line. We can start subjecting renderings to the same level of thoughtful critique. We must ably situate the architectural rendering as a unique visual mode, understanding that a digital image is a unique technological process that is specific to its conception, and that the content of the proto-photograph is specific to a particular space and time. The rendering is not innocent. It must come into its own, built from the scaffold of drawings and photographs that preceded it to live in the present. It should aim to represent the intractable concerns that make architecture so urgent and relevant in acknowledging the purpose of our profession and recording the visual history of its critical junctures and ideas.

## NOTES

<sup>1</sup> See John May on his argument of drawings as compared to images, and the resultant post-drawing/post-orthographic.

John May, *Signal. Image. Architecture* (New York: Columbia Books, 2019)

<sup>2</sup> I write this paper as Midjourney becomes an increasingly pervasive speculative tool, synthesizing precedent images through the black box of artificial intelligence and bringing the photography ever closer to the beginning stages of architectural practice.

<sup>3</sup> Beatriz Colomina conveys instances of the manipulation of photography.

See: Beatriz Colomina, "Le Corbusier and Photography," *Assemblage* 4 (1987): 6-23.

Claire Zimmerman writes of the often fraught and contradictory relationship of photography and contemporary architecture for architects like Ludwig Mies van der Rohe and Walter Gropius.

See: Claire Zimmerman, *Photographic Architecture in the Twentieth Century* (Minneapolis: Minnesota University Press, 2014): 54-55 and 169-177.

<sup>4</sup> Andrew Atwood, "Rendering Air" in *First Office: Nine Essays* (Treatise): 41.

Neil Levine's gives a compelling case of analog rendering for Henri Labrousse's Bibliothèque Sainte-Geneviève with an argument that the 'real' was a concern in analog technique as well.

See: Neil Levine, "The Template of Photography in Nineteenth-century Architectural Representation," *Journal of the Society of Architectural Historians* 71 (Sept. 2002): 306-331 at 314.

<sup>5</sup> Wolfgang Lotz, *Studies in Italian Renaissance Architecture* (Cambridge: MIT Press, 1987): 4.

<sup>6</sup> Consider Adi Shamir Zion's description of architectural modernism and the anti-perspective position of its early forebearers.

Adi Shamir Zion, "New Modern: Architecture in the Age of Digital Technology," *Assemblage* 35 (April 1998): 62-79.

<sup>7</sup> Barthes goes even further, stating that the camera was not not a machine of the eye, but of the finger, of machines of time.

See: Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill & Wang, 1981): 15.

<sup>8</sup> Barthes writes that photography was not invented by the painter but by the chemist.

See: Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill & Wang, 1981): 80.

<sup>9</sup> Antoine Picon describes the real as opposed to realism: "Thus, the question of the real in architecture is elusive, even risky, insofar that it may appear unnecessarily idealistic. However, the question is unavoidable to justify architecture's claim to cultural relevance... what the real is truly about could lie in considering the real as the most fundamental level at which architectural relates to the social imaginary... that is to say, with the various shared references with which a given society builds a common frame of understanding for the problems that matter to it"

Antoine Picon, "Continuity, Complexity, and Emergence: What is the Real for Digital Designers?," *Perspecta* 42 (2010): 147-157 at 149.

<sup>10</sup> Johanna Drucker writes: "Digital media gain their cultural authority in part because of the perception that they function on mathematical principles."

See: Johanna Drucker, "Digital Ontologies: The Ideality of Form in/and Code Storage: Or: Can Graphesis Challenge Mathesis?" *Leonardo* 34 (2001): 141-145.

<sup>11</sup> Neil Levine, "The Template of Photography in Nineteenth-century Architectural Representation," *Journal of the Society of Architectural Historians* 71 (Sept. 2002): 306-331 at 308.

<sup>12</sup> "After the arrival of photography, architectural representation multiplied further, as they populated every stage of creation of buildings, from drawing before the fact to construction itself to photography of construction to photographs taken for publication after the building was complete."

Claire Zimmerman, *Photographic Architecture in the Twentieth Century* (Minneapolis: Minnesota University Press, 2014): 5.

Neil Levine writes: "But once photography became engaged in the world of contemporary design, the issue of competition would arise, although in a form peculiar to a medium where the final product – the building – is far removed from the artistic act that brings it into being – the drawing."

See: Neil Levine, "The Template of Photography in Nineteenth-century Architectural Representation," *Journal of the Society of Architectural Historians* 71 (Sept. 2002): 306-331 at 309.

<sup>13</sup> See: Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge: MIT Press, 1996)

<sup>14</sup> As Friedrich Kittler writes, and Andrew Atwood reiterates this is a simplification of the process. "... I can do little more than point to the assumption of a "camera" within the software that was written by Turner Whitted in the late 1970s and early 1980s, called "ray tracing," and the absence of a camera in the process outlined by a team at Cornell in the mid-1980s, now known as "radiosity." Ray tracing and radiosity have since remained the dominant modes of calculating light in computer renders. However, as Kittler pointed out, the difference between the two processes – not just technically but also conceptually – are so vast that they remain almost entirely distinct. Modern rendering engines calculate each separately, making images of both available as output."

Andrew Atwood, "Rendering Air," *First Office: Nine Essays* (Treatise), 45.

See: Friedrich Kittler, "Computer Graphics: A Semi-Technical Introduction", trans. Sara Ogger, in *Grey Room*, No. 2 (Winter 2001): 30-45.

For a critique see: Alberto Perez-Gomez, "Questions of Representation: The Poetic Origin of Architecture," *Architecture Research Quarterly* 9 (2005): 217-225.

<sup>15</sup> John Berger notes that photographs are not a mechanical record because "we are aware, however slightly, of the photographer selecting that sight from an infinity of other possible sights."

See: John Berger, *Ways of Seeing* (London: Penguin Books, 1972): 10.

Sontag discusses the intention of the photographer (page 53) and the conflict between seeing the photograph before taking it and the lucky accident (116-117).

See: Susan Sontag, *On Photography* (New York City: Picador, 1977)

<sup>16</sup> Malcolm McCullough, *Abstracting Craft: The Practiced Digital Hand* (Cambridge: MIT Press, 1998): 193-196.

<sup>17</sup> This paper does not make a distinction between ray-tracing and radiosity, but it acknowledges that they are two fundamentally different modes of rendering.

See: Friedrich Kittler, "Computer Graphics: A Semi-Technical Introduction", trans. Sara Ogger, in *Grey Room*, No. 2 (Winter 2001): 30-45.

<sup>18</sup> This paper notes that a critical part of digital image making is post-processing in software such as Photoshop. This paper acknowledges but circumvents this important practice to focus more on the procedures and techniques of rendering as a mode of proto-photography.

William J. Mitchell & Malcolm McCullough write on rendering: "When a building or other artifact has been modeled as a collection of plane or curved surfaces in space, it can be rendered realistically in line, tone, or color. This is a three-step process. Rendering software must first generate a perspective or other projection: as in production of a wireframe view, each element in the geometric model is projected onto the viewplane and clipping is performed. Next, the visible surfaces must be determined: only those closest to the viewer will be displayed. Finally, some surface rendering computation must be executed to determine how the visible surfaces will look."

William J. Mitchell & Malcolm McCullough, *Digital Design Media* (New York: Van Nostrand Reinhold, 1995): 200.

<sup>19</sup> Andrew Atwood, "Rendering Air," *First Office: Nine Essays* (Treatise): 44-45.

William J. Mitchell & Malcolm McCullough write on rendering: "When a building or other artifact has been modeled as a collection of plane or curved surfaces in space, it can be rendered realistically in line, tone, or color. This is a three-step process. Rendering software must first generate a perspective or other projection: as in production of a wireframe view, each element in the geometric model is projected onto the viewplane and clipping is performed. Next, the visible surfaces must be determined: only those closest to the viewer will be displayed. Finally, some surface rendering computation must be executed to determine how the visible surfaces will look."

William J. Mitchell & Malcolm McCullough, *Digital Design Media* (New York: Van Nostrand Reinhold, 1995): 200.

<sup>20</sup> As Robin Evans notes: "we are only just beginning to investigate the power that drawing and photographs have to alter, strategize, obscure, renew, configure, and diffuse what they represent."

See: Robin Evans, "Architectural Projections" in *Architecture and its Image: Four Centuries of Architectural Representation*, ed. Eve Blau and Edward Kaufman (Montreal: Canadian Center for Architecture, 1989): 21.

<sup>21</sup> Work of this type does exist particularly in the practice of architects such as Perry Kulper, Marjan Colletti, and older work such as Marcos Novak, and Karl Chu among others.

<sup>22</sup> It mentioned previously, it is interesting to write this article at the moment when colleagues are experimenting with software such as Midjourney, and the rise of ChatGPT specifically and artificial intelligence more generally.

<sup>23</sup> I use the agency as set out in general practice theory or Actor-Network theory recognizing James Laidlaw's critique that agency is "on behalf of someone else" and that the term *action* is often more appropriate particularly as it relates to concepts of *responsibility* which the misuse of the term agency implies. As Laidlaw argues, the attempt to treat causal efficacy of persons and things symmetrically can only be sustained if we ignore the ethical dimension of human conduct.

James Laidlaw, *The Subject of Virtue: An Anthropology of Ethics and Freedom* (Cambridge: Cambridge University Press, 2013): 179 – 197.

<sup>24</sup> Swati Chattopadhyay, “Architectural Representations, Changing Technologies, and Conceptual Extensions” *Journal of the Society of Architectural Historians*, Vol 71, No. 3 (September 2012), 270.

<sup>25</sup> Robert Kronenburg, *Spirit of the Machine: Technology as an Inspiration in Architectural Design* (Chichester: Wiley-Academic, 2001): 11.

<sup>26</sup> Neil Leach, ed. *Designing for a Digital World* (London: Wiley Academic, 2002): 7.

<sup>27</sup> Susan Sontag, *On Photography* (New York City: Picador, 1977): 4.

<sup>28</sup> Susan Sontag, *On Photography* (New York City: Picador, 1977): 23 & 87.

<sup>29</sup> As Zion writes: “Turing’s Universal Machine revealed the underlying computational structure to everything, but to achieve a nearly tactile, almost sensual likeness, today’s programmers must mask the machine, providing the user with the most familiar, banal, identifiable signs, symbols, and icons. While modernism’s mute abstraction permits us to inhabit the virtual scape of reality, computer-generated virtuality is a padded, and inescapably literal, reality.”

Adi Shamir Zion, “New Modern: Architecture in the Age of Digital Technology,” *Assemblage* 35 (April 1998): 70.

<sup>30</sup> Sarah Chaplin, “Cybervisuality: Recoding Perception,” in *Designing for a Digital World*, ed. Neil Leach (London: Wiley Academic, 2002): 38-39

<sup>31</sup> Mitchell clarifies a distinction between images and pictures. “Images are also, in common parlance, mental things, residing in the psychological media of dreams, memory, and fantasy...” conversely a picture is “... the image plus the support; it is the appearance of the immaterial image in a material medium.”

See: William J. T. Mitchell, *What do Pictures Want: The Lives and Loves of Images* (Chicago: University of Chicago Press, 2005): 76-106 at 84-85.

<sup>32</sup> As David Hickey observes, advertisement is the official art of capitalism

In: Matthew W. Wilson, *New Lines: Critical GIS and the Trouble of the Map* (Minneapolis: Minnesota University Press, 2017): 49.

<sup>33</sup> For a critique see: Marc Treib, “An Island in the Riptide towards Dissolution,” *Journal of Architectural Education* Vol. 40, No. 2 (Winter 1987): 78-79.

<sup>34</sup> Bernard Tschumi writes extensively about shock as an indispensable tool. Here the context might be different, but it remains that in media, shock is accepted as ‘true’ if evidenced. Photography plays a critical role in this acceptance of evidence.

See: Bernard Tschumi, *Architecture and Disjunction* (Cambridge: MIT Press, 1996): 247-257.

<sup>35</sup> Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill & Wang, 1981): 76

<sup>36</sup> Claire Zimmerman describes the distortion in architectural photography and writes: The tools of the photographer included various technical instruments but also tropes such as approximation, exaggeration, and compensation that are typical in architectural photography.”

See: Claire Zimmerman, *Photographic Architecture in the Twentieth Century* (Minneapolis: Minnesota University Press, 2014): 110-116.

Filip Mattens writes: “Even though I do not modify the object itself when I take a picture of it, my relation to the object is mediated and modified in several ways... thus, I correctly separate depicted properties from properties of depiction.”

See: Filip Mattens, “The Aesthetics of Space: Modern Architecture and Photography,” *The Journal of Aesthetics and Art Criticism* 69, No. 1 (Winter 2011): 105 – 114 at 111.

One might consider, however, the increasing skepticism of images, the notion of fake news and alternative facts. Never has photographic ‘truth’ been so maligned, but photographic images remain an important currency in bringing weight to the information we process and believe.

<sup>37</sup> The fake real is being used in a very different manner than David Hickey’s original argument. Hickey describes the difference between Santa Fe, New Mexico and Las Vegas Nevada as a difference between the real fake, and the fake real. As a value judgement, Hickey argues that the knowing participation of the fake in Las Vegas is better than the mock authenticity of Santa Fe.

See: David Hickey, “Dialectical Utopias: On Santa Fe and Las Vegas,” *Harvard Design Magazine*, No. 4 (Winter/Spring 1998): 1-5.

<sup>38</sup> Mitchell writes: “We need, in other words, to grasp *both* sides of the paradox of the image: that it is alive – but also dead; powerful – but also weak; meaningful – but also meaningless.”

See: William J. T. Mitchell, *What do Pictures Want: The Lives and Loves of Images* (Chicago: University of Chicago Press, 2005): 8-10.

<sup>39</sup> William J. T. Mitchell, *What do Pictures Want: The Lives and Loves of Images* (Chicago: University of Chicago Press, 2005): 24-25

<sup>40</sup> See: Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction* (Scottsdale: Prism Key Press, 2010)

<sup>41</sup> Elizabeth Grosz writes extensively about the virtual and the body.

See: Elizabeth Grosz, *Architecture from the Outside: Essays on Virtual and Real Space* (Cambridge: MIT Press, 2001): 75-90.

This position may be countered by scholars such as Shannon Mattern and Tung-Hui Hu who argue that the virtual, and by extension the digital remains a material condition linking multiple media types through technological infrastructures such as software, hardware, and extensive communications networks.

See: Tung-Hui Hu, *A Prehistory of the Cloud* (Cambridge: MIT Press, 2016), and

Shannon Mattern, *Code and Clay, Data and Dirt: Five Thousand Years of Urban Media* (Minneapolis: University of Minnesota Press, 2017)

<sup>42</sup> John Berger laments at the loss of authority in art stating: “images of art have become ephemeral, ubiquitous, insubstantial, available, valueless, free... They have entered the mainstream of life over which they no longer, in themselves, have power.”

See: John Berger, *Ways of Seeing* (London: Penguin Books, 1972): 32.

<sup>43</sup> John Berger, *Ways of Seeing* (London: Penguin Books, 1972): 139.

<sup>44</sup> Eduardo Cadava and Gabriela Nouzeilles, *The Itinerant Languages of Photography* (Princeton: Princeton University Art Museum, 2014): 24-37 at 24.

<sup>45</sup> Antoine Picon, *The Materiality of Architecture* (Minneapolis: University of Minnesota Press, 2021)

<sup>46</sup> Harry Rand writes: Yet any art is ultimately judged not by its conceptual reach or theoretical potential but by what it achieves... the novelty of digital art is upon us; now we await the quality” and “A work of art is both a physical thing and a fact (representing a set of conditions); it is both a material entity and the symbolic embodiment of a host of inferences and implications... The truly radical digital art aims to create a world, a what-if condition contrary to current actuality.”

See: Harry Rand, “The Other Side of Digital Art,” *Leonardo* 41 (2008): 543-547.

<sup>47</sup> Karen Kurczynski, “Drawing is the New Painting,” *Art Journal*, 70 (Spring 2011): 92-110.

## BIBLIOGRAPHY

Atwood, Andrew. “Rendering Air.” In *First Office: Nine Essays*. Treatise Series

Re-published in: Atwood, Andrew. “Rendering Air: On Representation of Particles in the Sky.” *Log* 31 (Spring/Summer 2014): 47-51.

Barthes, Roland. *Camera Lucida: Reflections on Photography*. Translated by Richard Howard. New York: Hill & Wang, 1981.

Benjamin, Walter. *The Work of Art in the Age of Mechanical Reproduction*. Scottsdale: Prism Key Press, 2010.

Berger, John. *Ways of Seeing*. London: Penguin Books, 1972.

Cadava, Eduardo, and Nouzeilles, Gabriela. *The Itinerant Languages of Photography*, Princeton: Princeton University Art Museum, 2014.

Chaplin, Sarah. “Cybervisuality: Recoding Perception.” In *Designing for a Digital World*, edited by Neil Leach, 38-39. London: Wiley Academic, 2002.

Chattopadhyay, Swati. “Architectural Representations, Changing Technologies, and Conceptual Extensions.” In *Journal of the Society of Architectural Historians*, Vol 71, No. 3 (September 2012), 270.

Colomina, Beatriz. “Le Corbusier and Photography.” In *Assemblage* 4 (1987): 6-23.

Colomina, Beatriz. *Privacy and Publicity: Modern Architecture as Mass Media*. Cambridge: MIT Press, 1996.

Drucker, Johanna. “Digital Ontologies: The Ideality of Form in/and Code Storage: Or: Can Graphesis Challenge Mathesis?” In *Leonardo* 34 (2001): 141-145.

Evans, Robin. “Architectural Projections.” In *Architecture and its Image: Four Centuries of Architectural Representation*, edited by Eve Blau and Edward Kaufman, 18-37. Montreal: Canadian Center for Architecture, 1989.

Grosz, Elizabeth. *Architecture from the Outside: Essays on Virtual and Real Space*. Cambridge: MIT Press, 2001.

- Hickey, David. "Dialectical Utopias: On Santa Fe and Las Vegas." *Harvard Design Magazine* 4 (Winter/Spring 1998): 1-5.
- Hu, Tung-Hui. *A Prehistory of the Cloud*. Cambridge: MIT Press, 2016.
- Kittler, Friedrich. "Computer Graphics: A Semi-Technical Introduction." Translated by Sara Ogger. In *Grey Room*, No. 2 (Winter 2001): 30-45.
- Kronenburg, Robert. *Spirit of the Machine: Technology as an Inspiration in Architectural Design*. Chichester: Wiley-Academic, 2001.
- Kurczynski, Karen. "Drawing is the New Painting." In *Art Journal*, 70 (Spring 2011): 92-110.
- Laidlaw, James. *The Subject of Virtue: An Anthropology of Ethics and Freedom*. Cambridge: Cambridge University Press, 2013.
- Leach, Neil editor. *Designing for a Digital World*. London: Wiley Academic, 2002.
- Levine, Neil. "The Template of Photography in Nineteenth-century Architectural Representation." *Journal of the Society of Architectural Historians* 71 (Sept. 2002): 306-331
- Lotz, Wolfgang. *Studies in Italian Renaissance Architecture*. Cambridge: MIT Press, 1987.
- Mattens, Filip. "The Aesthetics of Space: Modern Architecture and Photography" *The Journal of Aesthetics and Art Criticism*, Vol. 69, No. 1 (Winter 2011): 105 – 114.
- Mattern, Shannon. *Code and Clay, Data and Dirt: Five Thousand Years of Urban Media*. Minneapolis: University of Minnesota Press, 2017.
- May, John. *Signal. Image. Architecture*. New York: Columbia Books, 2019.
- McCullough, Malcolm. *Abstracting Craft: The Practiced Digital Hand*. Cambridge: MIT Press, 1998.
- Mitchell, William J. T. *What do Pictures Want: The Lives and Loves of Images*. Chicago: University of Chicago Press, 2005.
- Mitchell, William J. T. and McCullough, Malcolm. *Digital Design Media*. New York: Van Nostrand Reinhold, 1995.
- Perez-Gomez, Alberto. "Questions of Representation: The Poetic Origin of Architecture." *Architecture Research Quarterly* 9 (2005): 217-225.
- Picon, Antoine. "Continuity, Complexity, and Emergence: What is the Real for Digital Designers?" *Perspecta* 42 (2010): 147-157.
- Picon, Antoine. *The Materiality of Architecture*. Minneapolis: University of Minnesota Press, 2021.
- Rand, Harry. "The Other Side of Digital Art." *Leonardo* 41 (2008): 543-547.
- Sontag, Susan. *On Photography*. New York City: Picador, 1977.
- Treib, Marc. "An Island in the Riptide towards Dissolution" *Journal of Architectural Education*, Vol. 40, No. 2 (Winter 1987): 78-79.
- Tschumi, Bernard. *Architecture and Disjunction*. Cambridge: MIT Press, 1996.
- Wilson, Matthew W. *New Lines: Critical GIS and the Trouble of the Map*. Minneapolis: University of Minnesota Press, 2017.
- Zimmerman, Claire. *Photographic Architecture in the Twentieth Century*. Minneapolis: University of Minnesota Press, 2014.
- Zion, Adi Shamir. "New Modern: Architecture in the Age of Digital Technology." In *Assemblage* 35 (April 1998): 62-79.

# DISRUPTIVE CONSERVATION IN THE MATERIAL TRANSMISSION OF PAST TO FUTURE

Authors:

**ELEANOR SWEETNAM, JANE HENDERSON**

Affiliation:

THE INTERNATIONAL INSTITUTE FOR CONSERVATION FOR CONSERVATION OF HISTORIC AND ARTISTIC WORKS. CARDIFF UNIVERSITY, UK

---

## INTRODUCTION

When objects move into museums, the location and nature of their associated power shifts. For example, a confederate statue may be removed from the public square and placed in a museum to ‘neutralise’ its symbolism. The symbolism of the statue is mediated by this curated public space, and the power shifts and changes in form, passing in some form to the museum impacting on all acts of its operations from the staff to its reputation. When an object is ‘collected’ during an imperial conquest that transference is not simply a matter of the location of the art but rather it is symbolic of the destruction of a culture and the dominance of another.<sup>1</sup> Removing the power of association of things to place is a symbol of control and domination and is an act intimately connected with colonialism. Museums use objects to transmit stories, when those stories tell stories of violence and oppression those who work in museums must consider this in their actions.

## CONSERVATION IN THE TRANSMISSION OF PAST TO FUTURE

Conservation is ‘the measures taken to extend the life of cultural heritage while strengthening transmission of its significant heritage messages and values’.<sup>2</sup> Conservation is practiced in the present with the intent of supporting the transmission of value from past to present and future users. In most cases conservation will involve actions that change the tangible manifestation of the object. A challenge for those of us working in the heritage sector is to examine our practice both personally and on behalf of a wider professional community to consider our impact.<sup>3</sup> Conservators care for scientific and heritage collections in museums through active means – intervening on objects and passive means by intervening on the environment around objects.

Much of the discussion of conservation practice considers the tangible impact that is had on objects. As our work shapes the way that an object transitions into the future such examination is justified. However, much of this examination holds a focus on the tangible and measurable changes with less focus on the intangible. We believe that the language and approach of conservation as benign or neutral helps avoid the difficult examination of how conservation expresses the power of the museum and in downplaying the often-violent stories that are associated with objects kept within them. As such, a metaphor that will be used in this paper to examine the neutrality of conservation, is of a broken and repaired ceramic vessel. Museum visitors will be able to conjure up an image of an archetypal ceramic repair, perhaps a terracotta ceramic body with missing parts filled with a beige conspicuous in its ‘neutrality’.

## NEUTRALITY AND THE MUSEUM

‘Museums are not neutral in their preservation of history. In fact, arguably, they are sites of forgetfulness and fantasy.’<sup>4</sup> As such, they must be viewed as political spaces, for many their histories and collections are based on the colonial practices so actions taken by those in the Institutions can and often do continue the perpetuation of this colonialisation. Even something that can be considered the foundation of museums, the ‘keeping’ of objects, symbolises a political act and one that is often in conflict with the meanings or origin especially where its value lies in its decay.<sup>5</sup> We cannot continue with the ideology that objects which represent a harmful or damaging past have no effects upon the present day.<sup>6</sup> While museums may claim an objective or neutral stance on certain storylines and approach to our historical narrative, the conservation, curation, and presentation take on almost a propagandist like approach.<sup>7</sup> This apparently neutral practice is exclusionary – often not ‘overt or conscious’<sup>8</sup> – but one that perpetuates the continue of harmful stereotypes that materialised via colonialisation.<sup>9</sup> When we begin to question the broader concept of the museum environment, we can also transition this line of questioning into the role of specific functions of the museum, and as such encourage the creation of both responses and outcomes that do not typically conform with the most common current approaches.

## TRANSITIONING THROUGH TIME

When an object moves through spatio-temporal dimensions, having originated from its raw concept (‘In the beginning there was clay’<sup>10</sup>), to its physical form, through use and discovery to acknowledgement and display, it accumulates multiples value and significances. Conservation acknowledges that change is constant<sup>11</sup> – it is not only material and chemical changes that happen to the physical object but a multitude of values, significances and relationships that accumulate and shift. The museum can be seen as both a ‘womb and tomb’<sup>12</sup>; when the object is imprisoned within its glass case, it dies and is then reincarnated into an object of our choosing. Whilst the things we place in museums accrued and changed their meanings becoming associated with complex and fluid histories<sup>13</sup> when it enters the collection is labelled and placed within the glass case of the museum it ‘freezes’<sup>14</sup>, becoming permanently frozen in its determined state. The material and contextual transition from past to future is halted within its present – the stratifications of time and interchanging values become concrete. Forcing the past to perform a static existence in the present can be described as the ‘dominant interpretation’<sup>15</sup> which has the ability to ‘overwhelm other interpretations and discourses integral to its layered significance’.<sup>16</sup> Within built heritage formal recognition through listing performs the same function. Attempts to define how a place conforms to recognised universal values fixes a single static identity, ‘in creating universal narratives, conservation steps away from the messy, multiplicity of stories and stakeholders at the heart of the heritage creating process’.<sup>17</sup>

Our unexamined treatment methodologies and approaches, such as the use of a beige fill on the ceramic vessel creates a ‘forgery of the original’.<sup>18</sup> The ‘neutral’ interventions presents a singular narrative of the object’s true life reducing the evidence of the conservator’s interpretation and creating a false alignment for the viewer. This supports the continuation and perpetuation of the dangerous and harmful narratives of oppression<sup>19</sup> that exist within the museums power dynamic. When objects become recognised as changeable entities,<sup>20</sup> conservation should be able to mould itself with these shifts, both material and contextual, and provide a structure that allows the object to perform as whole.

## NEUTRALITY AND CONSERVATION

The conservator's role is to comprehend the materiality and significance of an object to prevent decay while also enhancing the understanding of them.<sup>21</sup> Often presented as neutral choices, even work that is presented as *behind the scenes* is always shaped by context. It is through their responsibility and ultimately, their power, that the conservator determines how the object can be understood by the viewer. When the decision-making process deems conservation a necessary undertaking, it is the conservator who determines how that object will be and which notion(s) of the past are passed on.<sup>22</sup> These acts seen through the piecing together of a story hidden away in the body of an object, places us within this power struggle. How can conservators decide on strategies without acknowledgment of these struggles and the contexts of their own specific working practices?

The social and cultural environment within the museum is complex and, in many museums, the colonial legacies reign supreme in shaping their presentation, interpretation and management.<sup>23</sup> Hölling's position is that the archive can be used as tool in deciphering cultural, social and political orders<sup>24</sup>, but we can also translate this into our understanding of objects. Museums normally contain thousands if not millions of objects whereas conservators who treat those objects will normally treat 10s or 100s in a year. There is a selection process in what we do, and this means that the very nature of what we conserve is a political act.<sup>25</sup> Accordingly, the decision making and treatment options we choose are also political.

Balachandran argues that conservators hide behind their benches, and that this has gone unchallenged for too long.<sup>26</sup> The terminology used by conservators allows us to frame our work as benign. We conceal ourselves and absolve ourselves of the consequences of our actions behind words such as 'reversible', 'identifiable' and 'minimal' when we know deep down that our impact may never fulfil any of these aims. Even if an adhesive can be reversed, the surface that was cleaned before it was applied cannot be uncanceled, the dust once removed cannot be replaced. By engaging in the performative ethics such as 'minimal intervention', we can create an illusion that we are not part of this object's life or create an outcome detectable only by a select few. Yet all our decisions in practice will be represented in the material truth of the object so conservation is always present. The issue is whether that presence is acknowledged. Through our collective self-deception we avoid acknowledgment of the tangibilisation of our decisions and accordingly fail to answer or address our political stance in the being of this object in this moment.

Conservators are expected to intervene in heritage objects, they must decide for example, what percentage of adhesive to use for a repair or determine optimum and acceptable light levels in a gallery or the co-location of items within a box in a store. All these decisions are linked to power and control. It is these decisions which will affect whether an object will be on display, who has access to it and what form it will take. Each of these choices is an exertion of power and none of them are independent of the pathways by which the object arrived in their care. Traditionally staff in collections management have comforted themselves with their neutrality on wider political questions and have rendered this in practice with choices that sound benign.<sup>27</sup> By removing ourselves from any discussion about stories of control we have removed ourselves from responsibility and avoided spaces where we can be critical<sup>28</sup> both via action (such as a neutral gap-fill in an archaeological vessel) or stance (as with the museum labelling).

## A QUESTION OF NEUTRALITY: THE NEUTRAL FILL

Consider a broken roman ceramic vessel on display, its dusky salmon fragments held together by network of reversible adhesive and the lacunae – pieces lost through time and space – filled in with a tonally lighter colour. Conservators' actions are governed by ethical frameworks developed over the years by various national and international professional bodies. Within the codes our relationship

with objects is often described using terminology such as ‘respect’, ‘authenticity’ and ‘integrity’, terms which lack a common meaning.<sup>29</sup> This semantic uncertainty results in people citing common codes of ethic to guide very different practices. The vocabulary within some of our principles such as reversibility and minimal intervention also paint conservators as an impartial cog<sup>30</sup> in a politically neutral process. Minimal intervention, as an example, is a philosophical notion referring to the idea that our interventions should be kept to ‘an absolute minimum’.<sup>31</sup> Yet paradoxically there are no clear definitions of it within conservation Charters.<sup>32</sup> The implementation of these principles that manifest themselves as ‘silent’<sup>33</sup> (Phillips, D. 1997) or neutral, designed to be as unobtrusive as possible, have become a synonym for good practice.<sup>34</sup> This (dis)honesty of decision-making and intervention denies the viewer a truthful alignment of not only past and present but also of its future.

Question the implication of a hot-pink coloured replacement section. The creation of such a discernible and attention seeking mend can transcend the static parameters that have been placed upon the object. While the visually unobtrusive gap-fill represents the current neutral conservation techniques, disruptive mends have the potential to create an explicit and public statement drawing attention to the transition of time that the vessel has gone through. The missing piece is not a separate, hidden away past within the object but rather is incorporated and clearly written as evidence of its history – and the act of conservation.

## **THE CHALLENGE TO CONSERVATION NEUTRALITY**

There are many in the sector that acknowledge that our museums and conservation is not a neutral sector.<sup>35</sup> The authors have previously discussed the power that conservators hold, and this provides us with the ability to uncover the values the object accumulates and how they are presented to the viewer. If we deploy neutral treatments without any critical thinking as to how to redistribute power and avoid reflexive practice, then we are complicit in the continuation of this faux neutrality. Such avoidance of reflexive practice and the continued use of ‘neutral’ vocabulary and treatments is problematic. ‘Fear of open conflict prevents participants from voicing differing opinions prioritizes those in power’<sup>36</sup> working in a culture of perfectionism maintains the static status quo. Any deviation from this traditional perfectionism, sustained via neutral acts and terms, leaves those in power worried about a loss in power<sup>37</sup> or fearing disapproval of their peers or visitors.<sup>38</sup>

## **A WORLD OF POSSIBILITIES**

Heritage professionals, who serve the Institution in which they work, do not always perpetuate the narrative of objects as representations of this single, linear history or one of exclusion. It may be time to ‘rethink the archetypes that condition our understanding of the world’<sup>39</sup> and Institutions have the ability to engage audiences in a multitude of ways. One example being the Library of Congress (LoC) where musician and classically trained flautist, Lizzo, was granted permission to play the crystal flute, manufactured in 1813, that belonged to President James Madison. It can be argued that the act of ‘allowing’ Lizzo to play this famous instrument owned by an American Founding Father is an act of political symbolism, the point of which was missed by neither fans nor detractors.<sup>40</sup> It is not unusual for musical instruments in collections to be played, indeed there are sometimes donor stipulations that an instrument must be played. The LoC stated that that curators determined the flute could be played without damaging the instrument.<sup>41</sup> Whilst Lamb argues that the integrity of an instrument is its sound, it must be acknowledged that its use will change both the tangible and intangible aspects of the instrument. Lamb calls this a ‘destructive process’<sup>42</sup> but this is a zero-sum concept of destruction that highlights another semantic uncertainty – is destruction a tangible matter only? If the loss of the tangible is mediated by intangible gains does the term ‘destruction’ still apply?

In this case the increased knowledge resulting from hearing the instrument, introducing the LoC to a new audience, the sense of excitement that ‘my’ celebrity was accessing collections and the messaging related to ‘racial retribution’ and must also feature in calculations of destruction versus enhancement.<sup>43</sup> This balance of choice between an object and the action of being played lies with the values of the decision maker.<sup>44</sup>

## CONFRONTING THE STATUS QUO

The decisions made in the LoC highlights a necessary redistribution of power between those perceived as being the establishment and their control as represented by their custodianship of symbols of power. The contrast between traditional pale, male and stale representatives of the past and Lizzo challenges dominant narratives that society and Institutions perpetuate. Any assessment of loss or damage must critically engage with both the minute physical changes and an assessment which acknowledges that Carla Hayden, who began this process, is the first woman and African American to lead the LoC.<sup>45</sup> The heritage environment is complex and often it is colonial legacies that are dominant,<sup>46</sup> Lizzo playing the crystal flute was a powerful visual challenge to those legacies<sup>47</sup> and demonstrates how the decisions of heritage professionals shape how objects move with the current times and present their past and also our future.

## AN ACTIVE MORAL STANCE IN CONSERVATION PRACTICE

With 90% to 95% of African art housed outside of Africa in Institutions such as the British Museum and the Metropolitan Museum of Art<sup>48</sup>, it must be acknowledged that access in itself is a privilege. Access through the acquisition and ‘keeping’ of objects is also an inherently political act.<sup>49</sup> The keeping of objects of significance and immense value is the continuation of the dominant principles of colonialism, dominance, and power – and the continuum of the status quo. This act of ‘epistemic violence’<sup>50</sup> alongside the obtuse process of repatriation is the “...navigation into European paternalism, arrogance, and anti-blackness.”<sup>51</sup> One version of our ethical codes states that we must not work on stolen or illicitly traded objects<sup>52</sup>, but at what point in time does the fact that these objects were stolen cease to matter.<sup>53</sup> Our neutral treatments are an example of the power of choice, and that being neutral, both in action and mindset, is also hidden behind paperwork and glass cases. But being neutral translates to the fact that we are actually the dominant<sup>54</sup> and are institutionally complicit, which voids conservation from any form of neutrality.<sup>55</sup>

## DISRUPTIVE CONSERVATION

When Disruptive Conservation is undertaken, it places the object in a different temporality than that of objects with a conservation response that aims to be inconspicuous ; it presents a striking balance of movement between the past, our ‘all-encompassing present’<sup>56</sup> and the unknown future. It draws attention to the transition that the object has experienced under the control of the conservator.<sup>57</sup> It offers a challenge via the conservation intervention to the identification of a singular correct state of existence and stands as a rejection of attempted perfectionism and the implication of neutrality of heritage that masks past injustice within our heritage practice. The authors have previously focussed on gap fills in a hot pink colour to illustrate Disruptive Conservation in action<sup>58</sup>, what the concept fundamentally offers is a ‘thinking process over a colour palette’.<sup>59</sup> If we follow the notion that our decision making is led by conservators considering stakeholders, objects and contexts through time, *A Manifesto for Disruptive Conservation*’s development acts an alternative substructure to the ingrained and unconscious working processes happening at our lab benches. *A Manifesto for Disruptive Conservation* is a conceptual guide deliberately lacking in specificity than that is perhaps

intended within a Code of Conduct. Its deliberate nature allows for its use within multi-faceted contexts and creates a space in which allows the conservator-user to re-examine their working practices.

### **A MANIFESTO FOR DISRUPTIVE CONSERVATION**

1. Listen
2. Question
3. Question some more
4. Challenge the questions
5. Aim to understand
6. To unlearn is to learn
7. Probe
8. Provoke
9. Expose the power

### **ACKNOWLEDGEMENTS**

Both Authors are located in and trained within the UK and as a result have experienced privileged in their access to resources such as publications and to museums holding culture around the world. We acknowledge that this necessarily shapes our perspectives and arguments.

## NOTES

<sup>1</sup> Dan Hicks, *The British Museums: The Benin Bronzes, Colonial Violence and Cultural Restitution* (London: Pluto Press, 2020)

<sup>2</sup> “Conservation”, UNESCO Institute for Statistics, accessed January 14, 2023, <http://uis.unesco.org/en/glossary-term/conservation>

<sup>3</sup> The authors are conservators, and this places conservation at the heart of this paper<sup>4</sup> Sumaya Kassim, “The museum will not be decolonised” *Media Diversified*, no date, <https://mediadiversified.org/2017/11/15/the-museum-will-not-be-decolonised/>

<sup>5</sup> Jane Henderson, “Beyond Lifetimes: Who Do We Exclude When We Keep Things for the Future?”, *Journal of the Institute of Conservation* 43, no. 3 (2020), 7, DOI: <https://doi.org/10.1080/19455224.2020.1810729>

<sup>6</sup> Tyler Stiem, “Statue wars: what should we do with troublesome monuments?”, *The Guardian*, September 26, 2018, <https://www.theguardian.com/cities/2018/sep/26/statue-wars-what-should-we-do-with-troublesome-monuments>

<sup>7</sup> Eleanor Sweetnam, “History of the Archive”. *How Will I Recognise You? A Women’s Archive* (blog), Cargo collective, no date, <https://cargocollective.com/elliesw/History-of-the-Archive>

<sup>8</sup> Simone Zeefuik, Wayne Modest, “Perspectives Matter” in *Words Matter, An Unfinished Guide to Word Choices in the Cultural Sector: Work in Progress*, ed by Wayne Modest and Robin Lelijveld, National Museum of World Cultures, 2018, <https://www.materialculture.nl/en/publications/words-matter>

<sup>9</sup> Wayne Modest, “Words Matter” in *Words Matter, An Unfinished Guide to Word Choices in the Cultural Sector: Work in Progress*, ed by Wayne Modest and Robin Lelijveld, 13 -17, National Museum of World Cultures, 2018, <https://www.materialculture.nl/en/publications/words-matter>; Zeefuik, Modest, “Perspectives Matter”

<sup>10</sup> Theaster Gates, *A Clay Sermon*, Whitechapel Gallery, London, 2021

<sup>11</sup> Chris Caple, “The Aims of Conservation” in *Conservation Principles, Dilemmas and Uncomfortable Truths*, ed by Alison Richmond and Alison Bracker (Oxford: Butterworth-Heinemann, 2009), 7; Barbara Appelbaum, *Conservation Treatment Methodology* (Great Britain: Amazon, 2010), 47, 53

<sup>12</sup> Catherine Ross, “Liminal Space: Non-Place and Spatio-Temporal Knowing.” paper presented at the *Representing Pasts-Visioning Futures (AMPS)*, Online, December 1-3, 2022

<sup>13</sup> Rosemary A. Joyce, “The future in the past, the past in the future” in *Cultural Heritage and the Future*, ed by Cornelius Holtorf and Anders Högborg (London: Routledge, 2020), DOI: <https://doi.org/10.4324/9781315644615>

<sup>14</sup> Hanaa B. Hölling, “Time and Conservation. Linking Past and Future.” in ICOM-CC 18<sup>th</sup> Triennial Conference Preprints, Copenhagen, 4-8 September, 2017, ed J Bridgeland, 1-7, (Paris: International Council of Museums), 3

<sup>15</sup> Jonathan S. Bell, “The Politics of Preservation: Privileging One Heritage over Another.” *International Journal of Cultural Property* 20, no. 4 (2013), 434, DOI: <https://doi.org/10.1017/s0940739113000192>

<sup>16</sup> Bell, “The Politics of Preservation: Privileging One Heritage over Another.”, 434

<sup>17</sup> Erica Avrami, “Sustainability, intergenerational equity, and pluralism: Can heritage conservation create alternative futures” in *Cultural Heritage and the Future*, ed. Cornelius Holtorf and Anders Högborg, (London: Routledge, 2020), 211, DOI: <https://doi.org/10.4324/9781315644615>

<sup>18</sup> Eleanor Sweetnam, Jane Henderson, “Disruptive Conservation: Challenging Conservation Orthodoxy” in “Conservation and Philosophy: Interactions and Intersections”, special issue, *Studies in Conservation* 53, no 1-2 (2008), 67, DOI: [10.1080/00393630.2021.1947073](https://doi.org/10.1080/00393630.2021.1947073)

<sup>19</sup> La Tanya Autry, Mike Murawski, “Museums Are Not Neutral: We Are Stronger Together,” *Panorama: Journal of the Association of Historians of American Art* 5, no. 2 (2019), DOI: <https://doi.org/10.24926/24716839.2277>

<sup>20</sup> Hanna B. Hölling, “Lost to museums? Changing media, their worlds, and performance” *Museum History Journal* 10, no 1 (2017), DOI: [10.1080/19369816.2017.1257873](https://doi.org/10.1080/19369816.2017.1257873); Panayota Malkogeorgou, “The observed object: the distance between the studio and the gallery” *Victoria & Albert Museum Conservation Journal* 41 (2002), <http://www.vam.ac.uk/content/journals/conservation-journal/issue-41/the-observed-object-the-distance-between-the-studio-and-the-gallery/>; Sanneke Stigter, “Autoethnography as a new approach in conservation.” Supplement, *Studies in Conservation* 61, no. S2 (2016), DOI: <https://doi.org/10.1080/00393630.2016.1183104>; Taylor, Joel, Cassar, May. “Representation And Intervention: The Symbiotic Relationship Of Conservation And Value” Supplement, *Studies in Conservation* 53. no. S1 (2008), DOI: [10.1179/sic.2008.53.Supplement-1.7](https://doi.org/10.1179/sic.2008.53.Supplement-1.7)

<sup>21</sup> “Definition of the profession (1984), The Conservator-Restorer: a definition of the profession.”, ICOM international council of museums – committee for conservation (ICOM-CC), accessed February 19, 2023, <https://www.icom-cc.org/en/definition-of-the-profession-1984>

- <sup>22</sup> Torgeir Rinke Bangstad, "Beyond Presentism: Heritage and the Temporality of Things" in "Shared Spaces – Multispecies Approaches in the Museum", special issue, *Ethnologia Europaea* 49, no. 1 (2019), 166, DOI: <https://doi.org/10.16995/ee.1443>; Marte de la Torre, "Values and Heritage Conservation." *Heritage & Society* 6, no. 2, (2013), 162, DOI: <https://doi.org/10.1179/2159032x13z.00000000011>.
- <sup>23</sup> Maureen Anne Matthews, Roger Roulette, Roger Brook Wilson, "Meshkwajisewin: Paradigm Shift" *Religions* 12, no.10 (2021), 5, DOI: <https://doi.org/10.3390/rel12100894>
- <sup>24</sup> Hölling, "Lost to museums? Changing media, their worlds, and performance", 110
- <sup>25</sup> Bell, "The Politics of Preservation: Privileging One Heritage over Another.", 431
- <sup>26</sup> Sanchita Balachandram, "Race, Diversity and Politics in Conservation: Our 21st Century Crisis." Presented at the 44th AIC Annual Meeting, May 16, 2016
- <sup>27</sup> The adhesive is selected for its reversibility, the gallery light caters for average vision and the collections are material things that can be boxed based on their physical properties alone.
- <sup>28</sup> "Conservation is Not Neutral (and neither are we)" Fletcher Durant, last modified 18 June 2020. <https://www.youtube.com/watch?v=bFKS12TYTEg>
- <sup>29</sup> "AIC Code of Ethics and Guidelines for Practice." American Institute for Conservation (AIC), accessed January 20, 2023. <https://www.culturalheritage.org/about-conservation/code-of-ethics>; "Code of Ethics and Code of Practice." Australian Institute for Conservation of Cultural Material (AICCM), accessed January 20, 2023. [https://aiccm.org.au/wp-content/uploads/2020/01/Code-Of-Ethics-And-Code-Of-Practice-Australian-Institute-for-Conservation-of-Cultural-Material-1.pdf?\\_\\_cf\\_chl\\_jschl\\_tk\\_\\_=9e89db067b1da77e7bc8981d69ea3c7ed30426d5-1597670305-0-AeScq0ju8Ca2GvPGpAbiaGP6Pf3trjFyV31hw2CMNIDPNP1WWlaRCR000oCtHrM9RBo9WuPJ](https://aiccm.org.au/wp-content/uploads/2020/01/Code-Of-Ethics-And-Code-Of-Practice-Australian-Institute-for-Conservation-of-Cultural-Material-1.pdf?__cf_chl_jschl_tk__=9e89db067b1da77e7bc8981d69ea3c7ed30426d5-1597670305-0-AeScq0ju8Ca2GvPGpAbiaGP6Pf3trjFyV31hw2CMNIDPNP1WWlaRCR000oCtHrM9RBo9WuPJ); "Codes Of Ethics and Guidance for Practice." Canadian Association for Conservation of Cultural Property and the Canadian Association of Professional Conservators (CAC & CAPC), accessed January 20, 2023, <http://www.alapointeconservation.com/documents/ecode.pdf>
- <sup>30</sup> Rita Udina, "Reversibility and the Right Conservation Treatment" in *Conservation Insights 2020 Lectures*, ed by Padma M Rohila (New Delhi: Indian National Trust for Art and Cultural Heritage (INTACH), 2020), 201, DOI: 10.13140/RG.2.2.26130.58560; Caroline Villers, "Post minimal intervention" *The Conservator* 28, no. 1 (2004), 3, DOI: 10.1080/01410096.2004.9995197
- <sup>31</sup> Cristina Ureche-Trifu, "Minimal intervention and decision making in conserving built heritage.", (Master of Arts thesis, Carleton University, 2013), 11, [https://curve.carleton.ca/system/files/etd/b6471698-b6ca-484e-acb0-1e91f9d584ff/etd\\_pdf/37c211d2d47fbc33b453816de5ae5d2f/ureche-trifu-minimalinterventionanddecisionmakinginconserving.pdf](https://curve.carleton.ca/system/files/etd/b6471698-b6ca-484e-acb0-1e91f9d584ff/etd_pdf/37c211d2d47fbc33b453816de5ae5d2f/ureche-trifu-minimalinterventionanddecisionmakinginconserving.pdf)
- <sup>32</sup> Ureche-Trifu, "Minimal intervention and decision making in conserving built heritage.", 134-135
- <sup>33</sup> David Phillips, *Exhibiting Authenticity*. (Manchester: Manchester University Press. 1997)
- <sup>34</sup> Udina, "Reversibility and the Right Conservation Treatment", 201. In this instance, Udina refers to 'reversibility' specifically.
- <sup>35</sup> Erica Avrami, "Heritage, Values and Sustainability" in *Conservation Principles, Dilemmas and Uncomfortable Truths*, ed by Alison Richmond and Alison Bracker (Oxford: Butterworth-Heinemann, 2009); Sanchita Balachandram, "Race, Diversity and Politics in Conservation: Our 21st Century Crisis."; Marta de la Torre "Values and Heritage Conservation."; "Conservation is Not Neutral (and neither are we)" Fletcher Durant; Jane Henderson, "Beyond Lifetimes: Who Do We Exclude When We Keep Things for the Future?"; Robert Jenson, "The Myth Of The Neutral Profession." *Progressive Librarian* 24 (2004), [http://www.progressivelibrariansguild.org/PL\\_Jnl/contents24.shtml](http://www.progressivelibrariansguild.org/PL_Jnl/contents24.shtml); Salvador Muñoz-Viñas, "Contemporary theory of Conservation" Supplement, *Studies in Conservation* 47, S1 (2002), DOI: 10.1179/sic.2002.47.Supplement-1.25; Elizabeth Pye, "Authenticity challenged? The 'plastic house' at Çatalhöyük" *Public Archaeology* 5, no. 4 (2006), DOI: 10.1179/pua.2006.5.4.237; Caroline Villers, "Post minimal intervention"
- <sup>36</sup> Joelle D.J Wickens, Anisha Gupta, "Leadership: the Act of Making Way for Others" in "Contributions to the Wellington Congress 2022. Conservation and Change: Response, Adaptation and Leadership", special issue, *Studies in Conservation* 67 no. 1 (2022): 320-321, DOI: 10.1080/00393630.2022.2065956
- <sup>37</sup> Wickens, Gupta, "Leadership: the Act of Making Way for Others", 320-321
- <sup>38</sup> Nyssa Mildwaters, "Capturing motion in Māori cloaks: Logistics, decision making and perceptions" in ICOM-CC 18th Triennial Conference Preprints, Copenhagen, 4-8 September, 2017, ed J Bridgeland, (Paris: International Council of Museums); Sophie Rickett, Jenny Williamson, "Cupid, Canvas, Circle, Plane: Conservation and Conceptual Fine Art Practice" in "Conservation and Philosophy: Interactions and Intersections", special issue, *Studies in Conservation* 53, no 1-2 (2008), DOI: 10.1080/00393630.2021.1959136

- <sup>39</sup> Fabrizio Cocchiarella, "Visionary Rumours Lost in Space – between rationale and reason, its time to realign our creative perspectives." Paper presented at *the Representing Pasts-Visioning Futures (AMPS)*, Online, December 1-3, 2022
- <sup>40</sup> Dani Di Placido, "Lizzo Plays A 200-Year-Old Crystal Flute, Accidentally Summons A Swarm Of Trolls" *Forbes*. October 2, 2022, <https://blogs.loc.gov/loc/2022/09/its-about-danged-time-lizzo-at-the-library/>
- <sup>41</sup> April Slayton, "It's About (Danged) Time: Lizzo at the Library!" (blog), *Library of Congress blog* (blog), September 28, 2022, <https://blogs.loc.gov/loc/2022/09/its-about-danged-time-lizzo-at-the-library/>
- <sup>42</sup> Andrew Lamb, "To play or not to play: the ethics of musical instrument conservation" *Victoria & Albert Museum Conservation Journal* 15 (1995)  
<http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>
- <sup>43</sup> Di Placido, "Lizzo Plays A 200-Year-Old Crystal Flute, Accidentally Summons A Swarm Of Trolls"
- <sup>44</sup> Erica Avrami, Randall Mason, "Mapping the Issue of Values" in *Values in Heritage Management. Emerging Approaches and Research Directions*, ed by Erica Avrami, Susan Macdonald, Randall Mason and David Myers (Los Angeles: Getty Conservation Institute, 2019),  
[https://www.getty.edu/publications/heritagemanagement/downloads/Avrami\\_etal\\_ValuesinHeritageManagement.pdf](https://www.getty.edu/publications/heritagemanagement/downloads/Avrami_etal_ValuesinHeritageManagement.pdf)
- <sup>45</sup> "About the Librarian", Library of Congress, accessed October 19, 2022  
<https://www.loc.gov/about/about-the-librarian/>
- <sup>46</sup> Matthews, Roger, Brook Wilson, "Meshkwajisewin: Paradigm Shift", 5
- <sup>47</sup> Slayton, "It's About (Danged) Time: Lizzo at the Library!"
- <sup>48</sup> Tarusai Ngangura, "The Colonised World Wants Its Artifacts Back" *Vice*, December 7, 2020 citing Felwine Sarr and Bénédicte Savoy, 2018, <https://www.vice.com/en/article/5dpd9x/the-colonized-world-wants-its-artifacts-back-from-museums-v27n4?src=longreads>
- <sup>49</sup> Henderson, "Beyond Lifetimes: Who Do We Exclude When We Keep Things for the Future?", 7
- <sup>50</sup> Yirga Gelaw Woldeyes, " "Holding Living Bodies in Graveyards": The Violence of Keeping Ethiopian Manuscripts in Western Institutions." *A Journal of Media and Culture* 23, no 2 (2020), DOI: <https://doi.org/10.5204/mcj.1621>
- <sup>51</sup> Ngangura, "The Colonised World Wants Its Artifacts Back"
- <sup>52</sup> "Code of Conduct." Institute of Conservation (ICON), accessed January 20, 2023.  
<https://www.icon.org.uk/resource/code-of-conduct.html>
- <sup>53</sup> Eleanor Sweetnam, "Anarchy in the UK: Can an exploration into our perception of ethics, the role of authenticity and neutrality legitimise the concept of disruptive conservation", (Master of Science dissertation, Cardiff University, 2020), 36
- <sup>54</sup> Miles Horton, Paulo Freire, "Is it possible to *just* teach biology?" in *We Make the Road by Walking : Conversation on Education and Social Change*, edited by Brenda Bell, John Gaventa and John Peters, 102-108, Philadelphia: Temple University Press, 1990.
- <sup>55</sup> Henderson, "Beyond Lifetimes: Who Do We Exclude When We Keep Things for the Future?"
- <sup>56</sup> Bangstad, "Beyond Presentism: Heritage and the Temporality of Things" in "Shared Spaces – Multispecies Approaches in the Museum" citing François Hartog, 2015
- <sup>57</sup> Caitlin DeSilvey, "Palliative curation and future persistence: Life after death" in *Cultural Heritage and the Future*, edited by Cornelius Holtorf and Anders Höglberg (London: Routledge, 2020),  
DOI: <https://doi.org/10.4324/9781315644615>
- <sup>58</sup> Sweetnam, Henderson, "Disruptive Conservation: Challenging Conservation Orthodoxy"
- <sup>59</sup> Sweetnam, Henderson, "Disruptive Conservation: Challenging Conservation Orthodoxy", 64

## BIBLIOGRAPHY

- American Institute for Conservation (AIC). "AIC Code of Ethics and Guidelines for Practice." Accessed January 20, 2023. <https://www.culturalheritage.org/about-conservation/code-of-ethics>
- Appelbaum, Barbara. *Conservation Treatment Methodology*. Great Britain: Amazon. 2010
- Australian Institute for Conservation of Cultural Material (AICCM). "Code of Ethics and Code of Practice." Accessed January 20, 2023. <https://aiccm.org.au/wp-content/uploads/2020/01/code-of-ethics-and-code-of-practice-Australian-Institute-for-Conservation-of-Cultural-Material->

- 1.pdf?\_\_cf\_chl\_jschl\_tk\_\_=9e89db067b1da77e7bc8981d69ea3c7ed30426d5-1597670305-0-aescq0ju8ca2gvpgpabiagp6pf3trjfyv31hw2cmndnpn1wwlarcr000octhrm9rbo9wupj
- Autry, La Tanya, Murawski, Mike. "Museums Are Not Neutral: We Are Stronger Together" *Panorama: Journal of the Association of Historians of American Art* 5, no. 2 (2019). DOI: <https://doi.org/10.24926/24716839.2277>
- Avrami, Erica. "Heritage, Values and Sustainability" in *Conservation Principles, Dilemmas and Uncomfortable Truths*, edited by Alison Richmond and Alison Bracker, 177-182, Oxford: Butterworth-Heinemann, 2009
- Avrami, Erica. "Sustainability, intergenerational equity, and pluralism: Can heritage conservation create alternative futures" in *Cultural Heritage and the Future*, edited by Cornelius Holtorf and Anders Högborg, 217-229, London: Routledge, 2020. DOI: <https://doi.org/10.4324/9781315644615>
- Avrami, Erica, Mason, Randall. "Mapping the Issue of Values" in *Values in Heritage Management. Emerging Approaches and Research Directions*, edited by Erica Avrami, Susan Macdonald, Randall Mason and David Myers, 9-33, Los Angeles: Getty Conservation Institute, 2019.  
[https://www.getty.edu/publications/heritagemanagement/downloads/Avrami\\_etal\\_ValuesinHeritageManagement.pdf](https://www.getty.edu/publications/heritagemanagement/downloads/Avrami_etal_ValuesinHeritageManagement.pdf)
- Balachandram, Sanchita. "Race, Diversity and Politics in Conservation: Our 21st Century Crisis." Presented at the 44th AIC Annual Meeting, May 16, 2016
- Bangstad, Torgeir Rinke. "Beyond Presentism: Heritage and the Temporality of Things" in "Shared Spaces – Multispecies Approaches in the Museum", special issue, *Ethnologia Europaea* 49, no 1 (2019): 115-132 DOI: <https://doi.org/10.16995/ee.1443>
- Bell, Jonathan S. "The Politics of Preservation: Privileging One Heritage over Another." *International Journal of Cultural Property* 20, no. 4 (2013): 431–50. DOI: <https://doi.org/10.1017/s0940739113000192>.
- Canadian Association for Conservation of Cultural Property and the Canadian Association of Professional Conservators (CAC & CAPC), "CODES OF ETHICS and Guidance for Practice." Accessed January 20, 2023. <http://www.alapointeconservation.com/documents/ecode.pdf>
- Caple, Chris. "The Aims of Conservation" in *Conservation Principles, Dilemmas and Uncomfortable Truths*, edited by Alison Richmond and Alison Bracker, 25-31, Oxford: Butterworth-Heinemann, 2009
- Cocchiarella, Fabrizio. "Visionary Rumours Lost in Space – between rationale and reason, its time to realign our creative perspectives." Paper presented at the *Representing Pasts-Visioning Futures (AMPS)*, Online, December 1-3, 2022
- de la Torre, Marta. "Values and Heritage Conservation." *Heritage & Society* 6, no. 2, (2013): 155- 166 DOI: <https://doi.org/10.1179/2159032x13z.00000000011>
- DeSilvey, Caitlin. "Palliative curation and future persistence: Life after death" in *Cultural Heritage and the Future*, edited by Cornelius Holtorf and Anders Högborg, 198-216, London: Routledge, 2020. DOI: <https://doi.org/10.4324/9781315644615>
- Di Placido, Dani. "Lizzo Plays A 200-Year-Old Crystal Flute, Accidentally Summons A Swarm Of Trolls" *Forbes*. October 2, 2022. [https://blogs.loc.gov/loc/2022/09/its-about-danged-time-lizzo-at-the-library/Durant, Fletcher. Conservation is Not Neutral \(and neither are we\). Last modified 18 June 2020. https://www.youtube.com/watch?v=bFKS12TYTEg](https://blogs.loc.gov/loc/2022/09/its-about-danged-time-lizzo-at-the-library/Durant,Fletcher.Conservation%20is%20Not%20Neutral%20and%20neither%20are%20we.%20Last%20modified%2018%20June%202020.%20https://www.youtube.com/watch?v=bFKS12TYTEg)
- Gates, Theaster. *A Clay Sermon*. Whitechapel Gallery, London, 2021
- Henderson, Jane. "Beyond Lifetimes: Who Do We Exclude When We Keep Things for the Future?" *Journal of the Institute of Conservation* 43, no. 3 (2020): 195–212. DOI: <https://doi.org/10.1080/19455224.2020.1810729>.
- Hicks, Dan. *The British Museums: The Benin Bronzes, Colonial Violence and Cultural Restitution*. London: Pluto Press. 2020.
- Hölling, Hanna B. "Lost to museums? Changing media, their worlds, and performance" *Museum History Journal* 10, no 1 (2017): 97-111. DOI: <https://doi.org/10.1080/19369816.2017.1257873>
- Hölling, Hanaa B. "Time and Conservation. Linking Past and Future." in ICOM-CC 18<sup>th</sup> Triennial Conference Preprints, Copenhagen, 4-8 September, 2017, edited J Bridgeland, 1-7, Paris: International Council of Museums
- Horton, Miles, Freire, Paulo. "Is it possible to just teach biology?" in *We Make the Road by Walking : Conversation on Education and Social Change*, edited by Brenda Bell, John Gaventa and John Peters, 102-108, Philadelphia: Temple University Press, 1990.
- ICOM international council of museums – committee for conservation (ICOM-CC) "Definition of the profession (1984), The Conservator-Restorer: a definition of the profession." Accessed February 19, 2023. <https://www.icom-cc.org/en/definition-of-the-profession-1984>
- Institute of Conservation (ICON). "Code of Conduct." Accessed January 20, 2023. <https://www.icon.org.uk/resource/code-of-conduct.html>
- Jenson, Robert. "The Myth Of The Neutral Profession." *Progressive Librarian* 24 (2004): 23-34. [http://www.progressivelibrariansguild.org/PL\\_Jnl/contents24.shtml](http://www.progressivelibrariansguild.org/PL_Jnl/contents24.shtml)

- Joyce, Rosemary A. "The future in the past, the past in the future" in *Cultural Heritage and the Future*, edited by Cornelius Holtorf and Anders Högborg, 159-175, London: Routledge, 2020.  
DOI: <https://doi.org/10.4324/9781315644615>
- Kassim, Sumaya. "The museum will not be decolonised." *Media Diversified*, no date.  
<https://mediadiversified.org/2017/11/15/the-museum-will-not-be-decolonised/>
- Lamb, Andrew. "To play or not to play: the ethics of musical instrument conservation" *Victoria & Albert Museum Conservation Journal* 15 (1995) <http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>
- Library of Congress (LoC). "About the Librarian." Accessed October 19, 2022. <https://www.loc.gov/about/about-the-librarian/>
- Malkogeorgou, Panayota. "The observed object: the distance between the studio and the gallery" *Victoria & Albert Museum Conservation Journal* 41 (2002). <http://www.vam.ac.uk/content/journals/conservation-journal/issue-41/the-observed-object-the-distance-between-the-studio-and-the-gallery/>
- Matthews, Maureen Anne, Roulette, Roger, Brook Wilson, Roger. "Meshkwajisewin: Paradigm Shift" *Religions* 12, no.10 (2021): 1-22. DOI: <https://doi.org/10.3390/rel12100894>
- Mildwaters, Nyssa. "Capturing motion in Māori cloaks: Logistics, decision making and perceptions" in ICOM-CC 18<sup>th</sup> Triennial Conference Preprints, Copenhagen, 4-8 September, 2017, edited J Bridgeland, 1-7, Paris: International Council of Museums
- Modest, Wayne. "Words Matter" in *Words Matter, An Unfinished Guide to Word Choices in the Cultural Sector: Work in Progress*, edited by Wayne Modest and Robin Lelijveld, 13 -17, National Museum of World Cultures, 2018. <https://www.materialculture.nl/en/publications/words-matter>
- Muñoz-Viñas, Salvador. "Contemporary theory of Conservation" Supplement, *Studies in Conservation* 47, S1 (2002): 25-34. DOI: 10.1179/sic.2002.47.Supplement-1.25
- Ngangura, Tarisai. "The Colonised World Wants Its Artifacts Back" *Vice*, December 7, 2020.  
<https://www.vice.com/en/article/5dpd9x/the-colonized-world-wants-its-artifacts-back-from-museums-v27n4?src=longreads>
- Phillips, David. *Exhibiting Authenticity*. Manchester: Manchester University Press. 1997
- Pye, Elizabeth. "Authenticity challenged? The 'plastic house' at Çatalhöyük" *Public Archaeology* 5, no. 4 (2006): 237-251. DOI: 10.1179/pua.2006.5.4.237
- Rickett, Sophie, Williamson, Jenny. "Cupid, Canvas, Circle, Plane: Conservation and Conceptual Fine Art Practice" in "Conservation and Philosophy: Interactions and Intersections", special issue, *Studies in Conservation* 53, no 1-2 (2008): 84-91. DOI: 10.1080/00393630.2021.1959136
- Ross, Catherine. "Liminal Space: Non-Place and Spatio-Temporal Knowing." Paper presented at the *Representing Pasts-Visioning Futures (AMPS)*, Online, December 1-3, 2022
- Slayton, April. "It's About (Danged) Time: Lizzo at the Library!" (blog), *Library of Congress blog* (blog), September 28, 2022. <https://blogs.loc.gov/loc/2022/09/its-about-danged-time-lizzo-at-the-library/>
- Stiem, Tyler. "Statue wars: what should we do with troublesome monuments?" *The Guardian*, September 26, 2018,  
<https://www.theguardian.com/cities/2018/sep/26/statue-wars-what-should-we-do-with-troublesome-monuments>
- Stigter, Sanneke. "Autoethnography as a new approach in conservation." Supplement, *Studies in Conservation* 61, no. S2 (2016): 227-232. DOI: <https://doi.org/10.1080/00393630.2016.1183104>
- Sweetnam, Eleanor. "Anarchy in the UK: Can an exploration into our perception of ethics, the role of authenticity and neutrality legitimise the concept of disruptive conservation" Master of Science dissertation, Cardiff University, 2020.
- Sweetnam, Eleanor. "History of the Archive". *How Will I Recognise You? A Women's Archive* (blog), *Cargo collective*, no date. <https://cargocollective.com/elliehs/History-of-the-Archive>
- Sweetnam, Eleanor, Henderson, Jane. "Disruptive Conservation: Challenging Conservation Orthodoxy" in "Conservation and Philosophy: Interactions and Intersections", special issue, *Studies in Conservation* 53, no 1-2 (2008): 63-71. DOI: 10.1080/00393630.2021.1947073
- Taylor, Joel, Cassar, May. "Representation And Intervention: The Symbiotic Relationship Of Conservation And Value" Supplement, *Studies in Conservation* 53. no. S1 (2008): 7-11. DOI: 10.1179/sic.2008.53.Supplement-1.7
- Udina, Rita. "Reversibility and the Right Conservation Treatment" in *Conservation Insights 2020 Lectures*, edited by Padma M Rohila, 201-210, New Delhi: Indian National Trust for Art and Cultural Heritage (INTACH), 2020. DOI: 10.13140/RG.2.2.26130.58560

- UNESCO Institute for Statistics. "Conservation", Accessed January 14, 2023. <http://uis.unesco.org/en/glossary-term/conservation>
- Ureche-Trifu, Cristina. "Minimal intervention and decision making in conserving built heritage." Master of Arts thesis, Carleton University, 2013.  
[https://curve.carleton.ca/system/files/etd/b6471698-b6ca-484e-acb0-1e91f9d584ff/etd\\_pdf/37c211d2d47fbc33b453816de5ae5d2f/ureche-trifu-minimalinterventionanddecisionmakinginconserving.pdf](https://curve.carleton.ca/system/files/etd/b6471698-b6ca-484e-acb0-1e91f9d584ff/etd_pdf/37c211d2d47fbc33b453816de5ae5d2f/ureche-trifu-minimalinterventionanddecisionmakinginconserving.pdf)
- Villers, Caroline. "Post minimal intervention" *The Conservator* 28, no 1 (2004): 3-10.  
DOI: 10.1080/01410096.2004.9995197
- Wickens, Joelle D.J, Gupta, Anisha. "Leadership: the Act of Making Way for Others" in "Contributions to the Wellington Congress 2022. Conservation and Change: Response, Adaptation and Leadership", special issue, *Studies in Conservation* 67 no. 1 (2022): 319-325. DOI: 10.1080/00393630.2022.2065956
- Woldeyes, Yirga Gelaw, " "Holding Living Bodies in Graveyards": The Violence of Keeping Ethiopian Manuscripts in Western Institutions." *A Journal of Media and Culture* 23, no 2 (2020). DOI:  
<https://doi.org/10.5204/mcj.1621>
- Zeefuik, Simone, Modest, Wayne. "Perspectives Matter" in *Words Matter, An Unfinished Guide to Word Choices in the Cultural Sector: Work in Progress*, edited by Wayne Modest and Robin Lelijveld, 35-39, National Museum of World Cultures, 2018. <https://www.materialculture.nl/en/publications/words-matter>

# VISUALISING STORYTELLING THROUGH A LOCALLY BASED DIGITAL WAYFINDING EXPERIENCE

Authors:

**SARAH JANE JONES**

Affiliation:

THE UNIVERSITY OF SYDNEY, AUSTRALIA

---

## INTRODUCTION

This paper initiates a critical enquiry into the ecological and cultural history of the inner city of Sydney in relation to how we find our way and orientate to place. In this paper, I argue that wayfinding is founded on storytelling and memory-making practices that differ from the criteria prioritised in most digital mapping and wayfinding systems. Utilitarian digital mapping demands quick and efficient goal acquisition, directing, locating, and instantly connecting the user to the nearest amenities, transport, and local economy. Identifying the disjunct between articulating the ecological history of the area and contemporary digital mapping and physical signage led to the development of a prototype titled *Type Trails*.<sup>1</sup> The wayfinding experience of the prototype *Type Trails* involves getting lost and being immersed in this state and then re-finding the way and sits at the intersection of the digital and the physical. The prototype explores the affordances of the digital mapping program, Mapbox,<sup>2</sup> its fluidity and zoom functions to create a non-linear system designed to include a diverse range of literary sources. It responds to elements within the site-specific area of inner-city Sydney. *Type Trails* reveals the invisible memory lines of the original coastline of Sydney, the Tank Stream and the original Aboriginal trade pathways, with a primary focus on the flora, particularly the trees, and on what lies underneath, thus revealing the very beginnings of Sydney's city plans and through this, the reasons for the ways in which we currently find our way in this area. This is experienced through words (typography), a typographical map which is the interface for a digital wayfinding experience. The result is a memory of a landscape plotted over the actual one.

## WAYFINDING AS STORYTELLING AND MEMORY-MAKING PRACTICES

The primary role of urban wayfinding design is largely understood as functional, as helping people to find their way around a city and is widely researched and defined as a spatial problem-solving process that shapes behaviour in cities.<sup>3</sup> City wayfinding schemes are based on the concept of the “image” or “legibility”<sup>4</sup> of the city and assisting movement between points of interest to a destination point. Likewise, current manifestations of digital mapping largely focus on ‘getting’ there, finding/locating and key areas to help local economy.

Wayfinding is a performative act of finding your way and orientating oneself in an environment. Lynch defines wayfinding as a series of distinct and ‘organised’ ‘sensory cues’ in the environment.<sup>5</sup> Taking this further, Ingold describes wayfinding as a performative act over time and place in which wayfinders gain their knowledge of place or pathways “as they go” and that “people’s knowledge of

the environment undergoes continuous formation in the very course of their moving about in it”.<sup>6</sup> Ingold positions the role of wayfinding as more akin to storytelling, because “places do not have locations but histories”.<sup>7</sup> Wayfinding is also considered a social, cultural and historical narrative over time and distance.<sup>8</sup> Harry Heft argues that “the navigational and orientation practices and knowledge that exist within any culture are contingent on the environmental character of local conditions and on the sociocultural history of the culture.”.<sup>9</sup> Scholars Iosefo, Harris and Jones, in *Wayfinding as Pacifika, Indigenous and critical ethnographic knowledge* (2020), discuss how wayfinding is a cultural story about place and journey that evolves over time and through movement and is “defined not just by the individual’s pedagogical experience ‘within an environment’, but rather by the generations of knowledge shared and passed down.”.<sup>10</sup> Understanding how wayfinding theory has extended from transactional and practical to socio-cultural and generational and time based allows for the potential for digital wayfinding to enable new ways of experiencing place.

In this paper I use two broad categories of wayfinding in order to strengthen the positioning of interpretive wayfinding. In his book ‘Wayshowing: A guide to environmental signage; principles and practices,’ Mollerup argues that there are two types of travellers, those who like to be directed and those who like to find their way around a city.<sup>11</sup> Similar to this, during the Legible London wayfinding project,<sup>12</sup> two distinct personae were created that were coined the ‘strider’ and the ‘stroller’.<sup>13</sup> The strider wants to be reminded where they are, directed and connected quickly and efficiently to their destination. The stroller seeks an experience where the aesthetic, cultural and spatial qualities of the city may be absorbed. The stroller, unlike the strider, is collecting experiences as they move. Current digital wayfinding systems cater well for the ‘strider’ who is focused on ‘getting to a destination’ and who wants to be reminded where they are, but what about the “stroller” who wants to find their own way and get lost in that narrative? To orientate digital wayfinding systems to also allow for a stroller experience and perhaps ‘getting lost’ uncovers and points to a largely unrealised potential for digital wayfinding in allowing ways of focusing on the journey.

## CRITICALITY IN DIGITAL MAPPING

Wayfinding design and digital maps are powerful artefacts<sup>14</sup> and mechanisms that shape experience, provide informal education and help us find out way, not just spatially, but geographically and culturally. There is extensive literature on how cartographic systems and maps are ‘inherently partial’,<sup>15</sup> and devices of power<sup>16</sup> and should be understood for the constraint they have in representing only particular points of view and for what they omit.<sup>17</sup> The history of Cartography, a westernised way of navigating and organising space, is ‘deeply entangled’ in the colonial occupation of space and the ‘erasure’ of people and cultures.<sup>18</sup> This is particularly relevant to Australia and New Zealand, where maps and journals became a surveying tool for land claim.<sup>19</sup> My prototype Type Trails explores the use of literary fragments (sourced from archives, authors, government documents and signage in place) in a non-linear experience to attempt to make explicit the partial nature of maps.

Critical cartography is a field of scholarship concerned with the critique of cartographic practices and the emergence of new mapping practices.<sup>20</sup> Mapping practices in Aboriginal culture are a reflection that “Indigenous knowledge is inherently spatialised, as it is related to recurring processes, site specific knowledges and is embedded into the landscape through the names and stories of places which contain the meanings, relationship and interconnectivity of a place”.<sup>21</sup> Contemporary Indigenous mapping practices have also re-invented, deconstructed and counter-mapped western approaches to organising space. Counter-mapping is a term used to explain practices that centre on adding storytelling to a map, subverting grand narratives and empowering communities.<sup>22</sup> Digital maps can therefore be used to dissect, contest or re-invent mapping conventions.

In my prototype *Type Trails*, my intent is to critically probe the “hidden logic” of the way we find our way around the city centre of Sydney based on historical, ecological and cultural information. Ross Gibson notes that Kurgen has a provocation in her own work to “put the project of orientation—visibility, location, use, action and exploration—into question ... [but] without dispensing with maps”<sup>23</sup>. This became a provocation for me to use mapping software as a form to experiment with in my practice-based research. In addition, digital maps can make an argument and rather than seeing them as “static representations”<sup>24</sup>.

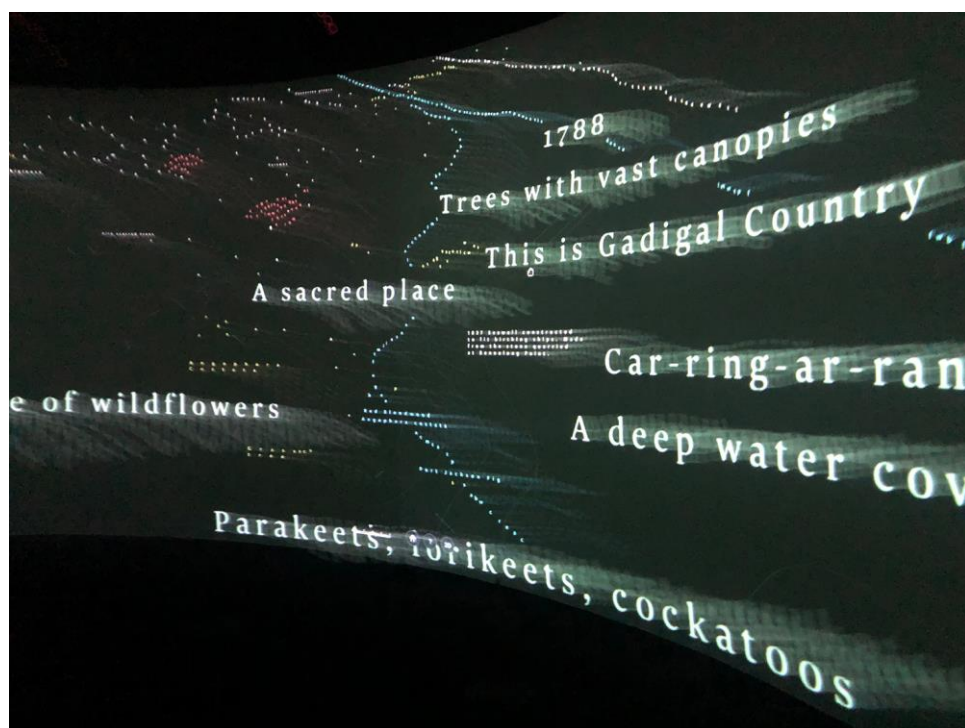


Figure 1. Prototype exhibited in a small exhibition in the Data Arena at the University of Technology.

## SITUATING THE PRACTICE-BASED RESEARCH

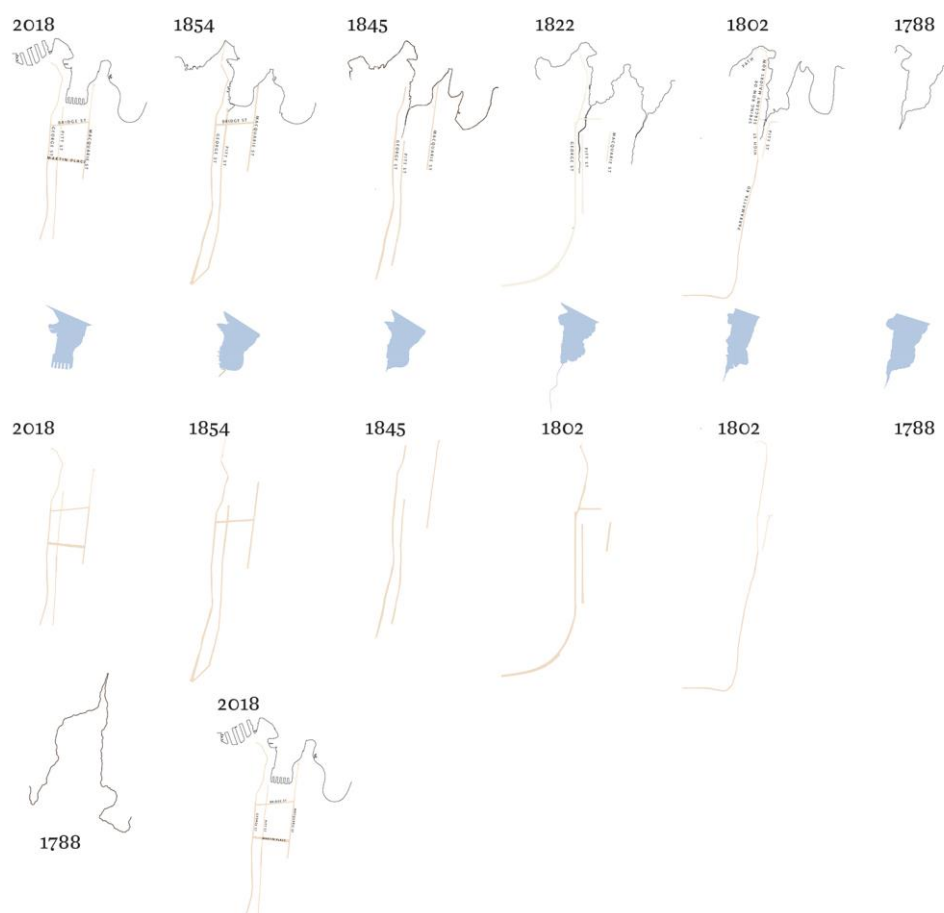
The wooded areas and forest were pushed back as soon as the colonials arrived in Australia in 1788.<sup>25</sup> In this prototype *Type Trails* I focus on the inner-city business district area of the city of Sydney from Hyde Park down to Warrang (Circular Quay), the harbour, and from Macquarie Street to George Street. The initial reason for choosing this area in the heart of Sydney’s financial centre for the research was to follow some of Sydney (and Australia’s) earliest principal streets. We are following the traces of Aboriginal past activity over thousands of years on some of Sydney’s main streets, George Street being one of them. Many of the main streets in Sydney follow Aboriginal pathways of trade and access to ceremonial places or places of resources.<sup>26</sup> Many of the streets and original Aboriginal pathways also followed the contours of the land or the ridges or the streams of fresh water.<sup>27</sup> While Macquarie Street, situated on the highest ridge, appeared later, in 1810, as part of Governor Macquarie’s attempt to regiment Sydney streets into a more military pattern, these other roads already had a fairly organic formation.<sup>28</sup>



Figure 2. The situated area: from Hyde Park to Warrane/Circular Quay and from Macquarie Street to George Street.

Currently inner-city Sydney projects a colonial framework of names through its street signs. George Street is Australia's oldest colonial street and was a bustling, thriving hub of commerce, retail and residence. At one point it was the town's main shopping street, which is why, in the tradition of English streets, it was originally named "High Street".<sup>29</sup> Pitt Street, like George Street, runs up from where the head of the Tank Stream used to exist. One of its parallels, Macquarie Street, contains many of Sydney's oldest architectural and heritage sites, such as the Hyde Park Barracks, the Law Courts and Sydney's oldest hospital. Historically, Macquarie Street was a street of wealth, in sharp comparison to Pitt or George streets. Bridge Street is named after the small wooden footbridge that was built across the Tank Stream.<sup>30</sup> So what is left out of this narrative?

This project acknowledges that "We walk in the footsteps and live in the spaces of those who were here before and of course are still here".<sup>31</sup> These walking tracks of thousands of years that became roads are traces of lived space. In addition to the movements of "walking feet", bringing attention to the original vegetation and natural features of this area, conveys a sense of how this area has been transformed over the last 200-plus years, of what lies beneath the city as undisturbed pollen or buried streams and what is left as remnant trees. *Type Trails* also emphasises the fact that this area is now unrecognisable from its 1788 state and hard to imagine. Very little remnant vegetation remains in this area and the biodiversity has been greatly reduced. The City of Sydney Urban Ecology Strategic Action Plan states, "Almost all of the original vegetation and other natural features have been removed or modified".<sup>32</sup> The vegetation community has been completely removed from this area apart from pockets in The Royal Botanic Garden Sydney and The Domain, Sydney.<sup>33</sup>



*Figure 3. Tracing the adapted coastline, the Tank Stream and the development of the roads.*

In addition to pathways, trees and vegetation, there is very little in the inner city of Sydney indicating the invisible Tank Stream, there are environmental graphics as drain coverings, street signage and city artworks as fountains. Once a stream of fresh water which made its way from the current day Hyde Park as marshland and then trickled down with its head at Sydney Cove incorporating a series of small waterfalls along the way, this stream now runs under the city as a storm water drain.<sup>34</sup>

This prototype is not intended to be scientifically or geographically accurate. In fact, such accuracy is not possible, as the historical data on pollen and geographic coordinates is fairly speculative, based as they are on the lack of pollen readings from this urban centre,<sup>35</sup> on old maps that were hand drawn and lack important geographic information and on tree growth patterns that cannot be completely accurate as their historical references are circumspect. I have traced the line of where Tank Stream and the original coastline and George street from the original colonial maps. If you are in this area, this prototype locates you. The trees are plotted as accurately as possible and the stories on the trees, tank stream, the coastline and the wildflowers are located in the areas the research indicates. I have therefore reframed the space into one that is experimental, placing the information from the colonial maps of the area over the GIS map to be as accurate as possible. I have also used data from the Significant Tree Register<sup>36</sup> and data and research on pollen readings in the area. The person experiencing this moves around the city based on what trees were here and what environmental and ecological aspects have lain underneath in the landscape.

## METHODOLOGY

Research through design (RTD) has been used for more than 20 years by an international community of practitioner researchers “to describe practice-based inquiry that generates transferrable knowledge”.<sup>37</sup> Throughout this research, I used RTD for my research process of using design practice as a mode of scholarly inquiry explored through a critical documentation process. This methodology enabled me to demonstrate how the particular methods and processes evolved through an iterative practice—each experiment led to a new idea, experiment or process—and how this led to insights that generated knowledge-synthesis perspectives.<sup>38</sup>



Figure 4. Pin-up of critical documentation for critical feedback within a doctorate program.

## Methods: prototype

A prototype is a working format often used in applied design fields; partly it is a ‘representation—a plan, program or image—of an artifact to be constructed by others’<sup>39</sup> and partly it is a discursive object for—an inquiry into a field of practice. The design work for this research was taken to the stage of a prototype, not to a final artefact. In their article “Making as growth: Narratives in Materials and Process”, Ian Lambert and Chris Speed say, “Increasingly, ‘the doing’ (the process) seemingly yields more new knowledge and insight than ‘the done’ (the outcome),”.<sup>40</sup>

## TYPOGRAPHIC ARCHIVE

*Type Trails* is also an interpretive investigation into the geospatial possibilities of using typography as a system for non-linear storytelling within digital mapping, and exploring the potential of how it could also operate as a text archive. As an alternative to other ways of reading information in a city I explored different ways of reading text in digital mapping through exploring typographic structural relationships. Central to this practice-based research was a question that author and theorist Johanna Drucker asked in her 2013 book *Diagrammatic Writing*, “how do structural relations participate in the production of meaning?”.<sup>41</sup> Digital storytelling offers the opportunity to layer information, often this is done categorically, in this prototype, I have layered the information fluidly and not in categories. The limitations and restrictions of Mapbox determined how I structured the navigation of the reading. Placing the literary fragments or words on the digital map became an organisational principle<sup>42</sup> and allowed me to layer information and to plot it, thus splitting the historical content geographically. The historical information became geospatial data with longitudinal and latitudinal co-ordinates. It could be expanded on further from an archival research point of view to split and display only certain texts and narratives, and to work with live data.



Figure 5. Prototype Type Trails exhibited in a small exhibition in the Data Arena at the University of Technology Sydney.

The affordances of the software –the fluid and fleeting transitions–contributed to the kinetic and temporal feel and the zoom function created the way I structured the changes in content and helped to integrate hierarchies of information. The scalability, as information appears and then again disappears as one zooms in and out, up and down, is an important part of the journey. The fluidity of the navigational logic echoes past text based explorations in interface design but does something different through being location-based and particular to the affordances and limitations of this mobile mapping software.

On the first zoom level, Letterforms indicate the memory lines and the main areas where the wildflowers that once grew. Tree names are scattered over the whole area and located to where the archival research and pollen data indicates they would have grown. At the same time, larger titles of text flicker in and out and have to be read across the screen. Zooming in ... Literary passages are broken into single words and fragments of sentences can be followed like pathways down, up or across the screen... Zooming in further words give way to paragraphs of information by historical authors, council reports, cultural authors and from the content found in place, on signage within this environment. This content converges with significant existing native plants or trees, remnant trees or signage in the physical environment.

## CONCLUSION

In this paper I have discussed the complexities of wayfinding mechanisms and digital map making and the need for criticality in their design. Through the prototype TypeTrails I have invoked the idea of prioritising the needs of the ‘stroller’ above those of the ‘strider’ in digital mapping, exploring the experience of finding your own way and getting lost in that narrative. This sense of getting lost can open up a new state of being in the work. Type Trails also destabilises the usual hierarchy in wayfinding design by taking the focus away from destination points as places and emphasising the value of trajectories by prioritising the journey.

I have identified three potential directions for this project to contribute to field of typography in digital mapping:

- structuring typographic storytelling layers in digital mapping in a fluid manner so that they can converge and present a diverse set of narratives
- using the dimensionality and scalability of the zoom functions of digital mapping software as a typographic system for storytelling which could be used as a text archive or as digital wayfinding
- providing a non-linear and generous way of working with content, so many literary sources can be included as an alternative to layering information in categories.

## **ACKNOWLEDGEMENTS**

Photography by Sarah Jane Jones, Nicola Hardcastle and Ben Simons

## NOTES

<sup>1</sup> Type Trails is the practice-based outcome of my PhD thesis and is currently presented online in a website as an interactive system for wayfinding inquiry and place-evocation. <http://typetrails.com.au/> It has been exhibited in the Data Arena at the University of Sydney, May 12, 2021.

<sup>2</sup> Mapbox is a mapping platform for location based services.

<sup>3</sup> See Paul Arthur and Romedi Passini. *Wayfinding: People, Signs, and Architecture*, (New York: McGraw-Hill Book Co.), 1992; Craig Berger, *Wayfinding: Designing and Implementing Graphic Navigational Systems* (Mies: RotoVision, 2005); Per Mollerup, *Wayshowing: a Guide to Environmental Signage; Principles & Practices* (Baden: Lars Müller, 2005).

<sup>4</sup> See Lynch's seminal work on legibility: Kevin Lynch, *The Image of the City* (Cambridge: Mass: M.I.T. Press, 1960).

<sup>5</sup> Kevin Lynch, 3.

<sup>6</sup> Tim Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (Abingdon, Oxon: Routledge, 2022), 230.

<sup>7</sup> Ingold, 219.

<sup>8</sup> Heft's research is instrumental in positioning wayfinding into the socio-cultural domain. See Harry Heft, "Environment, Cognition, and Culture: Reconsidering the Cognitive Map," *Journal of environmental psychology* 33 (2013): 14–25.

<sup>9</sup> Heft, 22.

<sup>10</sup> Fetaui Iosefo, et al, "Wayfinding as Paskifika, indigenous and critical auto ethnographic knowledge," in *Wayfinding and Critical Autoethnography*, ed. Fetaui Iosefo et al. (Abingdon, Oxon: Routledge, 2021), 17.

<sup>11</sup> see Mollerup.

<sup>12</sup> *Legible London* is a wayfinding system aimed at pedestrians and promoting walkability launched in London in 2007. For an excellent analysis on this project see: Jim Davies, *The Yellow Book: a prototype wayfinding system for London* (Transport for London, 2007). <http://www.tfl.gov.uk/info-for/boroughs-and-communities/legible-london>

<sup>13</sup> These two personae developed for the design of the Legible London wayfinding scheme are discussed in: Davies, 26–27; Shiho Asada, *Storytelling in urban wayfinding* [Unpublished Master's dissertation], (University of Reading:2015) <https://issuu.com/shihoasada/docs/dissertation>, 29–30; Colette Jeffrey, "Wayfinding perspectives: Static and digital wayfinding systems—can a wayfinding symbiosis be achieved?," in *Information Design: Research and Practice*, ed. Alison Black et al. (Routledge, 2017), 518.

<sup>14</sup> Martin Dodge et al, "Introductory Essay: Power and Politics of Mapping," in *The Map Reader: Theories of Mapping Practice and Cartographic Representation*, ed. Martin Dodge et al. (John Wiley & Sons, Ltd. 2011), 444.

<sup>15</sup> Dodge et al, 444; and Laura, Kurgan, "Cities full of data: a preface," in *Ways of Knowing Cities*, ed. Laura Kurgan et al. (Columbia University Press, 2019), 7.

<sup>16</sup> See J. Brian Harley, "Deconstructing the map." *Cartographica* 26, no 2, (Summer 1989): 1–20.

<sup>17</sup> Kurgan, *Cities of full data*, 7.

<sup>18</sup> Shannon Mattern, "Mapping's Intelligent Agents," *Places Journal*, (September 2017): para 23

<sup>19</sup> See Ross, Gibson, "Narrative hunger: GIS Mapping, Google Street View and the Colonial Prospectus," *Cultural Studies Review* 20(2) (2014): 263.

<sup>20</sup> For an understanding on the field of critical cartography see Dodge et al; and Jeremy Crampton and John Krygier, "An Introduction to Critical Cartography" *ACME: An International E-Journal for Critical Geographies* 4 (1) (2006): 11-33.

<sup>21</sup> Pearce & Louis, 2008 cited in Danièle Hromek and Dillon Kombumerri, "Designing with Country: Rethreading Aboriginal culture into the design fabric of Sydney's built and natural environment through language, place and memory," in *Our Voices II: The De-Colonial project*, ed O'Brien et al (Eds.), 2021, 149.

<sup>22</sup> Christine Rogers, "Almost always clouds: Stitching a map of belonging." in *Wayfinding and critical autoethnography*, ed. F. Iosefo et al. (Routledge Taylor & Francis Group, 2021), 115.

<sup>23</sup> see Gibson, *Narrative Hunger*, 253 cites Kurgan 2023: 17.

<sup>24</sup> See Anne Burdick et al *Digital\_humanities* (MIT Press, 2012), 47: "Within a dynamic, ever-changing environment, new data sets can be overlaid, new annotations can be added, new relationships among maps can be discovered, and, perhaps most importantly, missing voices can be returned to specific locations through 'writerly' projects of memory that the participatory architecture of Web 2.0 applications has made possible."

<sup>25</sup> For a full history on Sydney Cove (Warrane) see; Karskens, 2009; and on the notion of landscape as Indigenous infrastructure and country see Gammage 2011 and Pascoe, 2014.

<sup>26</sup> see Grace Karskens, *The colony: A history of early Sydney* (Allen & Unwin, 2009).

- <sup>27</sup> Jakelin Troy is a Ngarigu person whose Country is the Snowy Mountains of NSW. Troy mentions in the ABC article that George Street was once an Aboriginal pathway. Sue Daniel, "Walking in their tracks: How Sydney's Aboriginal paths shaped the city." Curious Sydney, ABC: May 17, 2018, <http://www.abc.net.au/news/2018-05-17/curious-sydney-aboriginalpathways/9676076>
- <sup>28</sup> See Karskens, *The Colony*; and Shirley Fitzgerald and Lisa Murray, "A History of Sydney Streets," [Video], January 20, 2009. YouTube.[https://www.youtube.com/watch?v=9ZFKkK2fw\\_Q](https://www.youtube.com/watch?v=9ZFKkK2fw_Q)
- <sup>29</sup> This is mentioned in the City of Sydney's History of Sydney Streets spreadsheet, which is an updated document that contains original naming and the history of the naming of each street: History-of-Sydney-Streets2.xls, [www.cityofsydney.nsw.gov.au/learn/sydneyshistory/peopleand-places/streets](http://www.cityofsydney.nsw.gov.au/learn/sydneyshistory/peopleand-places/streets)
- <sup>30</sup> See Karskens; and "Bridge Street". Dictionary of Sydney. State Library of New South Wales, accessed February 10, 2023, [https://dictionaryofsydney.org/place/bridge\\_street#refuuid=29e11ea8-ec6c-7804-a7f9-39e8e78e9c18](https://dictionaryofsydney.org/place/bridge_street#refuuid=29e11ea8-ec6c-7804-a7f9-39e8e78e9c18).
- <sup>31</sup> Hromek and Kombumerri 2021, 149
- <sup>32</sup> City of Sydney. "Urban ecology strategic action plan (Issue August 2020)", 2014. <https://www.cityofsydney.nsw.gov.au/strategies-action-plans/urban-ecologystrategic-action-plan: 8>
- <sup>33</sup> Doug Benson and Jocelyn Howell, Taken for Granted: The bushland of Sydney and its suburbs, (Kangaroo Press in association with the Royal Botanical Gardens Sydney, 1990),.44
- <sup>34</sup> The Tank Stream is still a storm-water channel which runs under the city from the lower part of the city centre out into the harbour. See Sydney Water, 2004
- <sup>35</sup> In the archaeological paper: 'The Soil and Pollen Analysis of part of the Gardens of First Government House, Sydney' Australian Historical Archaeology, 6, 49–56., the authors state that 'Not only are undisturbed soil profiles extremely rare in the City of Sydney, but the existence of one sealed from later contamination must also be unique' (p. 51). Doug Benson and Jocelyn Howell in their 1990 book *Taken for Granted, the Bushland of Sydney and its Suburbs*, refer to the bio-diversity in their map and research of this area as 'likely vegetation' and comment that 'no details of the original vegetation have survived', they list what was likely to have grown in this area based on what 'the soils and topography indicate', 42.
- <sup>36</sup> The City of Sydney Significant Trees Register is a map and list of Sydney's significant trees within the City of Sydney Council area, both native and introduced, and helps to protect and maintain them. The trees contained in this list were put forward by the local community and then assessed according to a classification criteria 'by landscape and heritage experts'. City of Sydney, n.d., para. 4.
- <sup>37</sup> Abigail C. Durrant et al, "Research through design: Twenty-first Century Makers and Materialities." Design Issues 33 no. 3 (2017), 39.
- <sup>38</sup> Sadokierski's 2020 guidelines on critical documentation provided a structured framework to work within. The methods and processes also draw on the work of Mäkelä & Nimkulrat, 2018; Lambert & Speed, 2017; and Grocott 2010.
- <sup>39</sup> Donald A. Schön, *The reflective practitioner: how professionals think in action*, (Arena, 1995), 78
- <sup>40</sup> Ian Lambert, and Chris Speed. "Making as Growth: Narratives in Materials and Process." Design issues 33, no. 3 (2017): 105.
- <sup>41</sup> Johanna Drucker, "Diagrammatic Writing." New formations 78, no. 1 (2013): 83–101.: 87
- <sup>42</sup> Agnieszka Leszczynski discusses how "locating" has become an organising principle of spatial media: Agnieszka Leszczynski. "Spatial media/tion." Progress in Human Geography, 39, no. 6 (2015): 729–751

## BIBLIOGRAPHY

- Arthur, Paul, and Romedi Passini. *Wayfinding: People, Signs, and Architecture*, New York: McGraw-Hill Book Co., 1992.
- Asada, Shiho. *Storytelling in urban wayfinding* [Unpublished Master's dissertation]. University of Reading, 2015. <https://issuu.com/shihoasada/docs/dissertation>,
- Benson, Doug., and Howell, Jocelyn. *Taken for Granted: The bushland of Sydney and its suburbs*, Kangaroo Press in association with the Royal Botanical Gardens Sydney, 1990.
- Berger, Craig. *Wayfinding: Designing and Implementing Graphic Navigational Systems*. Mies : RotoVision, 2005.
- Burdick, Anne., Drucker, Johanna., Lunenfeld, Peter., Presner, Todd., and Schnapp, Jeffrey. *Digital Humanities*. Cambridge: The MIT Press, 2012.

- City of Sydney Significant Trees Register, "City of Sydney Significant Trees Register." Accessed February 10, 2023. <https://trees.cityofsydney.nsw.gov.au/>
- City of Sydney. "Urban ecology strategic action plan (Issue August 2020)", 2014. <https://www.cityofsydney.nsw.gov.au/strategies-action-plans/urban-ecologystrategic-action-plan>
- Crampton, Jeremy W., and Jonh Krygier. "An Introduction to Critical Cartography." *ACME: An International E-Journal for Critical Geographies* 4, no. 1 (2006): 11-33
- Daniel, Sue. "Walking in their tracks: How Sydney's Aboriginal paths shaped the city." *Curious Sydney*, ABC: May 17, 2018. <http://www.abc.net.au/news/2018-05-17/curious-sydney-aboriginalpathways/9676076>
- Davies, Jim. *The Yellow Book: a prototype wayfinding system for London*. Transport for London: 2007. <http://www.tfl.gov.uk/info-for/boroughs-and-communities/legible-london>
- Dictionary of Sydney. State Library of New South Wales. "Bridge Street", Accessed February 10, 2023. [https://dictionaryofsydney.org/place/bridge\\_street#refuuid=29e11ea8-ec6c-7804-a7f9-39e8e78e9c18](https://dictionaryofsydney.org/place/bridge_street#refuuid=29e11ea8-ec6c-7804-a7f9-39e8e78e9c18)
- Dodge, Martin, Rob Kitchin, and Chris Perkins, eds. "Introductory Essay: Power and Politics of Mapping." In *The Map Reader: Theories of Mapping Practice and Cartographic Representation*, edited by Martin Dodge, Rob Kitchin, and Chris Perkins, 439–446. John Wiley & Sons, Ltd. 2011.
- Drucker, Johanna, "Diagrammatic Writing." *New formations* 78, no. 1 (2013): 83–101. <https://doi.org/10.3898/NEWF.78.04.2013>
- Durrant, Abigail C., Vines, John., Wallace, Jayne., Yee, Joyce S. R., "Research through design: Twenty-first Century Makers and Materialities." *Design Issues* 33 no. 3 (2017): 3–10. [https://doi.org/10.1162/DESI\\_a\\_00447](https://doi.org/10.1162/DESI_a_00447)
- Fitzgerald, S., and Murray, L. "A History of Sydney Streets," [Video], January 20, 2009. YouTube. [https://www.youtube.com/watch?v=9ZFkK2fw\\_Q](https://www.youtube.com/watch?v=9ZFkK2fw_Q)
- Gibson, Ross. "Narrative hunger: GIS Mapping, Google Street View and the Colonial Prospectus," *Cultural Studies Review* 20, no. 2 (2014): 250–265. <http://ebookcentral.proquest.com/lib/UTS/reader.action?docID=3387379>
- Heft, Harry. "Environment, Cognition, and Culture: Reconsidering the Cognitive Map." *Journal of environmental psychology* 33 (2013).
- Higginbotham, Edward., Macphail, Michael., & Davey, Brian, "The soil and pollen analysis of part of the gardens of First Government House, Sydney". *Australian Journal of Historical Archaeology*, no. 6, 49-56. <http://www.jstor.org/stable/29543209>
- Hromek, D., and Kombumerri, Dillon. "Designing with Country: Rethreading Aboriginal culture into the design fabric of Sydney's built and natural environment through language, place and memory." In *Our Voices II: The De-Colonial project*, edited by Rebecca Kiddle, Patrick Stewart Luugigyoo, and Kevin O'Brien, First edition. New York: ORO Editions, 2021.
- Ingold, Tim. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. Abingdon, Oxon: Routledge, 2022.
- Iosefo, F., and Harris, A., and Jones, S H. "Wayfinding as Paskifika, indigenous and critical auto ethnographic knowledge." In *Wayfinding and Critical Autoethnography*, edited by Fetaui Iosefo, Anne Harris, and Stacy Holman Jones 15–27. Abingdon, Oxon : Routledge, 2021.
- Jeffrey, Colette. "Wayfinding perspectives: Static and digital wayfinding systems—can a wayfinding symbiosis be achieved?." In *Information Design: Research and Practice*, edited by A. Black, P. Luna, S. Walker, & O. Lund, 509–526. Routledge, 2017.
- Karskens, Grace. *The colony: A history of early Sydney*. Allen & Unwin, 2009.
- Kurgan, Laura. "Cities full of data: a preface." In *Ways of Knowing Cities*, edited by Laura Kurgan, Dare Brawley, 6–13. Columbia University Press, 2019.
- Lambert, Ian., and Speed, Chris. "Making as Growth: Narratives in Materials and Process." *Design issues* 33, no. 3 (2017): 104–109. [https://doi.org/10.1162/DESI\\_a\\_00455](https://doi.org/10.1162/DESI_a_00455)
- Leszczynski, Agnieszka. "Spatial media/tion." *Progress in Human Geography*, 39, no. 6 (2015): 729–751. <https://doi.org/10.1177/0309132514558443>
- Lynch, Kevin. *The Image of the City*. Cambridge: Mass: M.I.T. Press, 1960.
- Mäkelä, Maarit., and Nimkulrat, Nithikul. "Documentation as a practice-led research tool for reflection on experiential knowledge." *FormAkademisk*, 11, no.2, (2018): 1–16. <https://doi.org/10.7577/formakademisk.1818>
- Mattern, Shannon. "Mapping's Intelligent Agents," *Places Journal*, (September 2017): <https://doi.org/10.22269/170926>

- Mollerup, Per. *Wayshowing: a Guide to Environmental Signage; Principles & Practices*. Baden: Lars Müller, 2005.
- Rogers, Christine. "Almost always clouds: Stitching a map of belonging." In *Wayfinding and Critical Autoethnography*, edited by Fetaui Iosefo, Anne Harris, and Stacy Holman Jones 151–167. Abingdon, Oxon : Routledge, 2021.
- Sadokierski, Zoë. "Developing Critical Documentation Practices for Design Researchers." *Design studies* 69 (2020). <https://doi.org/10.1016/j.destud.2020.03.002>
- Sydney Water. *Tank Stream : Sydney's first water supply*. Sydney NSW: Sydney Water, 2004.

# CITY AS DATA: URBAN ANALYTICS AS CONTEMPORARY FORM OF RHYTHMANALYSIS

Authors:

**KATJA KNECHT, OLAF MUMM, VANESSA MIRIAM CARLOW**

Affiliation:

TECHNISCHE UNIVERSITÄT BRAUNSCHWEIG, GERMANY

---

## INTRODUCTION

Cities are complex and dynamic systems, constantly in flux. The city with its spatiotemporal ebb and flow of people and things has held a fascination for many philosophers, writers, and artists, who have tried to capture and depict its essence in their work, such as Alfred Döblin<sup>1</sup> in his novel *Berlin Alexander Platz* and Walther Ruttmann<sup>2</sup> in his film *Symphony of a Metropolis* (1927) of Berlin in the 1920s.<sup>3</sup> These artistic endeavours have always been tied to the media of their time, be it literature, film, or other forms of artistic practice, and as such have constituted collages of unique, concrete moments, events and instances at a specific time and place focusing on the atmospheric properties of the city and experiential aspects rather than on capturing the rhythms and symphony of the city in its complexity or aiming to uncover its underlying patterns.

With *Rhythmanalysis*, or the study of rhythm, the French philosopher Henri Lefebvre aimed at founding a new science that would move rhythm from the realm of the art to the world of knowledge.<sup>4</sup> His analysis of urban rhythms was bent on isolating different rhythms and on deconstructing the symphony of the city into its sources to understand its patterns and provide insights into urban everyday life.<sup>5</sup> However, the method he proposed was more ethnographic and phenomenological in nature, analysing rhythms through experience without becoming involved, understanding the present first and foremost through presence.<sup>6</sup> Since *Rhythmanalysis: Space, Time, and Everyday Life* was published in 1992, the rapid development of digital and information technologies and the rise of pervasive computing has provided new means to perform *Rhythmanalysis* detached from the body and the self as point of reference: the capturing and analysis of large urban data sets has allowed to quantify urban movements and flows in time and space.<sup>7</sup> Remote sensing, IoT, and mobile computing devices provide a continuous stream of information on the urban environment and spatial practices, whose analysis using, for example, machine learning provide not only new representations and a deeper understanding of spatiotemporal patterns of urban everyday life but also predict them.<sup>8</sup>

This paper juxtaposes Lefebvre's *Rhythmanalysis* and urban analytics by comparing respective approaches, methods and tools. It explores data-driven and -informed representations of the city and the rhythms and flows of people, things and the built environment within it alongside research activities at the Spatial Analytics and Crossdisciplinary Experimentation (SpACE) Lab at the Institute for Sustainable Urbanism (ISU). The paper concludes by critically discussing the short-comings and opportunities of urban analytics as contemporary form of *Rhythmanalysis* as well as by laying out a trajectory for future research.

## RHYTHMS, RHYTHMANALYSIS AND URBAN ANALYTICS

Spatiotemporal repetitions of movements, situations, processes, and sounds with a qualified duration stand at the centre of Lefebvre's definition of rhythm.<sup>9</sup> These repetitions, however, are never absolute, as every instance bears within it difference and therefore the seed of transformation.<sup>10</sup> Furthermore, Lefebvre distinguishes two types of rhythms: cyclical rhythms originating in nature and the cosmic, such as night and day and the seasons, and recurring at fixed intervals as well as linear rhythms stemming from social practices and human activities consisting of occurrences that are reproduced and repeated at similar intervals, which superimpose and may interfere with the former.<sup>11</sup> The socio-economic organisation of everyday life thus creates a spatiotemporal framework according to which activities in time, e.g. work and leisure time, time for sleeping, eating, etc., but also space, e.g. home, work, etc. are organised. Time and space are inherently connected, as "every rhythm implies the relation of a time with space, a localised time, or if one wishes, a temporalized place"<sup>12</sup>.

The aim of *Rhythmanalysis* is to study the patterns and rhythms of everyday life based on an analysis of the spatiotemporal dynamics of people and things as well as their interactions and interdependencies within and with their urban as well as social context.<sup>13</sup> Studying urban rhythms is therefore key to understanding the complexities of cities and the way its integral parts interact with each other, but also to exploring their emergent properties.<sup>14</sup> This is where the concepts of *Rhythmanalysis* and contemporary urban analytics meet. However, a fundamental difference between *Rhythmanalysis* as intended by Lefebvre and the analysis of urban rhythms as conducted by urban analytics exists in the approach, methods and tools they apply.

### Rhythmanalysis: Approach, Methods and Tools

For Lefebvre's *Rhythmanalysis* the following three instances are of essence: the body, timing, and location in space.<sup>15</sup> The first and foremost tool for conducting *Rhythmanalysis* is the human body, as the place where biological, physiological and social rhythms meet and interact.<sup>16</sup> As *Rhythmanalysis* requires being attentive to and integrating these internal as well as external rhythms, the Rhythmanalyst has to be at the same time immersed in as well as observant of these.<sup>17</sup> The second instance, timing, is of relevance in respect to the perception of the scheduling and duration of everyday activities and events.<sup>18</sup> Even seemingly immobile aspects of the urban built environment succumb to rhythms in their own inherent time frames.<sup>19</sup> For example, in the case of the city much longer time frames have to be regarded requiring a reflection on historical transformations and rhythms.<sup>20</sup> Thirdly, with the body as central point of reference its location in space possesses specific relevance. This not only regards the body's geographical position within the urban space but also its vantage point: whereas walking in the streets allows for immersion in the rhythms and to experience them with all senses, looking at them from a window creates the necessary distance between the observer and the observed to get outside of these.<sup>21</sup>

The methods Lefebvre proposes to conduct *Rhythmanalysis*, as participant observer<sup>22</sup> with embodied presence and experiencing with all senses, has been linked to phenomenological and ethnographic practices<sup>23</sup>. Although Lefebvre's and Régulier's own attempt at *Rhythmanalysis* remained a fragment<sup>24</sup> and was never fully undertaken following this proposed methodology, they in particular stress its transdisciplinary character and the conducting of *Rhythmanalysis* as interdisciplinary practice. They suggest to enrich these observations with data and using the instruments of other disciplines, such psychology, sociology and the sciences.<sup>25</sup>

### Contemporary Urban Analytics: Approach, Methods and Tools

Urban analytics focusses on applying computational and statistical methods on spatiotemporal urban data to examine, make sense of and forecast urban characteristics and to answer urban questions.<sup>26</sup> This moves the field away from a pure analysis of urban rhythms towards the development of urban theories from the evidence provided by data.<sup>27</sup> The approach of deriving meaning from data using statistical means is inherently inductive, as it aims to explain spatiotemporal phenomena.<sup>28</sup> Next to this exists a deductive approach in the field that aims at predicting future urban behaviours or events based on existing theories using modelling and simulation.<sup>29</sup> In contemporary urban analytics the line between the approaches, however, can be fleeting.<sup>30</sup>

Whereas the implementation of Lefebvre's approach to *Rhythmanalysis* can be traced back to a human geography tradition<sup>31</sup> and entails the understanding of rhythms from small data sets, whose characteristics are known<sup>32</sup>, contemporary urban analytics draws from large urban datasets, usually referred to as *Big Data*<sup>33</sup>. These sets of spatiotemporal, often real-time data are actively or passively contributed by users, such as via surveys or social media applications, or collected using active and passive sensing techniques embedded into the urban environment or objects, or monitoring it remotely.<sup>34</sup> Being recorded with a geolocation and timestamp, the collected data already inherently contains spatial and temporal information on the occurrences of events alongside their specific attributes.<sup>35</sup> Unlike small data sets, which are collected with a purpose in mind by the researcher and are clean and structured, these large data sets can be unstructured and messy;<sup>36</sup> they have been collected by businesses, companies, local or governmental agencies for primarily profit-oriented reasons.<sup>37</sup> Methods such as Machine Learning are employed to recognise spatiotemporal patterns in these large data sets and to help identify correlations between different variables that may not have been previously noticed.<sup>38</sup> As its tools, geospatial technologies allow to access, collate and integrate the data and provide the means to process it, whereby providing an environment for geospatial *Rhythmanalysis*.<sup>39</sup>

### URBAN RHYTHMS UNCOVERED: A NEW UNDERSTANDING OF THE CITY AND ITS RHYTHMS FROM DATA AND THEIR REPRESENTATIONS

The new types of data sources used for urban analytics come with characteristics that transform and expand the central instances of *Rhythmanalysis*, namely the body, timing, and location in space. Firstly, the body as primary tool and point of reference that also serves as sensing device for data collection in Lefebvre's *Rhythmanalysis* is replaced by sensors and their carriers. Second, unlike the human body with its physical needs and corresponding temporal rhythms, these sensors can collect data 24/7 and can observe the timing of external rhythms in their entirety. Thirdly, the locational qualities of the carriers diversify viewpoint, point of reference and scale of the collected data. They can be mobile, e.g. travel with people and objects or with their own trajectories, or can be static.<sup>40</sup> Whereas a mobile phone travels with its user and therefore collects data at body level and from its viewpoint, a drone's vantage point is variable meaning that it can collect information from close up to remote in scale. In contrast, the viewpoint and scale of data collected from sensors embedded in static objects does not vary. In all cases their features and the nature of embedded sensors determine the type of information they collect and its resolution in time and space.

### On the Rhythms of People, Things and the Built Environment

With data sets obtained from mobile phones, travel cards or social media, the availability and amount of information on human activities have increased.<sup>41</sup> Their analysis has allowed to generate theories and insights about spatial and temporal rhythms of human activities and mobility based on aggregated individual information.<sup>42</sup> An inductive approach to mobile phone datasets uncovered, for example, the

universal visitation law of human mobility, which states that the number of visitors to a specific location follows an inverse square law of visitation frequency multiplied by travel distance, or in other words: people visit places that are closer by to the square more frequently than those that are further away.<sup>43</sup> The finding has been represented in form of graphs and mappings to convey the statistical relevance of the information<sup>44</sup> and in form of a three dimensional data visualisation<sup>45</sup> as aggregation of individual data points (see Figure 1). These insights allow to predict recurring flows of people and their frequency and thereby can help inform urban and traffic planning.<sup>46</sup>

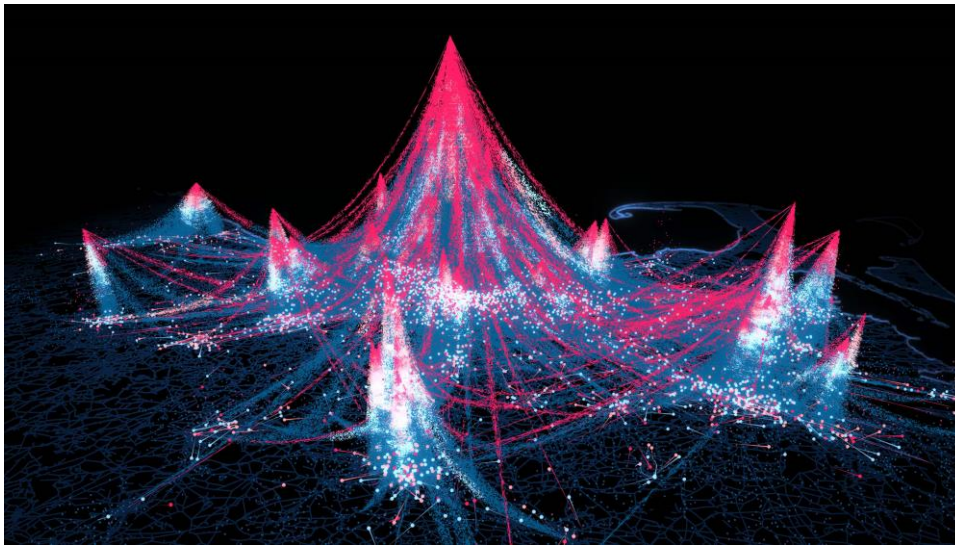


Figure 1. Universal Visitation Law of Human Mobility: three dimensional data visualisation (frequency: color, visitors count: linewidth, height: attractiveness). (Image credits: Guangyu Du, Senseable City Lab MIT, [senseable.mit.edu/wanderlust/](http://senseable.mit.edu/wanderlust/))<sup>47</sup>

Due to IoT and embedded sensing technology, an increasing amount information is also available on the flow and dynamics of inanimate objects, materials and resources, which have been studied, for example, in urban metabolism research.<sup>48</sup> The analysis of the dynamics and flows of different resources, such as energy, water, and waste, has its application in Smart City developments for the monitoring and optimisation of, for example, services.<sup>49</sup> The rhythms of things correlate with the activities within the urban environment and thus underlie the same socioeconomic and cultural practices.<sup>50</sup> Due to the spatiotemporal attributes of the data sets, common representational forms include time series and map-based data visualisations.<sup>51</sup>

Although not originally in the focus of *Rhythmanalysis*, the built environment is more than a backdrop for the rhythms of people and things flowing within it.<sup>52</sup> Its design inherently shapes these and due to the options new technologies provide, in urban analytics it becomes an object of analysis itself. It possesses its own temporality and underlies rhythms, only at a much lower frequency.<sup>53</sup> Remote sensing allows to obtain the required data at the necessary scale, e.g. in form of satellite imagery or LiDAR datasets.<sup>54</sup> With the help of geospatial technologies such as Geographic Information Systems (GIS), it can be further aggregated it with other relevant data sets and indicators, such as land-use information, which can yield deeper insights into different aspects of urbanisation.<sup>55</sup>

### TOPOI: Spatiotemporal Rhythms of Urbanisation Patterns

For example, the TOPOI approach developed at SpACE Lab employs 11 indicators of form, function and spatial linkages to classify settlements and cluster settlement units with similar characteristics.<sup>56</sup> The project was motivated by the issue that planning very often revolves around administrative boundaries, whereas due to the historical growth of settlements in reality there are a combination of

settlement units to deal with, which possess different characteristics and planning needs.<sup>57</sup> The TOPOI analysis shows that the urban-rural gradient can be described in much greater detail than traditional distinctions between city or county allows for and that it transcends administrative boundaries (see Figure 2). Furthermore, it reveals the heterogeneity of settlements and how they have evolved over time (Figure 3). In a study of the urban-rural gradient in Lower Saxony, Germany, a total of 13 TOPOI classes of settlements were found.<sup>58</sup> Their location in space and the connection between them allows to differentiate between urban-rural categories – such as NODE (urban core), PERIURBAN (urban fringe), DISSEMINATED (disperse patterns), and EXO (isolated patterns), showcasing that the urban-rural gradient can take very different forms.<sup>59</sup> These TOPOI classes allow to define prototypes, based on which scenarios and strategies for their sustainable future development can be developed.<sup>60</sup> As these prototypes can be considered prototypical for their settlement type these strategies can then be applied to all settlements of a specific type and allow to evaluate the impact of planning measures as whole.

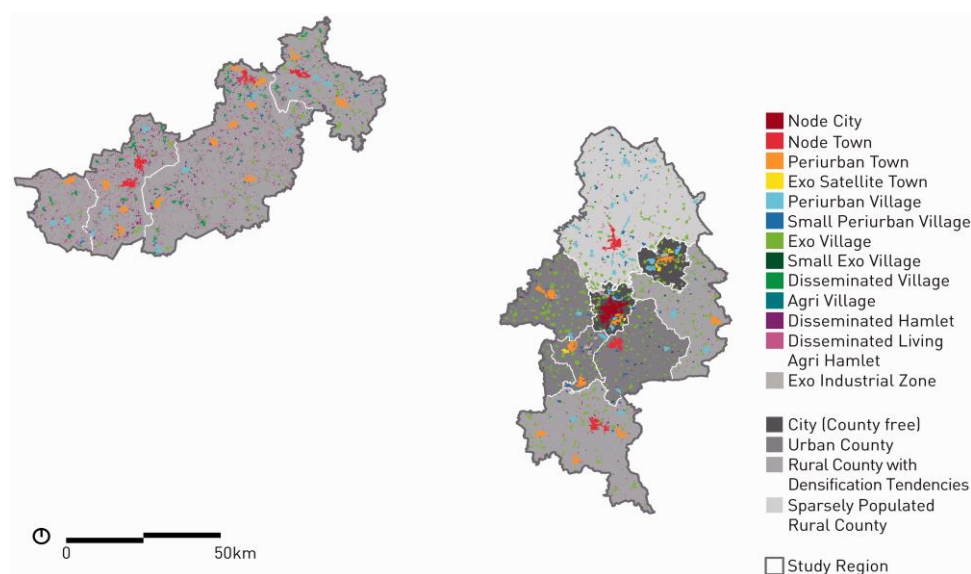


Figure 2. Superimposition of TOPOI classification of settlement units within administrative boundaries of two case study regions in Lower Saxony.<sup>61</sup>

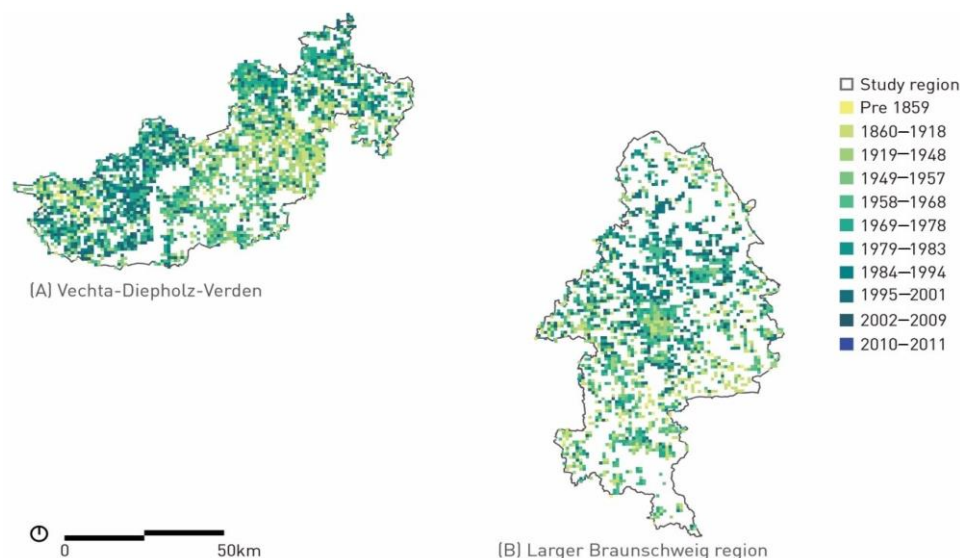


Figure 3. Spatiotemporal growth of settlements in the two case study regions.<sup>62</sup>

## DISCUSSION AND TRAJECTORIES FOR FUTURE RESEARCH

Not unlike artistic endeavours at the beginning of the 20<sup>th</sup> century, does urban analytics as contemporary form of *Rhythmanalysis* possess its own visual language tied to the medium and tools of our time: geospatial and statistical data visualisation. Contemporary data sources provide more variety in view of the spatiotemporal information they allow to collect and move *Rhythmanalysis* beyond the body as frame of reference. Although urban analytics can thus provide a more comprehensive understanding of the rhythms of people, things and the built environment, it is not free from critique. Critique includes that its reductionist approach, though uncovering urban spatiotemporal patterns, neglects to take into consideration the impact social, cultural, economic, and political practices and policies have on these.<sup>63</sup> Although research in the field has addressed socioeconomic aspects and looked, for example, at how social inequalities are manifested in spatiotemporal patterns, a deeper engagement has yet to take place.<sup>64</sup>

Furthermore, it has been criticised that urban analytics fail to provide insights that are contextual and possess a deeper meaning as related to the place-based and lived-experience of people.<sup>65</sup> Research in the field has tried to derive an understanding of the human perception of space using data from social media, such as tweets, posts or photographs.<sup>66</sup> However, this approach has its own limitations. Social media data is not free from bias<sup>67</sup> and does not necessarily provide the answers to the questions it is employed to solve<sup>68</sup>. A new approach is also needed to gain a deeper understanding of what factors impact people's decisions in relation to their spatiotemporal activities in the built environment.<sup>69</sup> For example, knowledge of the factors impacting route and mobility choices that determine the trajectories we observe, but also of the needs of specific user groups in this respect, can help to make the city more accessible to and for all.<sup>70</sup>

This will require the collection of specific small data sets, for which, however, contemporary digital technologies, such as Augmented and Virtual Reality, eye-tracking or also custom-designed smart phone apps can be employed.<sup>71</sup> Although this means returning to experiential aspects and the collection of instances, the use of scientific methods in the capturing and analysis of these as well as the combination with urban analytical processes can help derive deeper insights beyond the individual experience.<sup>72</sup> Looking at the specific and pursuing a human-centric approach, will also allow to address existing inequalities in the access to and the use of urban space as well as to better understand the dynamics and interdependencies between socio-cultural, socio-economic practices and spatiotemporal rhythms; insights, which will support the planning and design for liveable sustainable urban futures for all.

## CONCLUSION

Urban analytics transcends the original notions of Lefebvre's *Rhythmanalysis*, as contemporary methods and tools for data collection and analysis allow it draw from more varied and larger data sets on the spatiotemporal flow of people, things and the built environment. In particular, they substitute the body as the foremost primary tool and point of reference for conducting *Rhythmanalysis* with the sensors and carriers used to collect the data. The temporal and locational qualities of these devices diversify and expand viewpoint, point of reference and scale of the collected data. Looking at examples of rhythms urban analytics helped uncover showed that the new representations of the city they create are tied to geospatial and statistical data visualisations.

Drawing from Lefebvre's understanding of *Rhythmanalysis* as a transdisciplinary method and from human geography allows to address the shortcomings and critique of urban analytics, namely, its failing to address the impact of social, cultural, economic, and political practices and policies on spatiotemporal rhythms and the place-based and lived-experience of people. Combining urban analytics with insights from human-centric practices can help overcome the short-comings of both

worlds, while simultaneously providing a new approach that will allow to study rhythms of contemporary cities more holistically. This requires the development of new human-centred experimentation methods and their linkage to towards a novel concept of urban analytics at the individual-environment interface.

### **ACKNOWLEDGEMENTS**

The authors would like to thank the Federal Ministry of Education and Research (BMBF) for supporting their research within the project ISUrF-Hub under Grant No. 01DP17049.

## NOTES

- <sup>1</sup> Alfred Döblin, *Berlin Alexanderplatz*, 8th edition (Fischer Taschenbuch Verlag, 2013).
- <sup>2</sup> Walther Ruttmann, 'Symphony of a Metropolis', 1927.
- <sup>3</sup> The literary technique that Döblin uses in *Berlin Alexanderplatz* has been likened to montages in film, which constituted a new medium and way of representing and narrating the world at the time the novel was written. Although no direct reference exists, David B. Dollenmayer in 'An Urban Montage and Its Significance in Döblin's *Berlin Alexanderplatz*' ( *German Quarterly*, 1980, p. 320) suggests that Döblin was influenced by Ruttmann's conveyance of the hecticness of Berlin through montages in a *Symphony of a Metropolis* when working on the novel.
- <sup>4</sup> Henri Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, 2014th ed. (London: Bloomsbury Academic, 2004).
- <sup>5</sup> Henri Lefebvre and Catherine Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', in *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, ed. Henri Lefebvre (London: Bloomsbury Academic, 2004), p. 94, describe the process of Rhythmanalysis as the "listening out" to the urban environment as one would to a symphony or an opera with the aim of separating out the individual rhythms and their relations in order to understand how it is composed.; More generally, they refer to it as polyrhythmic (see p. 95 and see also Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, p. 25).
- <sup>6</sup> Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, 30.
- <sup>7</sup> Claudio Coletta and Rob Kitchin, 'Algorhythmic Governance: Regulating the 'heartbeat' of a City Using the Internet of Things', *Big Data & Society* (2017): 1–16
- <sup>8</sup> M. Batty et al., 'Smart Cities of the Future', *The European Physical Journal Special Topics* 214, no. 1 (2012): 482-483. The integration of ubiquitous computing as well as information and communication technology into the urban environment and governance of cities to provide data, insights out of which can be used to make services smarter, more efficient, or sustainable, is closely tied to the smart city concept and an inherent aspect of it.
- <sup>9</sup> "No rhythm without repetition in time and space, without reprises, without returns, in short without measure [mesure]" (Lefebvre, , *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, p. 16). Although in his definition of rhythms and Rhythmanalysis Lefebvre borrows analogies from musical theory and although he frequently uses musical metaphors within his work, his understanding though originating in art is that of rhythm as a universal concept rather than a purely musical one (see Peter Dayan, 'How Musical Is Henri Lefebvre's Rhythmanalysis', in *Rhythms Now: Henri Lefebvre's Rhythmanalysis Revisited*, ed. Steen Ledet Christiansen and Mirjam Gebauer (Open Access ed. Aalborg Universitetsforlag, 2019).
- <sup>10</sup> Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, 16.
- <sup>11</sup> Lefebvre, Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, p. 18; Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', 85.
- <sup>12</sup> Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', 96.
- <sup>13</sup> As Filipa Matos Wunderlich, 'Symphonies of Urban Places: Urban Rhythms as Traces of Time in Space. A Study of "Urban Rhythms"', *Rhuthmos* (2016), chapter 2 notes, Lefebvre's definition of rhythm and also his concept of Rhythmanalysis refers to the rhythms of everyday life in general. However, they can provide a necessary framework for studying urban rhythms, in which the urban provides the specific spatial context and framing for human and social activities.
- <sup>14</sup> Tim Edensor, 'Introduction: Thinking about Rhythm and Space', in *Geographies of Rhythm*, ed. Tim Edensor (London: Routledge, 2010), 1–21.
- <sup>15</sup> Dawn Lyon, *What Is Rhythmanalysis?* (London: Bloomsbury Publishing, 2019), 27–34.
- <sup>16</sup> "Furthermore, this human body is the site and place of interaction between the biological, the physiological (nature), and the social (often called the cultural), where each of these levels, each of these dimensions, has its own specificity, therefore its space-time: its rhythm", Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', p. 89/90.
- <sup>17</sup> Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, 30/31; Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', 95.
- <sup>18</sup> Lyon, *What Is Rhythmanalysis?*, 32.
- <sup>19</sup> Lyon, *What Is Rhythmanalysis?*, 32.
- <sup>20</sup> Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', 94.
- <sup>21</sup> Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, chap. 3.

<sup>22</sup> Lyon, *What Is Rhythmanalysis?*, 34.

<sup>23</sup> Lyon, 31.

<sup>24</sup> Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities'.

<sup>25</sup> Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, 32.

<sup>26</sup> Geoff Boeing et al., 'Urban Analytics: History, Trajectory, and Critique', in *Handbook of Spatial Analysis in the Social Sciences*, ed. S. Rey and R. Franklin (Cheltenham, UK: Edward Elgar, 2021), 1.

<sup>27</sup> Boeing et al., 'Urban Analytics: History, Trajectory, and Critique', 2; Michael Batty, 'Urban Analytics Defined', *Environment and Planning B: Urban Analytics and City Science* 46, no. 3 (2019): 40, describe this as the key challenge of contemporary urban analytics

<sup>28</sup> Boeing et al., 'Urban Analytics: History, Trajectory, and Critique', 3.

<sup>29</sup> Boeing et al., 'Urban Analytics: History, Trajectory, and Critique', 3. observe a shift in relevance from deductive approaches used in urban analytics to inductive approaches. However deductive approaches and models, e.g. Space Syntax, as well as simulations are still in use today and applied in urban planning.

<sup>30</sup> For example, agent-based models are often built on insights derived from data that are then applied in the model for forecasting and simulation. See: Cuauhtemoc Anda, Sergio A. Ordonez Medina, and Kay W. Axhausen, 'Synthesising Digital Twin Travellers: Individual Travel Demand from Aggregated Mobile Phone Data', *Transportation Research Part C: Emerging Technologies* 128 (2021): 103118, for a description of the creation of agents from mobile phone data for the transport simulation MATSim.

<sup>31</sup> Edensor, 'Introduction: Thinking about Rhythm and Space', 1.

<sup>32</sup> Rob Kitchin, 'Big Data and Human Geography', *Dialogues in Human Geography* 3, no. 3 (2013): 264.

<sup>33</sup> Traditionally, Big Data has been characterised by 3 Vs: volume, the size of data, variety, the types of data that are generated, and velocity, the speed with which data is generated and processed. See Rob Kitchin and Gavin McArdle, 'What Makes Big Data, Big Data? Exploring the Ontological Characteristics of 26 Datasets', *Big Data & Society* 3, no. 1 (2016) for a more in-depth elaboration on characteristics and traits of big data sets. See Batty et al., 'Smart Cities of the Future' for how urban analytics and the processing of big urban data sets has gained particular relevance in the context of Smart City developments.

<sup>34</sup> Stéphane C. K. Tékouabou et al., 'Identifying and Classifying Urban Data Sources for Machine Learning-Based Sustainable Urban Planning and Decision Support Systems Development', *Data* 7, no. 12 (2022): 11/12, distinguish two distinct sources for urban data: sensors as well as surveys and institutional statistics. The former includes sensors embedded in a variety of devices, such as satellites and radars, planes and drones, public and personal mobility vehicles, ubiquitous mobile as well as fixed devices. The latter group includes social media and networks, crowd-sourcing, interviews as well as institutional surveys and statistics.

<sup>35</sup> See Tékouabou et al., 'Identifying and Classifying Urban Data Sources for Machine Learning-Based Sustainable Urban Planning and Decision Support Systems Development', 4. on urban data features and structures distinguishing the "what, where and when" of collected data.

<sup>36</sup> Harvey J. Miller and Michael F. Goodchild, 'Data-Driven Geography', *GeoJournal* 80, no. 4 (2015): 452/453.

<sup>37</sup> Kitchin, 'Big Data and Human Geography', 5; Boeing et al., 'Urban Analytics: History, Trajectory, and Critique', 9. for a discussion of the particularities of big data and a critique of its ownership, which provides challenges for researchers to access it and also limits the insights that can be gained from it.

<sup>38</sup> Ylenia Casali, Nazli Yonca Aydin, and Tina Comes, 'Machine Learning for Spatial Analyses in Urban Areas: A Scoping Review', *Sustainable Cities and Society* 85 (2022): 8/9.

<sup>39</sup> See Tékouabou et al., 'Identifying and Classifying Urban Data Sources for Machine Learning-Based Sustainable Urban Planning and Decision Support Systems Development', 6. For a discussion of benefits of GIS as the central platform for the storage, organization, and access to urban geospatial data sets as well as allowing to aggregate data from different sources.

<sup>40</sup> See Henri Lefebvre and Catherine Régulier, 'The Rhythmanalytical Project', in *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, by Henri Lefebvre (London: Bloomsbury Academic, 2004), 90/91, for a discussion how our knowledge, what we perceive and at which scale and in which resolution is predetermined by our constitution, namely our body and its senses, and how experiencing the world at a different scale would mean grasping it differently. In as such, sensing devices allow us to grasp the world differently and provide the rhythmanalyst not only with a different viewpoint from which to observe the world from but an alternate reality of the present.

<sup>41</sup> Jing Wang and Filip Biljecki, 'Unsupervised Machine Learning in Urban Studies: A Systematic Review of Applications', *Cities* 129 (2022): 11. Point out smartcard data, call records and mobile phone data, as well as social media data as data sets that allow to study individual human activities.

- <sup>42</sup> See Boeing et al., 'Urban Analytics: History, Trajectory, and Critique', 10; Casali, Aydin, and Comes, 'Machine Learning for Spatial Analyses in Urban Areas: A Scoping Review', 6; Wang and Biljecki, 'Unsupervised Machine Learning in Urban Studies: A Systematic Review of Applications', 11/12 for a broader and more in-depth overview of examples of studies in the field of urban analytics addressing human activity and mobility patterns.
- <sup>43</sup> See M. Schlapfer et al., 'The Universal Visitation Law of Human Mobility', *Nature* 593, no. 7860 (2021): 522–27, for more details. The law was established based on the analysis of mobile phone data from seven urban areas on four continents.
- <sup>44</sup> Schlapfer et al., 'The Universal Visitation Law of Human Mobility', 523.
- <sup>45</sup> Guangyu Du, 'Wanderlust', *Wanderlust :: MIT Senseable City Lab* (blog), 6 March 2023, <http://senseable.mit.edu/wanderlust/>.
- <sup>46</sup> Schlapfer et al., 'The Universal Visitation Law of Human Mobility', 527. The empirically obtained law and model also supports hypotheses from human geography, such as the central place theory and theory of emergent optimality, which previously had not been tested (see p. 526).
- <sup>47</sup> Du, 'Wanderlust', 14. Wanderlust, visualizes the mobility flows across Greater Boston as lines that form spatial clusters of attractive places.
- <sup>48</sup> The flows and rhythms of things have neither traditionally been in the focus of urban analytics nor in Rhythmanalysis, as Lefebvre considered the thing a metaphor of space-time production in the context socioeconomic practices (see Lefebvre, *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, 16:). In the context of smart cities, however, the flow of resources has become of particular interest and relevance for governance in the context of sustainability, see Hossein Shahrokni, David Lazarevic, and Nils Brandt, 'Smart Urban Metabolism: Towards a Real-Time Understanding of the Energy and Material Flows of a City and Its Citizens', *Journal of Urban Technology* 22, no. 1 (2015): 65–86.
- <sup>49</sup> Samuel Stehle and Rob Kitchin, 'Real-Time and Archival Data Visualisation Techniques in City Dashboards', *International Journal of Geographical Information Science* 34, no. 2 (2020): 344–66.
- <sup>50</sup> Ilse M. Voskamp et al., 'A Systematic Review of Factors Influencing Spatiotemporal Variability in Urban Water and Energy Consumption', *Journal of Cleaner Production* 256 (2020): chapter 2.
- <sup>51</sup> Stehle and Kitchin, 'Real-Time and Archival Data Visualisation Techniques in City Dashboards'.
- <sup>52</sup> Kevin Lynch, *What Time Is This Place?* (Cambridge, MA: The MIT Press, 1972), 72, discusses how spatial design should be concerned with designing not only for spatial but also temporal patterns of human behavior.
- <sup>53</sup> Lefebvre and Régulier, 'Attempt at the Rhythmanalysis of Mediterranean Cities', 94.
- <sup>54</sup> Deepank Verma, Olaf Mumm, and Vanessa Miriam Carlow, 'Exploration of Latent Space of LOD2 GML Dataset to Identify Similar Buildings', 28 December 2022, <https://arxiv.org/pdf/2212.13965>.
- <sup>55</sup> Wang and Biljecki, 'Unsupervised Machine Learning in Urban Studies: A Systematic Review of Applications', 9/10. for an overview of additional examples of case studies in this area.
- <sup>56</sup> See Vanessa Carlow et al., 'TOPOI – A Method for Analysing Settlement Units and Their Linkages in an Urban–Rural Fabric', *Environment and Planning B: Urban Analytics and City Science* 49, no. 6 (2022): 1663–81, for an in-depth description of the methodology.
- <sup>57</sup> Carlow et al., Carlow et al., 'TOPOI – A Method for Analysing Settlement Units and Their Linkages in an Urban–Rural Fabric', 1664/1665.
- <sup>58</sup> Carlow et al., 'TOPOI – A Method for Analysing Settlement Units and Their Linkages in an Urban–Rural Fabric'.
- <sup>59</sup> Carlow et al., Carlow et al., 'TOPOI – A Method for Analysing Settlement Units and Their Linkages in an Urban–Rural Fabric'.
- <sup>60</sup> Vanessa Miriam Carlow et al., *Metapolis. Topoi. Scenarios: For Urban-Rural Sustainability in Lower Saxony* (Berlin: Jovis, 2022), <https://www.degruyter.com/isbn/9783868597257>; Grace Abou Jaoude et al., 'Understanding Land Take in Small and Medium-Sized Cities through Scenarios of Shrinkage and Growth Using Autoregressive Models', *Frontiers in Built Environment* 8 (2022).
- <sup>61</sup> Carlow et al., 'TOPOI – A Method for Analysing Settlement Units and Their Linkages in an Urban–Rural Fabric', 1676.
- <sup>62</sup> Ann-Kristin Mühlbach et al., 'TOPOI RESOURCES: Quantification and Assessment of Global Warming Potential and Land-Uptake of Residential Buildings in Settlement Types along the Urban–Rural Gradient—Opportunities for Sustainable Development', *Sustainability* 13, no. 8 (2021): 8.
- <sup>63</sup> Rob Kitchin, 'Big Data, New Epistemologies and Paradigm Shifts', *Big Data & Society* 1, no. 1 (2014): 5.
- <sup>64</sup> See Casali, Aydin, and Comes, 'Machine Learning for Spatial Analyses in Urban Areas: A Scoping Review', 5. For an overview of research in the area.

- <sup>65</sup> Andy Hong et al., 'Reconciling Big Data and Thick Data to Advance the New Urban Science and Smart City Governance', *Journal of Urban Affairs*, 2022, 3.
- <sup>66</sup> Wang and Biljecki, 'Unsupervised Machine Learning in Urban Studies: A Systematic Review of Applications', 5. For an overview of examples of studies in this area.
- <sup>67</sup> See Andrea Ghermandi and Michael Sinclair, 'Passive Crowdsourcing of Social Media in Environmental Research: A Systematic Map', *Global Environmental Change* 55 (2019): chap. 4, "Discussion", for an in-depth discussion of benefits, short-comings and in particular biases of social media data, such as gender, age, socioeconomic status, education and motivations.
- <sup>68</sup> See Batty, 'Urban Analytics Defined', 404 for a reflection on how the data employed in urban analytics is often not the data needed to address questions relating to a more strategic discussion of the city.
- <sup>69</sup> Miller and Goodchild, 'Data-Driven Geography', 455 refer to this as the "why" of occurrences, as an existing correlation between variables in data sets does not automatically mean that a causal relationship exists.
- <sup>70</sup> Elena Stasewitsch et al., 'Architektur Trifft Auf Psychologie: Vom Potenzial Eines Besonderen Spannungsfeldes', *Die Hochschullehre* 7, no. 25 (2021).
- <sup>71</sup> Hong et al., 'Reconciling Big Data and Thick Data to Advance the New Urban Science and Smart City Governance' for an overview of the thick data approach and Nicolas Tempelmeier et al., 'Data4UrbanMobility: Towards Holistic Data Analytics for Mobility Applications in Urban Regions', in *Companion Proceedings of The 2019 World Wide Web Conference*, ed. Ling Liu and Ryen White (New York, NY, USA: ACM, 2019), 137–45, as an example of a custom-designed smart phone app to collect relevant small data sets.
- <sup>72</sup> See Hong et al., 'Reconciling Big Data and Thick Data to Advance the New Urban Science and Smart City Governance'. For an example of a hybrid approach combining ethnographic practices with urban analytics based on the example of a case study on road safety in Mexico City.

## BIBLIOGRAPHY

- Anda, Cuauhtemoc, Sergio A. Ordonez Medina, and Kay W. Axhausen. 'Synthesising Digital Twin Travellers: Individual Travel Demand from Aggregated Mobile Phone Data'. *Transportation Research Part C: Emerging Technologies* 128 (2021): 103118. <https://doi.org/10.1016/j.trc.2021.103118>.
- atty, Michael, Kay W. Axhausen, Fosca Giannotti, Alexei Pozdnoukhov, Armando Bazzani, Monica Wachowicz, Georgios Ouzounis, and Yuval Portugali. 'Smart Cities of the Future'. *The European Physical Journal Special Topics* 214, no. 1 (2012): 481–518. <https://doi.org/10.1140/epjst/e2012-01703-3>.
- Batty, Michael. 'Urban Analytics Defined'. *Environment and Planning B: Urban Analytics and City Science* 46, no. 3 (2019): 403–5. <https://doi.org/10.1177/2399808319839494>.
- Boeing, Geoff, Michael Batty, Shan Jiang, and Lisa Schweitzer. 'Urban Analytics: History, Trajectory, and Critique'. In *Handbook of Spatial Analysis in the Social Sciences*, edited by S. Rey and R. Franklin. Cheltenham, UK: Edward Elgar, 2021.
- Carlow, Vanessa Miriam, Grace Abou Jaoude, Chantal Karadag, Olaf Mumm, Marie Scheer, Kristin Schöning, and Ryan Zeringue. *Metapolis. Topoi. Scenarios: For Urban-Rural Sustainability in Lower Saxony*. Berlin: Jovis, 2022. <https://www.degruyter.com/isbn/9783868597257>.
- Carlow, Vanessa, Olaf Mumm, Dirk Neumann, Anne-Kathrin Schneider, Boris Schröder, Maycon Sedrez, and Ryan Zeringue. 'TOPOI – A Method for Analysing Settlement Units and Their Linkages in an Urban–Rural Fabric'. *Environment and Planning B: Urban Analytics and City Science* 49, no. 6 (2022): 1663–81. <https://doi.org/10.1177/23998083211043882>.
- Casali, Ylenia, Nazli Yonca Aydin, and Tina Comes. 'Machine Learning for Spatial Analyses in Urban Areas: A Scoping Review'. *Sustainable Cities and Society* 85 (2022): 104050. <https://doi.org/10.1016/j.scs.2022.104050>.
- Coletta, Claudio, and Rob Kitchin. 'Algorhythmic Governance: Regulating the 'heartbeat' of a City Using the Internet of Things'. *Big Data & Society*, 2017, 1–16. <https://doi.org/10.31235/osf.io/bp7c4>.
- Dayan, Peter. 'How Musical Is Henri Lefebvre's Rhythmanalysis'. In *Rhythms Now: Henri Lefebvre's Rhythmanalysis Revisited*, edited by Steen Ledet Christiansen and Mirjam Gebauer. Open Access ed. Aalborg Universitetsforlag, 2019.
- Döblin, Alfred. *Berlin Alexanderplatz*. 8th edition. Fischer Taschenbuch Verlag, 2013.
- Dollenmayer, David B. 'An Urban Montage and Its Significance in Döblin's Berlin Alexanderplatz'. *German Quarterly*, 1980, 317–36.

- Du, Guangyu. 'Wanderlust'. *Wanderlust :: MIT Senseable City Lab* (blog), 6 March 2023. <http://senseable.mit.edu/wanderlust/>.
- Edensor, Tim. 'Introduction: Thinking about Rhythm and Space'. In *Geographies of Rhythm*, edited by Tim Edensor, 1–21. London: Routledge, 2010.
- Elena Stasewitsch, Lisa Handke, Simone Kauffeld, Olaf Mumm, Alkistis Thomidou, and Vanessa M. Carlow. 'Architektur Trifft Auf Psychologie: Vom Potenzial Eines Besonderen Spannungsfeldes'. *Die Hochschullehre* 7, no. 25 (2021).
- Ghermandi, Andrea, and Michael Sinclair. 'Passive Crowdsourcing of Social Media in Environmental Research: A Systematic Map'. *Global Environmental Change* 55 (2019): 36–47. <https://doi.org/10.1016/j.gloenvcha.2019.02.003>.
- Hong, Andy, Lucy Baker, Rafael Prieto Curiel, James Duminy, Bhawani Buswala, ChengHe Guan, and Divya Ravindranath. 'Reconciling Big Data and Thick Data to Advance the New Urban Science and Smart City Governance'. *Journal of Urban Affairs*, 2022, 1–25. <https://doi.org/10.1080/07352166.2021.2021085>.
- Jaoude, Grace Abou, Olaf Mumm, André Karch, and Vanessa Miriam Carlow. 'Understanding Land Take in Small and Medium-Sized Cities through Scenarios of Shrinkage and Growth Using Autoregressive Models'. *Frontiers in Built Environment* 8 (2022). <https://doi.org/10.3389/fbuil.2022.908698>.
- Kitchin, Rob. 'Big Data and Human Geography'. *Dialogues in Human Geography* 3, no. 3 (2013): 262–67. <https://doi.org/10.1177/2043820613513388>.
- . 'Big Data, New Epistemologies and Paradigm Shifts'. *Big Data & Society* 1, no. 1 (2014). <https://doi.org/10.1177/2053951714528481>.
- Kitchin, Rob, and Gavin McArdle. 'What Makes Big Data, Big Data? Exploring the Ontological Characteristics of 26 Datasets'. *Big Data & Society* 3, no. 1 (2016). <https://doi.org/10.1177/2053951716631130>.
- Lefebvre, Henri. *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*. 2014th ed. London: Bloomsbury Academic, 2004.
- Lefebvre, Henri, and Catherine Régulier. 'Attempt at the Rhythmanalysis of Mediterranean Cities'. In *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, by Henri Lefebvre. London: Bloomsbury Academic, 2004.
- . 'The Rhythmanalytical Project'. In *Rhythmanalysis: Space, Time, and Everyday Life: Translated by Stuart Elden and Gerald Moore*, by Henri Lefebvre, 82–92. London: Bloomsbury Academic, 2004.
- Lynch, Kevin. *What Time Is This Place?* Cambridge, MA: The MIT Press, 1972.
- Lyon, Dawn. *What Is Rhythmanalysis?* London: Bloomsbury Publishing, 2019.
- Miller, Harvey J., and Michael F. Goodchild. 'Data-Driven Geography'. *GeoJournal* 80, no. 4 (2015): 449–61. <https://doi.org/10.1007/s10708-014-9602-6>.
- Mühlbach, Ann-Kristin, Olaf Mumm, Ryan Zeringue, Oskars Redbergs, Elisabeth Endres, and Vanessa Miriam Carlow. 'Topoi Resources: Quantification and Assessment of Global Warming Potential and Land-Uptake of Residential Buildings in Settlement Types along the Urban–Rural Gradient—Opportunities for Sustainable Development'. *Sustainability* 13, no. 8 (2021): 4099. <https://doi.org/10.3390/su13084099>.
- Ruttmann, Walther. 'Symphony of a Metropolis', 1927.
- Schlapfer, M., L. Dong, K. O'Keeffe, P. Santi, M. Szell, H. Salat, S. Anklesaria, M. Vazifeh, C. Ratti, and G. B. West. 'The Universal Visitation Law of Human Mobility'. *Nature* 593, no. 7860 (2021): 522–27. <https://doi.org/10.1038/s41586-021-03480-9>.
- Schläpfer, Markus, Lei Dong, Kevin O'Keeffe, Paolo Santi, Michael Szell, Hadrien Salat, Samuel Anklesaria, Mohammad Vazifeh, Carlo Ratti, and Geoffrey B. West. 'The Universal Visitation Law of Human Mobility'. *Nature* 593, no. 7860 (2021): 522–27. <https://doi.org/10.1038/s41586-021-03480-9>.
- Shahrokni, Hossein, David Lazarevic, and Nils Brandt. 'Smart Urban Metabolism: Towards a Real-Time Understanding of the Energy and Material Flows of a City and Its Citizens'. *Journal of Urban Technology* 22, no. 1 (2015): 65–86. <https://doi.org/10.1080/10630732.2014.954899>.
- Stehle, Samuel, and Rob Kitchin. 'Real-Time and Archival Data Visualisation Techniques in City Dashboards'. *International Journal of Geographical Information Science* 34, no. 2 (2020): 344–66. <https://doi.org/10.1080/13658816.2019.1594823>.
- Tékouabou, Stéphane C. K., Jérôme Chenal, Rida Azmi, Hamza Touni, El Bachir Diop, and Anastasija Nikiforova. 'Identifying and Classifying Urban Data Sources for Machine Learning-Based Sustainable Urban Planning and Decision Support Systems Development'. *Data* 7, no. 12 (2022). <https://doi.org/10.3390/data7120170>.
- Tempelmeier, Nicolas, Yannick Rietz, Iryna Lishchuk, Tina Kruegel, Olaf Mumm, Vanessa Miriam Carlow, Stefan Dietze, and Elena Demidova. 'Data4UrbanMobility: Towards Holistic Data Analytics for Mobility Applications

- in Urban Regions'. In *Companion Proceedings of The 2019 World Wide Web Conference*, edited by Ling Liu and Ryen White, 137–45. New York, NY, USA: ACM, 2019. <https://doi.org/10.1145/3308560.3317055>.
- Verma, Deepank, Olaf Mumm, and Vanessa Miriam Carlow. 'Exploration of Latent Space of LOD2 GML Dataset to Identify Similar Buildings', 28 December 2022. <https://arxiv.org/pdf/2212.13965>.
- Voskamp, Ilse M., Nora B. Sutton, Sven Stremke, and Huub H.M. Rijnaarts. 'A Systematic Review of Factors Influencing Spatiotemporal Variability in Urban Water and Energy Consumption'. *Journal of Cleaner Production* 256 (2020): 120310. <https://doi.org/10.1016/j.jclepro.2020.120310>.
- Wang, Jing, and Filip Biljecki. 'Unsupervised Machine Learning in Urban Studies: A Systematic Review of Applications'. *Cities* 129 (2022): 103925. <https://doi.org/10.1016/j.cities.2022.103925>.
- Wunderlich, Filipa Matos. 'Symphonies of Urban Places: Urban Rhythms as Traces of Time in Space. A Study of "Urban Rhythms"'. *Rhuthmos*, 2016.

# DIGITAL STORYTELLING FOR PUBLIC ATTRACTIONS: THE EFFECT OF VIRTUAL REALITY ON MUSEUM EXPERIENCES

Authors:

**ERIC MCNAMARA, SÉAMUS Ó CIARDHUÁIN, DENISE MCEVOY**

Affiliation:

TECHNOLOGICAL UNIVERSITY OF THE SHANNON (TUS), IRELAND

---

## INTRODUCTION

The development of virtual reality (VR) technologies has accelerated recently. Head-Mounted Displays (HMD) have become available for end consumers, positioning these technologies as a fresh avenue for creating innovative simulated experiences. This study established the stability and validity of information collected to develop a VR experience for the Oculus GO centred around an exhibition at the Frank McCourt Museum in Limerick, Ireland, based on McCourt's memoir, *Angela's Ashes* which describes his childhood and youth in Limerick in the 1930s. In the context of immersive storytelling for public interaction, this research aims to learn more about the impact of VR on museum experiences.

To undertake this, three successively more complex prototypes were developed to measure visitor perceptions, user behaviour patterns, and immersive experiences for museum visitors. The analysis findings enhanced the final exhibit's application to comprehend museum visitors. Based on the development experience, suggestions and feedback were provided at each research strategy stage. These results demonstrate that immersive VR applications can effectively communicate cultural material, showing how VR technology may successfully target diverse audiences, including young individuals who are more familiar with new media and older people who are more accustomed to traditional communication methods. Furthermore, the research demonstrated the potential of VR for developing interactive museum experiences that benefit both the visitor and the museum by enhancing visitor engagement, increasing the attractiveness of museum visits, and contributing to museums' entertainment and educational purposes. The positive visitor responses suggest that as VR technology improves, its use will succeed as part of enhancing the museum experience.

## MUSEUM EXPERIENCES

Museum exhibits typically incorporate attention-getting tactics to lure visitors over to exhibit elements so that visitors can take away that exhibit's message from their experience. While new technologies may be part of the answer, the museums and exhibitions' desired message being delivered by technologies cannot lack material or be empty. Should this happen, the technology being used would simply become a gimmick as the museum and each exhibit "message" is the most effective, engaging, and appropriate method of communication and is what defines them. However, introducing new technologies is one way to reach visitors, but even the best technology has limitations.

An important issue is whether the public will use and interact with these emerging environments. Museums may not directly resolve these questions and issues they currently face, but by providing imaginative and intelligent opportunities, they can play a part in developing and accessing interactive technologies. Museum exhibits, where high-quality image technology is required, can become one of the most promising applications for VR technology. Also, it may reach a segment of people and a wider audience who are not usually museumgoers as museums show more interest in VR; how ready are museums for disruptive shifts in visitor behaviour and changes, and what sort of services would museums be able to provide in their environment. When used for cultural heritage purposes, a VR exhibit may give scholars an entirely new way of communicating the scientific results of the archaeological investigation within the scientific community and improving how these results are communicated to the public.<sup>1</sup>

VR is one of these technologies that can significantly impact many areas, including cultural heritage, which is not commonly associated with computer technologies.<sup>2</sup> In this respect, VR can offer solutions by visualising 3D modelling technology. By recreating and documenting cultural artefacts or environments digitally, you are not only affording visitors the opportunity to interact with them but also saving a piece of history electronically, such as the “visual preservation of old memories.”

Several types of technology can be used to support and enhance museum learning experiences. “Technology” can include hardware that continues to change quickly. At the same time, its cost decreases significantly as the performance improves dramatically, e.g., interactive screens, smart tablets, handheld technologies, head-mounted displays (HMD), and software - e.g., simulation modelling tools, online repositories of learning content, educational games, and 3D VR, etc.<sup>3</sup>

The availability of VR hardware and software is a requirement but is only the first step. For the wide adoption of this technology, museums need efficient, cost-effective, and simple methods of creating virtual reality exhibitions. Designing these interfaces requires both digital and physical space with their interrelations within hybrid ensembles that enable individual and social interaction.<sup>4</sup>

## RESEARCH METHODS

This research uses a design-based research methodology (DBR). Testing user behaviour in a specific domain is recommended to better understand the users.<sup>5</sup> The vital concepts considered were to understand the users’ intellectual and intuitive needs and to see things from their perspective<sup>6</sup> to investigate how people perceive products and use services.<sup>7</sup>

Our first step in user research was defining the primary user groups.<sup>8</sup> We collected data about the different involved concepts. The methods selected for the three studies were surveys, semi-structured interviews, and usability tests to gather insights into the various concepts (Table 1).

### Research Methods

	1	2	3
	Visitor Perceptions of the Potential for Virtual Reality in a Small Museum	Pilot Study; User Behaviour Patterns in a Virtual Reality Experience	Immersive Experience Test - A Virtual Reality Environment Evaluation
Surveys	✓	✓	✓
Semi-Structured Interviews	✓	✓	✓
Usability Tests	✓	✓	✓

Table 1. Research method concepts.

The target group for testing the prototypes was eighteen to eighty-plus years old. Surveys were conducted with questions to find patterns in behaviour and preference rather than performance among visitors to the museum. The semi-structured interviews and usability tests were combined and completed during the same session with the participants. All individuals who could use computers and smartphones daily without being technological novices or specialists were included.



*Figure 1. Participants during usability testing in the museum.*

The interviews were conducted with limited resources and time restrictions as many visitors to the museum were part of coach tours. Participants were asked to complete the surveys, participate in the usability test, and then be interviewed about their experience. The first part of the interview involved answering questions about the users' previous experience and knowledge of VR. Following were questions researching their goals, behaviour, opinions, and values regarding VR. Next, the participant's prior experience of VR and their views and expectations of VR were covered. Finally, participants were asked about their previous experience and knowledge of using VR systems and controllers. The interview provided a natural introduction for the participants to start thinking about their VR preferences and behaviour and what they expected from VR. The semi-structured approach was selected, and the interview questions were open and flexible based on recommendations to research the users' previous experience and goals.<sup>9</sup>

	COMFORT	NAVIGATION	PERFORMANCE	ENVIRONMENT	CONTROL	FEEDBACK	FUNCTIONALITY	CONSISTENCY
FIRST PROTOTYPE					X	X	X	X
SECOND PROTOTYPE	X	X			X	X	X	X
THIRD PROTOTYPE	X	X	X	X	X	X	X	X

Figure 2. Evaluation Process.

Qualitative and quantitative data were gathered, such as completion rates and completion times. All data collected during each step, i.e., surveys, interviews, and usability tests, were compared for each participant to better understand the participants and the prototype's user experience (UX) positioned within the museum. The pilot use of HMD technology provided a pivotal opportunity to establish whether VR was of value before taking the VR experience forward to the final installation. Each participant had a separate scheduled session that lasted between fifteen and thirty minutes based on recommendations.<sup>10</sup>

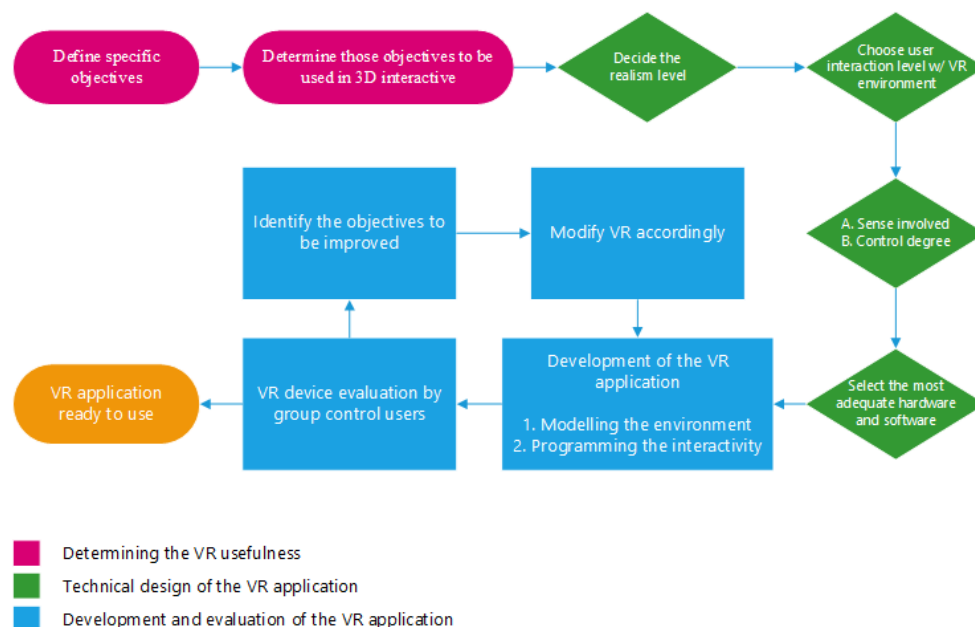


Figure 3. Flowchart of the VR exhibit application adapted from Multimodal Technologies.

## EVALUATION SUMMARY

### Visitor Perceptions of the Potential for Virtual Reality in a Small Museum

A strongly favourable attitude to provide VR experiences in museums was found, indicating that future visitors will receive the continuing deployment of VR in the museum environment. Museum exhibits, where high-quality image technology is required, can become one of the most promising applications for VR technology. Public environments such as museums should consider this medium's educational and recreational potential while examining how they could stay relevant to the culture they serve. As participants mentioned, museums now face various strengths and challenges to remain relevant.

*“Realistic simulations and exploring parts of the world if you can not travel”* were some strengths regarding the educational and recreation potential, and *“adoption by everyone”* was noted as

challenging. However, another participant noted, “*You get to see and sometimes hold artefact plus meet people and ask questions,*” which is a compelling reason to visit the museum in person.

### **Pilot Study - User Behaviour Patterns in a Virtual Reality Experience**

This VR pilot evaluation study helped users recognise that The Frank McCourt Museum immersive installation is intended to contribute to VR technology in the cultural sector by providing a VR experience appropriate for family audiences in a historical context. The survey findings have shown fascinating insights into visitors’ attitudes to The Frank McCourt Museum concerning the museum’s mission. The users’ enthusiasm was anecdotally observed during their experience, so this upward trend in interest and enjoyment for VR during our pilot is not shocking. The high rating level given by visitors was reflected in their comments; for example, one visitor noted that it was “*so exciting to try it,*” while another thought, “*the whole immersive experience with each headset was fantastic.*” While this is popular, VR’s highly visual and immersive style may be confusing. It has the potential to build deep affinities and elevated levels of interaction. However, the intuitive essence of the experience can be challenging. The importance of interactivity with other users was stressed. UX was described as one barrier to achieve a good VR experience, reflecting ongoing concerns about technological limitations and bulky hardware. Extended outside guidance was needed more with the HTC Vive in learning how to use the controllers, selecting and grabbing objects in the VR experience. The main difficulty with 80% of users were identifying the main actions of the HTC Vive controller. The opposing views on the HTC Vive device controllers were because they had a steeper learning curve. However, 40% of users using the Oculus Go controller struggle to identify which buttons to press first and where to point next when they initially put on the headset. The high level of interest in virtual reality as a communication technology could mean that users are beginning to embrace it and that this medium will soon be a big part of their lives.

### **Immersive Experience Test - A Virtual Reality Environment Evaluation**

The experience with the immersive VR test application has shown the potential to become an effective means to communicate cultural content. The presented examples and appealing features tested have shown that this technology could act as a “picklock,” suitable to different areas and target segments of the public. This would align with the findings of other studies regarding the broad impact of VR technologies on many areas, including cultural heritage and computer technologies.<sup>11</sup> Furthermore, young people were more comfortable being introduced to new media, and the older generation was more used to traditional communication means. These combined findings strongly validate the existing issues.<sup>12</sup>

### **CONCLUSION**

This project investigated the effect of VR on the overall museum experience by developing an informative VR museum exhibit based on the vanishing world of Frank McCourt. To accomplish this, a collaboration between the cultural and technological realms was created, informing visitors about the surviving aspects of Limerick city to guide future museum VR exhibitions.

The results show that the experiences significantly influence the VR museum experience, with many existing fields of study considering museum settings as a potential application domain for immersive entertainment, intending to create shared cultural experiences.<sup>13</sup> Furthermore, these results align with previous studies showing that the adoption of VR exhibits is more common in large and small museums due to their ability to provide an engaging and fun experience and enhance communication of the cultural contents to visitors.<sup>14</sup>

Our results demonstrated that VR and other emerging technologies have ushered in a fundamental shift, prompting, in some circumstances, a complete rethinking of what a museum experience includes. In addition, bringing the cultural and technology worlds together aligns with findings that the tourism industry benefits from VR, providing visitors with unique and enhanced experiences.<sup>15</sup> As a result, a broad understanding of VR's impact in many areas, including cultural heritage, is more important than ever, as it will influence the design and development of immersive exhibits and their perception and adoption by museum professionals.

This analysis found evidence that a thorough strategy should consider all stakeholders associated with and affected by VR technology.<sup>16</sup> Similarly, rethinking cost-cutting measures that are viable, practical, and implementable for both museum visitors and staff are another example. Museums may not address these problems and difficulties directly, but they can create and evaluate immersive technology by providing inventive and intelligent options. For example, some strategic options could be renting the hardware rather than buying or partnering with academic research projects to produce the VR exhibition.

The goal was to bridge the gap between the experiences and perceptions of museum visitors by using VR technologies in museum experiences. Nonetheless, additional staffing and training requirements observed within the Frank McCourt Museum indicate the necessity for specific interdisciplinary teams to deal with immersive technology in institutions requiring further training for museum staff. This reflection would be consistent with prior research on creating VR exhibitions by museum curators who are not supposed to be IT professionals.<sup>17</sup>

Often smaller museums' lack of resources, including staffing and funding, may be the most challenging hurdle to overcome. However, in line with the ideas of VR usage in small museums, immersive installations are still uncommon or only used temporarily. This is due to the numerous problems that museum personnel face and the difficulty of using VR to deliver socially engaging experiences. However, the necessity of storytelling or the presentation of a story can convey social engagement, thus communicating with a broad audience as each user can uniquely engage through immersive VR environments. This leads to an area where further research is needed: Interactive and Social Virtual Reality Applications in Museums.

However, we acknowledge considerable discussions among researchers as the impact of immersive experiences on institutions and users is difficult to assess<sup>18</sup>. There is a growing consensus that quantitative approaches, such as user behaviour tracking, analytics, or Likert rating systems, do not effectively reflect the complexities of participation in such encounters. Furthermore, wherever possible, use blended methods that combine approaches such as user mapping with interviews with focus groups<sup>19</sup>. User testing of immersive experiences, such as usability, design, and implementation, usually occurs in controlled settings such as laboratories. Therefore, it was important that the research and testing for this project were carried out in real-world settings within the Frank McCourt Museum where more challenging research questions could be addressed.<sup>20</sup> This research can be difficult and complex and often necessitates collaboration among varying disciplinary orientations. Therefore, this approach can be a hurdle in itself.

Considering the aforementioned approaches, we needed to use the correct set of data-gathering methods (qualitative and quantitative) and User-Centred Design concepts from visitors to the Frank McCourt Museum. These methods significantly impacted the final design and development of the VR exhibit application throughout the process and, as a result, enhanced the positive effect of the immersive museum experience. First, the primary contribution was the emotional level, which was reached by developing a visually pleasing virtual environment that encouraged enjoyment and exploration. Second, the VR exhibit was designed to be simple to interact with and reach users' behavioural and emotional levels. This design enabled the user to adapt to the immersive environment

quickly and effectively by identifying the user's needs and interests.<sup>21</sup> These improvements impose user-centred design thinking and focus on the users' needs and became a central part of the development process. Third, a reflective emotional level was achieved by developing a valuable exhibit that positively impacted the users, boosting their satisfaction by having a positive experience. Likewise, this contribution would not have been possible without putting museum visitors at the centre of all decision-making.

Although a significant amount of material is devoted to museum visitors and the experiences that preoccupy them, the requirements, and perceptions of museum staff, who are typically the intermediaries between the VR hardware equipment, software application, and museum visitors, are sometimes overlooked. These requirements would tie in with several drawbacks of use with VR in public spaces.<sup>22</sup>

In general, there is a paucity of research on the influence of VR on varying levels, some of which are frequently overlooked, from visitor experience to museological methods to organisational concerns. Relating to The Frank McCourt Museum's collections, physical space, and the fragility of some artefacts, this study's findings align with other researchers, which identify many small museums that do not have enough physical space and resources to exhibit their artefacts in their entire collections.<sup>23</sup> Understandably this poses several problems with "interactives," e.g., visitors cannot look at the artefacts from all angles or study them in different settings. The insights of museum visitors indicate that many issues may be overlooked when exploring the potential of these visitor experiences and technologies, which are nevertheless extremely important for museum professionals and the museum sector. The viewpoints of museum visitors to the Frank McCourt Museum illustrate that VR technologies have several applications in the museum industry. When used properly, they can attract more visitors and boost engagement.

We now better understand visitor behaviour in conjunction with VR headsets and their context with storytelling within the Frank McCourt Museum. The quantitative results from the survey "Immersive Experience Test: A Virtual Reality Environment Evaluation" revealed that visitors who experienced the VR exhibit found it "Extremely Informative" and "were "Extremely Interested" in the stories. Participants expressed their delight in hearing Malachy McCourt's voice (the only surviving brother of the McCourt family) narrating the storyline, which gave the experience authenticity and evoked an emotional reaction to stimulate discovery and enjoyment. These comments align with theorists who linked narratives with a conversation-analytical perspective, fragments of behaviour by which tellers and recipients collaboratively display their perception of a context for interaction.<sup>24</sup> Furthermore, when discussing narration to express a story, the narration is just like speaking about anything.<sup>25</sup>

Given the wide range of ages in the sample group, the degree of interest and experience was notable. It also shows that museum visitors are unafraid of new technology; they are somewhat prepared for it. This attitude is perhaps understandable as it is hard to imagine life without digital gadgets, the Internet, from where we are now. However, our reliance on technology is all-consuming in almost every aspect of daily life. Therefore, we must not overlook the possibilities of changing how we see and engage with public spaces, as VR can act as a helpful attention-grabbing conversation starter, encouraging museum visitors to experience the depths of what a museum offers with this technology. There was great interest in developing a more customised social experience through self-guided tours based on the users age and interests. Similarly, there is an obvious demand for expanding existing content and other Limerick-related areas of interest identified in *Angela's Ashes*, which should be examined in the future.

An objective throughout this research was to determine where we are now in terms of using VR in cultural and heritage institutions and how important it is from the standpoint of museum visitors. Based on the findings, researchers, museum visitors, and staff can focus their study on current needs

based on the data offered. This enables us to coordinate and integrate VR technology to support cultural and heritage experiences as a centre for disseminating knowledge through multiple narratives and understanding the past. On the other hand, it is essential to consider how VR can increase the value of cultural heritage and its visitors in the future.

Because of the visitor experiences at the Frank McCourt Museum, recommendations have been made on how best to develop and deploy VR in museums. This research aims to guide future studies into how VR may be effectively integrated into museums. These suggestions can serve as a road map, laying the groundwork for the future and helping people from both areas better understand and communicate.

Where does VR stand in the future within the context of museum integration? The insertion of VR application technologies provides museum visitors with substantially enhanced experiences regarding informative learning, entertainment, and creativity, along with endless methods to share the museum experience. Furthermore, there are so many different types of immersive technologies emerging. A museum should adapt each to a specific need and how it may be utilised effectively, considering the benefits and disadvantages of each one. Any integration of these technologies should be designed within the overall museum mission and strategies and not for an isolated individual offering, fulfilling the guiding principles of the museum.

Even though each museum visitor has a vision for the future, creating VR for museums requires a multidisciplinary approach, teamwork, and information sharing. This approach will allow factors such as cost, usability, and museum limitations to be factored into the design process. This design should be founded on the actual demands of museums and their visitors, considering all their concerns to create the most meaningful, engaging, and memorable museum experience, not necessarily the most inventive.



Figure 4. Museum Archive House Drawings and Pictures of Extinct Roden Lane.



*Figure 5. Roden Lane - Franks Footsteps VR Application Experience.*

## NOTES

- <sup>1</sup> Franco Niccolucci, *Virtual Reality in Archaeology: A Useful Tool or a Dreadful Toy?* (Mediaterra Art and Technology Festival, 1999), 238-239.
- <sup>2</sup> Rahaman, Hafizur, and Beng-Kiang Tan, *Interpreting Digital Heritage: A Conceptual Model with End-users' Perspective* (International Journal of Architectural Computing 9, no. 1, 2011), 107.
- <sup>3</sup> Hafizur Rahaman and Beng-Kiang Tan, *Interpreting Digital Heritage: A Conceptual Model with End-users' Perspective* (International Journal of Architectural Computing 9, no. 1, 2011), 104.
- <sup>4</sup> Peter Goodyear and Symeon Retalis, *Technology-Enhanced Learning: Design Patterns and Pattern Languages* (Sense Publishers, 2010), 8.
- <sup>5</sup> Russ Unger and Carolyn Chandler, *A Project Guide to UX Design: For User Experience Designers in the Field or in the Making* (New Riders, 2012), 23-26.
- <sup>6</sup> Clarie Anderson, *Presenting and Evaluating Qualitative Research* (American Journal of Pharmaceutical Education, 2010), 74.
- <sup>7</sup> John McRee, Jonathan Anderson, and Robb Wilson, *Effective UI: The Art of Building Great User Experience in Software* (O'Reilly Media, Inc., 2010), 62.
- <sup>8</sup> Russ Unger and Carolyn Chandler, *A Project Guide to UX Design: For User Experience Designers in the Field or in the Making* (New Riders, 2012), 86.
- <sup>9</sup> Rex Hartson and Pardha Pyla, *The UX Book: Process and Guidelines for Ensuring a Quality User Experience* (Elsevier, 2012), 428-465.
- <sup>10</sup> Rex Hartson and Pardha Pyla, *The UX Book: Process and Guidelines for Ensuring a Quality User Experience* (Elsevier, 2012), 359-389.
- <sup>11</sup> Hafizur Rahaman and Beng-Kiang Tan, *Interpreting Digital Heritage: A Conceptual Model with End-users' Perspective* (International Journal of Architectural Computing 9, no. 1, 2011), 101-103.
- <sup>12</sup> Janice Redish, and Carol Barnum. *Overlap, Influence, Intertwining: The Interplay of UX And Technical Communication* (Journal of Usability Studies 6, no. 3, 2011), 94-95.
- <sup>13</sup> Rebecca Grinter, Paul Aoki, Margaret Szymanski, James Thornton, Allison Woodruff, and Amy Hurst, *Revisiting the Visit: Understanding How Technology Can Shape the Museum Visit* (Proceedings of the ACM Conference on Computer Supported Cooperative Work, 2002), 146-147.
- <sup>14</sup> Luigina Ciolfi, Liam Bannon, and Mikael Fernström, *Envisioning and Evaluating "Out-of-Storage" Solutions* (In ICHIM, 2001), 596-597.
- <sup>15</sup> Fabio Bruno, Stefano Bruno, Giovanna De Sensi, Maria-Laura Luchi, Stefania Mancuso, and Maurizio Muzzupappa, *From 3D Reconstruction to Virtual Reality: A Complete Methodology for Digital Archaeological Exhibition* (Journal of Cultural Heritage 11, no. 1 2010), 44.
- <sup>16</sup> Hafizur Rahaman and Beng-Kiang Tan, *Interpreting Digital Heritage: A Conceptual Model with End-users' Perspective* (International Journal of Architectural Computing 9, no. 1, 2011), 104-105.
- <sup>17</sup> Hafizur Rahaman and Beng-Kiang Tan, *Interpreting Digital Heritage: A Conceptual Model with End-users' Perspective* (International Journal of Architectural Computing 9, no. 1, 2011), 105-106.
- <sup>18</sup> Laia Pujol, and Erik Champion, *Evaluating Presence in Cultural Heritage Projects* (International Journal of Heritage Studies 18, no. 1, 2012), 89.
- <sup>19</sup> Maria Economou and Laia Pujol Tost, *Evaluating the Use of Virtual Reality and Multimedia Applications for Presenting the Past* (In Handbook of Research on Technologies and Cultural Heritage: Applications and Environments, IGI Global, 2011), 225-228.
- <sup>20</sup> Areti Galani, and Jenny Kidd, *Evaluating Digital Cultural Heritage 'In the Wild' The Case for Reflexivity* (Journal on Computing and Cultural Heritage (JOCCH) 12, no. 1, 2019), 10.
- <sup>21</sup> Donald Norman, *The Design of Everyday Things* (MIT Press, 2013), 8.
- <sup>22</sup> Hafizur Rahaman and Beng-Kiang Tan, *Interpreting Digital Heritage: A Conceptual Model with End-users' Perspective* (International Journal of Architectural Computing 9, no. 1, 2011), 105-106.
- <sup>23</sup> Mike Fraser, Mike, Danaë Stanton, Kher Hui Ng, Steve Benford, Claire O'Malley, John Bowers, Gustav Taxén, Kieran Ferris, and Jon Hindmarsh, *Assembling History: Achieving Coherent Experiences with Diverse Technologies* (In Proceedings of the Eighth European Conference on Computer Supported Cooperative Work. Kluwer Academic Publishers, Dordrecht, The Netherlands, 2003), 2.
- <sup>24</sup> Marie-Laure Ryan, James Ruppert, and John Bernet, *Narrative Across Media: The Languages of Storytelling* (University of Nebraska Press, 2004), 57.
- <sup>25</sup> Joe Lambert, *Digital Storytelling: Capturing Lives, Creating Community* (Routledge, 2012), 53.

## BIBLIOGRAPHY

- Anderson, Claire. *Presenting and Evaluating Qualitative Research*. American Journal of Pharmaceutical Education 74, no. 8, 2010.
- Anderson, Jonathan, John McRee, and Robb Wilson. *Effective UI: The Art of Building Great User Experience in Software*. O'Reilly Media, Inc., 2010.
- Bowers, John, Jon O'Brien, and James Pycock. *Practically Accomplishing Immersion: Cooperation in and for Virtual Environments*. In Proceedings of the 1996 ACM Conference on Computer Supported Cooperative Work, 1996.
- Bruno, Fabio, Stefano Bruno, Giovanna De Sensi, Maria-Laura Luchi, Stefania Mancuso, and Maurizio Muzzupappa. *From 3D Reconstruction to Virtual Reality: A Complete Methodology for Digital Archaeological Exhibition*. Journal of Cultural Heritage 11, no. 1, 2010.
- Caulton, Tim. *Hands-on Exhibitions: Managing Interactive Museums and Science Centres*. Routledge, 2006.
- Ciolfi, Luigina, Liam J. Bannon, and Mikael Fernström. *Envisioning & Evaluating "Out-of-Storage" Solutions*. In ICHIM, 2001.
- Economou, Maria, and Laia Pujol Tost. *Evaluating The Use of Virtual Reality and Multimedia Applications for Presenting the Past*. Handbook of Research on Technologies and Cultural Heritage: Applications and Environments, IGI Global, 2011.
- Economou, Maria, Hilary Young, and Emilia Sosnowska. *Evaluating Emotional Engagement in Digital Stories for Interpreting the Past*. 3rd Digital Heritage International Congress (Digital Heritage) held jointly with 24th International Conference on Virtual Systems and Multimedia (VSMM 2018), IEEE, 2018.
- Fraser, Mike, Danaë Stanton, Kher Hui Ng, Steve Benford, Claire O'Malley, John Bowers, Gustav Taxén, Kieran Ferris, and Jon Hindmarsh. *Assembling History: Achieving Coherent Experiences with Diverse Technologies*. Proceedings of the Eighth European Conference on Computer Supported Cooperative Work. Kluwer Academic Publishers, Dordrecht, The Netherlands, 2003.
- Galani, Areti, and Jenny Kidd. *Evaluating Digital Cultural Heritage 'In the Wild' The Case for Reflexivity*. Journal on Computing and Cultural Heritage (JOCCH) 12, no. 1, 2019.
- Goodyear, Peter, and Symeon Retalis. *Technology-enhanced Learning: Design Patterns and Pattern Languages*. BRILL, 2010.
- Grinter, Rebecca E., Paul M. Aoki, Margaret H. Szymanski, James D. Thornton, Allison Woodruff, and Amy Hurst. *Revisiting the Visit: Understanding How Technology Can Shape the Museum Visit*. In Proceedings of the ACM Conference on Computer Supported Cooperative Work, 2002.
- Hartson, Rex, and Pardha S. Pyla. *The UX Book: Process and Guidelines for Ensuring a Quality User Experience*. Elsevier, 2012.
- Jackson, Anthony, Paul Johnson, H. Rees Leahy, and V. Walker. *Seeing it for real: An investigation into the effectiveness of theatre and theatre techniques in museums*. Manchester, England: Centre for Applied Theatre Research, University of Manchester, 2002.
- Niccolucci, Franco. *Virtual Reality in Archaeology: A Useful Tool or a Dreadful Toy?* Mediaterra Art and Technology Festival, 1999.
- Norman Donald. *The Design of Everyday Things*. MIT Press, 2013.
- Pujol, Laia, and Erik Champion. *Evaluating Presence in Cultural Heritage Projects*. International Journal of Heritage Studies 18, no. 1, 2012.
- Rahaman, Hafizur, and Beng-Kiang Tan. *Interpreting Digital Heritage: A Conceptual Model with End-Users' Perspective*. International Journal of Architectural Computing 9, no. 1, 2011.
- Redish, Janice, and Carol Barnum. *Overlap, Influence, Intertwining: The Interplay of UX And Technical Communication*. Journal of Usability Studies 6, no. 3, 2011.
- Ritter, Frank E., Gordon D. Baxter, Elizabeth F. Churchill, Frank E. Ritter, Gordon D. Baxter, and Elizabeth F. Churchill. *User-centered Systems Design: A Brief History*. Foundations for Designing User-Centered Systems: What System Designers Need to Know About People, 2014.
- Ryan, Marie-Laure, James Ruppert, and John Bernet. *Narrative Across Media: The Languages of Storytelling*. University of Nebraska Press, 2004.
- Shneiderman, Ben. *Designing The User Interface: Strategies for Effective Human-Computer*. Interaction 3, 1998.
- Lambert, Joe. *Digital Storytelling: Capturing Lives, Creating Community*. Routledge, 2012.
- Unger, Russ, and Carolyn Chandler. *A Project Guide to UX Design: For User Experience Designers in the Field or in the Making*. New Riders, 2012.

## MAPS OF IMAGINATION: A CITY METAPHOR

Authors:

**IRENE DE NATALE, AYL A SCHIAPPACASSE**

Affiliation:

ARCHITECTURE AND DESIGN DEPARTMENT, UNIVERSITY OF GENOVA, ITALY

---

### INTRODUCTION

Maps are metaphors and tools to explore the way we see the world. They are also a way of interpretation, charged with visual empathy, an expression of cognitive and symbolic control of reality. The map is capable of producing positions that can specify the places represented at multiple levels and bring out new consciousnesses of identity belonging. The urban landscape, likened to a *palimpsest*, is the stratification par excellence of past, present, and future.<sup>1</sup> Maps are a method of representing infinite possible data including places, times, and people. That is why they have no real disciplinary framework: visual communication, computer science, art, and geography contribute cross-culturally to the representation of a map. Unlike other audio-visual tools, maps seek an identity relationship - individual or social - because they arise from the need to visualize a story, a relationship, or an invisible concept. They are symbolic signs, purely artificial acts that allow one to see reality from an unseen point of view. They are one of the most profound tools of reification at our disposal.

Maps are the most interesting tool when they tell us about cities and urban stratification. Stratification of traces, of city pieces, of stories, of narratives. Reality and utopia live together in abstraction. Something precious, written, and rewritten, retaining signs and traces of the past; drawing layering and complexity. But however abstract, maps may be, they are always linked to places.

Through various examples from antiquity to the present, the intent of this essay is to investigate the imaginative and functional characteristics and potential of maps as a spatial and temporal representation tool.<sup>2</sup> Obviously, the characteristics of this tool vary according to changing society and its needs. In ancient times, maps were a tool to help visualise and explore the unknown world from a mostly spatial point of view. Today, the unknown we attempt to shed light on is mostly time-related, trying to predict the fluid and complex future as accurately as possible. What evolved from past maps to contemporary ones? Which symbols have been transformed? Which ones have been lost? Has their form changed?<sup>3</sup> We chose to address the issue of map-form representation precisely in the city because it is a concentration of human life and so of cultural signification. Not nautical maps, not astronomical maps, but city maps. In truth, we do not even want to analyze conventional maps, but maps that in history and contemporary times have challenged the form and convention of map representations. These maps concern not only cartography, but also psychology, and sociology, as well as urban planning and architecture, since they have the fundamental characteristic of including the physical succession of paths and roads that we store in our mind, but above they are including all our impressions of these places. This is because the rationalist approach<sup>4</sup> “does not allow us to grasp the cultural values of places, and their reason for being in relation to the lives of people and individual

human communities, in essence, it does not allow us to understand the essential meaning of the way the earth's surface is imagined, inhabited, used.”<sup>5</sup>

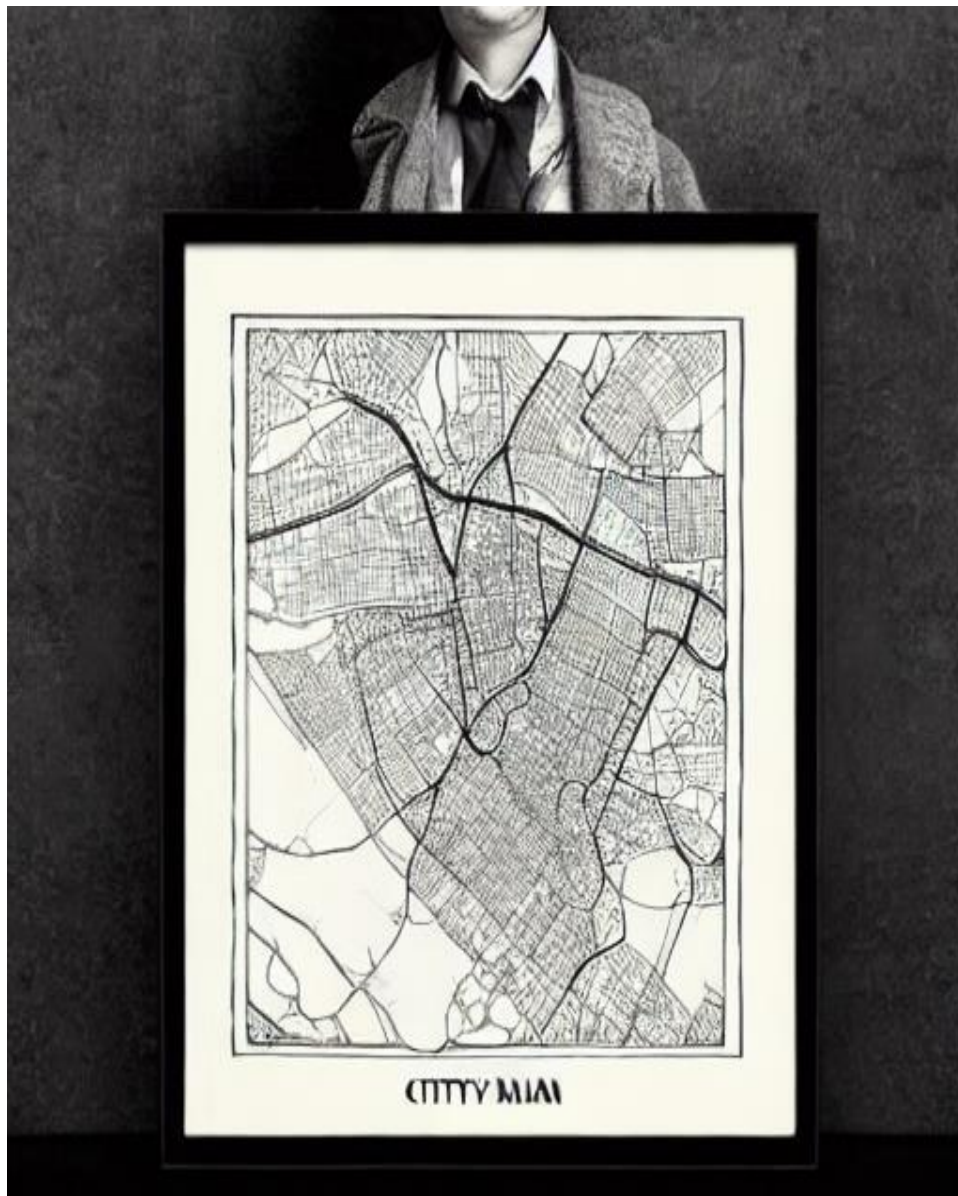


Figure 1. Image created from the words “city map” by DALL·E (AI system that can create realistic images and art from a description in natural language)

### **CITY: FROM ARTWORK TO MUSA**

Marco Romano devotes an entire volume to defining the city as a work of art. The city is interpreted as a work of art as an artefact built and animated by man: its walls and buildings are intrinsically linked to the lives of its inhabitants and citizens. *Urbs* and *civitas* together make the city a work of art. “Certainly, we are dealing with a somewhat sui generis work of art, for in comparing it with a statue or a painting a substantial difference seems to leap out at the eyes, these are imagined to be at their origin in themselves perfect while the one continually modified, and therefore not consonant with the usual notion of the immutable perfection of art.”<sup>6</sup>

If the urban work is comparable to a work of art because it is intrinsically “connected to recognition of the folds in the soul of the civitas”<sup>7</sup> then its very representation in a map is itself a work of art: the

work becomes a muse, the city becomes the inspiration for the design of city maps, graphing unique stories in space and time, graphic storytelling. “To ask for a map is to say: tell me a story”.<sup>8</sup> In the attempt to represent the city, countless maps have been drawn that through the graphic synthesis between abstraction and verisimilitude, have managed to capture stories in time and space, like books. But it is not just a book story: maps, however abstract, still maintain a relationship with the function of orientation in time and/or space. Authorial interpretation and instrumental drawing merge in the art of drawing and representing city maps. Authorial interpretation also reckons with a complex identity issue: the one represents otherness. To represent a vision of a city is to influence the history of its representation, a critical and imaginative reading steeped in identity and otherness, just like the city.

After all, if “the origins of the city are obscure, a large part of its past buried or effaced beyond recovery, and its further prospects are difficult to weigh”,<sup>9</sup> how can we even be sure about what is the city? Rem Koolhaas just published *Texts about the (no longer) city* (2021). Since the idea of a city “has been disrupted and expanded as never before, any kind of insistence on a primal condition-in visual, normative, constructive terms-has as its inevitable outcome, complicit in nostalgia, that of irrelevance”.<sup>10</sup> The city “is an artificial fact *sui generis*, in which voluntary and random elements are mixed, and not strictly controllable. If indeed the city must be related to physiology, more than anything else it resembles a dream”.<sup>11</sup>

The first maps were made to reduce fear of the unknown. Mapping is a remote need, linked to the knowledge of the reality that surrounds us. The large and desolate spaces in which primitive man found himself led the first humans to mark roads, borders, dangers, resources, hunting places, and everything possible to shed light on the darkness that surrounded them and thus ensure survival.

On the one hand, they represent a process of rationalization of the known world: the identification and evaluation of territorial resources; the morphological consistency of the phenomena that constitute cities and landscapes; the critical evaluation of the ways of their organization; the understanding of the dynamics of transformation; and so on.

On the other hand, they contain a strong metaphorical and narrative charge: the oldest stories, such as creationist myths and legends, are nothing more than arguments on phenomena that went beyond the limits of human comprehension of time, and which were born to give meaning to the mysterious world that surrounded our ancestors.

The system of paths of spiritual energy traced by the songs of the aboriginal tradition is drawn in maps of the territory: each path corresponds to a song and each song recalls a primordial story linked to the territory. Bruce Chatwin in the text *The Songlines* (1987) develops the thesis according to which Aboriginal songs are simultaneously representations of creation myths and maps of the territory. Imaginary lines draw the plot, initiatory and secret, of the correspondence between traditional songs and the geographical-topographical characteristics of stretches of explored streets. The *songlines* intersect, outlining the story of the origins of humanity and collecting the elements of the world in stories and paths.

Sometimes instead maps are triggering the balance between space and time. In *Forma Urbis* (1893), Rodolfo Lanciani is drawing a detailed map of all ancient ruins in Rome, overlaying temporal differences, between the present, in black, and the past, in red.

Sometimes maps are really used to orient ourselves. And sometimes we found out that we need to codify the space around us to efficiently get oriented. To understand it quickly, we need to make it simpler, to have codes, and symbols that abstract reality to make it more comprehensible. The evolution of the *Pocket Map of the Underground Railways of London* from 1908 to 1933 is showing this. If the 1908 version is just an overlay of the cartography with the roots of the subway, the 1933 version emphasizes the boundary between the abstract and the verisimilar. The lines are simplified, and the map is not so much verisimilitude as comprehensibility.

Sometimes instead, maps could get us lost. Together with the various maps created by the exponents and followers of the Situationist movement, the *Guide psychogeographique de Paris* became the emblem of the urban experience in the form of an erratic investigation. The representation of drift is presented to the public for the first time in 1954. What makes this map so interesting for city representation is the abstract play with verisimilar city parts: pieces of urban representation are fragmented and become new symbols.

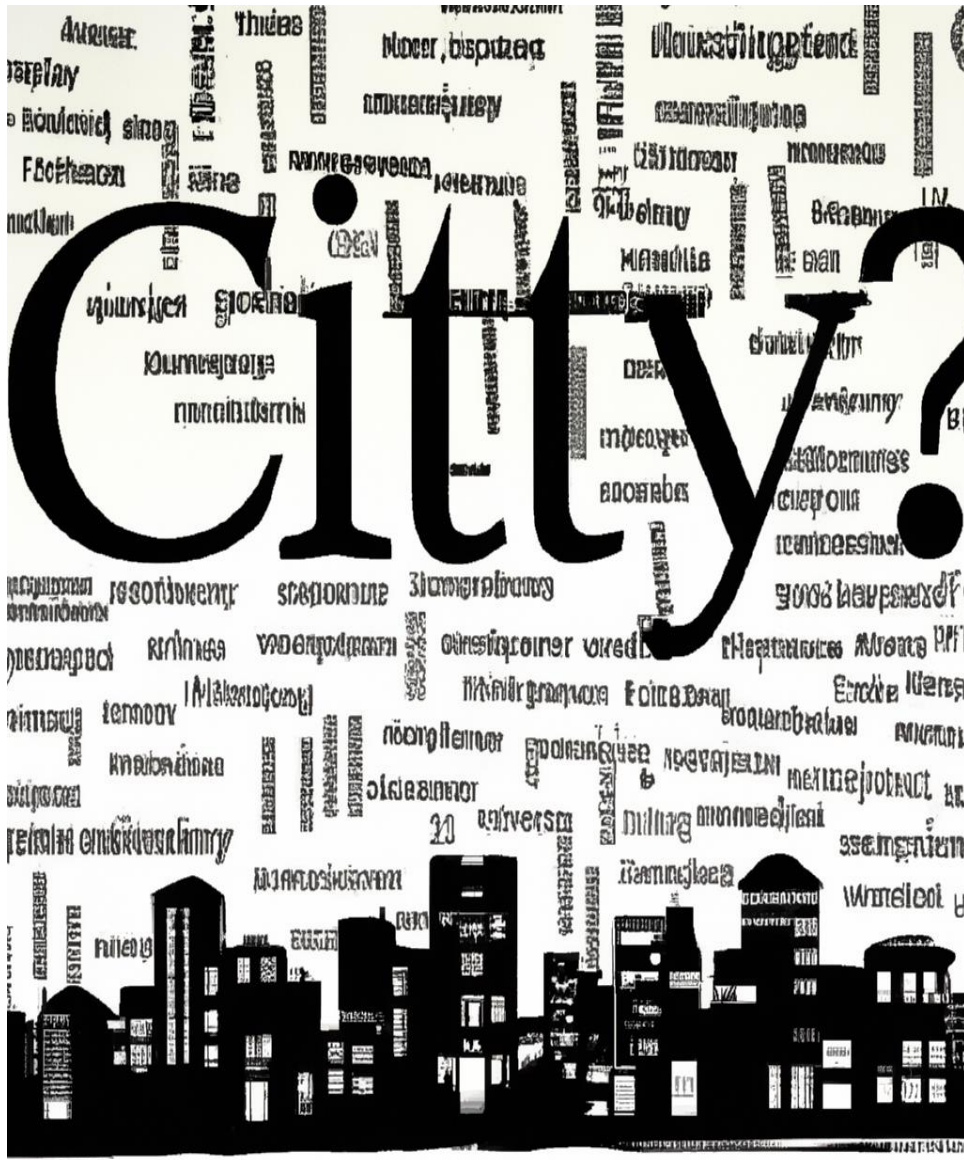


Figure 2. Image created from the words “city map” by DALL·E (AI system that can create realistic images and art from a description in natural language): the complexity of the city’s representation is handled with the visual word symbol, which in any case is not controlled because a symbol in itself is complex (especially in the abstract of the city context)

## CHANGING MUSE: A DYNAMIC CITY MAP

As mentioned in the previous paragraph, the city is an extremely complex and layered system of its constituent elements, whose interpretive planes are multiple: historical, social, cultural, infrastructural, virtual, architectural, and more. As stated earlier, the city today is even more connected and bound up

with constant change and fluidity that move it away from a fixed, increasingly elusive identity. Variability and otherness are features that affect it and contribute to a vision that is increasingly complex and linked to the temporal dimension.<sup>12</sup> The changing muse, in line with the concept already mentioned, could be a way of reinvestigating the representation of the city as a map that changes and evolves but always maintains its uniqueness and identity. At the same time, the vision is also multiple in point of view: "each of us has become the centre of our own mapped world. When we are at the computer, using our cell phones or driving our cars, we do not plan a route to get from A to B, but from where we are to wherever else we want to go. Any distance is calculated from where we are".<sup>13</sup>

Today, maps are adapting to a different purpose, trying to enclose a huge amount of data, continuously updated, even live, in the desire to design dynamic images intended for the continuous fruition of the city's activity. However - with respect to the issue of fruition and communication toward users - the large amount of data being transmitted could cause the most important information to be lost and create semiotic noise causing an excess of signs that make communication difficult. In addition, the very identity of the city, though characterized by otherness and continuous becoming, might have been gradually lost and replaced by the need for data synthesis. In fact, often the very process of creating graphic visualizations moves away from the identity representation of the specific place, since, if one looks at some examples, the type of visualisation is completely interchangeable with any city - look at Carlo Ratti's lab, Senseable City, for example - beyond the scientific evolution that makes it particularly interesting at the level of data recording. Indeed, thus the map becomes a veil dropped over the city.<sup>14</sup> The attempt to increasingly approach a representation for the purpose of having a connected city should always interface with the need to distinguish and identify itself in its uniqueness from another place: trying to recall its identity through the representation itself.<sup>15</sup>

In this investigation, it may be appropriate to identify key terms that help identify and classify map types with the goal of suggesting possible design alternatives in the construction of maps of the future, in line with the dynamism and fluidity of the city but also of its identity.

Making a semiotic analysis, we can assume that there are maps whose signs, understood as iconic signs, can be more or less abstract or verisimilar to the real object: in other words, the signifier can be more or less representative of the signified - architectural forms, vegetation, waterways, infrastructure - as the mentioned Lanciani map. However, as is well known, in the case of symbolic signs, the signifier has no recognizability in the signified and having no correspondence it becomes a totally conventional sign - broken lines, arbitrary colours, need for a legend for the recognizability of the symbolic sign - as the underground maps.

Regarding the techniques of representation, the dynamic and fluid character is certainly a prerogative of the contemporary map, facilitated by technological progress. This characteristic constitutes another point of interest and divergence in the map, namely analogue and digital techniques, which has a direct consequence: the possibility, today, to use digital for dynamic and not static representation. The concepts of space and time are other issues worth mentioning as features that divide maps that are more concerned with data representation and those that are concerned with spatial orientation. We can say that contemporary maps are more oriented to a temporal rather than a spatial representation, giving more importance to continuously updating data than to visualising a path as a necessity related to orientation.

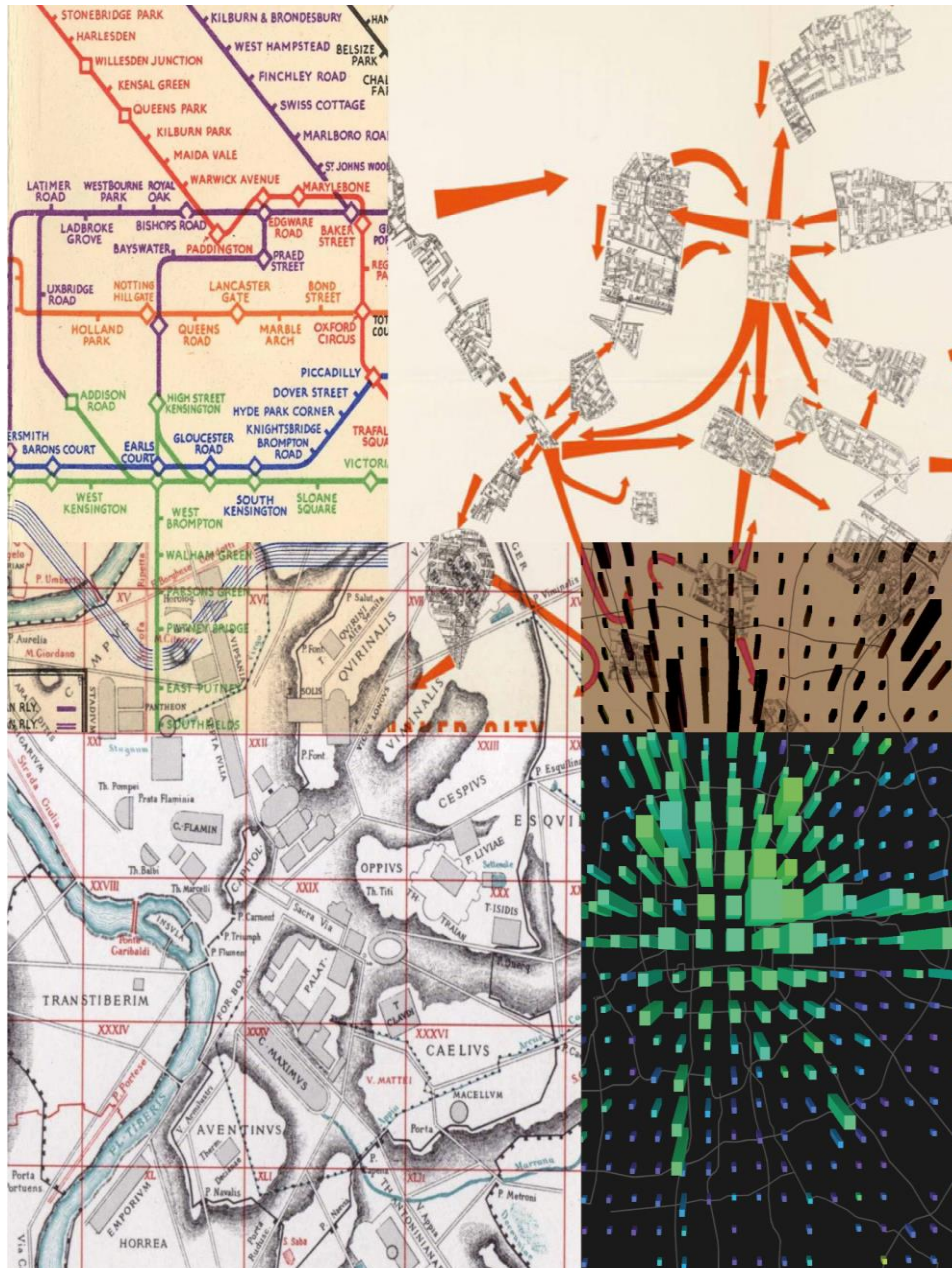


Figure 3. Mixed maps, collage by the author

Considering a recent example, MIT's maps from Carlo Ratti's Senseable City Lab constitute a way of mapping data concerning particular features of a city or territory, providing a dynamic and fluid visualisation that can be traced back to a temporal map. However, as mentioned earlier, such a representational system is interchangeable with any place, being that the map ends up in the background and becomes the background of the data.

In this regard, the diagrams included below, are intended to be some of the many possible cases of colour and sign composition involving maps. Case 1 in figure 4 represents a case with a strong symbolic value, coming very close to the map with minimal identity value and having no traceable elements to reality. Case 3 in figure 4 represents a case that, while partly having symbolic features, is strongly characterised by an iconic and verisimilitude sign. In this case, the map has recognizable signs. The scheme can then be considered for any map case, with a view to comparing various cases and figuring out which features to consider for narrative and identity.

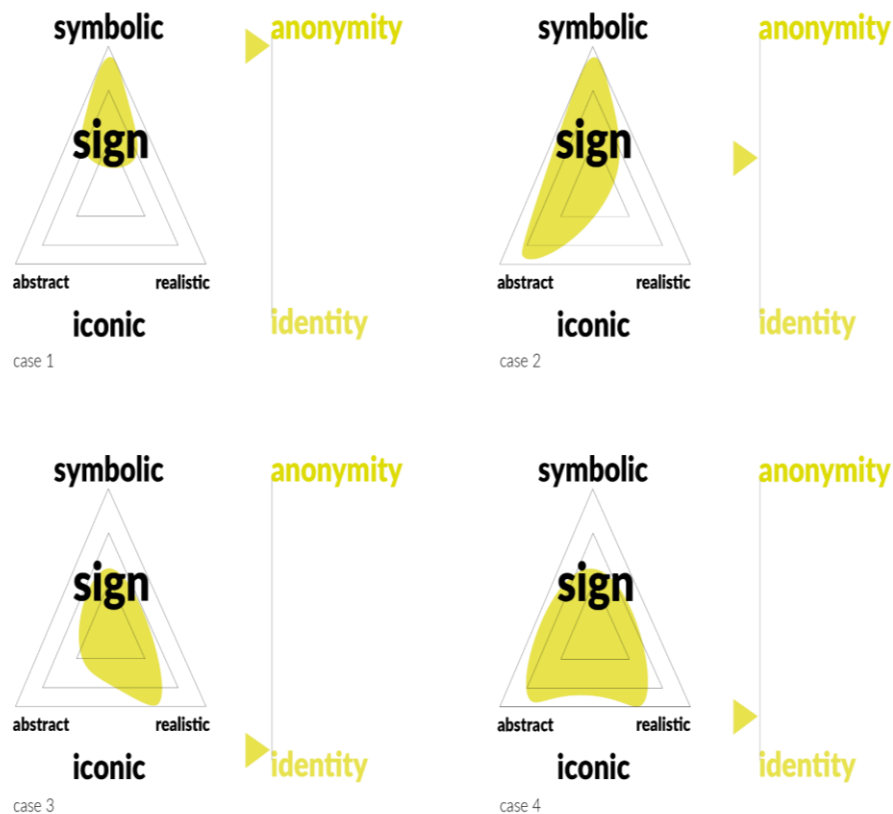


Figure 4. Diagrams by the author

## CONCLUSION

The representation of the city as a map certainly needs an evolution, following Flavio Biondo's words and updating to the present, again "today we are with the understanding that maps are no longer enough and must be replaced with some other thing that we do not yet know."<sup>16</sup> The city, an increasingly labile, unstable, and fleeting system in its identity as opposed to otherness, can hardly be captured. Even artificial intelligence itself, which today is able to return images from simple words when asked to represent a city map finds itself in difficulty.

What seems necessary in order not to lose the value of the narrative and identity of a place in its synthesis, is precisely to reason about the signs that make up the map, investigating what the images can convey and communicate in the best possible way and not enclosing the project exclusively on a continuous overabundance of data and simplification with the risk of losing the trace of identity.

## NOTES

- <sup>1</sup> André Corboz, *Ordine Sparso. Saggi sull'arte, il metodo, la città e il territorio* (Milano: Franco Angeli, 2008), 177-191.
- <sup>2</sup> See, in particular, chapter one.
- <sup>3</sup> See, in particular, chapter two.
- <sup>4</sup> Understood by Vellega as real-time mapping that shows the organization of human settlements and the resulting spatio-temporal changes.
- <sup>5</sup> Adalberto Vallega, *Le grammatiche della Geografia* (Bologna: Pàtron Editore, 2004), 10-11.
- <sup>6</sup> Marco Romano, *La città come opera d'arte* (Torino: Einaudi, 2008), 70-72.
- <sup>7</sup> Romano, *La città come opera d'arte*, 80.
- <sup>8</sup> Peter Turchi, *Maps of the Imagination: The Writer as Cartographer* (Texas: Trinity University Press, 2004), 16.
- <sup>9</sup> Lewis Mumford, *The city in history* (Boston: Mariner Books, 1961), 3.
- <sup>10</sup> Rem Koolhaas, *Testi sulla (non più) città* (Macerata: Quodlibet, 2021), 12-13.
- <sup>11</sup> Joseph Rykwert, *L'idea di città* (Milano: Adelphi, 1976), 7.
- <sup>12</sup> Francesco Remotti, *L'ossessione identitaria* (Bari: Laterza, 2010).
- <sup>13</sup> Simon Garfield, *Sulle mappe. Il mondo come lo disegniamo* (Milano: Tea, 2012), 15.
- <sup>14</sup> Emanuela Bonini Lessing, *Interfacce metropolitane: frammenti di corporate identity* (Milano: Etal, 2010), 45.
- <sup>15</sup> Gianni Sinni, *Una, Nessuna, Centomila. L'identità pubblica da logo a piattaforma* (Macerata: Quolibet, 2018).
- <sup>16</sup> "Mappe", Franco Farinelli, accessed October 2022, <https://www.raicultura.it/filosofia/articoli/2022/10/Franco-Farinelli-Mappe-de9734d8-70d7-4bfd-a93c-3700ad63b19e.html>

## BIBLIOGRAPHY

- Bonini Lessing, Emanuela. *Interfacce metropolitane: frammenti di corporate identity*. Milano: Etal, 2010.
- Corboz, André. *Ordine Sparso. Saggi sull'arte, il metodo, la città e il territorio*. Translated by Paola Viganò. Milano: Franco Angeli, 1998.
- Farinelli, Franco. "Mappe". Accessed October, 2022. <https://www.raicultura.it/filosofia/articoli/2022/10/Franco-Farinelli-Mappe-de9734d8-70d7-4bfd-a93c-3700ad63b19e.html>
- Felsing, Ulrike. *Dynamic Identities in Cultural and Public Contexts*. Freiburg: Lars Müller Publishers, 2010.
- Koolhaas, Rem. *Testi sulla (non più) città*. Macerata: Quodlibet, 2021.
- Mumford, Lewis. *The city in history*. Boston: Mariner Books, 1961.
- Remotti, Francesco. *L'ossessione identitaria*. Bari: Laterza, 2010.
- Romano, Marco. *La città come opera d'arte*. Torino: Einaudi, 2008.
- Rykwert, Joseph. *L'idea di città*. Translated by Giuseppe Scattone. Milano: Adelphi, 1976.
- Sinni, Gianni. *Una, Nessuna, Centomila. L'identità pubblica da logo a piattaforma*. Macerata: Quolibet, 2018.
- Simon, Garfield. *Sulle mappe. Il mondo come lo disegniamo*. Translated by Monica Bottini e Sabrina Placidi. Milano: Tea, 2012.
- Turchi, Paolo. *Maps of the Imagination: The Writer as Cartographer*. USA: Trinity University Press, 2004.
- Vallega, Adalberto. *Le grammatiche della Geografia*. Bologna: Pàtron Editore, 2004.
- Virilio, Paul. *The Great Accelerator*. Translated by Giuseppe Scattone. Cambridge and Malden: Polity, 2012.
- Wark, McKenzie. *Gamer Theory*. Cambridge, MA and London: Harvard University Press, 2007.
- Corboz, André. *Ordine Sparso. Saggi sull'arte, il metodo, la città e il territorio*. Translated by Paola Viganò. Milano: Franco Angeli, 1998.
- Corboz, André. *Ordine Sparso. Saggi sull'arte, il metodo, la città e il territorio*. Translated by Paola Viganò. Milano: Franco Angeli, 1998.

# UNITING SPACE AND TIME IN THE DOCUMENTATION OF URBAN SETTING THROUGH CINEMA

Authors:

**CAECILIA WIJAYAPUTRI, AMYRA SALSABILA, YEIRA SADAK, TADISA MARGAYU**

Affiliation:

**PARAHYANGAN CATHOLIC UNIVERSITY, INDONESIA**

---

## INTRODUCTION

Janji Joni is a film directed by Joko Anwar<sup>1</sup> where spectator may experience Joni's life as a film roll delivery who appears to have bad luck. The film's opening scene depicts people in Jakarta going about their daily lives while reflecting on the film they had just watched.

A copy of my Mind, another work by Joko Anwar, told the backstories of Sari and Alex, while the mundane everyday lives of Sari and Alex, serve as the foundation for this setting's plot.

The next film examined is Filosofi Kopi by Angga Dwimas Sasongko, which is based on Dee Lestari's short tale of the same name. Filosofi Kopi was exceptional because it blurred the lines between fiction and reality while also capturing the coffee culture that was only emerging in Jakarta at the time. The café, which was initially solely created for shooting subsequently evolved into a prosperous coffee chain. Naturally, this will have an impact on people's sense of place and how they behave when a filming site becomes a real café.

Jakarta, Indonesia's capital city, serves as the backdrop for all three movies' portrayals of their respective protagonists. Since there is narrative that can be related to the locations in the city of Jakarta, this enhances the immersive gameplay of the cinematic experience.

## Research Aims

A vastly underutilized and underappreciated resource, cinema is an exhaustive encyclopedia of architectural space, building components, and how people use them. It is a wonderful record of living space and a singular repository of post-residential studies. Through a process of cinematic urban archaeology, films about cities can be uncovered to trace not only the evolution of urban order but also the social, cultural, and social changes that have occurred throughout the 20th century to the present. Since the Lumière Brothers' "A Sunday in Paris" (1895) the representation of locations, lifestyles, and human conditions has been a focus of the film industry.<sup>2</sup> These films serve as the libraries that have shaped our collective urban imagination. Cinema can fully depict space to the audience, resulting in the creation of a collective identity in each place that is explored in the medium. An improved understanding of the architecture is anticipated because of the use of narrative to influence the space experience as the user moves about.<sup>3</sup>

In light of this, this essay will explore and reflect on how we perceive cities, specifically Jakarta in this case, via the lens of cinema. Can watching movies help us better grasp space?



*Figure 1. Opening Scene of Janji Joni*

## **CINEMATIC SPACE**

Thanks to technological advancements, film has been a powerful communication medium since the turn of the 20th century. The movie, according to Italian director Bernardolucci, is a collective language of the century we are living in. Film is therefore seen as a sufficiently effective medium to depict the way of life and culture of contemporary civilization.<sup>4</sup>

We can wander around created surroundings and investigate and capture the influence of buildings on society and urban settings through film. Film gives us an almost first-person encounter with the city, making it a wonderful tool for the quasi-perceptual experience of the city. Additionally, when employed cinematically in a movie, architecture and the city can interact with the characters who live there to create an experience that is conveyed using visuals. Films can convey a clear environment with a particular framing and visual composition, even though the setting of a location is not always an architectural object. The film production crew uses visual composition as a technique to give the audience a potent spatial experience. In a movie, a strong visual composition can evoke a specific sense of location, allowing viewers to fully appreciate the setting's background.

The series of stories from everyday movements, unravelled in each painstakingly observable detail, is a form of spatial ethnography that pays homage to the typical life summaries made from film scenes. It is similar to Ernst Neufert's Data Architect on the layout of the prototypical house, but goes far beyond its reductionist and westernized vision, which has contributed to the production of architectural images in the world since 1936.

The pictures seen in the movie, according to Andrei Tarkovsky,<sup>5</sup> are the outcome of direct observation from time to time of actual events, which are then portrayed in line with those events while keeping the standard of time. The image we get from watching a movie is a way for us to understand the impressions that the filmmakers have constructed. Therefore, it is possible to think about cinema as an attempt at "cognitive mapping," or spatial thinking.

There are two types of depictions of cities in films according to Cláudia Lima, namely dramatic cities, where films can be used as a vehicle to document and describe a city through re-imagining and as a 'real setting'. and envisioned city where film is also an instrument to convey the vision and desires of a city.

## **Being in Time and Spaces**

The fundamental tenet of this research is that spatial and temporal contradictions between image and sound are reconciled through movement. The concept of "space-time" developed during the past century combines the differences between space and time.<sup>6</sup>

Architects like Tadao Ando and Louis I. Kahn compose scenes in architectural formations to organize and provide poetic effects from their users' spatial experiences, much like cinematographers and

filmmakers do to shape the poetic experience of the audience. Films can also depict how people interact with the natural world, as well as how the environment is changing and how it affects people negatively. When seen through a camera lens, commonplace actions, things, and places take on a new identity and unfold as if they were brand-new. We need to add time to space to comprehend architectural elements in action, and only cinema provides us with access to both dimensions.

### Urban setting and Architecture as a Cinematic Tools

Richard Koeck stressed four essential elements to comprehend how the cinematic qualities were applied to structures and environments. Following are the four theoretical components of cinematic qualities:

Sequences and events	→	narrative qualities
Movement and passage	→	spectator qualities
Framing of space	→	optical qualities
Rhythm and sound of space	→	temporal qualities

In relation to space, sequence and events are related to how that space is used. According to Sergei Eisenstein,<sup>7</sup> there is a significant connection between the architectural ensemble in a movie and the spectator in motion. Eisenstein starts out by using the word "path" which cannot be separated from sequence.<sup>8</sup> A similar assertion is made by Bernard Tschumi, who claims that space is a container where events take place and that events are instruments for telling a story.

Unlike in architecture, where the spectator occupies space, the spectator is the audience in movies. Koeck claims that in a typical cinema trajectory, the spectator moves through a variety of items. The spectator needs movement in this trajectory

A film is observed with as many muscles and skin as there are eyes, according to Pallasmaa, who also asserts that both architecture and cinema imply a kinaesthetic method of experiencing space.

**Mental Space** (Plot, Concept, Geometric Spaces) + **Material Space** (Physical Space) = **Lived Space**

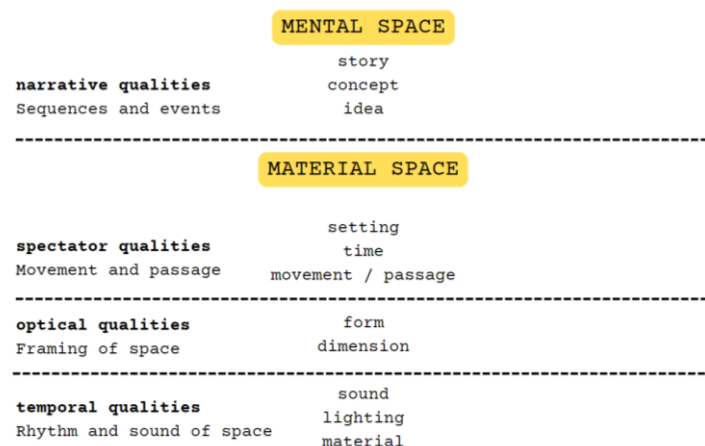


Figure 2. The relationship between Pallasmaa's Lived Space and Koeck's Cinematic Qualities

### Jakarta

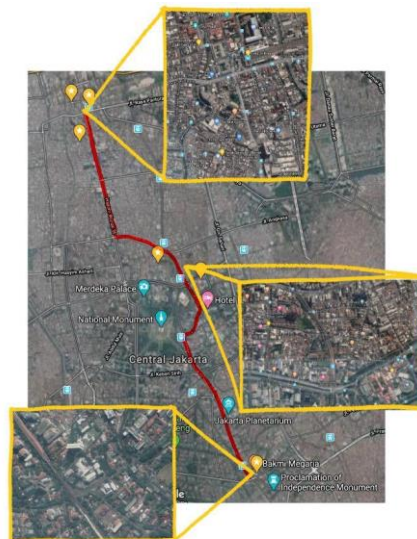
Janji Joni, A copy of My Mind, and Filosofi Kopi all start with an introduction and set the setting in Jakarta for the plot in their opening chapters.



*Figure 3. Janji Joni, A Copy of My Mind, Filosofi Kopi opening scene with Jakarta as Urban Setting*

### Janji Joni

The movie Janji Joni starts off with a prologue from Joni explaining how the 90s film industry operated. Three locations—the Metropole Building area, the Pecenongan and Pasar Baru neighborhoods, and the Old Town area—were used for the filming of Janji Joni.



*Figure 4. Map showing the position of the locations in the Janji Joni movie*





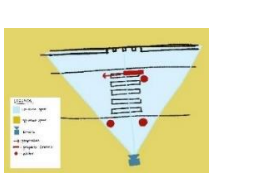


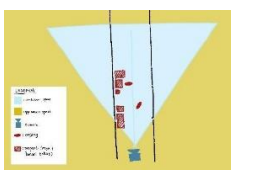


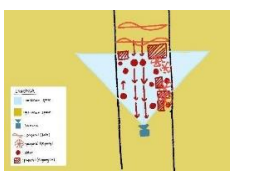

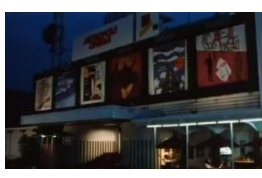
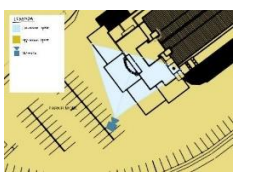

Sequences and Events	Movement and Passage	Framing of Space	Rhythm and Sound
			Vehicle sound, footsteps, Joni's monologue clear sky showing noon
			The sound of motorized vehicles on the highway, Joni's conversation with a blind man Natural sunlight
			The chatter of local residents, the sound of motorbikes passing by background music Natural sunlight
			the sound of the busy market, Joni and Voni's chatter, background music Natural sunlight
			A mellow background music The sky is dark, and the cinema lights are turned on showing the time of night

Table 1. Cinematic qualities in Janji Joni movie

As seen in Table 1, the Metropole Cinema Building, Jakarta's oldest movie theater, plays a significant role as the setting for Joni's character introduction. The space shown in Janji Joni's film is significantly influenced by the cinematic quality of the movie. When compared to real object observation, this perception is different. The filming and editing for the movie Janji Joni were able to transform the Metropole Cinema into an excellent backdrop for the story, even though the portrayal is not precisely the same as its actual physical shape.

### A Copy of My Mind

The storyline of A Copy of My Mind follows a young woman named Sari as she tries to live her best life in Jakarta. The hustle and bustle of the presidential election political campaign, the boisterous conversations and behavior of the suburban dwellers, and the dark hot room where Sari and Alek lived are just a few examples of how the movie was able to depict the lives of marginalized Jakarta residents as they are. The depiction of social inequality is not poured out through dialogue, but through the production of audio and visual film settings.


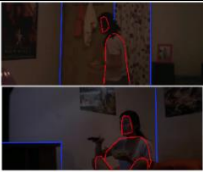









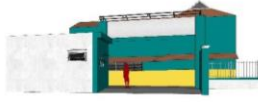



Sequences and Events	Movement and Passage	Framing of Space	Rhythm and Sound
			Chat sound, movie sound from tv, call to prayer  Sari's boarding room is extremely cramped
			the chatter of the visitors' voices  Noon
			vehicle sound,  Natural sunlight
			Sound effects include traffic noise, footfall, and guest chatter inside the prison.  Daylight
			vehicle rumbling  natural sunlight

Table 2. Cinematic qualities in 'A Copy of My Mind' movie

Images and sound play a significant role in the movie as seen on Table 2. It expresses the idea that the architecture and the identity of the city interact with each other as the architecture reflects the identity of the residents of the city and people's life and character is shaped by the architecture of Jakarta. It is not a love story set in a random city that happens to be Jakarta, it is a story of two people in this particular city, where architecture plays a central role in their lives and in the development of the narrative, where the two characters meet in the middle of the hustle and bustle of the city

### Filosofi Kopi

The drama movie *Filosofi Kopi* is set in a coffee shop in Jakarta and tackles questions of friendship and identity. Naturally, the environment of the "Filosofi Kopi" business is also depicted in great detail, from its interior and decoration to the exterior and the relaxed atmosphere on the side of the road.

*Filosofi Kopi* coffee shop at Melawai, the movie's primary setting which departs from Ben and Jody's idealism and coffee perspectives, breaks the boundaries between movies and the real world. It's quite intriguing to see how the *Filosofi Kopi* shop is depicted. It's an old grocery store in the Melawai

neighborhood that's located in front of a busy roadway where people stop to talk or just speak. Customers can watch Ben create each order for them right away thanks to a huge, long table that serves as the coffee bar. The distance between the tables and the coffee bar is also not too wide, so the interactions between customers and baristas are very intimate. The idea of spaciousness, similar to that in the neighborhood stores.

The site of Kedai Melawai, which was established in 2015, was formerly used for filming the movie *Filosofi Kopi*. The location of this coffee shop is inside Pusat Niaga Blok M Square, on Melawai 6 Street, opposite the M Hotel. This coffee shop's architecture is really fascinating; it was originally developed from an abandoned building, the first floor of which was transformed into a comfortable, charming area.

3D illustration of Filosofi Kopi movie scene (2015)	3D illustration of Filosofi Kopi Melawai (2022)
	
	
	
	

Table 3. Comparison of Visual Display in Cinema and Real Life

The Melawai neighborhood, which has been referred to as the "little Tokyo area" due to the abundance of restaurants and entertainment venues for Japanese expats, has taken on a new shape with the opening of the Filosofi Kopi coffee shop, much like the still image from this movie. From Table 3, we can see that the atmosphere of the Filosofi Kopi coffee shop, slightly different from the portrayal in the film. The illustration showed on how the experience is organized: The barista table is immediately visible when entering, so visitors are expected to order first and then look for a seat.

## **CONCLUSION**

Apart from the dimensions of space and time, films also show how architectural space is utilized, and the social dimension is used to explain the disparities between how middle-class and lower-class people use space.

Understanding urban-themed genre films can help one have a better understanding of how individuals navigate complexity, change, and urban living. Additionally, it will make it easier for us to understand urban culture's past, present, and future. Understanding how the city may be envisioned and thought about through created realities that are transmitted to us through film is crucial.

No matter how things change, we will always perceive the passage of time as a complex collection of remnants from the past, present, and future.

Filmic cities that have been imagined and dramatized are essential for looking back on and recording reality as well as looking forward. These affect how we view the accomplishments and shortcomings of urban living.

## NOTES

<sup>1</sup> Joko Anwar is one of Indonesia's most acclaimed auteurs of his generation. He made his directorial debut in 2005 with *Janji Joni*. The film was a box office blockbuster, propelling Joko to mainstream stardom. The film *A Copy of My Mind* (2015), which was the only Southeast Asian film to be presented at the 2015 Venice International Film Festival, has earned Joko significant praise from both domestic and international audiences today.

<sup>2</sup> Shiel, Mark, and Tony Fitzmaurice, eds. *Cinema and the city: film and urban societies in a global context*. John Wiley & Sons, 2011.

<sup>3</sup> Baudrillard pointed out that architecture is both what fills space and what makes it happen. Our sense of space changes throughout time based on our experiences with it, our knowledge, our memories, and our current emotions. Real space is transformed into mental space when it is revived in the mind from a brief picture or alternative viewpoint. In the search for design ideas, conventional architectural education is viewed as being overly theoretical, and neither architectural practice nor education are often well-versed in the human perception factor that comes into play when encountering spaces as well as memory that goes along with the construction of mental space.

<sup>4</sup> Bernardo Bertolucci on the Art and Poetry of Cinema, a conversation with Eleanor Wachtel in 2001

<sup>5</sup> Tarkovsky, Andrey, and Kitty Hunter-Blair. *Sculpting in time: reflections on the cinema*. University of Texas Press, 1989

<sup>6</sup> Both Giedeon's *Space, Time, and Architecture* and Einstein's Special Theory of Relativity demonstrate how interconnected our individual perceptions of space and time are and why they cannot be viewed as two distinct concepts. Movement, along with music, the visual arts, and architecture, naturally occupy space and time, especially when they are tied to one's perspective.

<sup>7</sup> Eisenstein, Sergei M., Yve-Alain Bois, and Michael Glenny. "Montage and architecture." *Assemblage* 10 (1989): 111-131.

<sup>8</sup> A sequence can refer to an imagined path taken by the eye that is impacted by the ways that different items are seen by the eye. It can also refer to the route taken by the mind as various phenomena ranging across time and space come together in a sequential manner to form a meaningful thought.

## BIBLIOGRAPHY

Antoniades, Anthony C. *Poetics of architecture: theory of design*. Van Nostrand Reinhold Company, 1990.

Antonioni, Michelangelo. "The Architecture of Vision. Writings and Interviews on Cinema. Ed. Carlo di Carlo and Giorgio Tinazzi." *Trans. Marga Cottino-Jones*. New York: Marsilio Publishers (1996).

Berger, John. *About looking*. Bloomsbury Publishing, 2015.

Boake, Terri Meyer. "Architecture And Film: Experiential Realities And Dystopic Futures." *Waterloo University* 27 (2007).

Bosman, Jos. *Bernard Tschumi: Architecture In/of Motion [published on the Occasion of the Exhibition Held at the Netherlands Architecture Institute, Rotterdam]*. NAI Publishers, 1997. Bruno, G., 2002. *Atlas of emotion: Journeys in art, architecture, and film*. Verso.

Eisenstein, Sergei M., Yve-Alain Bois, and Michael Glenny. "Montage and architecture." *Assemblage* 10 (1989): 111-131.

Hays, David Lyle. *(Non-) Essential knowledge for (new) architecture*. Princeton Architectural Press, 2013.

Jadoon, Musa, and Richard Koeck. "Architecture, Film, and Movement." *Essay. Edinburgh College of Art* (2015).

Koeck, Richard. *Cine-scapes: Cinematic spaces in architecture and cities*. Routledge, 2012.

Lima, C. "Filmic Narratives of the City." *Cities in Film: Architecture, urban space and the moving image* (2008): 135-141.

Merleau-Ponty, Maurice, and Colin Smith. *Phenomenology of perception*. Vol. 2012. London: Routledge, 1962.

Neumann, Dietrich, Donald Albrecht, Edward Carrere, Alexandra Exter, and Anton Furst. "Film architecture: set designs from "Metropolis" to "Blade runner"." *(No Title)* (1999).

Thomas, Maureen. *Cinema & architecture*. Edited by François Penz. London: British Film Institute, 1997.

Penz, François. *Cinematic Aided Design: An everyday life approach to architecture*. Routledge, 2017.

- Pallasmaa, Juhani. "Space and Image in Andrei Tarkovsky's *Nostalgia*: Notes on a Phenomenology of Architecture." In *Chora1: Intervals in the Philosophy of Architecture*, pp. 143-166. McGill-Queen's University Press, 1994.
- Shiel, Mark, and Tony Fitzmaurice, eds. *Cinema and the city: film and urban societies in a global context*. John Wiley & Sons, 2011.
- Tarkovsky, Andrey, and Kitty Hunter-Blair. *Sculpting in time: reflections on the cinema*. University of Texas Press, 1989.

## THE UNREPRESENTED CHICAGO OF 1893

Author:

**HAMZA AZIZ**

Affiliation:

NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY, PAKISTAN

---

### INTRODUCTION

The late nineteenth century was a turbulent time. The world was changing in an unprecedented manner, leaving everyone bewildered. Some were trying to resurrect the old from the ruins, while others were preaching about a new paradise that was yet to come. Every country envisioned its own forthcoming paradise by working with myriads of apparatuses for its conception. The aim was to establish one's superiority through these conceptions. Superiority can only be established if one is followed by the other or feels more significant than the other. How does one do that? Through the spread of content, advocating for one's superiority in all mediums and sizes.

In this new machine age, new technology aided this content spread. Through the rise of such technology, sketchbooks started getting replaced by cameras. Cameras began to help bridge the gap between the Occident and the Orient, Europe and the New World, and most importantly, between 'us' and 'them.' All this can be attributed to the spread of the 'image.' The image carried with itself the capacity of meaning to disseminate whatever 'truth' or 'propaganda' it contained. Architecture's success for the first time depended on the meaning these images produced.

A photograph contains within itself the 'image' that displaces the viewer into another world, a frozen-fluid past. It not only makes one inhabit the past but also exposes one to a 'lived space.' Even when a place ceases to exist, it continues its existence through the photograph. The habitation of the 'lived space' was majorly propagated through the dissemination of photographs in architecture. As it contained within itself a 'built reality' which, for now, can be mass-produced, deceiving the viewer to experience it as a sole true reality. The success of the dissemination can only be ruled in hindsight. At present, one only predicts. With the development of photographs as a medium to experience the 'lived space,' it was often exploited and manipulated by its creators in the production of a 'manufactured reality.'

In the production of a 'manufactured reality,' the World's Fair became an ideal platform for the propagation of such realities. Subsequently giving rise to their individual representation of realities, resulting in crude experimentation. Additionally, it carried an ambassadorial role within one's country to show its culture, heritage, history, and most importantly, a prophecy of a world yet to come.

The opportunity to project one's image onto the world for the United States was provided by the Chicago Exposition of 1893. The Exposition was named after Columbus as 1893 marked the 400th anniversary of Columbus's discovery of the New World. The two lead architects responsible for the Exposition were Daniel Burnham and John Root. What other year would be more fortunate for exhibiting the New World on the 400th anniversary of its discovery, showcasing the transformative journey it has gone through in all acts of life. Chicago was chosen over its rival, New York, though

New York had far wealthy patrons who thought of Chicago as primitive backwaters.<sup>1</sup> Regardless of wealth, Chicago represented the American spirit of perseverance, a phoenix born after the great fire of 1871. A similar spirit was shown by Chicago during the world's fair as it was suffering through the cash crunch of 1893.<sup>2</sup>

To put on a successful show, great crowds had to be attracted from all over the world. For this purpose, publicity started months (mid-1892)<sup>3</sup> before the opening. A postcard was used as a collectable item, a souvenir, a gift, and a prime tool in spreading glimpses of the prospective show. The postcards (Figure 1&2) were illustrated with watercolour renderings instead of photographs of the buildings as they were still in the final phase of their construction. These glimpses were being sent all over the world. Resulting in the circulation of a 'lived space' whose 'produced reality' experienced by the world was yet to be constructed. Making the viewer inhabit a 'lived space' whose reality was yet in question.



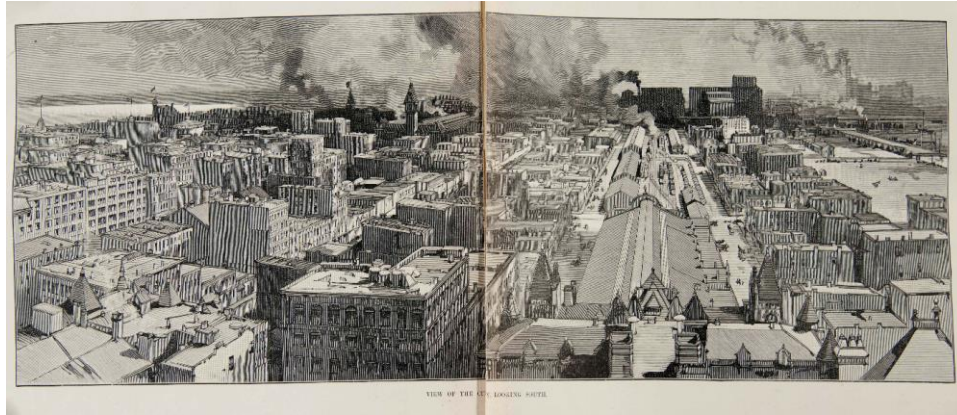
Figure 1&2. Postcards of the Chicago Exposition of 1893

## THE BLACK AND WHITE CITY

The circulation of postcards aided in attracting international visitors to The Chicago Exposition, attracting twenty-seven million<sup>4</sup> locally and internationally. The Chicago Exposition became a proponent of exhibiting the first glimpses of America, especially the mid-west of the United States, being the first that the world saw. America was considered a wild, rugged land full of bandits and adventures for the Europeans. The Exposition gave international tourists an excuse to visit this new world they had exhaustively read so much about in novels and travelogues. Steamships made the journey easier, faster and cheaper for these international tourists visiting from all over the world. But when these visitors laid their eyes on Chicago for the first time, they saw two different cities; one white, one black.<sup>5</sup> One Chicago, built for the Exposition, an artificial, ephemeral city. So much submerged in its artificial character, coal was banned from the 'White City' to conserve its whiteness.<sup>6</sup> In contrast, the other was the city, made out of steel and concrete, skyscrapers, factories, and squalors, the real city, the 'Black City.'

The real Chicago was growing unprecedentedly, both horizontally and vertically, in an unmatched manner. It was called the home of skyscrapers, giving birth to the world's first skyscraper, Home Insurance Building. These high-rises were devoid of classical aesthetics, following function over excessive ornament. These American modern values were shared all over the city. When William Archer, a journalist visiting Chicago, when writing about these buildings, '...Chicago proportion goes along with mere height, and many of the business houses are, if not beautiful, at least aesthetically impressive for instance, the grim fortalice of Marshall, Field & Company, the Masonic Temple, the Women's Temperance Temple, and such vast cities within the city as the Great Northern Building and the Monadnock Block.'<sup>7</sup> This incipient functionalist architecture was easily discernible all over Chicago, especially in its vast industrial complexes. These whirlwinds of black smoke can be spotted

from the city centre, identifying the industrial area (Figure 3). The stockyard, the Pullman train factory, and the Illinois steel factory were some of the vast industrial complexes on Chicago's periphery. Contradicting the image of Chicago produced by the Exposition, in reality, it was a modern manufacturing and commercial metropolis.



*Figure 2. The Skyline of Chicago 1888*

The architects produced a dichotomy between the perception of the two cities. Through the 'White City,' they created a 'lived space,' further strengthened as a 'manufactured reality' by photographs. As these photographs circulated, the manufactured 'lived space' of the ephemeral 'White City' started becoming the true representation of Chicago. A representation was so void of truth that the visitors found novel public services such as clean public toilets, clean water, and daycare centre few of many.<sup>8</sup> These two conflicting cities were surprisingly built by the same architects. The creators of the 'manufactured reality' and the 'Black City,' Daniel Burnham and John Root, both practised in Chicago. Burnham was even called the 'father of skyscrapers,' while Root designed the world's first two metal-framed, glass curtain-walled building.<sup>9</sup> The world's first skyscraper was built here in Chicago by William Jenney, who designed the Exposition's Horticultural Building. He also had numerous skyscrapers to his name. A similar practice background was shared by other architects of the Exposition. This makes one believe that these architects were living two different lives. Were they ashamed of what they achieved in Chicago, and so they wanted to exhibit a different image of their city?

An architect did exist who spoke the same language in both cities, preserving his stance. Louis Sullivan, who was pushed to the periphery of the show, his transportation building was the only building that won praise in the official report of the Exposition.<sup>10</sup> Off the Exposition's ground, he won both local and international praise for his modern architecture. A French commentator mentioned his Auditorium Building as not only 'matchless' but also as 'a feeling for beauty.'<sup>11</sup> An architecture wearing the cloak of terracotta, a fire-resistant ornament that Chicago incorporated after the Great Fire.<sup>12</sup>

Though, Sullivan's attempt to design a pavilion that rendered similar aesthetic values that he practised in Chicago only caught foreign praise. This gives one a hint as to why the mystique of the 'White City' blinded the builders of the 'Black City' by praising its 'manufactured reality' and, subsequently, the 'lived space' it had created. The reasons behind a false portrayal lie somewhere deep-rooted as to why these architects were not comfortable in their own skin?

## NOT MY OWN SKIN

The design attempt by the architects at the Chicago Exposition was forthcoming. The borrowed aesthetic values came from somewhere else. At that time, American architects were primarily being trained at Ecole des Beaux-Arts. This brought a direct influence of the Beaux-Arts tradition into the United States. This European influence was so predominant that in 1889 a prize was sponsored by the graduate of Ecole des Beaux-Arts in the United States.<sup>13</sup> In contrast, most practising architects in Chicago had a strong engineering background and received training on the job.<sup>14</sup> These two parallel entries into the world of architecture were simultaneously active. Subsequently giving birth to two worlds of ideas: imported and indigenous. This dichotomy is further deepened when we discern the direct influences and inspirations taken from the Exposition Universelle 1889. Although both of them were held during a similar period, they show two contradicting worlds and portrayed realities.

The Exposition Universelle marked the 100th anniversary of the French Republic, giving an opportune chance to France to showcase what it had achieved after the revolution. Both expositions displayed their respective national achievements, especially those of technological nature. As the world was going through a technological shift, these expositions took place during this shift. Although coming from the same academy of thought, both represented a different world, one looking forward, one looking backwards. As one wanted to live in a 'lived space' of the past.

The Exposition Universelle, though of a much smaller scale, was an inspiration for the planners of the Chicago Exposition. A team was sent to study the Exposition Universelle.<sup>15</sup> This is why a resemblance can be seen in the planning of the two. The Champ de Mars of Paris can be seen replicated with the buildings around the basin area, the Administration Building occupying the place of the Eiffel Tower.<sup>16</sup> Although both occupied different parts of their cities, on the periphery, a separate manmade island was constructed for the Exposition in Chicago, while in Paris, military parade grounds were evicted in the city centre for the Exposition. This resulted in the viewing of the host cities differently. For one, the Exposition's crown jewel was laid in the centre. The city became an open-air museum leading towards the Exposition, making it being experienced through it, creating a 'lived space' which was part of the city. The other, on the fringes, was trying to hide the city, running away from it. Resulting in a creation of a complete novel 'lived space', which was not a true depiction of where it came from.

This running away attitude was very much palpable in the architecture of the Chicago Exposition by the two lead architects, Daniel Burnham and John Root. Burnham was trained locally, while Root received some initial training in Liverpool.<sup>17</sup> Although these two architects mainly practised in Chicago, the principal buildings were given to architects from New York and Boston. This suggests that the Exposition reflected a cohesive picture of American thought in architecture.

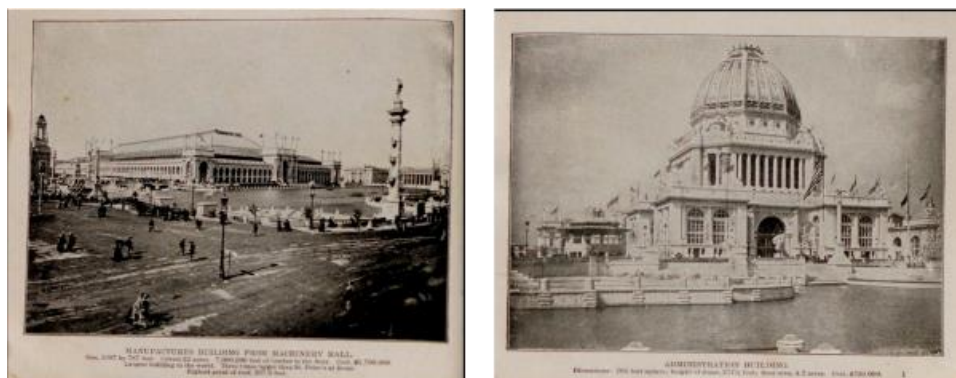
The majority of the architects who participated in the Chicago Exposition were trained in Paris through different schools and institutions. Richard Hunt, the Fair's Administration Building designer, was educated in the Ecole des Beaux-Arts;<sup>18</sup> Robert Peabody, the architect of the Machinery Hall studied in Paris;<sup>19</sup> William Jenney, the architect of the Fair's Horticultural Building, studied at the Ecole Polytechnique.<sup>20</sup> Even with this visible Parisian influence, the two expositions were drastically apart. One could say that the Exposition Universelle was mainly taken over by engineers, thus resulting in a clear contrast. However, not all could be credited to their interference. William Jenney, an engineer by training, succumbed to the contextual pressure of the Chicago Exposition. Burnham, who worked under him,<sup>21</sup> all that training he received was swept away when one sees his design of the Exposition.

On the other hand, in the Exposition Universelle, the engineers remained true to their craft in their contribution towards the design. The jewel of Exposition Universelle was a work of an engineer, Gustave Eiffel, which later became a symbol of Paris. Galerie des machines was a collation between

an engineer and an architect. The Palaces of Fine Arts and Liberal Arts, though designed by an architect, the influences of contextual works were very much present in the design, a steel frame building that could be reassembled anywhere.

This dichotomy between the two expositions resides at the subliminal level. Although receiving training from a similar locale, the two interpreted the ‘present’ differently, creating contrasting ‘lived spaces.’ One dwelling in the past or a forcibly made-up past, and the other integrating new players in the design; the engineers. They saw that to achieve the great structures of the future, one can not be left to the whimsical of aesthetic-obsessed architects.

A mere show of aesthetics can not hold its ground, even being a token of whatever blessed past. A supplementary story was needed to fill up these visible cracks. This was seen in the pictures (Figure 4&5) published by Chicago Tribune, the biggest newspaper in Chicago at that time. Although it is visibly seen that the Chicago Exposition followed neoclassical architecture, the description of the images tells a defensive tale. An architecture trying to find its origin in the Hellenic tradition and culminating in a Neoclassical expression.<sup>22</sup> Each description includes the cost and the size of the building. A very American capitalist notion of showcasing the size and cost, as if these are the two most essential things in architecture regardless of the ‘idea’ behind it. This produced a ‘lived space’, which had to be supplemented by the text to portray the scale of the space, where monetary value and the square footage would add to the audacity of the created ‘lived space.’ Additionally, this represents a sense of inferiority and an attempt to fill a void created by a lack of original thought. The rise of new wealth can be attributed to this description of the architecture, which has no historical lineage; the only way to mark one's superiority is through these superficial descriptions. This mentality is reflected in two things that still exist from both expositions; the Eiffel Tower and the Ferris wheel. Their current status also reflects the state of both expositions. One is a national symbol, and although replicated worldwide, its true aura remains in its true context, i.e. Paris. On the other hand, the Ferris wheel, which has been replicated worldwide, is never associated with Chicago, and it reflects a true capitalist venture to mass-produce and get maximum output from a product.



*Figure 4&5. Photographs taken by the Chicago Tribune*

Apart from this superficial capitalist injection of text, the true motive of these photographs was to digress from the critique of architecture by using architecture as a backdrop in showcasing something else. Rather than using architecture as the primary tool in the creation of the ‘lived space,’ they addressed the flamboyant urban life. Every building was tried to be caught with the lagoon, giving it a picturesque quality. Roads and walkways were filled with pedestrians in suits and dandy attires, telling the world about the new burgeoning American middle class. Chicago, a city of wealth with lagoons, bridges, pathways, and classical architecture. Clearly depicting their portrayal of how they

want the world to see America, especially Chicago. In the creation of such a dichotomy, one wonders what authority can the author exercise in the creation of such a ‘lived space’?

## CONCLUSION

The authors of the Exposition were trying to hide their true identity. The reality they portrayed through the ‘manufactured reality’ was not the true temporal or spatial reality of the ‘lived space’ that Chicago encompassed at that time. Rather than recognising their present, these architects went for a borrowed past. This pretentious borrowing could be associated with an act to impress the bourgeois, as they frequently visited Europe for holidays. When the new wealth surged after the gilded age, rather than reconciling with their past, they were more impressed by a foreign tradition. Unimpressed with their own belonging, they went for something not theirs.

This discontentment with their past which they saw as their weakness, was something some longed for. Goethe once said, ‘America's main power is its rootlessness.’ This sense of freedom was felt only outside the Exposition's grounds. Some still justified the Exposition as a success, liberating America from the English principles,<sup>23</sup> but in reality, the act of enslavement still existed. The Exposition was a transfer of the slave from one owner to another. This enslavement of the mind took many years to be liberated from, and even furthermore, for the American architects to feel comfortable with their designs.

Viewing the Chicago Exposition in hindsight, the ‘lived space’ it created and propagated was not the true representation of Chicago. The ‘manufactured reality’ it was trying to portray did not exist. The true Chicago existing outside the exposition was not experienced. Chicago was a cradle of modernism at that time, and the Exposition architects were ashamed of their present. It took America forty years to truly present a true ‘lived space’ when the World’s Fair returned to Chicago once more for the Century of Progress International Exposition of 1933. This time, Chicago was not unrepresented.

## NOTES

- <sup>1</sup> Stanley Appelbaum, *The Chicago World's Fair of 1893* (New York: Dover Publications Inc. 1980), 1.
- <sup>2</sup> Alexander Noyes, The Banks and the Panic of 1893, *Political Science Quarterly* 9, no. 1 (1894): 12.
- <sup>3</sup> "19th Century Rotunda: 1893 World's Columbian Exposition, Chicago, IL.", *Chicago Postcard Museum*, (accessed Jan 9 2022)  
[http://www.chicagopostcardmuseum.org/19th\\_century\\_rotunda\\_1893\\_worlds\\_columbian\\_exposition.html](http://www.chicagopostcardmuseum.org/19th_century_rotunda_1893_worlds_columbian_exposition.html).
- <sup>4</sup> Nico Viele, "World's Columbian Exposition of 1893 comes alive on computer screens," *UCLA*, November 4, 2015, (accessed Jan 9 2022). <https://newsroom.ucla.edu/stories/worlds-columbian-exposition-of-1893-comes-alive-on-computer-screens>.
- <sup>5</sup> Jean-Louis Cohen, *Scenes of the World to Come* (Paris: Flammarion. 1995), 21.
- <sup>6</sup> Appelbaum, *The Chicago World's Fair of 1893*, 5.
- <sup>7</sup> Bessie Louise Pierce, *As Others See Chicago: Impressions of Visitors, 1673-1933* (Chicago: University of Chicago Press, 2004), 410.
- <sup>8</sup> Eric Larsen, *The Devil in the White City*, (New York: Vintage. 2003).
- <sup>9</sup> "Water Street / 4", *Viewing Liverpool through Engineering Eyes*, (accessed Jan 9, 2022).  
<http://www.liverpool.engineeringwalks.com/LiverpoolEngWalk/9.html>.
- <sup>10</sup> Cohen, *Scenes of the World to Come*, 21.
- <sup>11</sup> R. E, "Les grandes constructions américaines," *La Construction moderne*, 5 September 1891, 568-569.
- <sup>12</sup> Thomas Leslie, *Chicago Skyscrapers, 1871-1934* (Urbana: University of Illinois Press, 2013), 15.
- <sup>13</sup> Cohen, *Scenes of the World to Come*, 20.
- <sup>14</sup> Appelbaum, *The Chicago World's Fair of 1893*, 11.
- <sup>15</sup> Appelbaum, *The Chicago World's Fair of 1893*, 1.
- <sup>16</sup> Appelbaum, *The Chicago World's Fair of 1893*, 15.
- <sup>17</sup> "Water Street / 4", *Viewing Liverpool through Engineering Eyes*, (accessed Jan 9, 2022).  
<http://www.liverpool.engineeringwalks.com/LiverpoolEngWalk/9.html>.
- <sup>18</sup> Appelbaum, *The Chicago World's Fair of 1893*, 8.
- <sup>19</sup> Appelbaum, *The Chicago World's Fair of 1893*, 9.
- <sup>20</sup> Appelbaum, *The Chicago World's Fair of 1893*, 11.
- <sup>21</sup> Appelbaum, *The Chicago World's Fair of 1893*.
- <sup>22</sup> Henry Van Brunt, *Architecture at the World's Columbian Exposition*. Century magazine, 1892.
- <sup>23</sup> Appelbaum, *The Chicago World's Fair of 1893*, 14.

## BIBLIOGRAPHY

- Appelbaum, Stanley. *The Chicago World's Fair of 1893*. New York: Dover Publications Inc. 1980.
- Cohen, Jean-Louis. *Scenes of the World to Come*. Paris: Flammarion. 1995.
- Van Brunt, Henry. *Architecture at the World's Columbian Exposition*. Century magazine, 1892.
- Larsen, Eric. "The Devil in the White City." New York: Vintage(2003).
- Leslie, Thomas. *Chicago Skyscrapers, 1871-1934*. University of Illinois Press, 2013.
- Pierce, Bessie Louise. *As Others See Chicago: Impressions of Visitors, 1673-1933*. Chicago: University of Chicago Press. 2004.
- Noyes, Alexander D. "The Banks and the Panic of 1893." *Political Science Quarterly* 9, no. 1 (1894): 12-30.
- R. E. "Les grandes constructions américaines." *La Construction moderne*. 5 September 1891.
- Viele, Nico. "World's Columbian Exposition of 1893 comes alive on computer screens." *UCLA*. November 4, 2015. (accessed Jan 9 2022).  
<https://newsroom.ucla.edu/stories/worlds-columbian-exposition-of-1893-comes-alive-on-computer-screens>.
- "19th Century Rotunda: 1893 World's Columbian Exposition, Chicago, IL." *Chicago Postcard Museum*. (accessed Jan 9 2022).  
[http://www.chicagopostcardmuseum.org/19th\\_century\\_rotunda\\_1893\\_worlds\\_columbian\\_exposition.html](http://www.chicagopostcardmuseum.org/19th_century_rotunda_1893_worlds_columbian_exposition.html)
- "Water Street / 4." *Viewing Liverpool through Engineering Eyes*, (accessed 9 Jan, 2022).  
<http://www.liverpool.engineeringwalks.com/LiverpoolEngWalk/9.html>

## IMAGE CREDITS

Figure 1&2, Chicago Postal Museum,

[http://www.chicagopostcardmuseum.org/19th\\_century\\_rotunda\\_1893\\_worlds\\_columbian\\_exposition.html](http://www.chicagopostcardmuseum.org/19th_century_rotunda_1893_worlds_columbian_exposition.html).

Figure 3, The Smithsonian Library. *Chicago Tribune glimpses of the World's fair*. Laird and Lee pub, Chicago, 1893, <https://library.si.edu/digital-library/book/chicagotribuneg00>.

Figure 4&5, The City of Chicago and Some Recent Additions to its Architecture, *Harper's Weekly*, June 23, 1888. <https://digital.newberry.org/scalar/pullman/media/chicagos-skyline-1888>

# THE SCREEN, INTIMACY AND THE ATTENTION ECONOMY: ARE WE EVER TOGETHER?

Authors:

LINGXIANG WU, ERICA CRISTOBAL, KRISTI POOLE-ADLER <sup>1</sup>

Affiliation:

INDEPENDENT RESEARCHERS

---

## INTRODUCTION

From a touch of a button to a swipe to scroll, the screen of our mobile devices opens into the digital realm where endless streams of information and access to people and things sit at the palm of our hands. This experience ends when the screen shuts off and returns our reflection where we are then transported back into the present moment. The screen holds our attention by rapidly facilitating content and connections, resulting in more and more time spent engaging online. Yet, the time spent using the screen removes the possibility for intimacy to express. Intimacy defined in this paper refers to meaningful and substantial relationships characterized by trust, vulnerability, and honesty. Closeness can also be synonymous, but the measurement of distance does not concern this analysis on intimacy through the screen because it inherently functions to bring people together despite proximity or even physicality. Below the surface, our capacity to feel and foster intimacy wanes from the demands of the user experience of the screen. Internet personas can often be seen as superficial and impersonal, the immediate flow of content can be distracting and short, and communication with others online may dissuade one from meeting face-to-face. This paper examines the inability of the screen from smart devices to cultivate intimacy and how we as a collective imagine ways to engage with screens differently. With the vast number of people that we can encounter online from friends to followers, zooming out of the screen we ask the question, are we ever together?

What allures our attention to the screen can be described as what cultural theorist and author Byung-Chul Han refers to as the aesthetic of the smooth, which eradicates all negativity and otherness to ensure hyper-efficient exchange of information in digital communication.<sup>1</sup> Smoothness manifests in many forms, from click-bait titles to thirst trap videos as they generalize "the haptic compulsion to make everything available...everything is consumable."<sup>2</sup> Smooth consumable content from the screen becomes the cultural goods of this century under the attention economy, where the screen allows us to perform as both the producer and the consumer.<sup>3</sup> This cyclical relationship between the screen and the user depends on one interacting with the other until the rhythm of the two breaks and then repeats. Author and scholar Shoshanna Zuboff describes this dynamic through surveillance capitalism as the translation of human experiences as free raw material into behavioral data.<sup>4</sup> Targeted ads presenting topical information related to user habits and trends online as well as tailored algorithms on social media applications traps us within the mode of production and consumption. We are reaching a point of intimacy and spiritual fatigue as our everyday life experiences become attention-centric, as literary theorist, researcher, and essayist Yves Citton describes, "...which organizes our desires and

subjectivities according to the dominant logic of capitalist profit - with harmful consequences for our capacity for collective decision making and our individual well-being."<sup>5</sup> The screen functions as an apparatus for capitalism. Rather than helping us materialize connections online, the screen feeds, notifies, and demands our attention. As users, what are the tactics or coping mechanisms of resistance from the attention economy through or with the screen? Is it possible for the screen to bring people together as a site for community, collaboration, and discourse?

This paper uses art-based research to explore how intimacy forms in and out of the screen by using interdisciplinary methods to trace out the nuances of relationship building online. Toronto-based artists Lingxiang Wu and Kristi Poole-Adler guide this research with their labor-intensive practices and textual reflections to examine and understand our digital activities with the screen and their impacts. Sentiments of anxiety and longing for connection continuously reappear throughout their work as consequences of the self-exploitative labour within the attention economy. As a result, both search for a balance between the demands of the screen as well as their needs to pause and reflect.



Figure 1. Artworks of Kristi Poole-Adler(left) and Lingxiang Wu(right)

Using digital images and videos captured from Instagram and TikTok, Wu studies the endless labour we share as the performer and consumer of the screen. He creates various contemplative experiences to view collected material from these applications with VR, video, and collage with the hopes of resisting the aesthetic of the smooth. Poole-Adler draws from personal experiences using dating applications to create text-based fiber works of the interactions she shares online with proposed love matches. Bringing together themes of identity, intimacy, vulnerability, shame, and connection within romantic relationships, she questions how personal attachment styles affect the way people behave through the screen.<sup>6</sup> Wu and Poole-Adler use the concept of time in their artworks as a tool to pause, reflect, and ultimately refrain from the never-ending course of the attention economy. In doing so, the practice of prolonging surfaces to contend with trials of developing intimacy through the screen.

## PROLONGING TO BREAKAWAY

Prolonging increases the duration of something to move forward or onward. Wu and Poole-Adler use prolonging as a methodological approach to make sense of online activities and navigate the space of the screen freely from its user experience demands. Disconnecting or distancing from the screen merely breaks us away from its magnetic force to engage as we recognize the screen as an essential and inescapable space for daily living. Acting as a third appendage that travels with its users, the screen appears in day-to-day routines to accommodate a variety of needs online. For example, we turn

to the screen to access information or seek for answers, communicate and express our mind to others, or fill our time with entertainment and distraction. By popularity, Google takes the place of many users' main search engine and homepage, but it is not homey. Zubuff argues the innate orientation of all creatures towards seeking home, and that “home is where we know and where we are known, where we love and are beloved. Home is mastery, voice, relationship, and sanctuary: part freedom, part flourishing... part refuge, part prospect.”<sup>7</sup> To have a sense of home through the screen, we have to reclaim the space, decorate it, and engage in activities that foster intimacy and meaningfulness. Wu and Poole-Adler carry out prolonging in their artworks to divert from the intrinsic fixation towards the screen and in doing so, they pause, glitch, and disrupt passivity with the screen to initiate elements of care in digital interactions.



Figure 2. Lingxiang Wu, *Digital Landfill*, 2021

Recent trends rejecting social media or adopting minimalistic practices day to day seek to return to a time without the interruption of applications or advertisements constantly bombarding us. However, these attempts only provide temporary relief and to overcome the force of the screen, we must begin with prolonging. In his book, *Non-Things*, Byung-Chul Han mentions that “smartphones have established themselves as the devotional objects of the neoliberal regime. As apparatuses that serve the purpose of submission.”<sup>8</sup> The online arena focuses on collecting data and optimizing user interface and user experience design with algorithms to retain and exploit users within the momentum of consumption and production. We need an alternative or a glitch to cope with this systemic coercion. Wu's *Digital Landfill* (2021), contains a series of visual material considered highly disposable within the attention economy, such as social media posts from Instagram, images of bodies from TikTok, catalog photos from online fast-fashion retailers, and more.<sup>9</sup> These findings come together in the form of web VR and websites to archive and elongate the life span of the images, as well as create an opportunity for viewers to contemplate by themselves more deeply. Wu constructs these digital recreational spaces to suggest that we can regain agency when we are not under surveillance to perform and have the flexibility to decide who and what receives our attention and when to reciprocate. Prolonging refuses and creates rupture on our digital engagement with the screen, and “extends them to become fantastic landscapes of possibility.” As American curator and writer Legacy Russell concluded in *Glitch Feminism*, “We will take up space, and break this world, making new ones.”<sup>10</sup> As new technologies emerge and integrate into our everyday life like the Metaverse and

OpenAi, it demands us to break away from performing along the capitalist logic and imagine the screen as a place for alternative and substantial experiences.<sup>11</sup>

### **PROLONGING FROM REPETITION TO REFLECTION**

Both Wu and Poole-Adler's art-making process echo the concept of prolonging in terms of repetition and the art of seduction. In his book *The Disappearance of Ritual*, Byung-Chul Han mentions, "Today, many forms of repetition, such as learning by heart, are scorned on account of the supposed stifling of creativity and innovation they involve."<sup>12</sup> Instead, the attention economy prefers routinization and a more systematic way of generating variation of the same which explains why social media posts and images today appear disposable. Routinization has mechanical and almost soulless qualities, like spamming, as Hito Steyerl describes as, "something worthless and annoying, over and over again, to extract a tiny spark of value lying dormant within inert audiences."<sup>13</sup> When spam fails to capture our attention, it becomes obsolete and rendered useless. In turn, the screen develops variations of the same subject, a circulation of paraphrased ideas and ultimately, unimaginative callings. The monotonous and stifling caliber of routines leaves little to no room for creativity, meanwhile repetitious acts have margins for energy and care.

Handcrafts generally construct quiet, contemplative, and meditative moments due to their time-consuming nature, which inspires Poole-Adler in her ongoing project *Sweet Nothings* (2022). She uses handcrafts to reflect upon relationships shared through the screen, specifically from dating applications such as Hinge, Tinder, and Bumble by creating text-based weavings of her matches. Dating applications endorse habits of judgment and shallowness by practice because users are asked to like or pass on the visual and textual elements that comprise dating profiles. Poole-Adler weaves snippets of her conversations into large-scale and elongated fabric screens mimicking the repeated act of scrolling and includes typos and casual responses to analyze how these messages translate in person. *Sweet Nothings* critically examines the overwhelming experience of browsing profile after profile and receiving notifications and alerts from new prospects, like a 24-hour buffet of dating options.

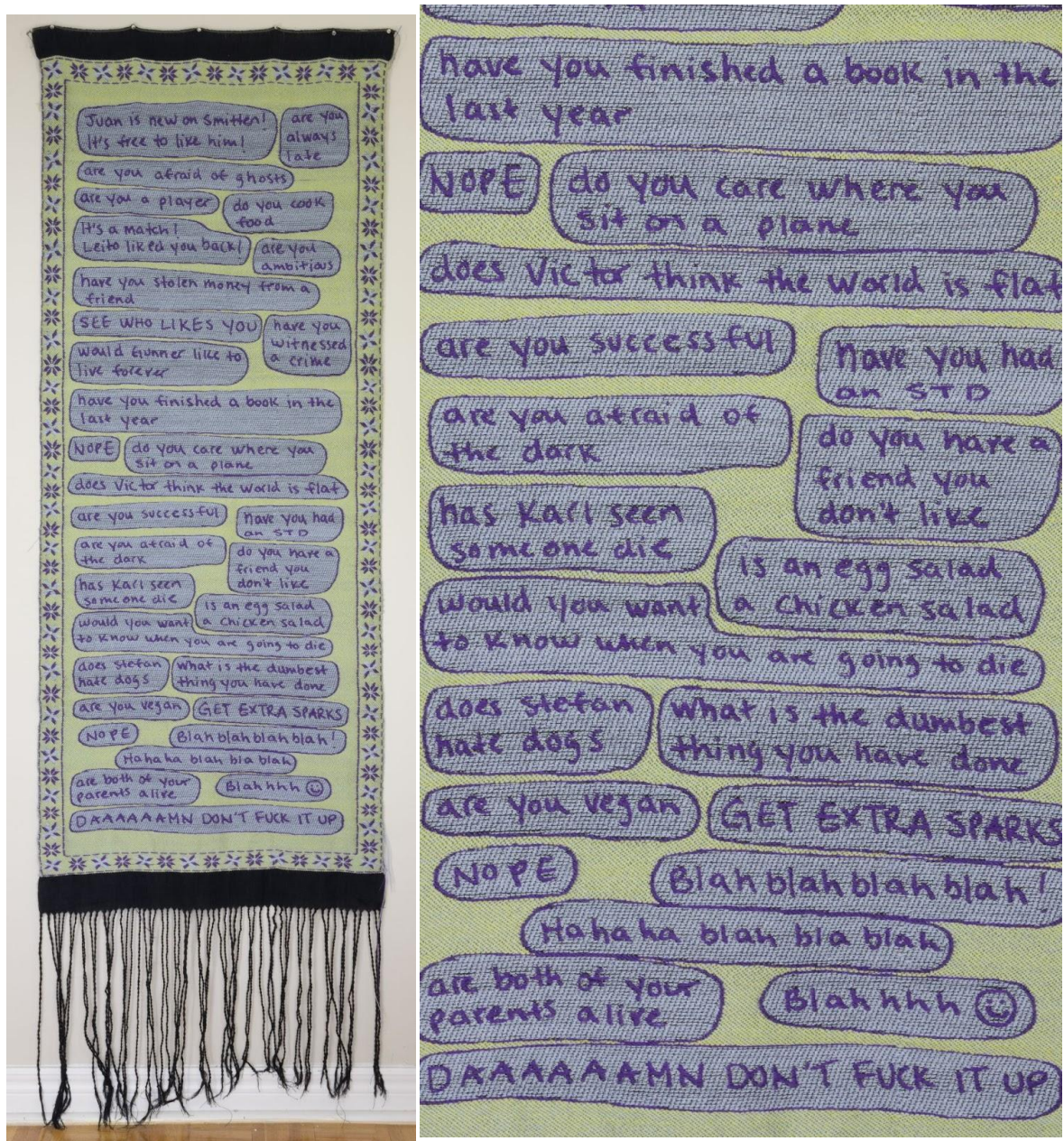


Figure 3. Kristi Poole-Adler, *Sweet Nothings*, 2022

Weaving involves a physical and embodied practice that slowly reveals the work one row at a time. From counting each rotation a thread winds around the warping board, to pulling each thread through the eye to follow a pattern, this slow repetition encourages thoughtfulness and intentionality within each step of the making process. In contrast, the routine of swiping, matching, and messaging on dating applications transpires at a faster and more passive pace. Poole-Adler superimposes elements of care from weaving into the short and oftentimes disingenuous exchanges. The routinization of online dating becomes distilled into soft, cozy, and physical objects viewers can interact with in a more tactile way. Where digital communication can feel fleeting, careless, and easily dismissed, *Sweet Nothings* uses repetition as an act of prolonging to find deeper, more meaningful relationships on and off the screen.



Figure 4. Lingxiang Wu, *The Labyrinth of Digital Bodies*, 2022

### PROLONGING FROM THE ART OF SEDUCTION TO INTIMATE FEELING

The attention economy complicates the potential to form genuine feelings and connections because it emphasizes impulsive emotions and quickly gratifies desires. Where reading and listening involve a gradual buildup of nuance and narrative, the screen lacks the capacity of lifting layers of veils to get to the context. Like pornography, the obsession with the efficient exchange of information erases the playful distance we need to seduce, feel, and progressively reach the stage of actual intimacy. According to Han, "Feelings are narrative... they possess duration, a narrative length."<sup>14</sup> Feelings cannot be formulated through direct contact of our eyes to the screen, but rather through a sophisticated form of play. In Wu's work, he often experiments with fragmentation, collage, and imperfect use of digital tools to create moments of uncanny that reside between familiar and unfamiliar, recognizable and unrecognizable.<sup>15</sup> In his project, *The Labyrinth of Digital Bodies* (2022), Wu collected, modified, and reconstructed images of bodies gathered from TikTok, making them less readable, and integrated them into VR as uncanny reminders of the pornographic nature of social media. Wu reverses the bareness of these bodies into seductive resonances that tease the viewer with a flirtatious way of looking where they may have to spend more time and effort to realize the images before them. As a result, prolonging aims to create distance and ambiguity necessary for developing feelings and meaning.

Where Wu's work seduces the viewer, inviting them to engage a little longer through the screen, Poole-Adler's work detaches from the screen physically, employing the materiality of cloth as a means for storytelling and connecting with her viewer. In *The Object of Labour: Art Cloth and Cultural Production*, editors Joan Livingstone and John Ploof describe how "The physical and intimate qualities of fabric allow it to embody memory and sensation and become a quintessential metaphor for the human condition."<sup>16</sup> Cloth becomes emblematic for seeking intimacy and closeness, and by contrast, Poole-Adler pairs it with seemingly meaningless chats she has on dating applications. In *Attached: The New Science of Adult Attachment and How It Can Help You Find and Keep Love*, Amir Levine and Rachel S.F. Heller explains how "If you're avoidant, you connect with romantic

partners but always maintain some mental distance and an escape route. Feeling close and complete with someone else – the emotional equivalent of finding a home – is a condition that you find difficult to maintain.”<sup>17</sup> Browsing through profiles becomes highly addictive, yet fails to offer users any real sense of connection. In *Out of Touch: How to Survive an Intimacy Famine*, Michelle Drouin explains that when we receive actual human touch like a hug, we get a full hit of oxytocin, the love hormone, but when we communicate digitally, we are only getting microdoses of dopamine, the reward hormone, therefore leaving us empty and craving more.<sup>18</sup> Poole-Adler employs personal narrative to build emotional connections with the viewer, while simultaneously exploring the sensual materiality of fabric. Her work becomes a personal archive and record of diverse characters and their vulnerability, blurring the boundaries of private and public, material and immaterial. *Sweet Nothings* acknowledges the flaws and quirks of online communication and seeks to draw out earnest acts of care, which encourages viewers to reflect on their own experiences.



Figure 5. Kristi Poole-Adler, *Sweet Nothings*, 2022

## CONCLUSION

We understand the dire need to reshape our relationship with smart technology because the attention economy thrives on our weakening will power to answer that late night text, click on that targeted ad, and get lost in the comments section on a controversial TikTok video. Through Han, we realize that

“the smartphone puts the other at our disposal by reifying the other into an object. It turns the you into an it. The disappearance of the other is the ontological reason why the smartphone makes us lonely...because it lacks the presence of the other, it only deepens the loneliness.”<sup>19</sup> How do we decide who and what to devote our attention to and how can we exercise more care in doing so? Prolonging reminds us that life and relationships with others are beyond hyper-communication, regardless of how the attention economy tries to convince us otherwise. In the form of glitch, repetition, and seduction, Wu and Poole-Adler’s artistic reflections emphasize the need for care in a society that demands our attention 24/7/365.

We break away from the momentum of the attention economy to re-orient ourselves, re-gain our focus and re-approach our digital homes with a critical lens. This research proposes that the screen should transform into a space for care and intimacy rather than continue as a site for capitalistic purposes and that users adopt more proactive consumer habits online through prolonging. We conclude that the practice of care is essential for being together. To care in the attention economy involves the embodied acts of tending to someone or something through the screen as opposed to acting passively. Feminist scholar Maurice Hamington says that care involves an action to be performed and effectively received beyond its approach to morality.<sup>20</sup> Care transfers relationally as our thoughts and actions are mutually connected with others in our environment and not just independently. As we contended with the attention economy using artistic processes framed by prolonging, we can start to build intimacy through the screen with care.

## **ACKNOWLEDGEMENTS**

This paper includes the project, Digital Landfill by Lingxiang Wu, which is gratefully funded by the Canada Council for the Arts.

## NOTES

1. All authors have contributed equally
2. Byung-Chul Han, *Saving Beauty*, trans. Daniel Steuer (Cambridge, UK: Polity, 2018) 15-22
3. Byung-Chul Han, *Non-Things: Upheaval in the Lifeworld*, trans. Daniel Steuer (Cambridge, UK: Polity, 2022. Kindle Edition), 19
4. The attention economy was first articulated by Herbert Simon and many others like Georg Franck and Thomas Davenport. Our understanding of the concept mainly comes from Yves Citton, who describes it as a new economic model that manages the information triggered by the Internet and digital technology, where our attention becomes a scarce resource that is traded across the digital marketplace.
5. Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019), 8
6. Yves Citton, *The Ecology of Attention*, trans. Barnaby Norman (Cambridge: Polity, 2021), 7
7. Attachment theory was developed in the 60's by Mary Ainsworth and John Bowlby in relation to how infants form bonds with their primary caregivers. Amir Levine, and Rachel S.F. Heller, among others, further this research to explain how Attachment styles affect the way we view intimacy and closeness, conflict resolution, attitude towards sex and communication in romantic relationships.
8. Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019), 5
9. Byung-Chul Han, *Non-Things: Upheaval in the Lifeworld*, trans. Daniel Steuer (Cambridge, UK: Polity, 2022. Kindle Edition), 24
10. To be visible online on TikTok, for instance, these contents take the form of mass production. Creators will bombard the platform with abundant numbers of videos per day to gain traction, and the ones with low views will quickly be deleted to maintain their popular status in the eyes of data analysis.
11. Legacy Russell, *Glitch Feminism: A Manifesto* (Verso Books, 2020. Kindle Edition) 29-145
12. These technologies will further integrate automation and obsession with efficiency into our lives. Moving from experience through the screen to inside the screen makes us more vulnerable to systemic coercion if we do not regain a sense of control over our attention.
13. Byung-Chul Han, *The Disappearance of Rituals: A Topology of the Present*, trans. Daniel Steuer (Cambridge, UK: Polity, 2020), 8-10
14. Hito Steyerl, *Duty Free Art* (Verso Books, 2017. Kindle Edition), 105
15. Byung-Chul Han, *Saving Beauty*, trans. Daniel Steuer (Cambridge, UK: Polity, 2018) 65
16. For visual post-production tools like Photoshop or After Effects, many features involve algorithm generation, such as rotoscoping to cut an object out from its background smoothly. Wu often disrupts that generative process against its original agenda to gain a rough and less readable result.
17. Joan Livingstone and John Ploof, introduction to *The Object of Labour: Art, Cloth, and Cultural Production*, edited by Joan Livingstone and John Ploof (Chicago: School of the Art Institute of Chicago Press; Cambridge, MA: MIT Press, 2007), vi-xiv.
18. Amir Levine, and Rachel S. F. Heller. *Attached: The New Science of Adult Attachment and How It Can Help You Find and Keep Love* (New York: TarcherPerigee, 2011) 116
19. Michelle Drouin, *Out of Touch: How to Survive an Intimacy Famine*, (Cambridge, MA: MIT Press, 2022) 10
20. Byung-Chul Han, *Non-Things: Upheaval in the Lifeworld*, trans. Daniel Steuer (Cambridge, UK: Polity, 2022. Kindle Edition), 28
21. Maurice Hamington. "Performative Approach to Teaching Care Ethics: A Case Study," *Feminist Teacher* 23, no. 1 (2012): 34, <https://doi.org/10.5406/femteacher.23.1.0031>

## BIBLIOGRAPHY

- Black, Anthea, and Burisch, Nicole, eds., *The New Politics of the Handmade: Craft, Art and Design*, London: Bloomsbury Visual Arts, 2021.
- Citton, Yves, *The Ecology of Attention*. Translated by Barnaby Norman. Cambridge: Polity, 2021.
- Drouin, Michelle, *Out of Touch: How to Survive an Intimacy Famine*, Cambridge, MA: MIT Press, 2022.
- Franck, Georg. "The Economy of Attention." *Journal of Sociology* 55, no. 1 (2018): 8–19.

- <https://doi.org/10.1177/1440783318811778>.
- Hamington, Maurice. "Performative Approach to Teaching Care Ethics: A Case Study," *Feminist Teacher* 23, no. 1 (2012): 34. <https://doi.org/10.5406/femteacher.23.1.0031>
- Han, Byung-Chul, *Saving Beauty*. Translated by Daniel Steuer. Cambridge, UK: Polity, 2018.
- Han, Byung-Chul. *The Disappearance of Rituals: A Topology of the Present*. Translated by Daniel Steuer. Cambridge, UK: Polity, 2020.
- Han, Byung-Chul, *Non-Things: Upheaval in the Lifeworld*. Translated by Daniel Steuer. Cambridge, UK: Polity, 2022. Kindle Edition.
- Levine, Amir, and Rachel S. F. Heller. *Attached: The New Science of Adult Attachment and How It Can Help You Find and Keep Love*. New York: TarcherPerigee, 2011.
- Livingstone, Joan, and Ploof, John. *Introduction to The Object of Labour: Art, Cloth, and Cultural Production*, edited by Livingstone, Joan, and Ploof, John, vi-xiv. Chicago: School of the Art Institute of Chicago Press; Cambridge, MA: MIT Press, 2007.
- Lorz, Julianne. *Louise Bourgeois: The Woven Child*. New York: Verve Editions, 2002.
- Russell, Legacy. *Glitch Feminism: A Manifesto*. Verso Books, 2020. Kindle Edition.
- Steyerl, Hito. *Duty Free Art*. Verso Books, 2017. Kindle Edition.
- Steyerl, Hito. *The Wretched of the Screen*. Sternberg Press, e-flux. 2013. Kindle Edition.
- Wark, McKenzie. *Sensoria*. Verso Books. 2020. Kindle Edition.
- Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: Public Affairs, 2019.

## THE INCOMPLETE RESULTS OF AN ACT OF MAPPING

Authors:

**MARTA LABASTIDA<sup>1</sup>, EULÀLIA GÓMEZ-ESCODA<sup>2</sup>, MAARTEN GHEYSEN<sup>3</sup>, MIGUEL HERNÁNDEZ-QUINTANILLA<sup>4</sup>**

Affiliation:

<sup>1</sup>LAB2PT – UNIVERSIDADE DO MINHO, PORTUGAL; <sup>2</sup>BARCELONA LABORATORY OF URBANISM - UPC BARCELONA TECH, SPAIN; <sup>3</sup>DEPARTMENT OF ARCHITECTURE, KU LEUVEN, BELGIUM; <sup>4</sup>OSLO CENTRE FOR URBAN AND LANDSCAPE RESEARCH OCULS, NORWAY

---

### INTRODUCTION

The disciplines of architecture and urban design have representation as their main communication tool. However, in recent years, the possibilities of access to information – digital archives, open cartographic sources – and the emergence of geographic information systems have shaken the way of representing and explaining issues that were until recently linked to the physical condition of places.

How do we map space and experiences? How do we map global – climate change, monetary flows – vs. local processes? How do we map concepts such as boundaries, regularity or porosity? How do we map tangibles and intangibles? How do we map sensations produced by noises, flavours or smells? How do we map paths and movement? How do we represent dynamics in a static drawing? What is the (ir)relevance of geographical precision?

This paper describes the process based on an expanded dialogue to use domestic digital tools – hand drawings, pictures, video, google maps, cad and GIS cartographies, big data, open-source data, sound recordings – to produce incomplete understandings of the territory instead of achieving a finished product.

### METHODS

The starting point of this paper is an academic experience, “One territory, four questions, one atlas”,<sup>1</sup> an intensive summer research program between four institutions: AHO Oslo; KULeuven; Universidade do Minho; ETSABarcelona-UPC. The programme was aimed to generate new synergies and a common theoretical-practical body to trigger a joint discussion on how to represent and visualise cities and life, spatial design and spatial reframing, ruptures and permanence, people and time by the act of mapping.

The twelve participants of the summer school worked together grouped in three teams during one week in which four questions were progressively launched to which the teams responded by drawing speed maps in 8 hours. In turn these maps served as an entry for a common discussion and unlocked hidden hypothesis.

## THE SITE

The work was developed under the premise that mapping is linked to a specific geographic location, or at least that this facilitates it. Therefore, the exercises explored a nearby location, the surroundings of the Colonia Güell, a small settlement in Santa Coloma de Cervelló, in the metropolitan region of Barcelona.

The Colonia Güell was founded as a town for workers together with the adjacent textile factory by the industrialist patron Eusebi Güell in 1890. The settlement was built between the Llobregat agricultural valley floor and the dry slopes that frame it. A seasonal creek traverses the Colonia from east to west, where the local train tracks and a road physically divide it from the agricultural park. The plan of the new town, allegedly designed by the architect Antoni Gaudí<sup>2</sup> is organized through two main perpendicular axes traced within the invisible triangle drawn by the towers of the factory, the church and the school. The church is considered a masterpiece also designed by the Catalan architect but never finished. The main housing types are two-floor family units, most of them built in brick or masonry by local architects, some of them of high architectural interest.

The town was designed so that the workers were at the same time provided work and education by the industrial patron within the physical limits of the Colònia.<sup>3</sup> The factory was collectivized into a self-organized industrial community during the 1930s. Today the industrial production has moved out of the factory and its buildings house new activities such as communication agencies and start-up businesses. On the other hand, most of the houses are still inhabited by descendants of the first industrial workers of the Colònia. The multiplicity of entanglements on site – local and global, water and soil, patches, corridors, flows – provided exceptionally rich grounds for the acts of mapping.

## AN EXCURSION

Walking, watching, drawing, and recording was the way for participant in the programme to collect first impressions. Due to its heritage value, the site is visited by a relatively high number of tourists that take a detour from the main *gaudiesque* attractions of the metropolis. The tour started following the instructions of the local museum's audio guide,<sup>4</sup> wandering and stopping by the main buildings and public spaces of the industrial town. Gradually, the attention drifted from the framed route towards the unexpected findings of the place: views towards golden wheat fields at the edge of a modernist high rise concrete neighbourhood, spontaneous appropriation of outdoor spaces to dry clothes or do yoga, banners against the new taxes to improve train services. These lived absorptions provided clues that would be later result in mappings.



*Figure 1. Site visit and field work for data collection. Source: Authors' elaboration.*

After visiting the urban settlement, a jump outside the formal built defined border facilitated the immersion in the landscape of the agrarian park. Surrounded by the large infrastructure of roads and train rails, large agricultural plots fed by intricate systems of water channels. The journey before heading back, ended as fig trees and artichoke fields gave way to the apparent wilderness of the riverbed, plagued with impressive clusters of giant invasive reeds. The territory around the Colònia Güell appeared to the eye as an “assembly of events, of pieces and fragments, conflicting, complementing and hence condensing the urban context”.<sup>5</sup> Under this light the idea of exploring these assemblages through fast, incomplete cartographic acts seemed even more relevant.

#### **FOUR QUESTIONS**

After the trip the group faced four days, eight hours per day to answer to four different questions to explore potential maps of a territory. Each one of the questions presented as subchapters in this text was answered with three maps made by the different teams. One map per question is described in the following paragraphs as example of the reflections triggered by the simultaneous acts of mapping. The resulting cartographies are considered deliberately incomplete products but are nevertheless useful for the understanding of the site, making a finished map unnecessary.

#### **Ground condition**

The first question asks how ground characteristics are related to the urban development of the Llobregat valley. Old national roads, historical urban settlements and plot structure have been usually developed following the characteristics of the ground. Yet the past hundred years of radical technological and economical transformations have clearly blurred this relationship and resulted in questionable decisions.<sup>6</sup> The upper crust of the earth continues to be deeply transformed today as “the processes of demolition and construction for which humans are collectively responsible appear to transcend the human scale. These processes influence faster – at a fraction of the speed – and have a greater impact on the transformation of the troposphere than all natural processes combined”.<sup>7</sup> Therefore, the graphic production should answer what is the state and characteristics of the current

ground; what are the hidden resources and problems that can be revealed beneath its surface; how is it possible to unveil the geomorphological qualities and processes of the landscape; and, especially, how can the terrain be represented with only first-hand information about the ground.

The two-dimensional resulting map, entitled *Blow-ups and megapixels*,<sup>8</sup> is proposed as a meta-explanation of the composition of the different layers of the ground from the reading of its external appearance. On the one hand, the geological map of Almera and Brossa<sup>9</sup> gives clues about the limits between alluvial and calcareous lands, as well as the consequent character of vegetation, watercourses, agricultural plot structure and position of infrastructures. On the other hand, images taken during the field visit show apparent contrasts fruit of that hidden dimension. The representation fits in with this starting point, enlarging photographs taken on site to the maximum, to leave visible only the fertile, the humid, the dry, the barren, the natural and the altered. Through blowing up the images, the literality of what they represent loses meaning, but the chromatic or textural condition for which the fragments of photography were chosen remains. In this way, a new territorial mosaic is composed from the obtained megapixel tiles that translate the character of the ground.

“The photographer Alfred Stieglitz (1864-1946), a bridge between the pictorialist and documentary practices of the 20th century, considered that the function of photography is not to offer aesthetic pleasure but to provide visual truths about the world.”<sup>10</sup> And being literal with his words, the composed map uses reframed images to explain the reality of the ground. The exercise also ends with questions on what would be the correct pixel size; on whether all tesserae have to be the same size; on how much ground would have to be covered with the mosaic; or on how to represent the organic boundaries of reality within the new orthogonal geometries.

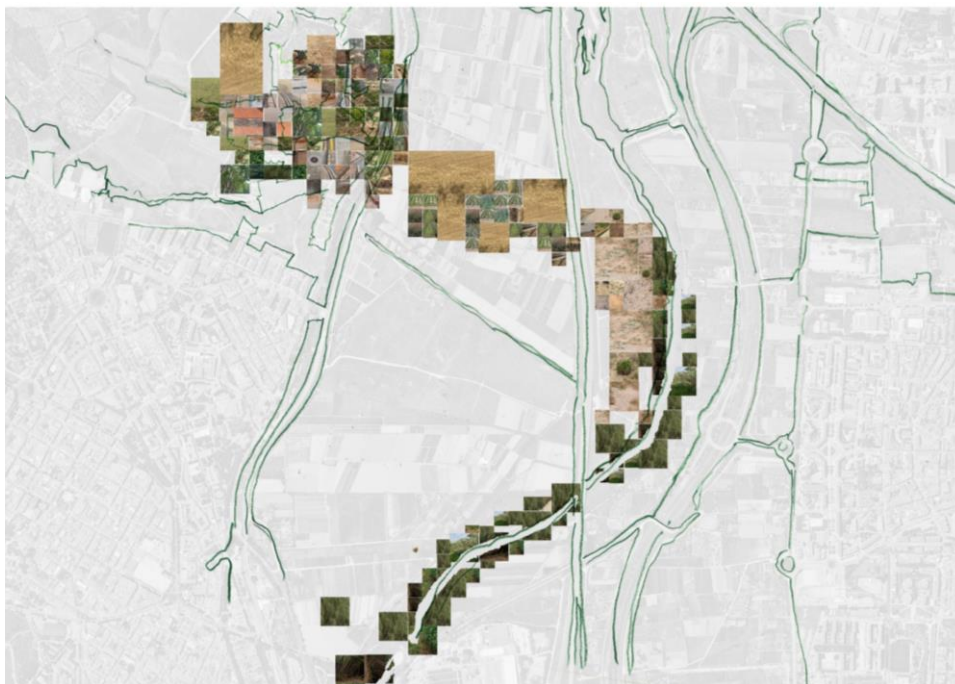


Figure 2. *Blow-ups and megapixels*. Source: Fredrik van der Horst, Rute Carlos, Sophie Leemans and Eulàlia Gómez-Escoda

### Informal realities

The second question and its consequent eight-hours map were about understanding informal realities through mapping. The question was approached from a broad stance by proposing three diverging perspectives on this tension triggering at the same time other perspectives to be explored.

The first perspective challenged the fact that within the discipline of architecture, conventional architectural drawings – plans, sections, elevations, axonometries and perspective drawings – generally focus on built and materialized aspects of space. The presence of human bodies is often missing and the distinct contrast existing between planned and lived space seems to undermine the possibilities of “architectures as complex ecosystems”.<sup>11</sup> Perspective number two reflected on the notion of *Third Landscape*,<sup>12</sup> coined by the French landscape architect Gilles Clément. This concept explains how in dispersed territories, where low-density built fabric prevents the formation of large-scale nature preservation, a number of informal or unplanned spaces appear to be highly biologically valuable. Passively maintained corridors of verges along rivers, canals, highways and railways become attractive spaces for specific animal and plant species. Clément puts these informal spaces forward as “the sum of the space left over by man to landscape evolution – to nature alone. [...] This can be considered as the genetic reservoir of the planet, the space of the future.”<sup>13</sup> The third notion introduced was the concept of “perception of space”. Mediation of formal and informal space in Barcelona is immersed in digital cultures, represented by a dense visual and spatial data structure. It allows a broad audience to be engaged in exploring the city, shaping their notion and perception of space. Content of public sphere like social media platforms is oriented on a city as a cultural heritage, purified imaginary vision of public space, areal views of a bounded and compressed urban grid, and a stage for football culture. A dynamism of activities in the public sphere is continuously updated, increasingly fragmented, and reconstructed in a formal city. Oppositely the notion of informal city can be understood as the one that is not exposed to oversaturation and fragmentation in the online sphere. The two meanings of the city are entangled in the meaning, experience, and representation. These informalities and formalities guide the exploration of the notion of city. Mapping might help unfold and discuss the two faces and investigate the boundaries and mediation between them.

When looking at Colònia Güell on an orthographic map or an aerial view, one can immediately see the distribution and development of plots. What is not visible on such top-down perspective representations is how this environment is used, experienced, and occupied by informal and non-designated day-to-day and temporary aspects of space such as sounds. The map *Appropriated sounds*<sup>14</sup> is a conceptual idea that aims to represent a time-space experience, focusing mainly on auditory aspects of this experience. During a walk, we recorded short sound fragments at different locations. On the top of the map the walked trajectory is shown as a line on an aerial view of the area. The different places on this path where sound recordings were made are marked with a circular symbol with a cross. The different sound recordings were assembled and visualized as a sound wave. This conventional way of representing sound makes it possible to understand where sound peaks occur. In addition, what caused this sound peak was annotated. Alongside the sound reproduction, a representation of the views of façades and landscapes was equally projected in linear form, allowing the sound to be linked to spatial conditions. Finally, an extraction is made of temporary spatial aspects such as vegetation and inconstant environmental conditions, which might also be related to the perceived sound.

In short, the map is a representation of a temporary and fluid moment in time, where formal – the mapping format, ambient sound – and informal – unexpected noise jumps, the spatial-temporary extractions – interact, questioning how a particular walked trajectory is perceived.

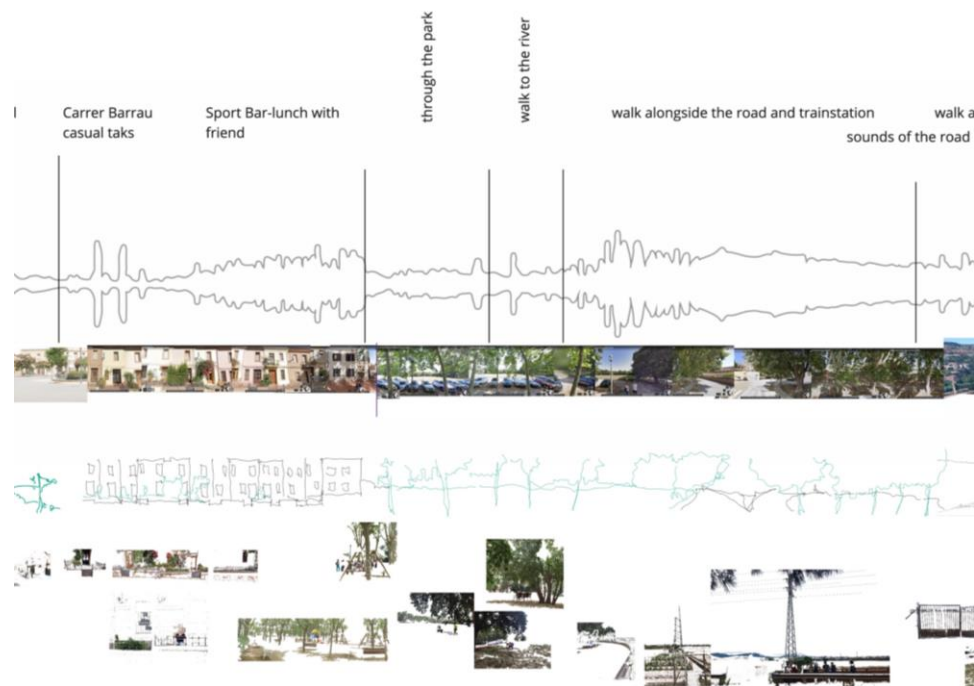


Figure 3. *Appropriated sounds (fragment)*. Source: Rute Carlos, Catherine Papst, Karl Inge Rosén and Liselotte Vroman

## Time

Time makes visible the multiplicities inscribed in a place by incorporating distinct and elastic diachronic scales, advocated both in short and long-time spans. Time can also represent the lived experience articulated with the various socio-spatial, political, environmental and economic dynamics of the place. So can it portray the experience of the self-being as its inhabitant, through the way one interacts with public space and sometimes appropriates it. Time reveals itself through the place. The place reveals itself through time. From this dialectic, the third question proposes to elaborate cartographies that cross the multiple scales of spatial, social, and personal relationships that define the temporal thickness of the territory. The last question asks how time can be a tool to map places through their history, processes, dynamics and rhythms and simultaneously use different time scales.

*5-minute experiences*<sup>15</sup> is one of the resulting answers that challenges the notion of landscape as simply spatial extent, and acknowledges the importance of subjective experience in understanding our surroundings. Here, the city is not made by its objects and materials only, but by how we travel through and interact with it, and the extent to which we have access to its content. To understand experience, we need to start with time. Subjective experience is situated in time as a sequence of moments, and configured by the way we move through our surroundings. Here, infrastructure becomes especially important. The investigation into time takes its vantage point in infrastructure and seeks to reveal hidden figures or qualities not visible in most conventional geospatial data. The basis for our investigations was a composite map showing three different isochrones for Colònia Güell based on a 5-minute threshold – by foot, by bicycle and by car/train. The contents of the isochrones were then articulated with various media and techniques interrogating how the three different infrastructures in play give rise to three completely different experiences of the landscape. The isochrones for pedestrians and cyclists depict the close, immersive, and sensory qualities of moving freely and unsheltered through the landscape. The isochrones for car and train highlight a fixed and

controlled mode of travel, where landscape is experienced through a window and the passenger orients mainly with the use of signs and symbols.

Through multiple media, the mapping addresses the temporalities that traverse a territory and their effect on architectures, landscapes, and our own personal experience. It also points towards an important question, as it portrays infrastructure as protagonist of the map in the unfolding of old, current, and future temporalities.



Figure 4. 5-minutes experiences (fragment). Source: Maarten Gheysen, Eulàlia Gómez-Escoda, Fredrik van der Horst and Karl Inge Rosén

## Flows

The last question interrogated the representation of flows through the territory: those related to domesticity and daily life; those related to the energy consumed in daily commuting; those of the networks that are activated by communications; or the more invisible ones, which trace the origin of food or the destination of daily waste. Daily movements have tangible and intangible implications that go beyond our area of proximity. This question aimed to trigger cartographies capable of synthesizing the double local-global scale of ordinary actions and the objects that surround us.

The fourth map, *Domestic Ficus*,<sup>16</sup> aims to explore and visualize the social aspects, industrial processes and infrastructure related to domestic vegetation and household plants. The stem of this mapping revolved around revisiting the site of Colònia Güell using google maps to outline the spatial significance domestic plants hold to everyday life. How does acquisition and maintenance of these plants connects to different processes throughout the local-global scale? Using google maps we were able to discover the five-year long evolution of a domestic Ficus tree in one of the household plots. The map assembles several collages that present the findings of how the Ficus tree may have interacted with the house creating marks on the facade, and how occupants cultivated and finally removed the plant. *Ficus elastica* is a plant species originally from southeast Asia, in a deeper time perspective, the plan also acts as a bridge that connects us to the long story before it became an ornamental plant common on domestic spaces all around the Mediterranean basin. The map also introduced a diagrammatic scheme of implications on a global scale of the driving forces linked to production of planting soil, fertilizer, as well as distribution flows. This was done through an

abstraction of the infrastructure network connected to Colònia Güell and the locations of plant nurseries, plant soil businesses and alternative travel routes in a 5-km radius.

Like the photographic gun of Etienne J. Marey capturing in frames the flight of a seagull,<sup>17</sup> the speculative mapping acts as a synthesis of the movement of flows that played a role in the Ficus lifespan, bringing to the fore the accumulation of simultaneous flows that make up a territory.



Figure 5. *Domestic Ficus (fragment)*. Source: Cruz Armando Criollo Aliendres, Weronika Gajda and Fredrik van der Horst.

## CONCLUSION

The combination of the twelve acts of mapping results in an atlas of unfinished drawings. A series of conclusions built through the academic experience can be extracted.

First, that the unfinished map is a deliberate state and works as an open cartography. There is no aim in finishing the maps as the end result would not reveal new insights, just a better-looking map. Secondly, that domestic digital tools are effective at exploring and presenting territories. Unlike sophisticated GIS driven maps, the format of the unfinished cartography obliges to use daily and accessible tools. At the same time these tools have a great potential in their combinations. Unlike global GIS cartographies, the digital domestic tools bring to fore the local condition and its particularities, as an in-situ mapping.

Third, the development of these cartographies allows synthesising, organising, ordering, and recording ideas, thoughts, and uncertainties. The mapping process opens new questions, speculations and, occasionally, some conclusions. A fourth relevant aspect is that these are collective maps that reflect a dialogue prior to or during their preparation. They result from an agreement and/or consensus between different ways of looking, understanding and communicating. They lie in the liminal space between the subjectivity that allows you to freely invent a narrative and the agreed objectivity that must respond to the question placed. Each of the unfinished maps became an open conversation that shows a co-construction of knowledge. A final extraction from the experience would be that unfinished maps do not fully reflect reality; they show a collectively constructed position in front of a real place and a specific question. There is a prior and conditioned selection from which there are multiple options for positioning. Each of the maps is original and they rarely repeat scales, elements, or perspectives between them. Each map seeks an original position to explore the same reality and multiply the ways of seeing or explaining it.

The combination of these conclusions makes up for an exciting approach to place analysis, representation and projection that can be explored further as complementary to other mapping techniques but potentially as a solid tool on its own. Indeed, if according to Corner “the unfolding

agency of mapping is most effective when its capacity for description also sets the conditions for new eidetic and physical worlds to emerge”<sup>18</sup>, these twelve incomplete acts of mapping proved to be effective in their results and extremely efficient in terms of the means needed to do so.

## **ACKNOWLEDGEMENTS**

This paper has been produced through researched funded by Erasmus+.

Along with the authors of this work, the program included the participation of architects and doctors Rute Carlos, Liselotte Vroman, Sabine Müller and Catherine Papst; as well as master's and doctoral students Cruz Criollo, Weronika Gajda, Sophie Leemans, Karl Inge Rosén and Fredrik van der Horst.

## NOTES

- <sup>1</sup> Summer school at Barcelona School of Architecture (ETSAB-UPC), 7th-13th June 2022
- <sup>2</sup> Salvador Tarragó, “Colònia Güell. A ruralised and Christian textile factory village”, *Quaderns d’arquitectura i urbanisme* 97 (2006): 96-105.
- <sup>3</sup> Tarragó, 104.
- <sup>4</sup> Gaudi’s crypt and the colònia Güell, managed by Advance Leisure Services, 2022.  
<https://gaudicoloniaguell.org/en/>
- <sup>5</sup> Oswald M. Ungers “Architecture of the Collective Memory: The Infinite Catalogue of Urban Forms”, *Lotus International* 24 (1979): 127.
- <sup>6</sup> André Corboz, “The Land as Palimpsest”, *Diogenes* 31(121) (1983): 12–34.
- <sup>7</sup> Gunther Vogt, “We are geomorphic agents!,” in *Distance and Engagement, walking, thinking and making landscape*, ed. Gunther Vogt and Alice Foxley (Baden: Lars Müller Publishers, 2010).
- <sup>8</sup> Made by Fredrik van der Horst, Rute Carlos, Sophie Leemans and Eulàlia Gómez-Escoda
- <sup>9</sup> Known as “Mapa geològic y topogràfic de la provincia de Barcelona: región primera ó de contornos de la capital” [Geological and topographical map of the province of Barcelona: first region or the outskirts of the capital city] drawn by Jaume Almera and Eduard Brossa in 1888, available at Institut Cartogràfic i Geològic de Catalunya [Cartographic and Geological Institute of Catalonia], accessed January 24, 2023,  
<https://cartotecadigital.icgc.cat/digital/collection/catalunya/id/2174/>
- <sup>10</sup> Joan Fontcuberta, *El beso de Judas. Fotografía y verdad* (Barcelona: Gustavo Gili, 1997).
- <sup>11</sup> Carolina A. Miranda, “Andrés Jaque Finds the Urbanism in L.A. Sprawl”, *Architect Magazine*, February 2, 2022.  
[https://www.architectmagazine.com/design/exhibits-books-etc/andres-jaque-finds-the-urbanism-in-l-a-sprawl\\_o](https://www.architectmagazine.com/design/exhibits-books-etc/andres-jaque-finds-the-urbanism-in-l-a-sprawl_o)
- <sup>12</sup> Gilles Clément, *Manifeste du Tiers Paysage* (Paris : Sens & Tonka, 2014).
- <sup>13</sup> Clément, 14.
- <sup>14</sup> Made by Rute Carlos, Catherine Papst, Karl Inge Rosén and Liselotte Vroman.
- <sup>15</sup> Made by Maarten Gheysen, Eulàlia Gómez-Escoda, Fredrik van der Horst and Karl Inge Rosén
- <sup>16</sup> Made by Cruz Armando Criollo Aliendres, Weronika Gajda and Fredrik van der Horst
- <sup>17</sup> Bruno Latour and Albena Yaneva, “Give Me a Gun and I Will Make All Buildings Move: An ANT’s View of Architecture,” in *Explorations in Architecture: Teaching, Design, Research*, ed. Reto Geyser (Basel: Birkhäuser, 2008), 80-89.
- <sup>18</sup> James Corner, “The Agency of Mapping”, in *Mappings*, ed. Denis Cosgrove (London: Reaktion Books, 1999), 214.

## BIBLIOGRAPHY

- Clément, Gilles. *Manifeste du Tiers Paysage*. Paris: Sens & Tonka, 2014.
- Corboz, André. “The Land as Palimpsest”. *Diogenes*, 31(121) (1983): 12–34.
- Corner, James. “The Agency of Mapping.” In *Mappings*, edited by Denis Cosgrove, 213-300. London: Reaktion Books, 1999.
- Fontcuberta, Joan. *El beso de Judas. Fotografía y verdad*. Barcelona: Gustavo Gili, 1997.
- Miranda, Carolina A. “Andrés Jaque Finds the Urbanism in L.A. Sprawl”. *Architect Magazine*., February 2, 2022.  
[https://www.architectmagazine.com/design/exhibits-books-etc/andres-jaque-finds-the-urbanism-in-l-a-sprawl\\_o](https://www.architectmagazine.com/design/exhibits-books-etc/andres-jaque-finds-the-urbanism-in-l-a-sprawl_o)
- Latour, Bruno and Yaneva, Albena. “Give Me a Gun and I Will Make All Buildings Move: An ANT’s View of Architecture.” In *Explorations in Architecture: Teaching, Design, Research*, edited by Reto Geyser, 80-89. Basel: Birkhäuser, 2008.
- Tarragó, Salvador. “Colònia Güell. A ruralised and Christian textile factory village”. *Quaderns d’arquitectura i urbanisme* (2006): 96-105.
- Ungers, Oswald Mathias. “Architecture of the Collective Memory: The Infinite Catalogue of Urban Forms”. *Lotus International* 24 (1979).
- Vogt, Gunther. “We are geomorphic agents!.” In *Distance and Engagement, walking, thinking and making landscape*, edited by Gunther Vogt and Alice Foxley. Baden: Lars Müller Publishers, 2010.

Waldheim, Charles, Desimini, Jill, Mostafavi, Mohsen. *Cartographic Grounds: Projecting the Landscape Imaginary*. New York: Princeton Architectural Press, 2016.

# PARK HILL SHEFFIELD: UNDERSTANDING REPRESENTED PLACE THROUGH VISUAL ARTS PRACTICE

Author:

**TIM MACHIN**

Affiliation:

SHEFFIELD HALLAM UNIVERSITY, UK

---

## INTRODUCTION

Park Hill Flats, Sheffield, UK is an iconic post-war modernist “cité radieuse”. A parkland-set social housing project conceived from the beginning as “picture architecture”<sup>1</sup> intended to change housing conditions in Sheffield but by elevating modern working class housing on a prominent site right above the city centre in the 1950s, aimed to re-present this grimy, industrial, war-damaged city. A contemporary critic declared: “[Park Hill] cannot fail to be a major step in revitalizing the whole centre of the city.”<sup>2</sup>

Extensively documented,<sup>3</sup> Park Hill has been well represented through the lens of the conventional narrative of post-war high rise public housing in the UK – that of socialist-utopia-become-crime-scene, as Lynsey Hanley has noted: “[Park Hill] remind[s] people of a kind of socialism that is imposed rather than agreed: the very opposite of consensus”<sup>4</sup>. The narrative continues, with the estate now in the process of public/private transformation, where a private sector developer is refurbishing flats and parkland, for private sale,<sup>5</sup> retaining more limited public access and a small quantity of social housing. At the same time, representations of Park Hill have reflected prevalent views of the changing fortunes of Sheffield itself.<sup>6</sup>



*Figure 1. Park Hill Flats*

These representations are used by key actors – politicians, architects, planners, developers, investors - to “roll the pitch” for development practices applied to the city at large<sup>7</sup>, a practice elsewhere identified by Marotta and Cummings as acting to create an indeterminate space which, “gives power a

raw material to mold, a way to (attempt to) capture an affective register so as to manage a place's becoming.”<sup>8</sup>

This paper presents a suite of artworks including installations, a newspaper and a radio play which use art practice to find a pathway to explore “official” representations of Park Hill, whilst resisting the hegemonic narratives they are employed in support of. This is an artistic process, but holds onto Claudia Mitchell's recognition that, “[w]orking with the visual to create artistic texts... Should be regarded as an interpretive process in and of itself”.<sup>9</sup>

## THE WORKS

This is a journey through “found” images, employing collage as research a method – finding, collecting, dismantling, cutting, pasting and juxtaposing images to understand this architecture of the imagination and its use of and hold over understandings of history and time: “The collage holds the possibility of correcting, reinventing the past and linking historical moments and people to one another”.<sup>10</sup>

Reuse of found images opens up consideration of IP and ethical issues. As Richard Misek has pointed out, “property is also a spatial phenomenon. Though distinct and often discussed separately, intellectual property and spatial property are closely related.”<sup>11</sup> At Park Hill there is an opportunity not just to understand the limits proscribed around reproducing images belonging to others, but also as a way of understanding this entwinement of intellectual and physical property as expressed through less easily delineated claims of ownership of imagined spaces.

## The Archive

At the heart of the suite an approach to archival material drawing on Alan Sekula's notions of the “archival artwork”. Here a series of existing archives have been identified and cuts of the material made: raw material affording the possibility of new equivalences between images, where: “new meanings come to supplant old ones, with the archive serving as a kind of 'clearing house' of meaning”<sup>12</sup>, centred around communicating the planning and construction of the building and its site from the 1950s through subsequent changes and its post-2006 public/private rebirth.

## Reconstruction

The first of these investigations is *Reconstruction*, a projection installation, where a vintage slide projector automatically clicks through a carousel of 120 35mm transparencies, projected near-actual size in a former garage block at Park Hill, itself reimagined as a temporary home for a gallery and artists' studios.<sup>13</sup> Staging is minimal, the projector sits on the concrete floor and the white walls of the gallery act as a projection screen, implicating the building in the production of the work.



Figure 2. *Reconstruction* (detail)

*Reconstruction* is a recovery of a now disappeared place – from 2006 onwards the landscaped parkland around the flats has been swept away and replaced with an entirely different (and unashamedly contemporary) approach, “that will redefine each open space within the site and give it a clear image, a clear and needed function and a richness of colour and delight”.<sup>14</sup> Although a listed heritage asset,<sup>15</sup> preservation has been largely through recording and remaining elements are shorn of their original intelligibility and functions.<sup>16</sup>

*Reconstruction* reworks archival representations, into a fleeting, barely physical rebuilding in light, a flimsy pavilion built from history and time sitting alongside and acting upon the well-known monument. The making process was deceptively simple, beginning with the identification of images of the parkland, within the “archival artwork” all associated with the construction and earliest occupancy of the estate – predominantly images commissioned by Sheffield Corporation<sup>17</sup> or local and architectural press.<sup>18</sup> Carefully staged “official” views of Sheffield’s ambitious new housing, these images are demonstrations of intent, the landscape staged in its ideal form. Images were then carefully, closely cropped to shift the subject to the “lost” landscape: lawns, trees, paths, steps and their users. These digital images were then rephotographed on 35mm E6 transparency film.

This is a view of the park as more than a setting for the building. The dazzling brightness of these images emphasises the sculptural, idealised qualities of the landscape yet also reveals and frames vistas beyond, of the smoky city, of soot-blackened gothic churches – a delight in the picturesque but also the cross hairs of future transformations. Elsewhere wide-open spaces meet their match in generously-sized baby boom prams and the structure frames and directs the play of its younger residents, in a plethora of images of childhood play – a site intended to last for and act on generations to come.

From our present day viewpoint there is a dramatic irony in these images – early water-staining on concrete, tyre marks in the grass, unswept paths – and empty spaces which will become so remorselessly empty in the future.

As an installation in the sandblasted concrete of Park Hill, viewers are immersed in the sound, heat and smell of the 35mm slide projector, a half-forgotten method of image display rendering the temporality of these images uncertain. The installation could have been staged in 1965, and as we cross the projector beam (having walked up through Park Hill’s re-landscaped gardens) our shadows blend with those of long-gone residents, an invitation to consider the action of the past on the present and the action of the present on the past.



Figure 3. *Reconstruction* (detail)

This installation might sit within the category of interventions Jill Stoner has termed “Minor Architecture” (building on Gilles Deleuze): “The spatial conditions we are calling minor may already be close by, latent within our consumer objects, veiled by property relations. To tease them out is to think outside conventional visual paradigms, to resist the linearity of time and the seduction of progress,”<sup>19</sup>. *Reconstruction* aims to offer a minor reading of this landscape to see it through the prism of the smooth/striated dialectic and problematise decisions around its various transformations as attempts at control: “Power structures operate by facilitating such dichotomous distinctions: by stratifying, filing, sequencing, making categories and concordances, endlessly organizing.”<sup>20</sup>

### A New Landscape

The changing actions of power on this landscape are further charted in the next work, which plays further with the re-projection of found images. *A New Landscape* is a two-screen video installation, using uncropped images mined from planning documents from 2006-present,<sup>21</sup> placed side by side. The images are drawn from different, yet standard, classes of documents – Design and Access Statements,<sup>22</sup> with aspirational “mood board” imagery and technical reports, those artless catalogues of trees, ecological parcels, heritage assets. On one screen, those representing “the past” on the other “the future”, a slow collage of images of decay, of a decaying, abandoned landscape where concrete ruins sit in an increasingly untamed wilderness contrasted with images selling an imagined, better future<sup>23</sup> – of rolling hills, a continental square, or a mixed age group tending a garden. As each image is slowly cycled through unexpected juxtapositions occur, temporary collages which produce momentary new readings of both site of the images. Throughout, time is twisted, slowed. In these conjunctions there never is any present – these images are already archived and past, trees reported on and removed for example, or are a never-to-be-realised future where the pasts of other places are projected onto this place’s future.



Figure 4. *A New Landscape* (detail)

As Parveen Adams has noted "The collage is not a hybrid of the original images. It does not neatly join a part of one with a part of the other. The joins produce on the one hand, a distinct third product [...] There is a gap between the two in which there is nothing to be seen. We come close to seeing the

nothing to be seen.”<sup>24</sup> Here then is an invitation to see - in the arboricultural reports, for example, images are a sequence of each tree at Park Hill, individually documented, but (as far as the report is concerned) the is little more than evidence of the existence of a tree. And yet, these images leak out other meanings, a painted goal post remaining on a concrete wall, a passer-by, one of the surveyors at work. This is the hidden process of making a place, of working on it. Images that aren’t the public imaginary yet bring it into being.

This dialectic between the “was” and “will be” is sits at the very heart of regeneration and planning: Park Hill was a historic failure and needs a brighter future<sup>25</sup>. Yet this disjuncture is also a moment of crisis, of a failure – where a promised future fails to live up to the past, in these hauntological yet workaday representations. These found images are fragments, literally “witness to a previous dismantling”<sup>26</sup> whether of this landmark building or of a hundred other architectural schemes collected and represented as Design and Access Statements. This is an organising principle of collage, as Herrmann et al reflect: “as ‘found imagery’, there is also the sense that these source images have gathered the imprint of time and circumstances: they each have a past often obscure and unknowable. One could say they have a secret life, behind the line of a cut or beyond their horizon.”<sup>27</sup>

The rhythmic pace of the slow sliding into view of these bright, digital images lends the work a slow monumentality, despite the obvious flaws of these found images, where the varying sizes and quality of the originals. Artless composition, ill-focused subjects, pixellation and glitches are foregrounded tracking an image-life through site, camera, hard copies and digital (and digitised) archives.

The warp and weft of this digital materiality, hints at possibilities of alternative sculptural and curatorial encounters with these images: how might we handle them? How might they be picked up and turned in space? How much do they weigh?

In a planning system where “giving weight” is part of the process,<sup>28</sup> the heft of these images is important. Magnified, monumentalised, the material solidity of these images is opened to new understandings. We might take for granted that a glossy hi-res sheen lends marketability to the promises of regeneration, recognise that grungy veracity conveys the objectivity of the tree survey – yet does a low-res Wikipedia-scraped thumbnail reflect a lack of care or a deliberate desire for obfuscation?

## Prospect

As Pojani and Stead have suggested: “Planning imagery links the past, present and future into a willed history”.<sup>29</sup> The next work, *Prospect*, explores the latent power of these images to create an imagined future through various attempts at making a publication, resulting in a sixteen-page tabloid newspaper. The deliberately playful process – if you put these images together, what can you make? Is reflected in the unstapled but folded spreads of the final work which invite new arrangements and new logics. This iterative process raised questions and suggested different, visual, structures and architectures of these images, for example, where all the images align on a single point perspective, or began to inscribe circles or meet as a forest canopy.



Figure 5. *Prospect* (front cover)

In taking away reference to Park Hill we are thrown back on understandings we ourselves bring to these images, grasping for the familiar in them. Theories of collage provide a useful scaffold for understanding these transformations, this willing of new histories: “Even more than the individual archive held in the painter’s memory, the collage/arrangement of existing images depends on a collectively negotiated archive”.<sup>30</sup> These index a future, imaginary place but also our own experiences and memories of place(s). This process, of course, is of great appeal to the marketer - exploited in the mood board where each fragment offers the viewer potential, affective familiarity, a direct line between the product and the viewer’s own emotional, idealised, experiences.

### **Radio Play**

The final work in the suite builds on this mining of the source material as object, as fragments to rework and explore. *Radio Play* is a script developed using verbatim theatre approach, intended perhaps less for broadcast than as a step towards a participatory artwork.<sup>31</sup> It dramatizes archival material as conversations between key participants in the development and redevelopment of Park Hill from the 1950s to the present, folding scenes of the building’s initial construction and early tenants’ experiences into the challenges of its more recent regeneration, sourced purely from preserved documents— direct quotes sometimes, but also the piecing together of conversations conducted through terse typewritten memos or the deciphering of the scrawled feedback sheets from public workshops about Park Hill’s future. Here voices from the past unpick those of the more recent past (again the present is still elusive) where hopes for the future from the 1960s are set against those from the 2010s through residents’ (forgotten) letters to the council, responses to questionnaires and comments on planning applications.

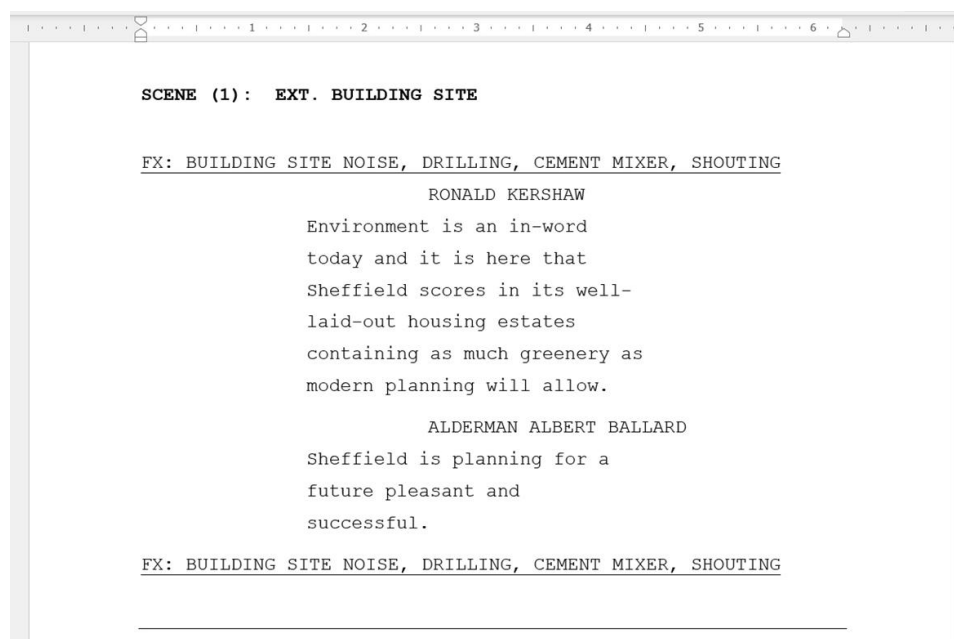
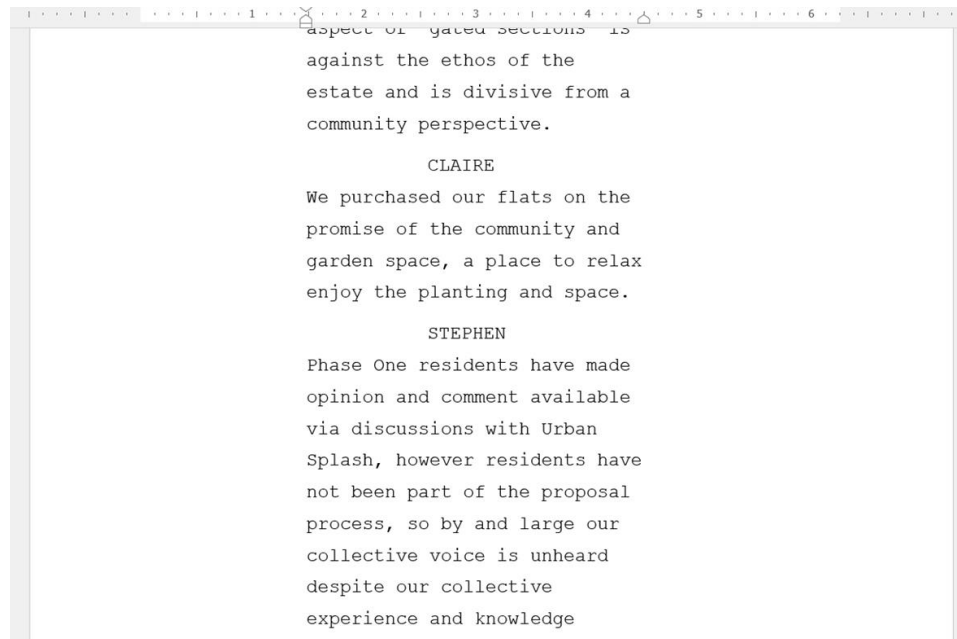


Figure 6. *Radio Play (detail)*

The dialogue in *Radio Play* pivots around description – of place, of activity, heavily laden with imagery. To an extent, this directs the choice of scenes the editing of the found text and the excavation of imagery therein. Discussion of the demolition of a chapel (and the temporary repurposing of its basement) in the 1950s evokes a battlefield decision – setting up a temporary command centre during the battle of Normandy. Elsewhere, the twenty-first century developer unwittingly recalls pulp sci-fi, in an unconscious echo of the difficulties of persuading people to live in this novel, strange, alien space faced by Sheffield Corporation Housing Department in the 1950s.

This format gives a different kind of life to voices in the planning system. Over a period of about a decade from the first residents moving in to the redeveloped Park Hill, through the later phases passing through planning and construction residents' responses to the system (workshops, objections) and to life at Park Hill are given a new hearing. Not only reflecting the reality of life at Park Hill (the gravel from the Tuileries-inspired paths gets caught in the doors, Park Hill's use as an iconic venue for the finish of a cycle race causes noise and disruption) the also chart something more affective – here we can see the gulf between utopian imagined future and reality - concerns for example that all the social housing will in one block which will see that block being represented as the 'social housing block', a concern for property values masked (or masking) the altruistic, utopian ideal of the mixed community that these owner occupiers have bought into.



*Figure 7. Radio Play (detail)*

## CONCLUSION

This research aims to trace and show the scope of imagery used in Park Hill's production as an iconic place. In studying these longitudinally we start to see how images have been recycled to sell and produce particular readings of the site by its developers, but at the same time how these images have acted upon and produced affect in its inhabitants. Applying visual arts practice to archival images of Park Hill affords new ways of seeing this well studied site: from recovering important details of the original landscape, and the intentions for this, to understanding the way that aspirational, utopian images of the site have worked to shape residents' experiences. At the same time, we can see the rich potential of documents preserved in these "working" archives – the public record of the planning process as a source of lived experience and repository of overlooked visualities of the process of bringing places into being.

## NOTES

<sup>1</sup> See Claire Zimmerman. *Photographic Architecture in the Twentieth Century* (Minneapolis: University of Minnesota Press, 2014), 21-47 for a discussion of architecture as representation.

<sup>2</sup> Pat Crooke, "Park Hill 1 and 2", *Architectural Design* Vol. 31 no. 9, 403 (1961)

<sup>3</sup> This is a well-studied site – its architecture and social impact promoted from the beginning as a case study, where its first tenant, Mrs J Demers, variously cited as social worker, housing officer and sociologist, lived at the estate in its first few months, helping guide tenants in the correct use of the new facilities, but also feeding back to Sheffield Corporation and the city architects tenants' surveyed opinions. The role of this as a system of control is further discussed in Matthew Hollow "Governmentality on the Park Hill Estate: The Rationality of Public Housing." *Urban History* 37, no. 1 (2010): 117-135. <http://www.jstor.org/stable/44614251>.

<sup>4</sup> Lynsey Hanley. *Estates: An Intimate History* (London: Granta Books, 2007), 119

<sup>5</sup> "Park Hill, Sheffield", Urban Splash, accessed 10 February, 2023, <https://www.urbansplash.co.uk/regeneration/projects/park-hill>

<sup>6</sup> Compare, for example Tony Belshaw, "Approval for upgrade of 'an eyesore'", *Sheffield Star*, 22 August, 2006 with David Walsh, "Park Hill Sheffield: Stiff competition for next phase of flats expected as popularity comes 'full circle' *Sheffield Star*, 24 August 2022, accessed 14 February 2023, <https://www.thestar.co.uk/business/park-hill-sheffield-stiff-competition-for-next-phase-of-flats-expected-as-popularity-comes-full-circle-ad-feature-3817407>. In the run up to the heritage listing of the estate, local press was calling for its demolition. Now it is once again a much-cherished landmark, its image sold on merchandise in city gift shops and the subject of an award-winning musical *On Sky's Edge*.

<sup>7</sup> See for example Jayne Dowle, "How the redevelopment of Sheffield's Park Hill has helped transform Steel City", *Yorkshire Post*, 8 August 2021, accessed 14 February 2023, <https://www.yorkshirepost.co.uk/lifestyle/homes-and-gardens/how-the-redevelopment-of-sheffields-park-hill-has-helped-transform-steel-city-3336742>

<sup>8</sup> Steve Marotta and Austin Cummings. "Planning Affectively: Power, Affect, and Images of the Future." *Planning Theory* 18, no. 2 (London, England 2019), 191-213. doi:10.1177/1473095218802317. <https://journals.sagepub.com/doi/full/10.1177/1473095218802317>.

<sup>9</sup> Claudia Mitchell. *Doing Visual Research*. (Los Angeles: SAGE, 2011), 11

<sup>10</sup> Dennis Busch, Hendrik Hellige, and Robert Klanten. *The Age of Collage: Contemporary Collage in Modern Art*. Berlin: Gestalten, 2013.

<sup>11</sup> Richard Misek. "Trespassing Hollywood: Property, Space, and the Appropriation Film." *October*, 153, 132–148. [https://doi.org/10.1162/OCTO\\_a\\_00230](https://doi.org/10.1162/OCTO_a_00230)

<sup>12</sup> Alan Sekula. "Reading an Archive" in *The Photography Reader*, ed. Liz Wells, (London: Routledge, 2002), 444

<sup>13</sup> S1 Artspace is an art gallery and artist studio complex currently housed in a former garage block at Park Hill but has ambitious plans to convert one of the multi-storey blocks into an arts centre and use part of the landscape as a sculpture garden.

<sup>14</sup> Grant Associates. "A New Landscape" in *Park Hill Outline Planning Report*, (Hawkins\Brown and Studio Egret West, London 2006), 26

<sup>15</sup> "Park Hill", Historic England, accessed 14 February 2023, <https://historicengland.org.uk/listing/the-list/list-entry/1246881>

<sup>16</sup> For example concrete walls which originally offered sculptural framing for pathways demonstrating the continuation of the famous street decks into the garden are now divided from paths, fragmented and used as the backdrop for the planting scheme.

<sup>17</sup> Sheffield City Council was 'Sheffield Corporation' until the 1970s.

<sup>18</sup> There is some overlap between the origin of these images, where images recur as credited to the council and also used in publication, suggesting close collaboration between council photographers and press officers and journalists.

<sup>19</sup> Jill Stoner. *Toward a Minor Architecture* (Cambridge MA: MIT Press, 2012), 15

<sup>20</sup> Stoner, *Toward a Minor Architecture*, 7

<sup>21</sup> These are images taken from the largely PDF documents submitted to gain planning permission for the various phases of regeneration.

<sup>22</sup> "A design and access (DAS) statement is a short report accompanying and supporting a planning application. They provide a framework for applicants to explain how a proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users." See "What is a Design and Access Statement?", PortalPlanQuest Limited, accessed 10 February, 2023,

<https://www.planningportal.co.uk/services/help/faq/planning/about-the-planning-system/what-is-a-design-and-access-statement>

<sup>23</sup> The audience for this varies, but in planning documents is predominantly key decision makers – Sheffield councillors and officers, government funding agencies, and heritage bodies – but this shapes the way the site will be promoted to property buyers in the future. As a site with such a long development process, where residents are well settled whilst future phases take place, there is a further layer of existing residents consuming the imagery used to promote later stages, which is explored further in *Radio Play*.

<sup>24</sup> Parveen Adams. "Adding and Taking Away: John Stezaker Collages." *Photographies* 12, no. 3 (Sep 2, 2019): 267-282. <http://www.tandfonline.com/doi/abs/10.1080/17540763.2019.1629995>.

<sup>25</sup> This division is at the heart of all these documents – whether surveying the existing landscape thereby relegating it to something to be acted upon or promoting a future change. Indeed the division is used quite explicitly in the glossy development prospectus that set out the approach at "preferred developer" bid stage.

<sup>26</sup> Brandon Taylor. *Urban Walls : A Generation of Collage in Europe and America : Burhan Dogançay with François Dufrêne, Raymond Hains, Robert Rauschenberg, Mimmo Rotella, Jacques Villeglé, Wolf Vostell*. New York: Hudson Hills, 2008.

<sup>27</sup> Daniel F. Herrmann, John Stezaker, Dawn Ades, Christophe Gallois, and Michael Bracewell. *John Stezaker*. London: Ridinghouse/Whitechapel Gallery, 2011.

<sup>28</sup> See for example, "The Essential Guide: How planning decisions are made", Strategic Land Group, accessed 14 February 2023, <https://www.strategiclandgroup.co.uk/insights/planning-decisions-made>

<sup>29</sup> Dorina Pojani and Dominic Stead. "Post-Rational Planning and the Shifting Role of Planning Imagery." *Journal of Urban Design* 21, no. 3 (2016): 353-385. doi:10.1080/13574809.2016.1167590.

<sup>30</sup> Michael Renner "New Images. Imagination in the Process of Aesthetic Practice—The Process of Collage." *Proceedings* 1, no. 9, 960 (2017)

<sup>31</sup> At the time of writing, it is intended to stage and record some rehearsed readings of scenes from the play with invited groups at appropriate locations at Park Hill.

## BIBLIOGRAPHY

Adams, Parveen. "Adding and Taking Away: John Stezaker Collages." *Photographies* 12, no. 3 (Sep 2, 2019): <http://www.tandfonline.com/doi/abs/10.1080/17540763.2019.1629995>.

Belshaw, Tony. "Approval for upgrade of 'an eyesore'", *Sheffield Star*, 22 August, 2006 .

Busch, Dennis, Hendrik Hellige, and Klanten, Robert. *The Age of Collage: Contemporary Collage in Modern Art*. Berlin: Gestalten, 2013.

Crooke, Pat, "Park Hill 1 and 2", *Architectural Design* Vol. 31 no. 9, 393-404 (1961).

Dowle, Jayne. "How the redevelopment of Sheffield's Park Hill has helped transform Steel City", *Yorkshire Post*, 8 August 2021, accessed 14 February 2023, <https://www.yorkshirepost.co.uk/lifestyle/homes-and-gardens/how-the-redevelopment-of-sheffields-park-hill-has-helped-transform-steel-city-3336742>.

Grant Associates. "A New Landscape" in *Park Hill Outline Planning Report*, (Hawkins\Brown and Studio Egret West, London 2006).

Hanley, Lynsey. *Estates: An Intimate History*. London: Granta Books, 2007.

Herrmann, Daniel F., John Stezaker, Dawn Ades, Christophe Gallois, and Michael Bracewell. *John Stezaker*. London: Ridinghouse/Whitechapel Gallery, 2011.

Historic England. "Park Hill", accessed 14 February 2023, <https://historicengland.org.uk/listing/the-list/list-entry/1246881>.

Hollow, Matthew. "Governmentality on the Park Hill Estate: The Rationality of Public Housing." *Urban History* 37, no. 1 (2010), <http://www.jstor.org/stable/44614251>.

Marotta, Steve and Austin Cummings. "Planning Affectively: Power, Affect, and Images of the Future." *Planning Theory* (London, England) 18, no. 2 (May, 2019). doi:10.1177/1473095218802317. <https://journals.sagepub.com/doi/full/10.1177/1473095218802317>.

Misek, Richard. "Trespassing Hollywood: Property, Space, and the Appropriation Film." *October*, 153, [https://doi.org/10.1162/OCTO\\_a\\_00230](https://doi.org/10.1162/OCTO_a_00230).

Mitchell, Claudia. *Doing Visual Research*. (Los Angeles: SAGE, 2011), 11

- PortalPlanQuest Limited. "What is a Design and Access Statement?", accessed 10 February, 2023, <https://www.planningportal.co.uk/services/help/faq/planning/about-the-planning-system/what-is-a-design-and-access-statement>.
- Pojani, Dorina and Dominic Stead. "Post-Rational Planning and the Shifting Role of Planning Imagery." *Journal of Urban Design* 21, no. 3 (2016). doi:10.1080/13574809.2016.1167590.
- Renner, Michael. "New Images. Imagination in the Process of Aesthetic Practice—The Process of Collage." *Proceedings* 1, no. 9, (2017).
- Sekula, Alan: "Reading an Archive" in *The Photography Reader*, ed. Liz Wells. London: Routledge, 2002.
- Stoner, Jill. *Toward a Minor Architecture* (Cambridge MA: MIT Press, 2012).
- Strategic Land Group, "The Essential Guide: How planning decisions are made", accessed 14 February 2023, <https://www.strategiclandgroup.co.uk/insights/planning-decisions-made>.
- Taylor, Brandon. *Urban Walls : A Generation of Collage in Europe and America : Burhan Dogançay with François Dufrêne, Raymond Hains, Robert Rauschenberg, Mimmo Rotella, Jacques Villeglé, Wolf Vostell*. New York: Hudson Hills, 2008.
- Urban Splash, "Park Hill, Sheffield", accessed 10 February, 2023, <https://www.urbansplash.co.uk/regeneration/projects/park-hill>
- Walsh, David. "Park Hill Sheffield: Stiff competition for next phase of flats expected as popularity comes 'full circle' Sheffield Star, 24 August 2022, accessed 14 February 2023, <https://www.thestar.co.uk/business/park-hill-sheffield-stiff-competition-for-next-phase-of-flats-expected-as-popularity-comes-full-circle-ad-feature-3817407>.
- Zimmerman, Claire. *Photographic Architecture in the Twentieth Century*. Minneapolis, Minn. [u.a.]: Univ. of Minnesota Press, 2014.

# RETHINKING THE SITES OF THE DITCHLEY PORTRAIT THROUGH NOTIONS OF POLYVOCALITY: DRAWING UPON NARRATIVES OF PLACE, TIME AND MEDIUM

Authors:

**CONSTANCE LAU**

Affiliation:

THE UNIVERSITY OF WESTMINSTER, UK

---

## RETHINKING ‘LIVED SPACE’ THROUGH MULTIDISCIPLINARY STUDIES

Rethinking ‘lived space’ through issues of site mediates mapping practices with multidisciplinary studies of painting, drawing, fine arts, poetry, literature, archaeological processes and architecture. These discussions radiate from the Ditchley Portrait, c. 1592, and all the places that are integral to and/or associated with this painting.<sup>1</sup> This is furthered by notions of polyvocality to optimise the existing body of multifaceted archival material. The notion of ‘lived’ locates and alludes to different types of boundaries across the various disciplines and mediums, and these studies are essential for reconstructing and representing the numerous buildings and sites that have not survived. Places and events are manifested by means of associated memories and intangible allegorical narratives, and explored through ‘perspective of meaning’. This sixteenth-century storytelling methodology apparent in historical works of art is revisited to communicate theoretical, cultural, social, ephemeral, experiential and material narratives within existing and reclaimed boundaries. Mapping practices expand upon the method’s inherent complexity and principles of montage to involve the variegated users. The latter’s fragmented, participatory and dialectical approach enables the layers of meanings that occur at different moments of engagement with the work to be conjured and reclaimed simultaneously in different and differing capacities. These simultaneously serve to confront, place and integrate spatial and chronological shifts regarding habitation, use and experience to initiate multiple material and experiential interpretations of the past, present and future of these sites through different creative processes.

## THE DITCHLEY PORTRAIT: NARRATIVE AND MULTIPLE INTERPRETATIONS

The Ditchley portrait, commissioned to commemorate the 1592 Accession Day Tilts is a larger-than-life-size painting which depicts Queen Elizabeth I standing on a globe with her feet on Oxfordshire, positioned as a figure between England and God.<sup>2</sup> The use of didactic allegory in the building of Elizabethan mythology is evident and the celestial association is reinforced by the portrayal of her ability to control the weather through dispelling storm clouds and ushering in sunshine. This technique of arranging individual objects to create a picture is also referred to as perspective of meaning and/or Elizabethan vision. This is manifested through issues of conveyance and includes the construction of visual symbols embedded with allegorical references as well as allusions to specific narratives.<sup>3</sup> The use of Elizabethan allegory through the individual symbolic elements and the composition of the figures serve to reinforce specific aspects of the narrative depending on the

assembling of different combinations. These works usually appear as a collection of individual objects placed within the picture plane, hence resulting in images that have ‘no unity in pictorial design’.<sup>4</sup> This idea of polyfocality is also apparent in works that encompass ‘a great variety of modes of presentation, points of view, media, styles, and levels of reality within one single depiction’, with the ‘tendency to treat single images as part of a larger visual ensemble’.<sup>5</sup> This approach is evident in ‘Sir Henry Upton’, c. 1596, a painting that depicts ‘lived space’ through commemorating his life and legacy within ‘a summary of the entire Tudor era’.<sup>6</sup> This presentation technique further allowed the sixteenth-century audience to understand and appreciate the intentions and implied meanings of the work. However, the use of didactic allegory meant that despite the different readings and pluralistic compositions afforded to the participant, the intended meanings were similar. Dialectical allegory in contrast facilitates the creation of new, multiple and individual readings where meanings are solely reliant on the users’ interpretations and required to complete the work. This is similar to notions of polyvocality where the inclusion of many and different ‘voices’ are used to shift and sustain narrative change. In this instance, this refers to the knowledge contributed by many people through the practice of archival research. More importantly, this idea of pronto-practices creates new definitions of ‘lived space’ to articulate the term ‘layers of meaning’ and demonstrate that the architecture and activities related to these places are inclusive and constantly shifting as opposed to finite.



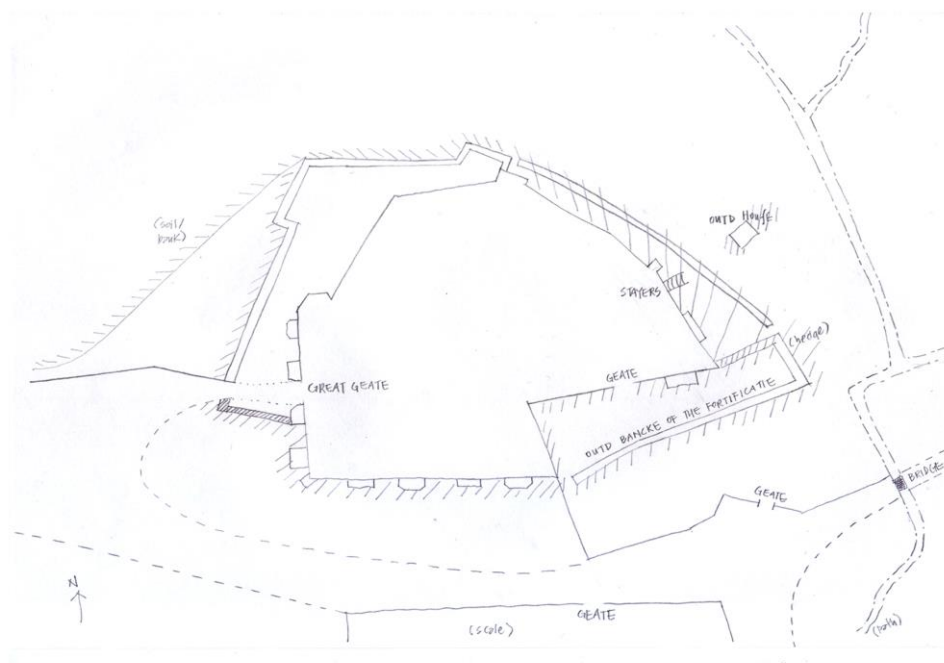
Figure 1. Ditchley Portrait, c. 1592, attributed to Marcus Gheeraerts the Younger

## PALIMPSESTS AND MATERIAL INDICATORS OF HISTORY

The sites associated with the Portrait date back to 1575, the most prominent being those of Ditchley Manor and/or Woodstock Palace where the painting was first presented to the Queen by Sir Henry Lee in c.1592 as part of private entertainments spread over two days. The geographical extents of these sites are not definite as neither currently exists.

The practice of archival research and discussions concerning mapping processes enable these historical narratives to be retold through material indicators on the grounds of what is currently Blenheim Palace and Gardens, c. 1700s.<sup>7</sup> The Queen's association with Ditchley and Woodstock is currently indicated by a small island in the middle of the lake. However, the historical significance of this site dates back to the turn of the eleventh-century as a 'royal resort and residence' for Henry I who constructed a stone enclosure for his deer and menagerie.<sup>8</sup> Henry II leaves his mark with the legend of Rosamond Clifford his mistress, and the romantic stories and ballads of the labyrinth and bower he built in an effort to hide her from Queen Eleanor. The well from where Rosamond obtained her bath water remains the oldest identifiable physical feature on site.<sup>9</sup> By about 1554-5, Woodstock Manor had become a quite impressive range of halls, chapels, courts, offices, a garden and even a tennis court.<sup>10</sup> This enlarged manor was subsequently also referred to as Woodstock Palace and was said to be sited on a hill overlooking a marsh with two raised causeways that led towards Woodstock and Oxford. Henry I's hunting lodge, which has been described as a separate but unambitious building, was rebuilt and added to by succeeding sovereigns until such time as Princess Elizabeth came to be imprisoned for her alleged part in the Wyatt Rebellion in 1554.<sup>11</sup> Woodstock Manor was inhabited until the time of King Charles I, but began to be demolished in the succeeding English Civil War from 1641.<sup>12</sup>

The earliest record of the Manor is a drawing of its ruins titled 'manor-house' dated c. 1695. There are no accredited visual records as the building was burned down and the remains were demolished in 1720. The process of cleaning out the lake in 1896 has revealed parts of its foundation and the current Grand Bridge is said to be partly constructed from the stone of the demolished Manor.<sup>13</sup> At present, the alleged sites of this building are claimed by Ditchley Mansion that was commissioned in 1722 and designed by James Gibbs, a 1961 stone memorial designed by William Chambers, and Sycamore trees overhanging the lake.<sup>14</sup>



Plan of the ruins of Woodstock manor-house, apparently drawn c. 1685

*Figure 2. Plan of the ruins of Woodstock manor-house, c. 1685*



Figure 3. Ditchley Mansion at present

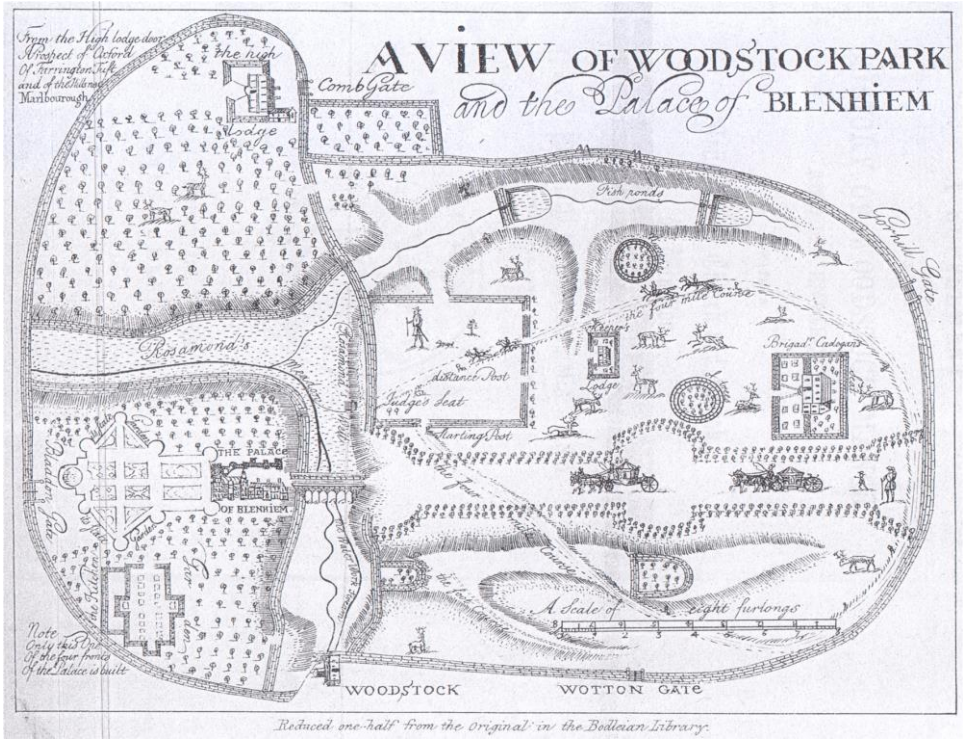


Figure 4. Plan of Blenheim Park, soon after the Date of the Original Grant



Figure 5. Material indicators of history



*Figure 6. Site plan of Blenheim Palace and Gardens*

The materially accessible entities enable contemporaneous encounters with the different narratives and layers of history within the cohesion of one physical site. While this is a fitting manner that ‘lived space’ can be experienced, a large amount of historical knowledge associated with the stories of and in the Portrait are overlooked. The idea that qualities apparent in perspective of meaning can be further derived intellectually through didactic and dialectical allegorical readings and allusions to enhance user participation will be discussed next to articulate the opportunities for additional definitions of ‘lived space’.

## ALLUSION AND HISTORIOGRAPHICAL MAPPING PRACTICES

The site of Woodstock predates the Portrait and is acknowledged as the place of the first documented allegorical performance Lee choreographed during the Queen's 1575 Summer Progress. The constitution of this event was integral to the imagery of the Accession Day Tilts, celebrations that were designed to establish the 'political and theological position' of Protestant England and the Queen's carefully constructed image as 'Supreme Governor'.<sup>15</sup> These jousting tournaments where knights paid homage to the Queen were celebrated in the tiltyard of Whitehall Palace. While the appearance of the building has completely changed, material characteristics still exist and the positioning of Henry VIII's original tiltyard that was established from the onset between 1530 and 1532, is spatially relatable to the current Horse Guards Parade ground.<sup>16</sup> This site is also one of the surviving areas of Whitehall Palace to have retained any ceremonial function.<sup>17</sup> The first Horse Guards building was commissioned by King Charles II in 1663 and until this day, remains the ceremonial entrance of Buckingham Palace.<sup>18</sup> The current building dated 1750–60 is the headquarters of the London District of the British Army and Household Cavalry, including the Household Cavalry Museum where original features include the cobbled floor and vaulted ceiling of the stables.<sup>19</sup> The integration of an aspect of history into the present context is apparent in one of the galleries that contain the Queen's Life Guard stables. Horses are still groomed for ceremonies in these original eighteenth-century stables and this activity can be glimpsed via a large glass partition in the Museum. The users' experience is further enhanced by the presence of the sentries at the entrance of the Horse Guards building that allude to the historical significance of this site and its association with royalty. The large open space through the archway and located alongside St James's Park is the Horse Guards Parade where the jousting tournaments occurred.

There are no surviving images and the Tilts are largely depicted through poetry and literary references.<sup>20</sup> Significantly, a piece of work hailed as a reflection of these significant celebrations is the Portrait. References to the idea of an annual feast in honour of the Queen recur in Elizabethan literature. These literary allusions further suggest that the Tilts were a fundamental aspect of the aesthetic language during the late sixteenth-century. Works which allude to the Tilts include Edmund Spenser's epic *Faerie Queen* (1590–1), Sir Philip Sidney's novel *Arcadia* (1590–3), and Michael Drayton's *The Shepheards Garland* (1593). These literary examples, termed by Frances Yates as 'word pictures' to reflect the pageantry of the Tilts have served to establish the emphasis on enactment within a fictitious narrative focused on particular themes, and woven around a deity-like figure.

The most precise visualisation of these celebrations can somewhat be reconstructed through a reading of George Peele's blank verse 'Polyhymnia' (1590). Composed specifically for a tilt in that same year, it remains the most detailed and descriptive account. The event is introduced chronologically with the repeated depiction of the thirteen pairs of tilters, their names, staging, and costumes as they entered the tiltyard. Descriptions of the elaborate costumes, accompanying paraphernalia and methods of arrival by means of horses, corteges, and pageant cars denoted the roles assumed by the knights. The one portrait which is said to be a visual translation of Peele's verse to painting and has been hailed as a reflection of these significant celebrations pertaining to the description of 'great Empresse of the world' and 'Star of Englands Globe', is the Ditchley portrait.<sup>21</sup> These written allusions are studied alongside existing pictorial documentation like the sketch of the tiltyard pavilion, drawings of jousting armour and score cards.

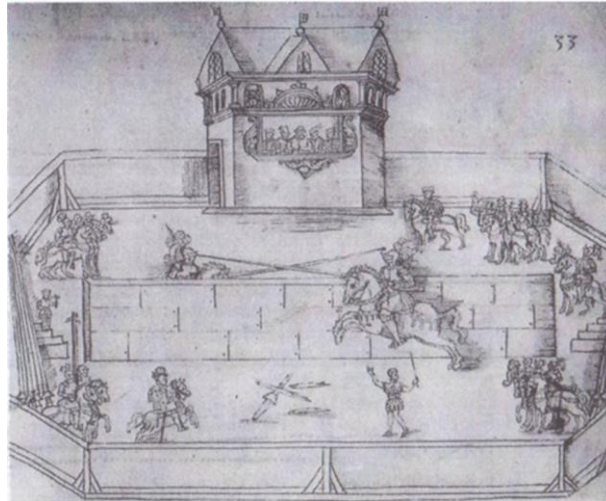


Figure 7. Sketch showing the Pavilion in the Tiltyard, c. 1600



Figure 8. Outline of the current Horse Guards building drawn over part of Henry VIII's tiltyard, and flanking the Parade Grounds at present

These sites are articulated and lived through the predominant mediums of historical and literary texts. This approach of multidisciplinary mapping through allegory and allusion further enables social,

political and cultural attitudes to be read alongside the material and ephemeral attributes on the grounds of Blenheim Palace. The qualities of polyvocality are enhanced as individual interpretations of the sites are construed from different combinations of physical, experiential and intellectual material. The resulting new narratives, readings and meanings further contribute to discussions of ‘lived space’.

### **POLYVOCALITY THROUGH DIFFERENT MEDIUMS AND DISSEMINATION METHODS**

The current site of the Portrait is the Tudor Gallery at the National Portrait Gallery in London, UK, and all material associated with the painting since the Gallery’s acquisition in 1933 is filed as Registered Packet 2561 at the Heinz Archive and Library. Meaningful engagement with the work and all the sites requires information that is historical and current, material and experiential. The extent of this new asynchronous archive consists of literary texts, visual works of art, oral records, as well as spatial, topographic and emotional experiences through individual encounters. These non-hierarchical fragments generate new meanings through adjacency and this idea of the ‘adjacent possible’ enables the intersecting boundaries and gaps between each body of knowledge to usher new combinations.<sup>22</sup> The analytical drawing communicating key aspects of ‘adjacent possible’ presents the associated sites in alphabetical order and as a chronological journey. This composition uncovers new ways to view and mediate between the different places, further demonstrating that there is always a history of drawings, objects and buildings within and against which an architectural work be seen’.<sup>23</sup> This dialectical notion of plurality where new meanings are produced through juxtaposition and adjacency foregrounds the role of the creative user and enables the understanding of the different sites to alter through different levels of interventions. Most importantly with each transformation, the shifts and gaps in knowledge are accommodated and the multiple facets of history, both tangible and intangible, are juxtaposed and exploited to resist fixed readings and meanings.<sup>24</sup>



*Figure 9. The Tudor Gallery exhibiting the Ditchley Portrait*

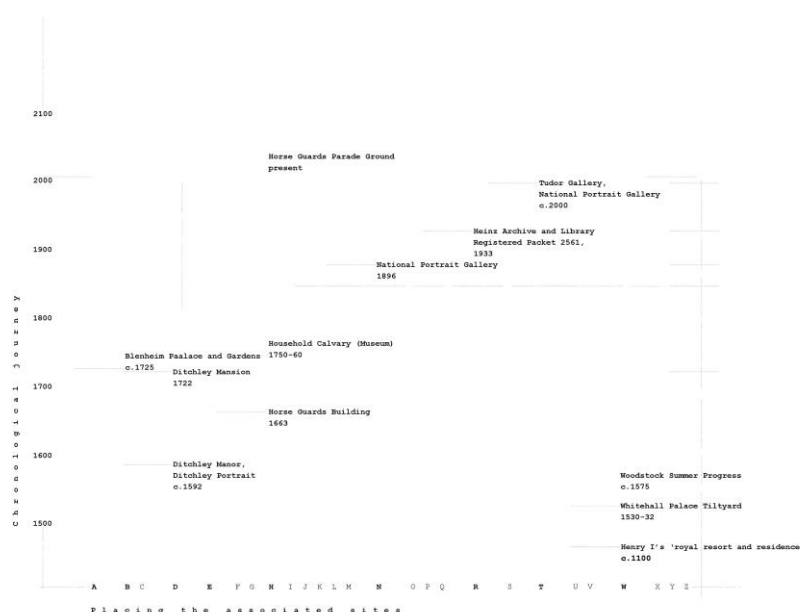


Figure 10. Locating the sites of the Ditchley Portrait and the 'adjacent possible'

The infinite interpretative qualities of this polyvocal system reference Umberto Eco's concept of 'openness' where organisational tactics are devised to facilitate the completion of the creative work through user interventions.<sup>25</sup> This dialectical approach presents the workings and components of a tool-kit, the archival material in this instance, and the poetics emerge as the user conceives personal modes of interpretations. This argument for initiating new approaches of dialectical thinking to disseminate site information also builds upon Gilles Deleuze and Felix Guattari's work concerning the 'rhizome' where the introduction of 'new things' as opposed to merely fitting things in 'pre-existing forms' were crucial in providing participants with 'a way to begin creating their own concepts'.<sup>26</sup> These ideas of an open system were 'fundamental to early theorisations of the internet and digital culture'.<sup>27</sup> Given that knowledge cannot be extracted or generated from a singular source, the initiation of a rhizomic open-system with random access further advocates for new working processes like pronto-practices to be adopted. This approach where resource structures include orchestrated networks of variegated users from different disciplines will enhance new engagement opportunities. These discussions concerning new systems for archival research and accessing material that emphasise the transitional qualities of polyvocality apparent in the physical and allegorical sites include current analogue and digital mapping processes. The architecture, activities and memories related to these site boundaries are perceived as knowledge that is constantly shifting and confront existing ideas of maps as fixed and factual entities. The significance of each piece of work is intrinsic to its medium, and the precise qualities of the specific medium are exploited to experience and perceive ideas of 'lived space' through these new knowledge systems. Hence the contributions of advancing technology are not assumed as more relevant and/or appropriate but challenged and compared to the complexity inherent in the didactic and dialectical approaches discussed. More importantly, the differences between exploiting the qualities of digital tools to address independent aspects of the research material against the construction of an overall organisation structure must be clearly distinguished.<sup>28</sup>

The habitation of the sites is discussed through ways of mapping and archiving where the distinct, fluid and non-hierarchical material transforms the interpretations of the work associated with each aspect and similarly, the work produced transforms the archive. The speculative characteristics

provokes and initiates innovative ways of looking at existing information to convey new asynchronous narratives and lived experiences, both in the past and future, through place, time and medium. The knowledge that would otherwise be consigned to memory or totally forgotten are retold, reworked and given new uses, readings and meanings. Consequently, these innovative reciprocal practices constitute new definitions concerning ‘lived space’ as the individual outcomes that reflect participation and use are returned to the continuously expanding collections.

## NOTES

<sup>1</sup> The Ditchley portrait measures 2413 x 1524 mm, is attributed to Marcus Gheeraerts the Younger and is currently displayed in the Tudor Gallery at the National Portrait Gallery, London, UK. Unless indicated otherwise all mentions of the Queen in this paper refer to Queen Elizabeth I.

<sup>2</sup> Susan Frye, *Elizabeth I: The Competition for Representation* (New York and Oxford: Oxford University Press, 1993), 114 and Frances Yates, “Elizabethan Chivalry; The Romance of the Accession Day Tilts,” *Journal of the Warburg and Courtauld Institutes*, v. 20, no. 1/2, January – June, (1995): 9.

<sup>3</sup> This notion set the tone regarding the commissioning and production of the portraits and images of Queen Elizabeth throughout her reign. Hence the term ‘lost sense of sight’ alludes to the fact that the ability to see and understand works of art presented in this manner is no longer common practice. Constance Lau, “A contemporary reading of the Accession Day Tilts in relation to festival and the Elizabethan notion of ‘lost sense of sight’,” in *Architecture, Festival and the City*, ed. Jemma Brown et al. (London: Routledge, 2019), 40. Additional reference, Roy Strong, *Gloriana: The Portraits of Queen Elizabeth I* (London: Thames & Hudson, 1987).

<sup>4</sup> Roy Strong, *The Cult of Elizabeth: Elizabethan Portraiture and Pageantry* (London: Thames and Hudson, 1977), 43. The original source is noted as ‘John White, *The Birth and Rebirth of Pictorial Space*, London, 1957, p. 35’.

<sup>5</sup> Martino Stierli, *Montage and the Metropolis* (New Haven and London: Yale University Press, 2018), 11.

<sup>6</sup> “A Full House of Tudors,” Breeze Barrington, [accessed February 2, 2023](https://www.apollo-magazine.com/tudors-holburne-museum-national-portrait-gallery-review/).

<https://www.apollo-magazine.com/tudors-holburne-museum-national-portrait-gallery-review/>

The painting ‘Sir Henry Upton’ measures 740 x 1632 mm, unknown artist and is currently displayed in the Tudor Gallery at the National Portrait Gallery, London, UK.

<sup>7</sup> Blenheim Palace was gifted to the first Duke of Marlborough by Queen Anne and the foundation stone was laid in 1705. Historical records date the completion to be around 1725.

<sup>8</sup> J. Vincent, *Guide to Blenheim and Woodstock* (London: Simpkin, Marshall, Hamilton, Kent and Co., 1903), 19. This was also perhaps the first enclosed park in England, the greater part of which remained until the eighteenth-century. Vincent, 14.

<sup>9</sup> Vincent, 16, 21. The less common spelling of ‘Rosamund’ appears in some sources.

<sup>10</sup> *Blenheim Palace, Woodstock, Oxfordshire Guide* (Oxfordshire: Blenheim Estate Office, 1975), 5.

<sup>11</sup> The Wyatt Rebellion, a popular uprising in England in 1554 was named after one of its leaders, Thomas Wyatt the younger. The most commonly accepted theory attributes the rebellion to the fear of England becoming Catholic once again. Hence the intention was to overthrow the newly crowned Queen Mary I and instate Elizabeth as Queen. The uprising failed, and Elizabeth was spared execution as she was unaware of the planned rebellion, but she was nonetheless imprisoned as a precautionary measure.

<sup>12</sup> King Charles I reined from 1625 until 1649. The war is also referred to as Times of Confusion and consisted of a series of three wars that lasted from 1641 to 1651. The result of this fighting between the Parliamentarians and Royalists established the precedent that an English monarch cannot govern without Parliament’s consent. This was later legally established in 1688.

<sup>13</sup> Vincent, 18.

<sup>14</sup> Ditchley Mansion was home to the seventeenth Viscount Dillon and the dining room remained the last documented location of the Portrait prior to its bequest to the National Portrait Gallery in 1933.

<sup>15</sup> Yates, “Elizabethan Chivalry,” 7 and Roy Houston, ed., *Queen Elizabeth II and the Royal Family* (London: Dorling Kindersley Ltd., 2015), 151. The Queen’s Accession Day took place on 17 November 1558.

<sup>16</sup> Simon Thurley, *Whitehall Palace* (New Haven and London: Yale University Press in association with Historic Royal Palaces, 1999), 46.

<sup>17</sup> The Parade ground also accommodates the ceremonies *Beating the Retreat* and *Trooping the Colour*. The first event takes place in May and June when military music and parades are performed under floodlights. The latter was a pageant to commemorate the late Queen Elizabeth II’s birthday and takes its name from the regimental colours on display. This ceremony is preceded by an official parade along the Mall with the reigning Monarch and other members of the royal household riding on horseback or by royal coach to the Horse Guards.

<sup>18</sup> After the fire of 1698, the Court moved to St James’s Palace and this building became the official entrance. By 1745, it was in disrepair, deemed unsafe and demolished. The current Horse Guards building consists of three arches with the central arch surmounted by the clock tower. The inscriptions of ‘SMF’ and ‘StMW’ on the main arch denote the historic parish boundaries of the churches St Martin in the Fields and St Margarets.

- <sup>19</sup> Emily Barber, *London* (London and Somerset: Blue Guides Ltd., 2014), 152. The Horse Guards building has been frequently attributed to William Kent. However, this account states that it was by William Robinson and John Vardy, 'influenced by the designs of William Kent'.
- <sup>20</sup> A suggested visual reference is the eight Valois Tapestries that depict ceremonial tilting at the French Court during the time of Catherine de Medicis. This body of mid-sixteenth-century textiles are attributed to cartoons by Lucas de Heere.
- <sup>21</sup> David H. Horne, *The Life and Minor Works of George Peele*, v. 1 (New Haven, CT: Yale University Press, 1952), 232.
- <sup>22</sup> Steven Johnson, *Where Good Ideas Come From* (New York: Riverhead Books, 2010), 31. The term 'adjacent possible' is credited to the scientist Stuart Kauffman.
- <sup>23</sup> Yeoryia Manolopoulou, *Architectures of Chance* (Surrey: Ashgate Publishing Ltd., 2013), 124.
- <sup>24</sup> Constance Lau, "Montage and Dialectical History," *Architecture, Media, Politics, Society (AMPS) Proceedings Journal Series 29.2: (In)Tangible Heritage(s)* (2023): 376.  
<https://amps-research.com/wp-content/uploads/2023/02/Amps-Proceedings-Series-29.2.pdf>
- <sup>25</sup> Umberto Eco, *The Open Work*, trans. Anna Cancogni (Cambridge, Mass: Harvard University Press, 1989), 3, 84-86.
- <sup>26</sup> Brent Adkins, Deleuze and Guattari's *A Thousand Plateaus: A Critical Introduction and Guide* (Edinburgh: Edinburgh University Press, 2015), 10, 12, 23. <https://www.jstor.org/stable/10.3366/j.ctt1g0b18p>
- <sup>27</sup> "To Fascinate and Unnerve, The philosophical leftovers of Gilles Deleuze," Andrew Marzoni, <https://www.thenation.com/article/culture/gilles-deleuze-letters-other-texts/tnamp/>
- <sup>28</sup> The general assumption that the use of advancing technology is more suited to future and/or futuristic representations of cities, places and people is apparent in the City Symphony repertoire of animated work during the 1920s. This trajectory that extends to ongoing discussions regarding digital environments like virtual reality are inevitable aspects of 'lived space' in the impending future. This paper argues that technology is not afforded greater importance and/or approached as an all-encompassing tool that overshadows the contributions of other archival material. Neither is it simply an organisational mechanism, structured as a framework to insert information.

## BIBLIOGRAPHY

- Adkins, Brent. *Deleuze and Guattari's A Thousand Plateaus: A Critical Introduction and Guide*. Edinburgh: Edinburgh University Press, 2015. <https://www.jstor.org/stable/10.3366/j.ctt1g0b18p>.
- Barber, Emily. *London*. London and Somerset: Blue Guides Ltd., 2014.
- Barrington, Breeze. "A Full House of Tudors." Accessed February 2, 2023.  
<https://www.apollo-magazine.com/tudors-holburne-museum-national-portrait-gallery-review/>
- Blenheim Palace, Woodstock, Oxfordshire Guide* (Oxfordshire: Blenheim Estate Office, 1975).
- Corner, James. *Taking Measures Across the American Landscape*. New Haven and London: Yale University Press, 2000.
- Deleuze, Gilles and Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. Minneapolis: University of Minnesota Press, 1980.
- Eco, Umberto. *The Open Work*. Translated by Anna Cancogni. Cambridge, Mass.: Harvard University Press, 1989. First published in Italian 1962.
- Frye, Susan. *Elizabeth I: The Competition for Representation*. New York and Oxford: Oxford University Press, 1993.
- Hill, Jonathan. *Actions of Architecture, Architects and Creative Users*. London and New York: Routledge, 2003.
- Horne, David H. *The Life and Minor Works of George Peele*, v. 1. New Haven, CT: Yale University Press, 1952.
- Houston, Roy, ed. *Queen Elizabeth II and the Royal Family*. London: Dorling Kindersley Ltd., 2015.
- Johnson, Steven. *Where Good Ideas Come From, The Natural History of Innovation*. New York: Riverhead Books, 2010.
- Lau, Constance. "A contemporary reading of the Accession Day Tilts in relation to festival and the Elizabethan notion of 'lost sense of sight'." In *Architecture, Festival and the City*, edited by Jemma Brown, Christian Frost and Ray Lucas, 35-48. London: Routledge, 2019.

- Lau, Constance, "Learning from World Architecture Festival 2015: Transitional opportunities and teaching in the new normal." In Association of Architectural Educators (AAE), *Charrette 7(1): Catalyst Pedagogies and the pandemic displacement of architectural education* (2021): 99-124.  
<https://www.ingentaconnect.com/contentone/arched/char/2021/00000007/00000001/art00006>
- Lau, Constance, "Montage and Dialectical History: The Accession Day Tilts, Whitehall and Embodied Participation." In *Architecture, Media, Politics, Society (AMPS) Proceedings Journal Series 29.2: (In)Tangible Heritage(s)* (2023): 376-384.  
<https://amps-research.com/wp-content/uploads/2023/02/Amps-Proceedings-Series-29.2.pdf>
- Manolopoulou, Yeoryia. *Architectures of Chance*. Surrey: Ashgate Publishing Ltd., 2013.
- Maroevic, Ivo. *Introduction to Museology: The European approach*. Munich: Verlag Dr. Christian Müller-Straten, 1998.
- Marzoni, Andrew. "To Fascinate and Unnerve, The philosophical leftovers of Gilles Deleuze." Accessed February 10, 2023. <https://www.thenation.com/article/culture/gilles-deleuze-letters-other-texts/tnamp/>
- Pallasmaa, Juhani. *The Architecture of the Image: Existential Space in Cinema*. Helsinki: Rakennustieto Publishing, 1999.
- Stierli, Martino. *Montage and the Metropolis: Architecture, Modernity, and the Representation of Space*. New Haven and London: Yale University Press, 2018.
- Strong, Roy. *The Cult of Elizabeth: Elizabethan Portraiture and Pageantry*. London: Thames and Hudson, 1977.
- Strong, Roy. *Gloriana: The Portraits of Queen Elizabeth I*. London: Thames and Hudson, 1987.
- Strong, Roy. *The Tudor and Stuart Monarchy, volume II: Elizabethan, Pageantry, Painting, Iconography*. Woodbridge: Boydell Press, 1995.
- Thurley, Simon. *Whitehall Palace: An Architectural History of the Royal Apartments, 1240–1690*. New Haven and London: Yale University Press in association with Historic Royal Palaces, 1999.
- Vincent, J. *Guide to Blenheim and Woodstock*. London: Simpkin, Marshall, Hamilton, Kent and Co., 1903.
- Yates, Frances. "Elizabethan Chivalry; The Romance of the Accession Day Tilts," *Journal of the Warburg and Courtauld Institutes*, v. 20, no. 1/2, January – June, (1995): 4–25.

## ANALOGICAL DISTRACTION IN LIVED SPACE OR UNCANNY ANALOGIES ACROSS FILMIC AND PRO- FILMIC SPACE

Author:

ELEANOR SUESS

Affiliation:

KINGSTON UNIVERSITY, UK; DEAKIN UNIVERSITY, AUSTRALIA

---

### Prologue – *La Région Centrale* (1971)

I'm going to start with a story. A story about the experience of viewing a film. That film is Michael Snow's epic *La Région Centrale*,<sup>1</sup> a 190 minute piece of avant-garde cinema made in 1971, filmed atop a mountain in North Quebec, using a purpose-built machine body to control the movement of the camera. I saw the film in London in January 2016, at the Close-Up cinema in Shoreditch, East London. I'd had the opportunity to see the film more than 20 years earlier, as an undergraduate fine art student, but at that time I found its extended temporality a bit too much for me. I didn't know what I was missing. This time I knew what I was letting myself in for, and brought my partner along for the experience.

The small auditorium was full – the opportunity to participate in the viewing of such a seminal work doesn't come along often. Collectively, we watched the constantly moving view from that Quebec mountain top, as seen from the mechanical eye of the camera mounted in its mechanical body, twisting its, and our, view around 360 degrees. We saw the detail of the ground surface under this body, we saw the horizon where mountains met blue sky. We saw that blue patterned with white clouds, and then the shadow of the camera and its body cast upon the ground below. The lens flared as the mechanical eye squinted against the sun, the moon diagonally crossed the night sky, round boulders sat solidly on the scrubby ground.

Over the duration of the film some audience members got up to replenish their drink, or use the bathroom – some never returned. We were aware of one another in the space, nestled into our deep seats, the reflected light from the film illuminating us. I started to doze off – I assume others did too. At first I resisted, concerned at missing parts of the film, but then I allowed these small naps to be part of my viewing experience – they refreshed me to be able to continue watching, to draw my attention back to the world on the other side of the screen.

During the screening I realised that we, the audience, formed a collective, albeit one which was not communicating directly with one another. We shared the same space, and versions of the same experience. That space and experience was both that of the cinema *and* the place of that mountain top. It felt as if I, along with the entire audience, was encamped in a constructed place, formed from the conjunction of the mountaintop in the film and the space of the cinema. I was struck by the clarity of the experiential nature of this artwork, and of the substantial agency of both myself, as one viewer, but also as a part of that collective audience. Afterwards, as my partner and I left the cinema and

walked back to Shoreditch overground station, I felt as though we had emerged from this propositional place, having made a momentous journey.

### Essay – an uncanny analogy

This paper is structured in three parts. The first, a prologue, presented an account of the experience of viewing a seminal work of structural film, with implicit recognition of the relationship between that *filmic* experience, and the *pro-filmic*<sup>2</sup> one of the filmmaker, Michael Snow<sup>3</sup>, and his camera and its custom body during the time of filming. The implications of the experience described in that story you have just read will be expanded upon in this “essay” section. Here I will draw together parallel ideas from architectural representation and artists’ film, along with analogy studies in various disciplines,<sup>4</sup> and the work of philosophers Walter Benjamin and C. S. Peirce, to discuss this analogical connection between the “lived” (embodied) experiences of both filmic and pro-filmic space, extending this into the relationship between drawing and building in architectural representation. I will argue that there is something fundamentally *uncanny* within analogy, that is made manifest through the relationship between the respectively *doubled* pro-filmic/filmic, drawn/built (or un-built) spatial experiences.

The paper will conclude with an epilogue, presenting an architectural artists’ film of my own, which uses the architectural and filmic device of the window/frame to create another parallel set of analogical, and uncanny, experiences. The discussion will offer a speculation that making this work from a transdisciplinary position, from both in-between, but simultaneously within, two disciplines, is an uncanny place of production in itself.

Michael Snow’s *La Région Centrale* is a work of artists’ cinema,<sup>5</sup> and specifically a work of structural filmmaking.<sup>6</sup> Elsewhere<sup>7</sup> I have identified artists’ film, and the genre of structural filmmaking in particular, as particularly relevant for an architectural focussed moving image practice<sup>8</sup>, and have identified several parallels in the theoretical operations of both structural film and architectural representation. In particular, that the tectonic practices of structural film and architectural representation both rely upon an active, engaged viewer who constructs meaning.

London-based structural<sup>9</sup> film-makers Peter Gidal and Malcolm Le Grice problematised the narrative and illusionism central to conventional cinema, seeing it as forming a passive, unchallenged viewer, thus preventing their personal construction of meaning.<sup>10</sup> Structural film often sought to challenge this passivity of the audience: “The mental activation of the viewer is necessary for the procedure of the film’s existence”<sup>11</sup>, and that it “is cinema of the mind rather than the eye”.<sup>12</sup> Similarly, architectural theorist Robin Evans, identified that a constructive process occurs through the active “imagination” of the reader or viewer of architectural drawings.<sup>13</sup> Evans’s model is based on the power of projections, and he asserts that the processes of projection at work within architectural drawing relate to the working of the architectural imagination. Evans emphasises that despite the seemingly rational system of drawing projection, the processes of translation between drawing and imagined building or constructed edifice makes this journey anything but straightforward.<sup>14</sup> These analogical parallels allow for an architectural reading of certain pieces of artists’ film, in a consideration of how the structure, form and content of these works might act as alternative forms of architectural representation.<sup>15</sup> The attention paid to the act of viewing/reading film/drawing also requires an acknowledgement of the situatedness of the viewer/reader, and how this impacts upon any process of making meaning.

In my description of the experience of viewing Michael Snow’s *La Région Centrale*, several aspects came to the fore, and which I shall draw upon here.

In film and architecture scholarship there are many forms of analogical connections drawn between the two disciplines.<sup>16</sup> In particular, in his *Artwork* essay<sup>17</sup> Walter Benjamin theorises on the operation of the audience of the new artistic media of film, likening certain forms of spatial, pro-filmic

experience to that of filmic experience. Benjamin's use of architecture for this analogy with film was predicated on the understanding that architecture was the only form of art prior to the advent of mechanical or technological reproduction that could be experienced by a collective, mass audience.<sup>18</sup> Benjamin suggested an interconnected, linked nature to the structure and behaviour of this collectivity, where "the reactions of individuals, which together make up the massive reaction of the audience, determined by the imminent concentration of reactions into a mass"<sup>19</sup>. For Benjamin, it was this network of the mass individual which collectively, through their interconnected nature, absorbed the cinematic work of art, as the same collectivity absorbed architecture through their distracted occupation.

While this might resonate with my story of the experience of viewing Snow's *La Région Centrale* as part of a *collective* audience at that cinema in Shoreditch, more complex notions of distraction as it relates to both architectural and filmic experience were to evolve subsequent to Benjamin's original theorising of (architectural and filmic) mass audiences which similarly distracted one another. In forms of avant-garde film practice, especially that originating in the 1960's and 70's structural film, a different form of distraction emerged. The American critic of avant-garde film, P. Adams Sitney suggests that Andy Warhol's film work in the early 1960s with extended duration was a precursor to the emergence of structural film.<sup>20</sup> Film critic Chris Fujiwara, discussing viewer "boredom" in the use of extended duration within Italian cinema of the 1950s-1970s<sup>21</sup> quotes Soviet filmmaker Andrei Tarkovsky: "If you extend the normal length of a shot, first you get bored; but if you extend it further still you become interested in it; and if you extend it even more a new quality, a new intensity of attention is born"<sup>22</sup>. Fujiwara is interested in "what happens if this intensity isn't attained, and the viewer remains stuck at the stage of waiting"<sup>23</sup>, suggesting that this provokes conscious reflection in the viewer of their own physical location, and its relationship to that of the imagery on the screen.

Similarly, cinema and media theorist Vivian Sobchack is concerned with how films' "spectators"<sup>24</sup> become aware of the operations at play in the cinema, and of their own situatedness in this place of viewing. In an extension of film theorist Christian Metz's discussion of the viewer's identification with the camera,<sup>25</sup> Sobchack uses philosopher of science and technology Don Ihde's concept of "echo focus"<sup>26</sup> to describe an awareness in the viewer of the "instrument-mediated perception"<sup>27</sup> in their experience of the cinematic projection. In her wider thesis of the relationship between the various "bodies" of filmmaker, camera, projector, viewer, and the film itself, Sobchack identifies that the lived body of the film's viewer is crucial in the process of viewing film, and their "place of viewing, [their] situation"<sup>28</sup> always affects the experience of viewing.

In *La Région Centrale*, the use of extended duration coupled with the unique way in which the film was shot, the viewer is encouraged to contemplate their own act of viewing and the space in which that takes place. Indeed, as Snow himself identified,<sup>29</sup> his work has always been concerned with the relationship of viewer to artwork, particularly in the active, reflective, construction of meaning by that viewer. In the experience of viewing *La Région Centrale* it was more than *meaning* that had been *constructed* – an analogical *filmic* experience had been formed, that was similar to, but also different from, the *pro-filmic* experience of Snow and his camera and their respective flesh and mechanical bodies upon that mountain top.

The sense that as an individual viewer I was part of a collective inhabiting that newly constructed place, of mountaintop/cinema, relied on being part of an audience. However, the source of distraction was the film rather than my fellow viewers, and was more akin to the distraction of the individual inhabitant of an architectural space, not as a part of a distracting collective. This idea of individual distraction is taken up by architectural theorists who enjoy the use of their discipline in Benjamin's artwork essay. Architect and theorist Jonathan Hill specifically links Benjamin's distraction to the extended duration of spatial dwelling – and anchors this in the body of the individual, the space that

they occupy, and the space and world beyond.<sup>30</sup> In Hill's interpretation of distraction within architectural experience the mass audience is replaced by the individual building inhabitant. It is this form of analogical relationship between distracted spatial experience, and distracted filmic experience that I think, in part, gives rise to the experience described in my story of watching *La Région Centrale*.<sup>31</sup>

Understanding and celebrating the difference between pro-filmic and filmic experience, artist filmmaker Malcom Le Grice proposes that analogy is a useful model for the ways in which these experiences are related.<sup>32</sup> In *La Région Centrale*, I suggest that this analogical relationship is fundamentally uncanny (as perhaps all analogy must be), and this is heightened by the very particular nature of the camera's body. As both Metz and Sobchack separately establish,<sup>33</sup> in all lens-based film, the camera has a body, it is the camera that dwells in the filmed space, we see through the camera's eye, inhabiting its viewpoint, ultimately identifying with the camera. However, in *La Région Centrale*, the camera's range of motion is particularly *inhuman*. It is a mechanical body, but one that we are still obliged to inhabit. We only see traces of the body, rather than the machinery itself – the shadow on the ground, the path of inhuman movement. In viewing *La Région Centrale* we perceptually associate with the camera and its body, but this body is so evidently different to ours, it is an uncanny, troubling double of our own body.<sup>34</sup>

Art historian Barbara Maria Stafford emphasises “the ways of seeing sameness-in-difference”<sup>35</sup> at work in processes of visual analogy. In this, Stafford allows for difference as much as similarity to be recognised as having value – difference is an opportunity, allowing for things such as the uncanny, for translation and interpretation. Stafford goes on to articulate the active, constructive process in seeing, and the acts of analogical connection that seeing entails.<sup>36</sup>

Philosopher and logician C. S. Peirce identified that analogy functions though “the three primary forms of inference ... a mixture of induction and abduction, and a tincture of deduction”<sup>37</sup>. Peirce's “abduction” is critical to analogy and is based on “processes of thought capable of producing no conclusion more definite than a conjecture”<sup>38</sup> and “deals with very partial premises; premises which are more or less sufficient but not necessary for the conclusion in that inference”<sup>39</sup>. As opposed to deduction and induction, Peirce acknowledges that abduction is much more of a “best guess”<sup>40</sup>, but is the only way of introducing new ideas.<sup>41</sup> Architect Marco Frascari celebrates Peirce's concept of abduction as “a highly productive procedure [through which] new understandings are continually generated”<sup>42</sup>. The heuristic function of analogy deploys the creative bounty of what Peirce terms “uberty”<sup>43</sup>, which is found specifically in abductive inference,<sup>44</sup> working to generate new understanding through connective processes of sameness in difference.

I assert that it is the abductive connections within analogy that provide a profound, creative, and constructive relationship between pro-filmic and filmic space, and similarly through architectural drawing and (built or un-built) building, *and* that this relationship is uncanny. Architectural scholar Kester Rattenbury identifies the phenomena that architects discuss their as-yet unbuilt buildings as if they were real.<sup>45</sup> This “belief” in the drawn building as building, not drawing, is a creative and constructive process, and necessary for architectural poesis. Sonit Bafna observes something similar, highlighting a particular form of engagement with the building artefact, invoked through the reading of drawings, and suggests that there is an experiential nature to this engagement.<sup>46</sup> Bafna acknowledges that this experience “is certainly nothing like the kind of experience derived from actually visiting a building”<sup>47</sup> and I assert that these different experiences are therefore *analogical*. While the notion of architectural representation as analogy is not an original insight – Marco Frascari had, for example, already identified the metonymic and metaphoric analogical tools linking the making of drawings and the making of buildings<sup>48</sup> – it is not a common one within architectural discourse. I suggest that framing the relationship between building and drawing as fundamentally

*analogical*, may be more useful and ultimately liberating than other conceptions, such as simulation, and better allow for the “eddies and circuits ... between the design drawing and the finished article”<sup>49</sup> to occur – in fact it allows for this non-linear relationship to be celebrated.

As with the analogical relationship between pro-filmic and filmic experience, the analogical relationship between drawing and an un-built building is fundamentally uncanny. In reading an architectural drawing the architect treats the un-built building as real, despite knowing it is not yet in existence – the simultaneous real/not real paradoxical nature of these analogical doubles is uncanny.

### Epilogue – *Carriage* (2017)

In March 2015, travelling at night on a train from London Victoria to East Croydon, I saw another train on parallel tracks, its windows forming apertures into an alternate world. The compelling quality of this pro-filmic experience, which I would later identify as being fundamentally “uncanny” in nature, prompted me to film this view. I recorded a two minute and 56 second single-take clip, and through editing this footage I attempted to express something of that original experience, to make something which might, in some way be analogical to it.

In the original, pro-filmic experience of viewing another train at night, that other carriage across the darkness feels real, but also unreal<sup>50</sup> – the rectangular windows take on the impression of screens, the internal space of the carriage flattened onto their surface, the occupants of that moving room characters on small, silent television screens. It is a space so like the noisy, familiar one in which the viewer/filmmaker herself sits, but is fundamentally unreachable, unfamiliar, and ultimately unknowable. As such, the space of the other carriage is an “uncanny” double<sup>51</sup> of the space the observer bodily inhabits.

My 2017 film, *Carriage*,<sup>52</sup> therefore focused on the windows of that parallel train, individually extracted from the source footage. The reading of the windows as screens is emphasised by their filmic treatment – they are enlarged and slowed down, simultaneously brought closer by the zoom, but placed at a distance by their extreme slowness, and by the blurring that occurs in the imagery. The silent views of that unreachable space are overlaid with the sounds of the carriage in which I, the filmmaker, was located, but similarly slowed down to produce an uncanny, haunting soundtrack. Informed by the use of repetition in structural film, and understanding that repetition can also be “a source of the sense of the uncanny”<sup>53</sup>, I reused clips of individual windows to reach a visual and auditory cacophony comprised of a jumbled overlay where windows have lost any sense of spatial coherence.

Taking the fundamentally cinematic experience of train journeys, which predates cinema itself,<sup>54</sup> *Carriage* amplifies the filmic aspects of that experience, offering a parallel, yet different, experience in the viewing of the film. This analogical experience is based on the quality of “duration as a material experience”<sup>55</sup> in both viewing of film and of the ready-made film as found in the world<sup>56</sup>. In the drawn-out experience of viewing *Carriage*, I would assert that the viewer experiences something analogical to that original uncanny experience. In the carriage of the train, and in the seat in the cinema, you are held in one place, projecting your attention to another world. That sense of a doubling of immersion and emersion, of being simultaneously there and not there, here and not here, analogically, uncannily, links both spatial and filmic experience.

As a transdisciplinary practitioner, I make work which is a hybrid form of architectural representation/artists’ film. I use techniques from both disciplines to make work which, I hope, can generate a filmic experience which is analogical to a specific pro-filmic one. Transdisciplinarity is fundamentally uncanny – it is being between and also moving across two disciplines, looking back at one home discipline from the location of another, to be simultaneously inside and outside a discipline – “at once inside and added on, always already at home yet an outsider”<sup>57</sup>.

## NOTES

<sup>1</sup> Michael Snow, *La Région Centrale*, 1971. See: John W Locke, "Michael Snow's "La Région Centrale" [Part 1]," *Artfourm* 12, no. 3 (1973); John W Locke, "Michael Snow's "La Région Centrale" [Part 2]," *Artfourm* 12, no. 4 (1973). Thierry de Duve, "Michael Snow: The Deictics of Experience and Beyond," *Parachute* 28 (1995).

<sup>2</sup> The term *pro-filmic* as used within avant-garde film theory can be broadly understood to be "that which the camera is aimed at" Peter Gidal, *Materialist Film* (London: Routledge, 1989), 72., or "the actual time/space of ... the film's shooting" Malcolm Le Grice, "Material, Materiality, Materialism [1978]," in *Experimental Cinema in the Digital Age* (London: British Film Institute, 2001), 166.

<sup>3</sup> Michael Snow died on 5 January 2023 "Michael Snow obituary: Canadian giant of experimental cinema," BFI, 2023, accessed 20/02/2023, <https://www.bfi.org.uk/news/michael-snow-obituary-canadian-giant-experimental-cinema>., while this paper was still being written. Snow had written some very kind words about my architecturally focussed analysis Eleanor Suess, "Light Events: Interior and Exterior Space in 'Wavelength' " in *Flow: Between Interior and Landscape* ed. Patricia Brown et al. (London: Bloomsbury, 2018). of his 1967 film *Wavelength* Michael Snow, *Wavelength*, 1967., a film which I credit with starting my journey in connecting structural film to architectural representation. I am saddened that I won't be able to send him this new paper.

<sup>4</sup> Analogy finds itself part of many disciplines, perhaps because, as cognitive scientist Douglas Hofstadter asserts "analogy is at the core of cognition" Douglas R. Hofstadter, "Epilogue: Analogy as the Core of Cognition," in *The Analogical Mind: Perspectives from Cognitive Science*, ed. Dedre Gentner, Keith J. Holyoak, and Boicho N. Kokinov (Cambridge, Mass. ; London: MIT Press, 2001). An excellent overview of analogy as used across disciplines is: Marcello Guarini et al., "Resources for Research on Analogy: A Multi-disciplinary Guide," *Informal Logic* 29, no. 2 (2009), <https://scholar.uwindsor.ca/philosophypub/18>.

In logic, analogy is used as a formal tool for learning something about a thing by relating it to something else with which it has some similarities and inferring that other similarities will also exist.

"An argument from analogy operates by identifying similarities between two 'domains', and then inferring that the target domain has an attribute of the source domain. Analogies are widely recognized as playing an important heuristic role, as aids to discovery." Paul Bartha, "Analogy and Analogical Reasoning," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Fall 2013 Edition, 2013).

<http://plato.stanford.edu/archives/fall2013/entries/reasoning-analogy/>.

<sup>5</sup> Early forms of cinema evolved into either entertainment or avant-garde art forms A. L. Rees, *A History of Experimental Film and Video: from Canonical Avant-Garde to Contemporary British Practice* (London: BFI Publishing, 1999), 15-29. The former embraced the illusionistic nature of the medium, finding it a powerful form for storytelling. Out of the latter, artists' film and video developed, engaging with time-based media for forms of art, rather than cinematic, practice.

<sup>6</sup> By the late 1960s in Europe and North America, artists' film, in the genre of structural film, offered a challenge to cinematic representational processes Rees. The term "structural film" was coined by the American critic of avant-garde film, P. Adams Sitney. Describing North American work, Sitney defined this as "a cinema of structure ... and it is that shape which is the primal impression of the film... what content it has is minimal and subsidiary to the outline" P. Adams Sitney, *Visionary Film: the American Avant-Garde* (New York: Oxford University Press, 1974), 407. Structural film addressed the processes of film's creation – the machines of camera and projector, the material of the film media, the act of editing, the relationship between the spaces of filming and screening, and critically for this paper, the construction of meaning by an active viewer Nicky Hamlyn, "Structural Traces," in *The British Avant-Garde Film, 1926-1995 : an Anthology of Writings*, ed. Michael O'Pray (Luton: University of Luton Press, 1996), 220.

<sup>7</sup> See: Eleanor Suess, "Prophecy and Memory: Wavelength as Architectural Drawing," *The International Journal of the Arts in Society* 5, no. 5 (2011).; Eleanor Suess, "Doors Don't Slam: Time-Based Architectural Representation," in *Consuming Architecture: on the Occupation, Appropriation and Interpretation of Buildings*, ed. Daniel Maudlin and Marcel Vellinga (Abingdon, Oxon: Routledge, 2014).; Suess, "Light Events: Interior and Exterior Space in 'Wavelength' ".; Eleanor Suess, "Light Matter: the Transdisciplinary Practice of the Architectural Moving Drawing," in *Architecture Filmmaking*, ed. Igea Troiani and Hugh Campbell (Bristol: Intellect, 2020).

<sup>8</sup> Film theorist Nicky Hamlyn identifies a specific difference between artists' film and narrative cinema: "The more a film becomes preoccupied with space in itself, or with a location as an end in itself, the more likely it is to be an experimental film... Experimental films tend to explore a location, whereas in movies they are invariably treated as a backdrop for drama." Nicky Hamlyn, *Film Art Phenomena* (London: British Film Institute, 2003), 139.

However, there is little further exploration of the potential benefit for spatial disciplines in using this to their advantage.

<sup>9</sup> Countering and extending Sitney's definition and term, London-based experimental film-makers Peter Gidal and Malcolm Le Grice placed emphasis on the concerns of the material presence of the medium, introducing the word "materialist" to the form's title. However, I will continue to use the term "structural film" as a shorthand for what might more appropriately be called structural/materialist film.

<sup>10</sup> See Le Grice, "Real TIME/SPACE [1972]." Peter Gidal, "Theory and Definition of Structural/Materialist Film," in *Structural Film Anthology*, ed. Peter Gidal (London: British Film Institute, 1976). Similarly, media scholar Anne Friedberg uses the term "window shopping" Anne Friedberg, *Window Shopping: Cinema and the Postmodern* (Berkeley ; Oxford: University of California Press, 1993). to relate "normative cinematic viewing [to] the culture of consumption" Kate Mondloch, *Screens: Viewing Media Installation Art*, NED - New edition ed., vol. 30 (University of Minnesota Press, 2010), 110.

<sup>11</sup> Gidal, "Theory and Definition of Structural/Materialist Film," 2-3.

<sup>12</sup> Sitney, 408.

<sup>13</sup> Robin Evans, "Architectural Projection," in *Architecture and its Image*, ed. Eve Blau and Edward Kaufman (Montreal: Centre Canadien d'Architecture, 1989), 19.

<sup>14</sup> Also see: Alberto Pérez Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge, Mass.; London: MIT Press, 1997)., Dalibor Vesely, *Architecture in the Age of Divided Representation: the Question of Creativity in the Shadow of Production* (Cambridge, Mass. ; London: MIT, 2004)., Kester Rattenbury, "Introduction," in *This is Not Architecture: Media Constructions*, ed. Kester Rattenbury (London: Routledge, 2002)., Sonit Bafna, "How Architectural Drawings Work — and what that implies for the role of representation in architecture," *The Journal of Architecture* 13, no. 9 (2008).

<sup>15</sup> Architect and theorist Stephen Holl, identifies the limits of conventional means of architectural representation in expressing some of the more intangible qualities of the built and natural environment Steven Holl, Juhani Pallasmaa, and Alberto Pérez Gómez, *Questions of Perception: Phenomenology of Architecture* (San Francisco, CA: William Stout, 2007). Jonathan Hill suggests that when such qualities cannot be drawn, they cannot therefore be designed, and that architects might expand their range of representational techniques by drawing in those from other disciplines Jonathan Hill, ed., *Occupying Architecture: Between the Architect and the User* (London: Routledge, 1998).

<sup>16</sup> The substantial body of research relating cinema and architecture includes: the role of architecture as a dramatic element in narrative cinema; an identification of similarity in scale and complexity of production Mark Lamster, ed., *Architecture and Film* (New York: Princeton Architectural Press, 2000), 1; Nic Clear, "Concept Planning Process Realisation The Methodologies of Architecture and Film," *Architectural Design* 75, no. 4 (2005/07/01 2005): 108.; the investigation of cultures through spaces depicted in films François Penz and Maureen Thomas, "Cinematics in Architectural Practice and Culture: The Cambridge Project," in *Architecture Filmmaking*, ed. Igea Troiani and Hugh Campbell (Bristol: Intellect, 2020).; the mobility of the architectural or urban inhabitant or flaneur as manifest through film Giuliana Bruno, "Site-seeing: Architecture and the Moving Image," *Wide Angle* 19, no. 4 (1997).; "the filmic properties of architecture and urban environments" Richard Koeck and Les Roberts, eds., *The City and the Moving Image: Urban Projections* (Basingstoke: Palgrave Macmillan, 2010), 7.; and the phenomenological relationship between the pro-filmic spaces of architecture, and the filmic spaces of cinema Juhani Pallasmaa, *The Architecture of Image: Existential Space in Cinema* (Helsinki: Rakennustieto, 2001). As well as exploring architecture as depicted within film, some theorists discuss the influence of cinematic practice upon architecture with the emergence "of architecture that is 'cinematic' – that is, theatrical in effect and thematic in nature" Lamster, 2. In *Montage and Architecture* Sergei Eisenstein insists that the supposed visual "spectacle" of architecture, formed from key viewpoints, has informed filmmaking practices, and then future architecture has reciprocally learnt from film Sergei M. Eisenstein, Yve-Alain Bois, and Michael Glenny, "Montage and Architecture," *Assemblage*, no. 10 (1989): 117. However, it is the dramatic film that is the primary reference for those discussions, and yet within this form architectural space usually acts subserviently to the film's focus on human narrative, particularly in mainstream commercial films Marc Boumeester, "'Camera Eye': Cinematic Studio Research into Architectural Practice," *Architecture and Culture* 3, no. 1 (2015/03/01 2015): 89., Hamlyn, *Film Art Phenomena*, 139.

<sup>17</sup> This seminal text, whose original German title is "Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit" is also referred to in its English translations as "The Work of Art in the Age of Mechanical Reproduction", "The Work of Art in the Epoch of its Technical Reproducibility", and "The Work of Art in the Age of its Technological Reproducibility". Benjamin published three versions of the text – see Howard Caygill, *Walter Benjamin: The Colour of Experience* (London: Routledge, 1998)., and there are several English translations – I

will be referring to Michael Jennings's translation of the third version of Benjamin's essay, published under the title *The Work of Art in the Age of its Technological Reproducibility* Walter Benjamin, "The Work of Art in the Age of Its Technological Reproducibility (Third Version)," in *Walter Benjamin: Selected Writings. Vol. 4, 1938-1940*, ed. Walter Benjamin and Michael Jennings (Cambridge, MA: The Belknap Press of Harvard University Press, 2006), 268. This translation attempts to use un-gendered language, and I consider it to have greater clarity than the Harry Zohn translation Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Walter Benjamin (London: Fontana Press, 1992)., but which is more often cited in the work of architectural theorists. In order to avoid confusion between the several translations of the essay's title, I use Miriam Hansen's tactic of referring to it as the "Artwork Essay" Miriam Hansen, "Benjamin, Cinema and Experience: 'The Blue Flower in the Land of Technology'," *New German Critique*, no. 40 (1987).

<sup>18</sup> "Distraction and concentration [Zerstreuung und Sammlung] form an antithesis, which may be formulated as follows. A person who concentrates before a work of art is absorbed by it; he enters into the work, just as, according to legend, a Chinese painter entered his completed painting while beholding it. By contrast, the distracted masses absorb the work of art into themselves. This is most obvious with regard to buildings. Architecture has always offered the prototype of an artwork that is received in a state of distraction and through the collective." Benjamin, "The Work of Art in the Age of Its Technological Reproducibility (Third Version)," 268.

<sup>19</sup> Benjamin, "The Work of Art in the Age of Its Technological Reproducibility (Third Version)," 264.

<sup>20</sup> Sitney argues that: "[Warhol] was the first film-maker to try to make films which would outlast a viewer's initial state of perception. By sheer dint of waiting, the persistent viewer would alter his experience before the sameness of the cinematic image... [Warhol] made films that challenged the viewer's ability to endure emptiness or sameness" P. Adams Sitney, "Structural Film," in *Visionary Film: the American Avant-Garde* (New York: Oxford University Press, 1974), 412.

<sup>21</sup> Chris Fujiwara, "Boredom, Spasmo, and the Italian System," in *Sleaze Artists: Cinema at the Margins of Taste, Style, and Politics*, ed. Jeffrey Sconce (Durham, N.C.: Duke University Press, 2007), 242-43.

<sup>22</sup> Andrei Tarkovsky, *Andrei Tarkovsky: Collected Screenplays*, trans. William Powell and Natasha Synessios (London: Faber, 1999), 6.

<sup>23</sup> Fujiwara, 242.

<sup>24</sup> "Spectator" is the term Sobchack uses, but one which I find too passive for the very active role of the viewer and which also implies the witnessing of a spectacle.

<sup>25</sup> Christian Metz, "The Imaginary Signifier," *Screen 16*, no. 2 (June 20, 1975 1975).

<sup>26</sup> Don Ihde, "The Experience of Technology: Human-Machine Relations," *Philosophy and Social Criticism* 2, no. 3 (1975).

<sup>27</sup> Vivian Carol Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton, N.J.; Oxford: Princeton University Press, 1992), 178.

<sup>28</sup> Sobchack, 179.

<sup>29</sup> Michael Snow and Louise Dompierre, eds., *The Collected Writings of Michael Snow* (Waterloo, Ont.: Wilfrid Laurier University Press, 1994).

<sup>30</sup> Jonathan Hill, "An Other Architect," in *Occupying Architecture: Between the Architect and the User*, ed. Jonathan Hill (London: Routledge, 1998), 144.

<sup>31</sup> I have elsewhere Suess, "Light Matter: the Transdisciplinary Practice of the Architectural Moving Drawing." discussed these issues of distraction in filmic and pro-filmic experience in an examination and comparison of John Smith's 1975 structural film *Leading Light* (John Smith, *Leading Light*, 1975. 16mm, 11 mins, colour, sound.) and my own 2013 film *Sunhouse Elevation/Sunhouse Azimuth* (Eleanor Suess, *Sunhouse Elevation/Sunhouse Azimuth*, 2013.), specifically around the use of sunlight in both films to support a specific analogical, distracted experience of spatial and cinematic dwelling.

<sup>32</sup> Christian Metz had already established an analogical relationship between the camera and the spectator (Metz, 54.), which Le Grice extended in his identification of pro-filmic and filmic experiences as being analogical: "Art, instead of representing the world, could now be a model for it, functioning as analogy rather than imitation. In addition artists could explore regions of perceptual experience which could only be the product of the special nature of the medium in question, in no way available in the world except as created through art." Malcolm Le Grice, *Abstract Film and Beyond* (London: Studio Vista, 1977), 16.

"the experience at projection [can] become an analog or be used as a metaphor for ... the 'shooting' TIME/SPACE." Le Grice, "Real TIME/SPACE [1972]," 157.

<sup>33</sup> Metz, 52-53.; Sobchack, 164-259.

<sup>34</sup> Notions of the uncanny centre on forms of doubling Sigmund Freud, *The Uncanny [1919]*, trans. David McLintock (London: Penguin, 2003). Ernst Jentsch, "On the Psychology of the Uncanny [1906]," *Angelaki* 2, no. 1

(1997/01/01 1997)., from the literal doubling of the doppelgänger, to the pairing of seeming opposites which are simultaneously similar. For a thorough overview on the ideas and history of the uncanny, see Nicholas Royle, *The Uncanny* (Manchester: Manchester University Press, 2003).

<sup>35</sup> Barbara Maria Stafford, *Visual Analogy: Consciousness as the Art of Connecting* (Cambridge, Mass.: MIT Press, 2001), xvi.

<sup>36</sup> Stafford, 138.

<sup>37</sup> Stephen McJohn, "On Uberty: Legal Reasoning by Analogy and Peirce's Theory of Abduction," *Willamette Law Review* 29 (04/26 2007): 209.

<sup>38</sup> Charles S. Peirce and Carolyn Eisele, *The new elements of mathematics* (The Hague: Mouton [etc], 1976), 319.

<sup>39</sup> Alessandro Zambelli, "Scandalous Artefacts: Visual and Analogical Practice Between Architecture and Archaeology" (PhD Thesis, University College London, 2016).

<sup>40</sup> Charles S. Peirce, "Abduction," in *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*, ed. M Bergman and S Paavola (2013).

<sup>41</sup> Charles S. Peirce, "Pragmatism and Pragmaticism. Collected Papers of Charles Sanders Peirce," ed. C. Hartshorne and Weiss P. (Bristol: Thoemmes, 1998), 171.

<sup>42</sup> Marco Frascari, "'Semiotica ab Edendo,' Taste in Architecture," *Journal of Architectural Education* (1984-) 40, no. 1 (1986): 7.

<sup>43</sup> "'Uberty' is an archaic word used by Peirce in the sense of 'rich growth, fruitfulness, fertility; copiousness, abundance.'" McJohn, 201.

<sup>44</sup> McJohn, 193.

<sup>45</sup> Rattenbury.

<sup>46</sup> Bafna, 543-44.

<sup>47</sup> Bafna, 544.

<sup>48</sup> Marco Frascari and William Braham, "On the Mantic Paradigm in Architecture: The projective evocation of future edifices," *Proceedings of the Association of Collegiate Schools of Architecture Annual Meeting* (1994): 264.

<sup>49</sup> Evans, 20.

<sup>50</sup> Hal Foster, "Uncanny images," Article, *Art in America* 71 (11// 1983): 2004.

<sup>51</sup> Freud. Jentsch.

<sup>52</sup> Eleanor Suess, *Carriage*, 2017.

<sup>53</sup> Freud, 143.

<sup>54</sup> Mitchell Schwarzer, *Zoomscape: Architecture in Motion and Media*, [1st ed. ed. (New York; [Great Britain]: Princeton Architectural Press, 2004), 32, 55.

<sup>55</sup> Le Grice, "Material, Materiality, Materialism [1978]," 166.

<sup>56</sup> Mark Lewis and Laura Mulvey, "UAL Professorial Platform INVENTION Professor Mark Lewis in conversation with Laura Mulvey," (03/03/2017 2014), Lecture. <https://www.youtube.com/watch?v=heC0uPBc7uE>.

<sup>57</sup> Royle, 19.

## BIBLIOGRAPHY

Bafna, Sonit. "How Architectural Drawings Work — and What That Implies for the Role of Representation in Architecture." *The Journal of Architecture* 13, no. 9 (2008): 535-64.

Bartha, Paul. "Analogy and Analogical Reasoning." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Fall 2013 Edition, 2013. <http://plato.stanford.edu/archives/fall2013/entries/reasoning-analogy/>.

Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, edited by Walter Benjamin, 211-44. London: Fontana Press, 1992.

Benjamin, Walter. "The Work of Art in the Age of Its Technological Reproducibility (Third Version)." Translated by Michael W. Jennings. In *Walter Benjamin: Selected Writings. Vol. 4, 1938-1940*, edited by Walter Benjamin and Michael Jennings. Cambridge, MA: The Belknap Press of Harvard University Press, 2006.

Boumeester, Marc. "'Camera Eye': Cinematic Studio Research into Architectural Practice." *Architecture and Culture* 3, no. 1 (2015/03/01 2015): 87-104.

Bruno, Giuliana. "Site-Seeing: Architecture and the Moving Image." *Wide Angle* 19, no. 4 (1997): 8-24.

- Caygill, Howard. *Walter Benjamin: The Colour of Experience*. London: Routledge, 1998.
- Clear, Nic. "Concept Planning Process Realisation the Methodologies of Architecture and Film." *Architectural Design* 75, no. 4 (2005/07/01 2005): 104-09.
- de Duve, Thierry. "Michael Snow: The Deictics of Experience and Beyond." *Parachute* 28 (1995): 28-41.
- Eisenstein, Sergei M., Yve-Alain Bois, and Michael Glenny. "Montage and Architecture." *Assemblage*, no. 10 (1989): 111-31.
- Evans, Robin. "Architectural Projection." In *Architecture and Its Image*, edited by Eve Blau and Edward Kaufman, 19-36. Montreal: Centre Canadien d'Architecture, 1989.
- Foster, Hal. "Uncanny Images." Article. *Art in America* 71 (11// 1983): 202-04.
- Frascari, Marco. "'Semiotica Ab Edendo,' Taste in Architecture." *Journal of Architectural Education* (1984-) 40, no. 1 (1986): 2-7.
- Frascari, Marco, and William Braham. "On the Mantic Paradigm in Architecture: The Projective Evocation of Future Edifices." *Proceedings of the Association of Collegiate Schools of Architecture Annual Meeting* (1994): 261-67.
- Freud, Sigmund. *The Uncanny [1919]*. Translated by David McLintock. London: Penguin, 2003.
- Friedberg, Anne. *Window Shopping: Cinema and the Postmodern*. Berkeley ; Oxford: University of California Press, 1993.
- Fujiwara, Chris. "Boredom, Spasmo, and the Italian System." In *Sleaze Artists: Cinema at the Margins of Taste, Style, and Politics*, edited by Jeffrey Sconce, 240-58. Durham, N.C.: Duke University Press, 2007.
- Gidal, Peter. "Theory and Definition of Structural/Materialist Film." In *Structural Film Anthology*, edited by Peter Gidal, 1-21. London: British Film Institute, 1976.
- Gidal, Peter. *Materialist Film*. London: Routledge, 1989.
- Guarini, Marcello, Amy Butchart, Paul Smith, and Andrei Moldovan. "Resources for Research on Analogy: A Multi-Disciplinary Guide." *Informal Logic* 29, no. 2 (2009): 84-197. <https://scholar.uwindsor.ca/philosophypub/18>.
- Hamlyn, Nicky. "Structural Traces." In *The British Avant-Garde Film, 1926-1995 : An Anthology of Writings*, edited by Michael O'Pray, 219-60. Luton: University of Luton Press, 1996.
- Hamlyn, Nicky. *Film Art Phenomena*. London: British Film Institute, 2003.
- Hansen, Miriam. "Benjamin, Cinema and Experience: 'The Blue Flower in the Land of Technology'." *New German Critique*, no. 40 (1987): 179-224.
- Hill, Jonathan, ed. *Occupying Architecture: Between the Architect and the User*. London: Routledge, 1998.
- Hill, Jonathan. "An Other Architect." In *Occupying Architecture: Between the Architect and the User*, edited by Jonathan Hill. London: Routledge, 1998.
- Hofstadter, Douglas R. "Epilogue: Analogy as the Core of Cognition." In *The Analogical Mind: Perspectives from Cognitive Science*, edited by Dedre Gentner, Keith J. Holyoak and Boicho N. Kokinov, 499-538. Cambridge, Mass. ; London: MIT Press, 2001.
- Holl, Steven, Juhani Pallasmaa, and Alberto Pérez Gómez. *Questions of Perception: Phenomenology of Architecture*. San Francisco, CA: William Stout, 2007.
- Ihde, Don. "The Experience of Technology: Human-Machine Relations." *Philosophy and Social Criticism* 2, no. 3 (1975): 267-79.
- Jentsch, Ernst. "On the Psychology of the Uncanny [1906]." *Angelaki* 2, no. 1 (1997/01/01 1997): 7-16.
- Koeck, Richard, and Les Roberts, eds. *The City and the Moving Image: Urban Projections*. Basingstoke: Palgrave Macmillan, 2010.
- Lamster, Mark, ed. *Architecture and Film*. New York: Princeton Architectural Press, 2000.
- Le Grice, Malcolm. *Abstract Film and Beyond*. London: Studio Vista, 1977.
- Le Grice, Malcolm. "Material, Materiality, Materialism [1978]." In *Experimental Cinema in the Digital Age*, 164-71. London: British Film Institute, 2001.
- Le Grice, Malcolm. "Real Time/Space [1972]." In *Experimental Cinema in the Digital Age*, 155-63. London: British Film Institute, 2001.
- Lewis, Mark, and Laura Mulvey. "Ual Professorial Platform Invention Professor Mark Lewis in Conversation with Laura Mulvey." 03/03/2017 2014. Lecture. <https://www.youtube.com/watch?v=heC0uPBc7uE>.
- Locke, John W. "Michael Snow's 'La Région Centrale' [Part 1]." *Artfourm* 12, no. 3 (1973): 66-71.
- Locke, John W. "Michael Snow's 'La Région Centrale' [Part 2]." *Artfourm* 12, no. 4 (1973): 66-72.
- McJohn, Stephen. "On Uberty: Legal Reasoning by Analogy and Peirce's Theory of Abduction." *Willamette Law Review* 29 (04/26 2007).
- Metz, Christian. "The Imaginary Signifier." *Screen* 16, no. 2 (June 20, 1975 1975): 14-76.

- Mondloch, Kate. *Screens: Viewing Media Installation Art*. NED - New edition ed. Vol. 30: University of Minnesota Press, 2010.
- Pallasmaa, Juhani. *The Architecture of Image: Existential Space in Cinema*. Helsinki: Rakennustieto, 2001.
- Peirce, Charles S. "Pragmatism and Pragmaticism. Collected Papers of Charles Sanders Peirce." edited by C. Hartshorne and Weiss P. Bristol: Thoemmes, 1998.
- Peirce, Charles S. "Abduction." In *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*, edited by M Bergman and S Paavola, 2013.
- Peirce, Charles S., and Carolyn Eisele. *The New Elements of Mathematics*. The Hague: Mouton [etc], 1976.
- Penz, François, and Maureen Thomas. "Cinematics in Architectural Practice and Culture: The Cambridge Project." In *Architecture Filmmaking*, edited by Igea Troiani and Hugh Campbell, 335-56. Bristol: Intellect, 2020.
- Pérez Gómez, Alberto, and Louise Pelletier. *Architectural Representation and the Perspective Hinge*. Cambridge, Mass.; London: MIT Press, 1997.
- Rattenbury, Kester. "Introduction." In *This Is Not Architecture: Media Constructions*, edited by Kester Rattenbury, xxi-xxiv. London: Routledge, 2002.
- Rees, A. L. *A History of Experimental Film and Video: From Canonical Avant-Garde to Contemporary British Practice*. London: BFI Publishing, 1999.
- "Michael Snow Obituary: Canadian Giant of Experimental Cinema." BFI, 2023, accessed 20/02/2023, <https://www.bfi.org.uk/news/michael-snow-obituary-canadian-giant-experimental-cinema>.
- Royle, Nicholas. *The Uncanny*. Manchester: Manchester University Press, 2003.
- Schwarzer, Mitchell. *Zoomscape: Architecture in Motion and Media*. [1st ed. ed. New York; [Great Britain]: Princeton Architectural Press, 2004.
- Sitney, P. Adams. "Structural Film." In *Visionary Film: The American Avant-Garde*. New York: Oxford University Press, 1974.
- Sitney, P. Adams. *Visionary Film: The American Avant-Garde*. New York: Oxford University Press, 1974.
- Smith, John. "Leading Light." 16mm, 11 mins, colour, sound. UK, 1975. Artists' Film.
- Snow, Michael. "Wavelength." Canada, 1967. 16mm Artists' Film (Colour/Sound).
- Snow, Michael. "La Region Centrale." Canada, 1971. 16mm Artists' Film (Colour/Sound).
- Snow, Michael, and Louise Dompierre, eds. *The Collected Writings of Michael Snow*. Waterloo, Ont.: Wilfrid Laurier University Press, 1994.
- Sobchack, Vivian Carol. *The Address of the Eye: A Phenomenology of Film Experience*. Princeton, N.J.; Oxford: Princeton University Press, 1992.
- Stafford, Barbara Maria. *Visual Analogy: Consciousness as the Art of Connecting*. Cambridge, Mass.: MIT Press, 2001.
- Suess, Eleanor. "Prophecy and Memory: Wavelength as Architectural Drawing." *The International Journal of the Arts in Society* 5, no. 5 (2011): 139-49.
- Suess, Eleanor. "Sunhouse Elevation/Sunhouse Azimuth." 2013. Artists' Film.  
<https://eleanorsuess.works/practice/moving-image/architecture/sunhouse-elevation-sunhouse-azimuth/>.
- Suess, Eleanor. "Doors Don't Slam: Time-Based Architectural Representation." In *Consuming Architecture: On the Occupation, Appropriation and Interpretation of Buildings*, edited by Daniel Maudlin and Marcel Vellinga, 243-59. Abingdon, Oxon: Routledge, 2014.
- Suess, Eleanor. "Carriage." 2017. Artists' Film.  
<https://eleanorsuess.works/practice/moving-image/train-windows/carriage/>.
- Suess, Eleanor. "Light Events: Interior and Exterior Space in 'Wavelength' ". In *Flow: Between Interior and Landscape* edited by Patricia Brown, Patricia Lara-Betancourt, Gini Lee, Penny Sparke and Mark Taylor, 87-96. London: Bloomsbury, 2018.
- Suess, Eleanor. "Light Matter: The Transdisciplinary Practice of the Architectural Moving Drawing." In *Architecture Filmmaking*, edited by Igea Troiani and Hugh Campbell, 155-70. Bristol: Intellect, 2020.
- Tarkovsky, Andrei. *Andrei Tarkovsky: Collected Screenplays*. Translated by William Powell and Natasha Synessios. London: Faber, 1999.
- Vesely, Dalibor. *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production*. Cambridge, Mass. ; London: MIT, 2004.
- Zambelli, Alessandro. "Scandalous Artefacts: Visual and Analogical Practice between Architecture and Archaeology." PhD Thesis, University College London, 2016.

# EXPERIENCING LAYERED CONTEXTS BETWEEN VIRTUAL AND PHYSICAL SPACES

Authors:

**MATTHEW LEWIS**

Affiliation:

THE OHIO STATE UNIVERSITY, USA

---

## INTRODUCTION

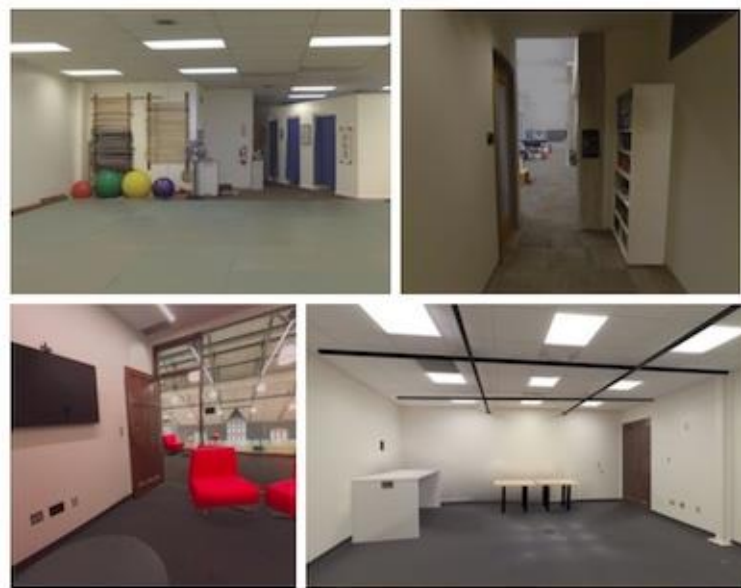
This paper discusses recent work capturing familiar spaces then shifting them to new physical locations. While virtual reality is generally used to completely replace a physical space with a different virtual environment, augmented reality (AR) usually integrates objects into the current environment. But weaving a different virtual *space* through a physical location creates a context-dependent liminal space experienced somewhere between the two realities.

A few of the examples that will be discussed include workplace research environments brought home, students bringing their home to school, and reconstructions of silent film architecture. Creating virtual versions of familiar physical spaces is first briefly introduced. Then a process for relocating and sharing these virtual spaces in remote contexts using AR is discussed with a few examples. Finally, the paper will close with some thoughts on trajectories, implications and next steps.

## 360-DEGREE SPACES

Before the pandemic started, a few researchers at our center who were working with 360-degree panoramic video began looking into software for transforming such imagery into virtual environments for use in VR. Some emerging beta software being developed for this purpose was found to be too challenging to work with. It turned out this mapping process had been used previously in the computer graphics field<sup>1</sup> but had been impractical for designers to use in the past. Newer interactive software and fast graphics processors were on the cusp of making such techniques potentially useful for VR. So, a process was slowly developed using familiar 3D tools with the goal of enabling our students, staff, and faculty to build photoreal environments of familiar places for use in VR-based design research. Some example virtual environments are shown in Figure 1.

Once this process was sufficiently well documented, a graduate student could be hired to assist with work on VR research projects that benefited from this new capability. The first project involved the creation of a virtual version of a pre-school education room. The research group had hoped to try out different possibilities for connected speakers and lights, without having to use the very busy physical space for prototyping. The space needed to be captured, recreated virtually, then experienced in VR, using virtual versions of the IoT technologies. After the pandemic started, this study was put on hold.



*Figure 1. Familiar virtual environments created from 360-degree photos*

## **VIRTUAL TECHNOLOGY PROTOTYPING**

The idea of enabling people to virtually visit remote spaces took on extra significance during the early pandemic as buildings were closed, work from home began, and unnecessary physical visits were discouraged. Several experiences have since been developed that combine real and simulated spaces using virtual technologies primarily for prototyping data visualizations using XR (i.e., VR and AR.) Figure 2 shows virtual monitors, projections, smart phones, and interactive AR concepts in both virtual and physical spaces.



*Figure 2. Virtual prototyping with simulated technologies*

Given even a simple photo-based 3D environment of a space, that space can be experienced in VR. Then simulated versions of technologies, such as a virtual smartphone running a virtual AR app, can be experienced. This allows different AR design concepts to be evaluated remotely in VR instead of always needing to be physically onsite, in the real space.



*Figure 3. Virtual and physical AR prototyping*

Figure 3 shows a student using AR to look at a virtual grid of digital humanities images that she had queried (in this case, images of popular international female singers.) The left image shows the screen of a virtual smartphone in a VR environment showing a simulated AR experience. The right image shows the same AR experience but in the actual environment. This is referred to as “virtual prototyping using XR and simulated technologies.”

### **AR HARDWARE**

Traditionally, augmented reality is primarily used for seamlessly locating individual virtual objects in physical spaces. A recent example is a virtual tree project done last year in collaboration with a professor in our School of Environment and Natural Resources. The project’s goal was to visualize tree planting possibilities and environmental sensor data in disadvantaged neighborhoods. Usually, different planting options can only be imagined when considering new trees for someone’s front yard. Using AR to see and feel the size and impact of different types of trees at different ages has the potential to be very helpful. This of course currently requires that one travel to the intended physical locations of the proposed trees.

Ubiquitous AR head mounted displays (HMDs) may eventually radically change the possibilities for design pre-visualization in general. HMDs greatly impact the sense of immersion and presence when compared to the current AR approach of holding up a phone or tablet with your arm in front of your face. But like Apple and Google in recent years, our AR work has been deployed using common handheld mobile devices instead of expensive (roughly \$3000 USD) “research lab” head mounted displays like Microsoft’s HoloLens<sup>2</sup> or Magic Leap devices,<sup>3</sup> even though there are a few around. Newer less expensive wearable displays are expected in the coming year, such as the Lynx<sup>4</sup> which has been frequently shown at technology trade shows. This next generation will cost a quarter of the price of prior AR HMDs but are unlikely to become truly commonplace for at least a few more years. Our work has remained focused on smart phones and tablets for AR display primarily because of how readily available they are for *students* to work with.



Figure 4. Virtual artwork in an office hallway, relocated, and experienced in a backyard

## RELOCATING SPACES

AR is ideal for placing virtual objects. For example, if one wanted to experience what generative art plotter drawings framed and hanging in the office hallway might *feel* like with different possible arrangements and sizes, then AR is indeed perfect. By creating a virtual 3D version of this hallway, one can additionally investigate this experience in VR, in whatever space one might be able to use a VR system. Finally, if one treats this virtual hallway *as an AR object*, it means this *space* can be opened at full scale and placed wherever one might like, as shown in Figure 4. An AR user can walk around inside *and* outside of the virtual space within a completely different context.

In Figure 4, work has been brought home quite literally. There is simultaneously a feeling of walking around at the office while in the backyard of one's home, under the familiar willow tree. The stress and formality of the office is felt, but it is layered with the comfort of the summer sun on the face, a garden in peripheral vision, and the sound of the wind in the leaves.

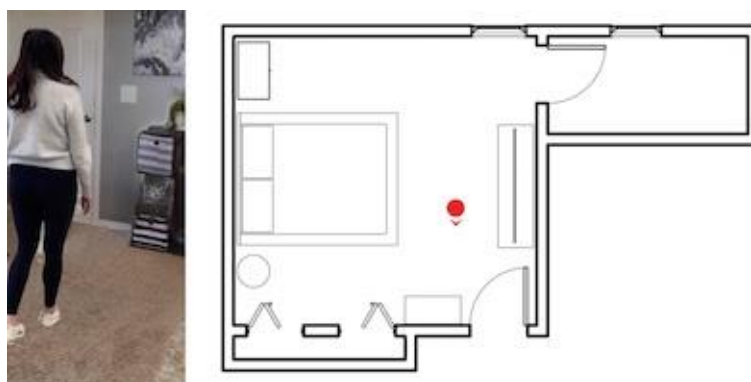


Figure 5. Virtual system prototyping by Ashland Damron, Sierra Dayen, and Josh Leidich

This ability to place 3D spaces as AR objects has recently enabled students in my design studio class to start prototyping technology system concepts in real spaces, and also to bring their spaces to school with them. One recent team of design students was interested in surveillance and sleepwalking and made the thought-provoking work shown in Figure 5. One of them used their smartphone to 3D scan their room at home to make a 3D model. They used AR to place this virtual room data as an object in

a large lobby space at school. The ability of their smartphone to intelligently include real people within the virtual space (with proper virtual object occlusion) allowed the students to choreograph and record themselves walking around inside this virtual space. This meant they could communicate and prototype their design ideas, without needing to travel to someone's physical home.

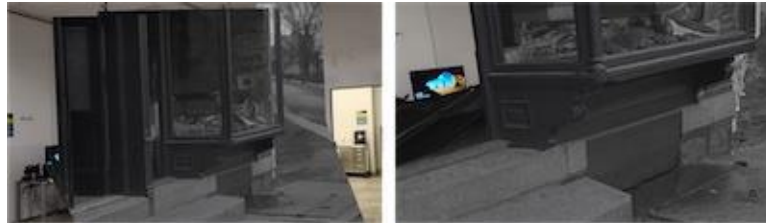


Figure 6. AR space created from a silent film movie frame

### Recreating spaces

While the previously discussed XR examples involve real spaces that one *could* travel to, it is also possible to reconstruct and relocate previously existing spaces that can no longer be visited. The approach above has been explored in collaboration with film history faculty and students at Dartmouth who are researching early American silent films that are being restored from paper prints. Figure 6 shows a 3D environment created from one frame of the storefront from the 1909 film *The Cord of Life*.<sup>5</sup> One can walk into and around this environment while looking at it through a smart phone or tablet. While Figure 6 shows the reconstructed 3D scene placed in our simulation lab, it could just as easily be located and explored anywhere that one might bring a smartphone.

It turns out that the block in Fort Lee New Jersey where this silent film was shot was used for shooting *many* silent films around the year 1910. Frames from six additional films were used that captured neighboring buildings from a variety of angles. Three of these images were provided by Dennis Doros and one was provided by Mark Williams, both via Tracey Goessel and the Biograph Project<sup>6</sup> which has been restoring films such as these.



Figure 7. 3D software (left) and AR in park (right)

### Modeling and texturing software

Given this set of movie frames, the building images can be mapped onto 3D planes and boxes, then roughly arranged and remapped to recreate this historic street virtually. Software generally used for 3D movie visual effects called *Houdini* was used for this work<sup>7</sup> but nearly all 3D animation software has the capabilities needed to project images onto 3D surfaces through a process called “texture mapping”. Using old photographs in this way is less common and is made particularly tricky when not

much is known about the original physical film camera used to shoot the images. Many assumptions and guesses were made about the historical truth, given unknowns such as the camera distance and height, and lens properties for the seven camera shots used. Once virtually recreated though, this block of storefronts can be placed anywhere like a hologram that can be seen by looking through a smartphone screen like a window into the past.

In the summer of 2022, the creation of this street model was completed during a trip to Missoula, Montana, in the northwestern part of the US. Walking outside along the river, the virtual hundred-year old city block was relocated to a park downtown with sufficient open space. A long time was spent experiencing a taste of what walking in front of these buildings a century ago might have felt like. Obviously, the real buildings were not black and white or mostly flat, but the sense of virtual place is something that can be noticed in the body while feeling the buildings' size and proximity. Additionally, the actual physical environment of the surrounding park was experienced at the same time. The tree, bridge overpass, and sculpture also felt present in the space.

### Attention

We are in a brief period in AR history before AR glasses arrive, where using smartphones as our primary AR display devices is not as technically immersive as AR will someday typically be. But despite the relatively small field of view of the screen in our extended hand, our *attention* is disproportionately on our phone screen, as opposed to the physical world around us. It is reminiscent of the very problematic inattentional blindness<sup>8</sup> of a person using their phone while crossing the street or worse yet, driving.

This is in some ways the inverse of contemporary AR HMDs like the HoloLens, in which the *edges* of the relatively small field of view annoyingly distract attention away from the virtual objects displayed. While our eyes lock on the phone and *mostly* ignore the surrounding world, nearly *all* our peripheral vision is fed to our body, despite our attention being elsewhere. The sensation is a bit like when one drives “on automatic pilot” with thoughts mainly focused on some conversation that was recently had. While an extended discussion about metacognition<sup>9</sup> might be appropriate, the important point is simply noticing that we're thinking almost entirely about one thing while we also *experience the presence* of what's around us, as we (mostly) avoid walking into the table or tree or people around us. Where things get particularly interesting is when we unintentionally treat *virtual* objects as if they are physical: walking around them, or occasionally even trying to lean against them without thinking.

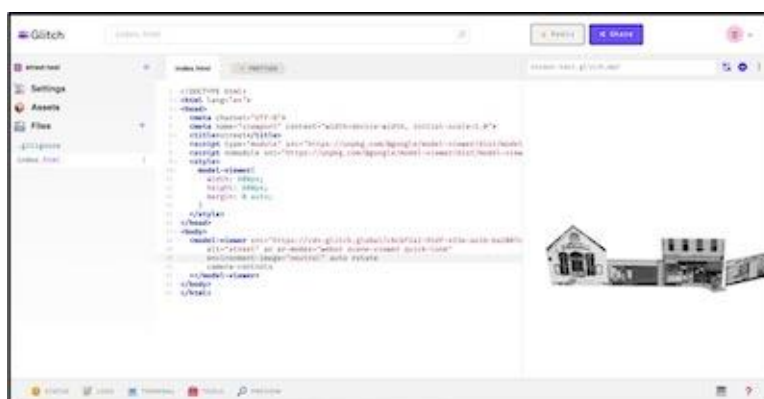


Figure 8. Glitch code for deployment

### Sharing spaces

There are a few relatively easy ways to share virtual environments for use in AR or VR. When an environment has limited interactive elements and animation it can simply be linked to from a web page with the 3D data files copied to a web server. Free JavaScript code libraries and cutting and pasting a handful of lines of HTML provides the AR capabilities. A free web site such as Glitch<sup>10</sup> makes these files available online so that a short web URL or QR code can be easily shared to provide others with remote access. Figure 8 shows an example of the web interface containing less than a page of HTML required to make the silent film street model available on the web. Students have been able to learn to do this very quickly. Learning to work with 3D modeling and texturing software however takes a bit longer.

Commercial software with restrictive licenses that require app installations or app store review processes before virtual environments may be shared have been avoided in the projects discussed in this paper. Free open-source web-based software provides easier access and sharing for students and researchers. Some of the web-based software libraries used for this work have included model-viewer,<sup>11</sup> A-Frame,<sup>12</sup> Three.js,<sup>13</sup> and p5.js.<sup>14</sup> All are free and require just a web browser. Again, a major advantage of using web technology is that one can just click a link, type a URL, or scan a QR code to see an AR experience. When the street model discussed previously was being remotely presented to a live audience in a film history conference auditorium last summer, the web address was shown in a slide in Zoom. On-site attendees were able to view the 3D model using AR in the auditorium using their phones.

### Remixing spaces

The activity of interactively recombining virtual and physical spaces (Figure 9) is interesting to consider. Emerging platforms for freely creating and sharing media frequently lead to new remix cultures. For example, the explosion of TikTok and other short video social media has created a generation with impressive video editing skills. In 2021 when crypto suddenly spawned a robust NFT market, formerly obscure generative computer graphics drawing techniques were rediscovered by a new community who began remixing and sharing (and selling) them online.



*Figure 9. Hybrid physical/virtual space; different scales*

Emerging technologies such as 3D generative AI, Apple's growing support for AR and 3D capture, Google's computational photography research, and eventual inevitable broader support for *actual*

highspeed 5G networks (and even 6G in a few more years) all may provide the fuel to spark a revolution in the use of 3D spaces as media content to relocate, layer, experience, and share.



Figure 10. Generative AI spaces created with the same text prompt

### Navigating possibility spaces

Generative AI is a particularly interesting case in any discussion of remixing contexts. Any time the ability is acquired to *manually* remix and share some new media type, programmers inevitably create generators<sup>15</sup> that procedurally produce surprising combinations. These days, this pattern leads to machine learning. AI can be trained with examples as data, which it uses to learn generic attributes of the artifacts provided. This then creates a space of possible designs that can be explored via interfaces such as descriptive text (Figure 10), sketching, or images. Generative text and image systems have become mainstream in recent months. The generation of 3D environments is slowly making its way from research lab experiments towards freely available software. At the current rate that generative AI is advancing, the capability to create full 3D environments from descriptions seems to be just around the corner. What are the implications as we continue advancing week by week towards asking AI to show us more ideas from these latent spaces than we can possibly navigate interactively? There are also, as always, very significant questions about the boundaries and biases lurking in these processes. It is difficult to understand the limitations.

### CONCLUSION

Possible applications for using virtual versions of physical spaces seem endless across many fields. A few of the diverse domains that we've begun work on include outdoor neighborhood streets for healthcare research, medieval medical practice portrayals from a rare book collection, visual representations of wireless signals in outdoor environments, and recreations of lost punk rock venues.

As with the above possibility spaces, working in an interdisciplinary community provides more opportunities than are practical to pursue.

Performers, inspectors, and designers of course often do require physical interaction as part of their work. Travelling significant distances to physically interact with others in specific spaces is sometimes inevitable. It will be extremely challenging to relocate and sufficiently replicate many site-specific *physical* experiences using haptic simulation for a very long time. However, climate change and related sustainability challenges are pushing us to reduce our unnecessary travel as much as possible. When feasible, bringing remote spaces to us instead of traveling to them seems to be an unexpected alternative worth examining. Most of the web-based augmented reality work discussed is available from the author's website at [go.osu.edu/mattlewis](http://go.osu.edu/mattlewis).

## ACKNOWLEDGEMENTS

The projects described in this paper were supported by funding from The Ohio State University's Global Arts and Humanities Discovery Themes (GAHDT), the Advanced Computing Center for the Arts and Design (ACCAD), the Translational Data Analytics Institute (TDAI), and the Battelle Engineering, Technology and Human Affairs (BETHA) Endowment. Virtual environments and objects shown in Figures 2 and 3 were implemented by design graduate students Emily Subr and Hsi-Yuan Chu. The silent film AR project was part of *The Media Ecology Project*, a digital humanities research initiative directed by Mark Williams and John Bell at Dartmouth College, in relation to the NEH Digital Humanities Advancement Grant "Understanding Visual Culture Through Silent Film Collections".

## NOTES

- <sup>1</sup> Greg Downing, “Panoramic Image Modeling Project, Tribunal Plaza, Nice France,” 2003, <http://www.gregdowning.com/pimp/Tribunal/index.htm>.
- <sup>2</sup> Microsoft, “Microsoft HoloLens | Mixed Reality Technology for Business,” accessed February 19, 2023, <https://www.microsoft.com/en-us/hololens>.
- <sup>3</sup> Magic Leap, “Home,” accessed February 19, 2023, <https://www.magicleap.com/en-us/>.
- <sup>4</sup> Lynx Mixed Reality, “Lynx-R1: Mixed Reality Standalone Headset,” Lynx Mixed Reality, January 27, 2023, <https://www.lynx-r.com/>.
- <sup>5</sup> D.W. Griffith, *The Cord of Life* (American Mutoscope & Biograph, 1909).
- <sup>6</sup> Film Preservation Society, “The Biograph Project,” Film Preservation Society, accessed February 19, 2023, <https://filmpreservationsociety.org/biograph-project>.
- <sup>7</sup> SideFX, “Houdini - 3D Modeling, Animation, VFX, Look Development, Lighting and Rendering | SideFX,” accessed February 19, 2023, <https://www.sidefx.com/>.
- <sup>8</sup> Brian J Scholl et al., “Talking on a Cellular Telephone Dramatically Increases ‘Sustained Inattentive Blindness,’” *Journal of Vision* 3, no. 9 (October 1, 2003): 156, <https://doi.org/10.1167/3.9.156>.
- <sup>9</sup> Kimberly D. Tanner, “Promoting Student Metacognition,” *CBE—Life Sciences Education* 11, no. 2 (June 2012): 113–20, <https://doi.org/10.1187/cbe.12-03-0033>.
- <sup>10</sup> Fastly, “Glitch: The Friendly Community Where Everyone Builds the Web,” accessed February 19, 2023, <https://glitch.com/>.
- <sup>11</sup> Google, “3D Model-Viewer Embed,” accessed February 19, 2023, <https://modelviewer.dev/>.
- <sup>12</sup> Supermedium, “A-Frame – Make WebVR,” A-Frame, accessed February 19, 2023, <https://aframe.io>.
- <sup>13</sup> mrdoob, “Three.js – JavaScript 3D Library,” accessed February 19, 2023, <https://threejs.org/>.
- <sup>14</sup> Processing Foundation, “Home | P5.js,” accessed February 19, 2023, <https://p5js.org/>.
- <sup>15</sup> Kate Compton, “So You Want to Build a Generator...,” Tumblr, *Tumblr* (blog), accessed February 19, 2023, <https://galaxykate0.tumblr.com/post/139774965871/so-you-want-to-build-a-generator>.

## BIBLIOGRAPHY

- Compton, Kate. “So You Want to Build a Generator...” Tumblr. *Tumblr* (blog). Accessed February 19, 2023. <https://galaxykate0.tumblr.com/post/139774965871/so-you-want-to-build-a-generator>.
- Downing, Greg. “Panoramic Image Modeling Project, Tribunal Plaza, Nice France,” 2003. <http://www.gregdowning.com/pimp/Tribunal/index.htm>.
- Fastly. “Glitch: The Friendly Community Where Everyone Builds the Web.” Accessed February 19, 2023. <https://glitch.com/>.
- Film Preservation Society. “The Biograph Project.” Film Preservation Society. Accessed February 19, 2023. <https://filmpreservationsociety.org/biograph-project>.
- Google. “3D Model-Viewer Embed.” Accessed February 19, 2023. <https://modelviewer.dev/>.
- Griffith, D.W. *The Cord of Life*. American Mutoscope & Biograph, 1909.
- Lynx Mixed Reality. “Lynx-R1: Mixed Reality Standalone Headset.” Lynx Mixed Reality, January 27, 2023. <https://www.lynx-r.com/>.
- Magic Leap. “Home.” Accessed February 19, 2023. <https://www.magicleap.com/en-us/>.
- Microsoft. “Microsoft HoloLens | Mixed Reality Technology for Business.” Accessed February 19, 2023. <https://www.microsoft.com/en-us/hololens>.
- mrdoob, “Three.js – JavaScript 3D Library,” accessed February 19, 2023, <https://threejs.org/>.
- Processing Foundation. “Home | P5.js.” Accessed February 19, 2023. <https://p5js.org/>.
- Scholl, Brian J, Nicholas S Noles, Vanya Pasheva, and Rachel Sussman. “Talking on a Cellular Telephone Dramatically Increases ‘Sustained Inattentive Blindness.’” *Journal of Vision* 3, no. 9 (October 1, 2003): 156. <https://doi.org/10.1167/3.9.156>.
- SideFX. “Houdini - 3D Modeling, Animation, VFX, Look Development, Lighting and Rendering | SideFX.” Accessed February 19, 2023. <https://www.sidefx.com/>.
- Supermedium. “A-Frame – Make WebVR.” A-Frame. Accessed February 19, 2023. <https://aframe.io>.

Tanner, Kimberly D. "Promoting Student Metacognition." *CBE—Life Sciences Education* 11, no. 2 (June 2012): 113–20. <https://doi.org/10.1187/cbe.12-03-0033>.

# THE ROLE OF SCREEN SPACE IN ARCHITECTURE AND FILM AS MULTIMEDIUM

Authors:

**RADOSŁAW ACHRAMOWICZ, MAJA PIECHOWIAK**

Affiliation:

FACULTY OF ARCHITECTURE, WARSAW UNIVERSITY OF TECHNOLOGY, POLAND

---

## INTRODUCTION

In the modern world, there is, practically, no part of life that would not be under control of a preview. The screen as a phenomenon has been present in culture since the beginning of humanity and can exist in many forms. This experience has come a long way from its origins as static images and photography, the introduction of cinema, radio, and TV to current digital era that created new forms of screen space. It can be observed not only in the digitalization of architectural and urban spaces but also in cinema and computer environments. According to this statement French theorist Paul Virilio announces the “disappearance of the places of projection because everything today becomes a screen”.<sup>1</sup> In line with this assumption, architecture also becomes a surface. Looking at the modern city, it is not difficult to notice the huge role of mass media and the ubiquitous images accompanying them. New digital technologies integrate art, design, and architecture, having an obvious impact on the city. The urban screen, just like the screen of a telephone or computer can be currently understood as the holder of the content.<sup>2</sup> This causes the transfer of contemporary urban agora to a space of electronic media. Previously indicated phenomenon of digitization occurs also in the field of cinema. As a medium, film still evolves in its content and form. Being a breakthrough in modern era it created a revolutionary visual language. Film as well as architecture are media linked to the time, space, and people. It also corresponds to reality and human life through narratives of space. Therefore, by now the screen has been a plane to receive fictional reality. But the cinema goes beyond it – the whole screen experience becomes the interface of stories told in space as long journeys and new narratives. It is a frame that divides each space into what is visible inside and outside. Both exist in viewer’s imagination as one as they create a whole.

## SCREEN PROTOTYPES

Plato's Cave - a philosophical concept presented in one of Plato's dialogues entitled *Politeia* can be considered a first prototype of a modern screen. According to this concept, people imprisoned in a cave, observe shadows - illusions of the real-world cast on the surrounding walls. The source of projection for this „shadow theater” is the light of a bonfire. The Platonic concept is a confirmation of the fact that the screen (even if it didn’t function under this name in ancient times) is quite an old invention in human mind. The widely accepted interpretation is that the screen has historically been used to present visual information, starting with Gothic cathedrals that formed natural screens for the projection of stained-glass windows. In modern architecture one can find a fascination with new possibilities of imaging: in the 18th century with panoramas, at the turn of the 19th and 20th centuries

with photography, in the interwar and postwar period with cinema and now with virtual reality and digital techniques. The prototype of such approach to shaping space can be found in Étienne Louis Boullée, who used the idea of projection in the *Newton - Cenotaph Museum* project (Fig.1). In the shell of dome, he placed many irregularly scattered channels through which daylight was supposed to enter the interior, imitating the light of stars representing the night sky. At night, the interior was illuminated by a lamp imitating the spreading sunlight.<sup>3</sup>



Figure 1. Étienne-Louis Boullée- A Cenotaph for Newton, Wikimedia Commons <sup>4</sup>

In the first half of the 18th century, buildings with panoramas were erected in many European metropolises. Their perception was based on discoveries in optics that time. From that era until the 20<sup>th</sup> century, thanks to the discoveries and help of microscopes, telescopes, endoscopes, X-ray photography and cinema, the range of visibility was constantly expanding. In the 20th century, the increasingly stronger links between architecture and cinema resulted in the first prototype of a monitor in the form of a backlit wall: in the design of the editorial office of the *Leningradskaya Pravda* newspaper in Moscow, designed by Aleksander and Viktor Viesnin, the screen was to display pages of this newspaper. In the 1930s, László Moholy-Nagy experimented with a concept of projection without clearly defined plane, creating a „light atelier of the future”. The culmination of this search was a project of the „simultaneous cinema or polycinema”, which completely dispensed with a single fixed projection surface. Already before World War II, Moholy-Nagy predicted that the apartments’ walls could be projection screens: „I dream of light apparatuses, thanks to which - in a craftsmanlike or automatic-mechanical way - it would be possible to project light visions into the air, into large rooms and onto projection umbrellas (...) onto fog, gas, clouds (...). It is very possible that in the future a certain place will be reserved in the apartments, as for the radio, for the reception of these light frescoes”.<sup>5</sup> In 1928 another innovator of the Great Avant-Garde, Naum Gabo treated the sky above the Brandenburg Gate as a light game screen. It was an announcement of „light architecture”, which he developed before the war with the help of Albert Speer anti-aircraft headlights in a form of *Cathedral of Light* in Nuremberg <sup>6</sup> (Fig.2). The continuation and development of such treatment of space can be found in the 1950s in so-called „multi-screen” architecture by Charles and Ray Eames. One of their most significant projects involved a film entitled *Glimpses of the USA*, consisting of 2,200 images displayed on 7 screens. It was exhibited simultaneously for 12 minutes inside the Buckminster Fuller's geodesic dome during the Moscow Fair in 1959 (Fig.3).

This significantly contributed to the debate on the role of screens in contemporary architectural space and was also an impulse for the research on perception based on the intensification of sensory impressions.<sup>7</sup>



Figure 2. Albert Speer - A Cathedral of Light, Wikimedia Commons <sup>8</sup>



Figure 3. Charles and Ray Eames - Glimpses of the USA, Eames Office <sup>9</sup>

## THE SCREEN AS A FILMIC MEDIUM

Despite the incredible development of technology, transmitting information and moving images, basic plane of human perception of the world still remains a screen of our consciousness as states Polish film theorist Marek Hendrykowski.<sup>10</sup> It is relatively permanent and can exist in many different forms. In each of them it turns out to be a metaphor of a representation. As a cultural object, it plays a role of a communicative medium thanks to which what is imagined encounters what is presented. The first and the most significant function of a frame of the cinematographic spectacle in all its forms, is a division between the world on the screen and the world off the screen. It separates the reality from imaginative. The barrier between those two universes is always a screen as a subjectively existing frame surrounding the world in which the spectacle exists.<sup>11</sup>

Since the beginning of a cinematography and expansion of a screening space, a cinematic space has enormously emerged. It can be dated back to the beginning of 20<sup>th</sup> century when Abel Gance used the split triple screen as an experiment in the closing sequence of his famous *Napoleon* (1928) (Fig. 4). It was filmed with three cameras linked together. The final composition created a panoramic image with a triptych of two separated actions.



Figure 4. Frame from a triptych - Abel Gance - *Napoleon*, Radio France <sup>12</sup>

At this time the Avant-Garde movements of the early 20<sup>th</sup> century asked many questions about rectangular format of a screen frame, multiplication and expansion of a screen space and the concept of spectators collaborating with the certain piece of art. The experimental cinema between WWI and WWII, works of Man Ray - *Le retour à la raison* (1923), Marcel Duchamp - *Anemic Cinema* (1926) and Rene Clair - *Entr'acte* (1924) served as a source of inspiration for many future artists. These trends of deconstruction and multiplication of an image and a screen were raised again in the 1960s and 1970s as the new approach of filmic projection called “Expanded Cinema” movement became significant across the globe. Artists like Stan VanDerBeek, Nam June Paik, Lis Rhodes challenged the moving image convention and broke down the feeling of a projection plane. Video installations of the 1970s extended this cinematic medium even further and predicted the creation of digital installations and cinema in the 1980s and 1990s. Those experiments with projection and presentations of moving images introduced immersive environments and interactive relationships between the viewer and the image found in contemporary media and film projects. However, the main breakthrough for the cinema itself occurred in the early 1980s when one of the most significant steps in digital cinematography was introduced. The *Tron* production directed by Steven Lisberger was one of the first to present Computer Generated Imagery. Not only was this film revolutionary but also predicted the future. One of the most evident examples is the surreal world - The Cyberspace. The whole idea is similar to the construct of the metaverse environment currently transforming how we see the world. Moreover, during the 1990s the boundary between film and digital arts regarding the projecting plane significantly changed. Cinema entered the artistic circulation, strengthening its presence and taking on an omnipresent multimedia character.<sup>13</sup> Around the turn of the millennial era this was also influenced by the development of digital tools for recording, processing, and distributing images. They enabled multi-directional flows of the film image to spread between media and technologies, creating new possibilities for its transformation and presentation. According to Michael Newman one should rather talk about the „art of the moving image” - an image not only ubiquitous, but also infinitely convertible and modifiable.<sup>14</sup>

Today, the use of a screen space is still an essential element allowing creators to produce narratives that can evolve and advance for the future attempts. Since around the 2000s, the medium of film shifted into multiple spaces, platforms and materialities initiated by digitization of the world. The current and future cinema space can be found everywhere: in galleries, on mobile phones, architectural forms and most importantly - in the metaverse.

## THE SCREEN AS AN ARCHITECTURAL SPACE

Peter Cook's *Kunsthau*s in the city of Graz can be an example of a contemporary search based on the Eames' marriage principles. It touches upon the issue of the presence and flow of information in an architectural space (Fig.7). The key element of this building is the BIX media façade by Berlin-based design firm Realities:united (created by Tim and Jan Edler). The façade functions as a membrane between the museum and public space, consequently providing a visual platform for art projects. It

works on a 900 m<sup>2</sup> screen with pixels of round fluorescent lamps transforming the architecture into a low-resolution urban screen. This screen extends the scope of communication of the *Kunsthaus* to the public space outside the building. It can be said that BIX is a kind of a communication laboratory - an urban „transmitter”, in which the „skin” becomes a programmable surface sending electronic messages. This project can be described by the words of the architecture critic Aaron Betsky,<sup>15</sup> who notes that the architectural space is increasingly determined by information, financial and cultural codes that have not been noticed so far. The fundamental property of such a space, as noted by the Polish media researcher Maryla Hopfinger, is „the directness of communication contact, assuming the possibility of active participation”.<sup>16</sup> We can even say that the space around us is designed and organized in such a way that the passer-by becomes first: a spectator and then: a participant. As the French philosopher Gilles Deleuze writes, „the modern world is a world of appearances” and „all identities are only pretended as an optical effect”,<sup>17</sup> and "the essence of this multimodality is the constant transition from the real world to the world of mirror and screen appearances".<sup>18</sup>

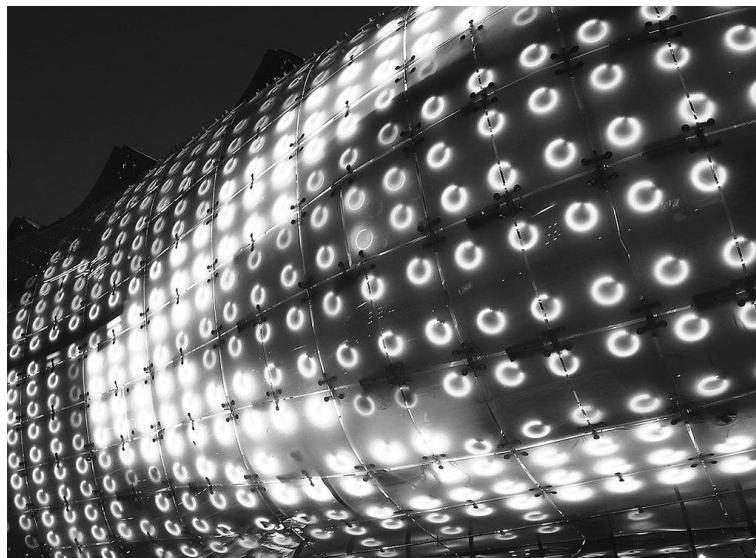


Figure 5. Peter Cook - *Kunsthaus* From the author's archive (R.Achramowicz)<sup>19</sup>

This contemporary discourse on screens in the city is therefore an extension of post-structuralism, which has led to extensive research on the issue of superiority of communication in society and culture. At the same time, architecture subjected to principle of a multimedia spectacle becomes a reflection of Marshall McLuhan's search, which is culminated in his statement: „the medium is the message”. An example of this can be the *Crystal Mesh* screen façade designed by the Realities:united studio, which is an integral element of the Iluma building in Singapore. The designers proposed a luminous ornament formed by a mosaic, modular pattern - a kind of matrix, formed with fluorescent lamps entwining the façade. According to the authors, the intention of the project was to create a light impression - a „baroque light carpet”.

Let us refer here to the words of Vilém Flusser, who believes that the energy source of contemporary culture is imagery, and we „live in a world of images”. As the cited examples show, some architects tend to redefine the form and meaning of the architectural façade - expanded in the 21st century to include the function of an interface. Therefore, some of the buildings have changed - as Jean Badrillard in *Écran total* (1997) and Paul Virilio in *L'écran du désert* (1991) agree - into giant, total screens. In this context, we can recall the Galleria Department Store in Seoul, designed by UN Studio. Here, architects developed a façade inspired by a chameleon skin, which during the day reflects natural light from the iridescent glass discs. However, at dusk they turn into a screen and create light

patterns on the façade. To sum up, following Paul Virilio, one can say such buildings-screens, being contemporary „audiovisual monuments” are increasingly replacing traditional architectural monuments in the urban space.

### THE SCREEN AS AN ART INSTALLATION

Through storytelling and vivid imagery, artists not only attract attention to public art but also redefine people’s relationship and interaction with architectural spaces. They create a dialog between a spectator and a creator. The audience can then become more aware in receiving certain information as the maker had been in the act of making it.<sup>20</sup> Currently many immersive projections integrate various forms of engagement such as video, screens and lighting to create an interactive space. With multimedia installations the feeling of a space becomes an integral part of the design process, resulting in a more immersive experience. An active visitor engagement can be stimulated by a variety of semantic materials, including light, sound and smell. The difference between traditional sculpture and the one at the exhibition space is that the visitor is the center around which the works are constituted, while the subject is off-center and spread over the entire space.<sup>21</sup> Additionally screens can be used to create a sense of place.

Many today’s buildings are designed to be functional and efficient but often lack individuality. By incorporating multimedia exhibits and screens into a design of a modern space, one creates an identity that sets it apart from others. A multimedia installation in the lobby of an office building could be used to create an unique experience reflecting culture and values of the company. One thrilling example is a lobby of *44 Montgomery Street Office Building* in San Francisco, USA designed by Revel Architects. This project has become the focal point of the main hallway. With the use of colored light that reacts with movement of people the lobby comes to life as a living organism on a wall-screen. This installation is a kind of art that uses various types of technology to form an unique experience for the audience.

Movement, image and sound create a multi-sensory environment that can engage everyone on multiple levels. According to this, Nonotak Studio often uses projection mapping, light and sound to create immersive environments that blend boundaries between art, technology, and architecture. One of their most well-known lighting sculpture is *Horizon* which consists of multiple high, screen-tubes switching on an off in a certain rhythm. These projections create an illusion of movement and depth, transforming space and creating a sense of immersion. They also incorporate sound into their project using a mix of electronic and acoustic elements to create a dynamic and constantly evolving soundscape.

Moreover, multimedia installations could also be a manifesto of certain issues and are used as a tool to provoke and highlight significant matters. Nonotak designed *Isotopes v.2* (Fig.8.), a mesmerizing light show that took its cue from the disaster at the Fukushima nuclear power plant. According to them this project, with its changing appearance, creates a sense of uncertainty bridging the gap between what existed and what didn't, pulling the visitor into a journey of their own shifting emotions.<sup>22</sup>



Figure 6. Nonotak Studio – *Isotopes v.2* <sup>23</sup>

## CONCLUSION

In the essay *Lost Dimension* (1983) Paul Virilio compares electronic media to windows through which one „looks” at the world. In the mediatized reality, he describes that, more and more often, space and devices play a role of a „third window” and the website address becomes the city's doorstep.<sup>24</sup> The immateriality of the world viewed through a monitor as a window is described by many twentieth-century theoreticians and philosophers, including Lyotard and Baudrillard. The main contemporary pleader for audiovisual culture, de Kerckhove, believes that modern screens are a rigorously mandated frame of perception that instantly defines the dimensions of everything that can be viewed. They focus viewer's eye and attention as well as ruthlessly condition the way information is processed and delivered.<sup>25</sup> Accompanying people constantly, from birth to death, and everywhere - from the hospital room to the space of a house and street, contemporary screens become not only a center of access to all kinds of data, but they become a symbol of modern culture. Following Baudrillard, the modern era can be called the universe of a total monitor, where he writes: „All our machines are monitors, we ourselves have become them, and human relations are relations between monitors.”<sup>26</sup>

## NOTES

- <sup>1</sup> Paul Virilio, "La Lumiere Indirecte", in *After Cinema? Audiovisuality In the Epoch of Electronic Messengers*, Translated by Andrzej Gwozdz, (Cracow: Universitas, 1994), 92.
- <sup>2</sup> Marshall McLuhan, "The Medium is the Message", in *Understanding Media. The Extensions of Man*, (Berkley: Gingko Press, 1994), 18.
- <sup>3</sup> Thomas Wells Schaller, "The Art of Architecture Drawing: Imagination and Technique", (New York: John Wiley & Sons, 1997), 160.
- <sup>4</sup> "A Cenotaph for Newton", Étienne-Louis Boullée, Wikimedia Commons, accessed February 03, 2023, [https://commons.wikimedia.org/wiki/File:Bundesarchiv\\_Bild\\_183-1982\\_1130502,\\_Nürnberg,\\_Reichsparteitag,\\_Lichtdom.jpg](https://commons.wikimedia.org/wiki/File:Bundesarchiv_Bild_183-1982_1130502,_Nürnberg,_Reichsparteitag,_Lichtdom.jpg)
- <sup>5</sup> Andrzej Gwozdz, "Mała Ekranologia" in: *Wiek ekranów*, (Cracow: Rabid, 2002), 20.
- <sup>6</sup> Piotr Winkowski, "Architektura: przestrzeń projekcji i powierzchnia ekranu", in: *Wiek ekranów*, (Cracow: Rabid, 2002), 495.
- <sup>7</sup> Beatriz Colomina, "Otoczeni przez obrazy: wieloekranowa architektura Eamsow", in *Co to jest architektura*, (Cracow: Bunkier Sztuki, 2002), 37-40.
- <sup>8</sup> "A Cathedral of Light", Albert Speer - Wikimedia Commons, accessed February 02, 2023, [https://commons.wikimedia.org/wiki/File:%C3%89tienne-Louis\\_Boull%C3%A9,\\_C%C3%A9notaphe\\_de\\_Newton\\_-\\_05\\_-\\_Coupe,\\_repr%C3%A9sentation\\_de\\_nuit\\_avec\\_un\\_effet\\_de\\_jour\\_%C3%A0\\_l'27int%C3%A9rieur.jpg](https://commons.wikimedia.org/wiki/File:%C3%89tienne-Louis_Boull%C3%A9,_C%C3%A9notaphe_de_Newton_-_05_-_Coupe,_repr%C3%A9sentation_de_nuit_avec_un_effet_de_jour_%C3%A0_l'27int%C3%A9rieur.jpg)
- <sup>9</sup> "Glimpses of the USA", Charles and Ray Eames, Eames Office, accessed: February 03, 2023, <https://www.eamesoffice.com/the-work/glimpses-of-the-u-s-a-film/>
- <sup>10</sup> Marek Hendrykowski, "Ekran i kadr [The screen and a frame]", in *Przestrzenie Teorii* 01, (Poznan: Adam Mickiewicz University Press, 2002), 138.
- <sup>11</sup> See endnote 10: Marek Hendrykowski, "Ekran i kadr", in *Przestrzenie Teorii*, (Poznan: Adam Mickiewicz University Press, 2002), 137-148.
- <sup>12</sup> Frame from the last part - triptych "Napoleon", Abel Gance, Radio France, accessed January 20, 2023, <https://www.radiofrance.fr/franceculture/abel-gance-les-reves-de-napoleon-en-polyvision-enfin-restaures-4538278>
- <sup>13</sup> Łukasz Mojsak, "Sztuka ruchomego obrazu między filmem, kinem i wideo w latach 90 i pierwszej dekadzie XXI wieku", in *Historie filmu awangardowego. Od dadaizmu do postinternetu*, (Warsaw: Korporacja Haart, 2020), 397.
- <sup>14</sup> Michael Newman, "Moving image, Video Revolutions: On the History of a Medium", (New York: Columbia University Press, 2014), 88.
- <sup>15</sup> Aaron Betsky, "From Box to Intersection – Architecture and Crossroads", in *Disappearing Architecture*, (Basel: Birkhauser, 2005), 250-252.
- <sup>16</sup> Maryla Hopfinger, "Kultura audiowizualna u progu XXI wieku", (Warsaw: Wydawnictwo Instytutu Badań Literackich PAN, 1997), 59.
- <sup>17</sup> Gilles Deleuze, "Différence et Répétition", Translated by Bogdan Banasiak, Krzysztof Matuszewski, (Warsaw: Wydawnictwo KR, 1997), 23.
- <sup>18</sup> Ewa Rewers, "Ekran Miejski" in *Pisanie miasta – czytanie miasta*, (Poznan: Wydawnictwo Fundacji Humaniora, 1997), 50.
- <sup>19</sup> "Kunsthaus", Peter Cook, From the author's archive – R. Achramowicz
- <sup>20</sup> David Curtis, Steve McQueen, "World of Art, Artist's Image", (New York: Thames & Hudson, 2021), 222.
- <sup>21</sup> Christine Vial Kayser, Sylvie Coellier, "Installation Art as Experience of Self, In Space and Time", (Delaware, Malaga: Vernon Press, 2021)
- <sup>22</sup> "New Installation Traps Visitors in Prison of Light", My Modern Met, 2013, accessed November 19, 2022, <https://mymodernmet.com/nonotak-isotopes-incredible-light-installation/>
- <sup>23</sup> "Isotopes v.2", Nonotak Studio 2013, accessed: January 20, 2023, [https://www.nonotak.com/\\_Isotopes-V-2](https://www.nonotak.com/_Isotopes-V-2)
- <sup>24</sup> Paul Virilio proposes a three-stage history of windows, that functions were originally performed by doors (windows-thresholds), separating the inner reality from the outer one. Additionally when finally proper windows appeared, their main task was to separate day from night, public from private, open from closed. The most recent – a third window is a portable monitor window - first television - now computer „window”.
- <sup>25</sup> Derrick de Kerckhove, "The Skin of Culture. Investigating The New Electronic Reality", Translated by Witold Sikorski, Piotr Nowakowski, (Warsaw: MIKOM, 2021), 36.
- <sup>26</sup> Jean Baudrillard, "Video World and Fractal Subject," in *After Cinema? Audiovisuality In the Epoch of Electronic Messengers*, Translated by Andrzej Gwozdz, (Cracow: Universitas, 1994)

## BIBLIOGRAPHY

- Baudrillard, Jean. "Video World and Fractal Subject." In *After Cinema? Audiovisuality In the Epoch of Electronic Messengers*, edited by Andrzej Gwozdz, Cracow: Universitas, 1994.
- Betsky, Aaron. "From Box to Intersection – Architecture and Crossroads." In *Disappearing Architecture*, 250-252, Basel: Birkhauser, 2005.
- Cook Peter. „Kunsthau”. From the author's archive – R. Achramowicz
- Colomina, Beatriz. "Otoczeni przez obrazy: wieloe ekranowa architektura Eamsow." In *Co to jest architektura*, 37-40, Cracow: Bunkier Sztuki, 2002.
- Curtis, David, Steve McQueen. *World of Art, Artist's Image*. 222, New York: Thames & Hudson, 2021.
- Deleuze, Gilles. *Différence et Répétition*. Translated by Bogdan Banasiak, Krzysztof Matuszewski, 23, Warsaw: Wydawnictwo KR, 1997.
- Eames Office. "Glimpses of the USA". Charles and Ray Eames. Accessed February 03, 2023, <https://www.eamesoffice.com/the-work/glimpses-of-the-u-s-a-film/>
- Gwozdz, Andrzej. "Mała Ekranologia." In: *Wiek ekranów*, 20, Cracow: Rabid, 2002.
- Hendrykowski, Marek. „Ekran i kadr.” In *Przestrzenie Teorii*, 137-148 Poznan: Adam Mickiewicz University Press, 2002.
- Hopfinger, Maryla. *Kultura audiowizualna u progu XXI wieku*. 59, Warsaw: Wydawnictwo Instytutu Badań Literackich PAN, 1997, 59.
- Kerckhove de, Derrick. *The Skin of Culture. Investigating The New Electronic Reality*. Translated by Witold Sikorski, Piotr Nowakowski, 36, Warsaw: MIKOM, 2021.
- McLuhan, Marshall. "The Medium is the Message." In *Understanding Media. The Extensions of Man*, 18, Berkley: Gingko Press, 1994.
- My Modern Met. "New Installation Traps Visitors in Prison of Light." Accessed November 19, 2022, <https://mymodernmet.com/nonotak-isotopes-incredible-light-installation>
- Newman, Michael. *Moving image, Video Revolutions: On the History of a Medium*, 88, New York: Columbia University Press, 2014.
- Plato. *Politeia*. Translated by Wladyslaw Witwicki, Fundacja Nowoczesna Polska
- Radio France. Frame from the last part - triptych "Napoleon", Abel Gance. Accessed January 20, 2023, <https://www.radiofrance.fr/franceculture/abel-gance-les-reves-de-napoleon-en-polyvision-enfin-restaures-4538278>
- Rewers, Ewa. "Ekran Miejski," in *Pisanie miasta – czytanie miasta*, 50, Poznan: Wydawnictwo Fundacji Humaniora, 1997, 50.
- Vial Kayser, Christine, Sylvie Coellier. *Installation Art as Experience of Self In Space and Time*. Delaware, Malaga: Vernon Press, 2021.
- Virilio Paul. „La Lumière Indirecte.” In *After Cinema? Audiovisuality In the Epoch of Electronic Messengers*. Translated by Andrzej Gwozdz, 92, Cracow: Universitas, 1994.
- Virilio, Paul. *Lost Dimension*. Translated by Julie Rose. London and New York: Verso, 1983
- Wells Schaller, Thomas. *The Art of Architecture Drawing: Imagination and Technique*. 160, New York: John Wiley & Sons, 1997.
- Wikimedia Commons. „A Cenotaph for Newton”. Étienne-Louis Boullée. Accessed February 03, 2023, [https://commons.wikimedia.org/wiki/File:%C3%89tienne-Louis\\_Boull%C3%A9,\\_C%C3%A9notaphe\\_de\\_Newton\\_-\\_05\\_Coupe,\\_repr%C3%A9sentation\\_de\\_nuit\\_avec\\_un\\_effet\\_de\\_jour\\_%C3%A0\\_l'int%C3%A9rieur.jpg](https://commons.wikimedia.org/wiki/File:%C3%89tienne-Louis_Boull%C3%A9,_C%C3%A9notaphe_de_Newton_-_05_Coupe,_repr%C3%A9sentation_de_nuit_avec_un_effet_de_jour_%C3%A0_l'int%C3%A9rieur.jpg)
- Wikimedia Commons. „A Cathedral of Light”. Albert Speer. Accessed February 02, 2023, [https://commons.wikimedia.org/wiki/File:Bundesarchiv\\_Bild\\_183-1982-1130-502,\\_Nürnberg,\\_Reichsparteitag,\\_Lichtdom.jpg](https://commons.wikimedia.org/wiki/File:Bundesarchiv_Bild_183-1982-1130-502,_Nürnberg,_Reichsparteitag,_Lichtdom.jpg)
- Winskowski, Piotr. "Architektura: przestrzeń projekcji i powierzchnia ekranu." In: *Wiek ekranów*, 495, Cracow: Rabid, 2002.

## MOBILE PERSPECTIVE: A POST-PRESCRIPTIVE JOURNEY THROUGH TIME AND SPACE

Authors:

**LOUISE MARTIN**

Affiliation:

DUBLIN DESIGN INSTITUTE, IRELAND

---

### INTRODUCTION

Responding to AMPS' *Representing Pasts – Visioning Futures* conference themes, I presented a design research paper as a parallel narrative screenplay treatment exploring liminality across territories of surface and space. The treatment documented a journey from exterior to interior and out again, travelling east to west on one of the original North-American transcontinental railways.<sup>1</sup>

Conceived as a piece of design fiction, a hero's narrative arc is depicted as they travel from one state to another; Across an extended natural landscape experienced from within the constant of a rail car and its wider social, cultural and historical network, a critical reflection upon the mediation of time and space dynamically frames a state of openness and possibility.

In a sweeping Cinemascope survey, the treatment drew upon the filmic quality of the journey, establishing parallel developments of cinema and the transcontinental railroad in running commentary to a practice of environmental design. It cut between common emphasis on apparatus of experience – temporality and movement in space and the structures that frame it – and an ensuing reconceptualisation of the way in which we orient within the contemporary age.

In the interplay of elements within an overarching narrative, the treatment referenced hyperlink cinema and a concept of network narratives that map society through dynamic connections between people, spaces and action. The concept of hyperlink is well established in twenty-first century media. This paper considers intersections of place, time and their representation and asks what about the real world, where we also face the need for opposing takes and discontinuities even, within sense-making narratives.



*Figure 1. A journey between two points*

### **A three-act structure**

The central organising plot of the screenplay treatment is a journey between two points. Specifically, the urban centers of Toronto and Vancouver, east and west termini on Canada's original transcontinental railway route *The Great Western Way*. The long-distance train was approached as a site of liminality, a structure to "hold open a contemplative space against the pressures of habit, familiarity, and distraction."<sup>2</sup> The journey develops into a proposal on how we might re-frame experiences around a 'mobile perspective' within multivalent contemporary terrain, drawing reference to 'systems perspective' and practice.<sup>3</sup> (Figure 1.)

Foucault wrote on Heterotopia as 'other' space, able to reflect and reflect upon the complex and layered reality of the world around us. Similar to cinema's ordering of dimensions into a projected rectangle, but more than a static form for passive pleasure, Heterotopia presuppose a system of opening and closing that both isolates and makes them penetrable.<sup>4</sup> The origin for this long-distance train scenario was personal. To literally step out of time, place and myself, and enter a sustained, immersive physical experience in order to open up a different cognitive position; To move into an 'other' space.

The journey, both that of the train and resulting design-research-paper-as-screenplay-treatment, was established over a three-act structure bearing out the classical narrative arc of 'exposition', 'climax' and 'denouement.' (Figure 2.) This paper does not attempt to re-enact the full detail of the treatment/journey presented at the conference. Just as liminality is defined as the space between two states, so here the two acts that define the journey 1: Departure and 3: Arrival, frame the space of action and potential 2: Transit. It is from this open centre that we reflect upon representation of pasts and look toward visions of futures.

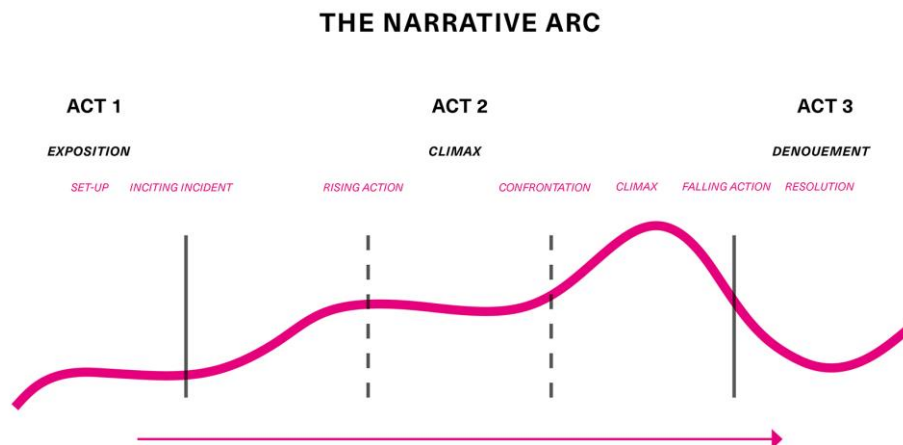


Figure 2. The narrative arc

## POINT OF DEPARTURE

Our journey begins in the late nineteenth century, with The Modern Project’s call for mastery and possession of nature<sup>5</sup> brought to bear in a willfully-disruptive expansion across territories. As burgeoning icons of modernity, the railway and cinema heralded new systems of spatial organisation and experience that set out to confront and re-define boundaries. These “mechanically-motivated bodies”<sup>6</sup> colonised minds as much as physical reality through constructions of experience and subjectivity.<sup>7</sup> From orders of perspective to liberated modes of perception, the way in which we saw and understood the world began to shift. Advancing scientific thought around relativity and uncertainty underscored a world that was unmooring from its foundation in absolutes.

When the Lumière brothers first presented ‘actuality film’ *Arrivée d’un train*<sup>8</sup> in 1896, audience members were famously reported to have run in fright, for fear that the life-size train would continue its one-point perspective trajectory from screen into the space of the auditorium. (Figure 3.) In a neat coalescence of themes, ‘cinema’s founding myth’ illustrates the extent to which fixed constructs of exteriority and interiority were being opened up and moved through in spatial, temporal and psychological terms. The subject is mobilised.

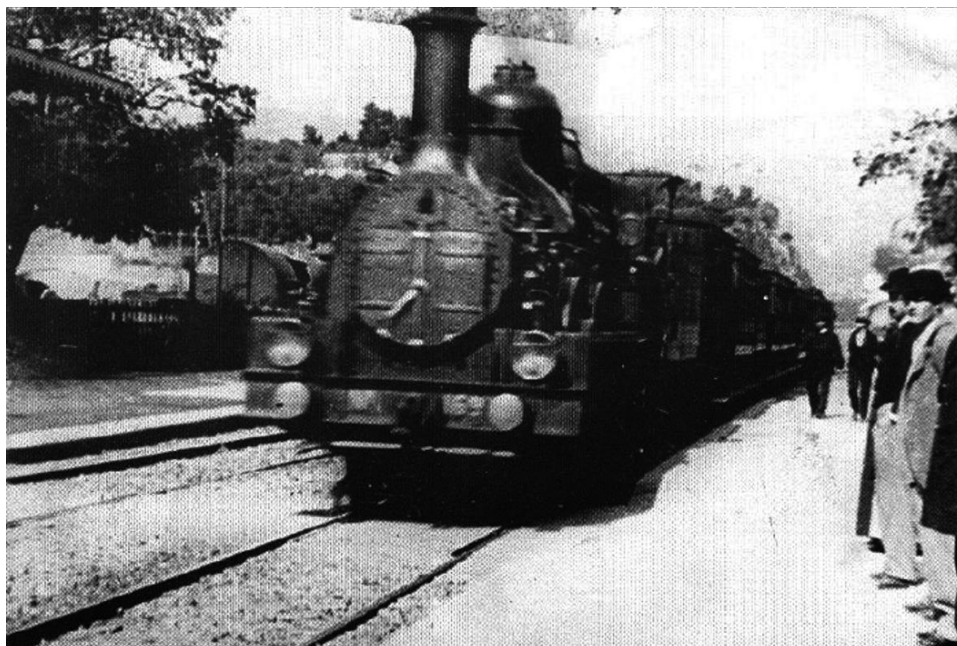


Figure 3. Still from *Arrivée d'un train (à la Ciotat)*

Writing one century later, cultural theorist Paul Virilio continued enquiry into technology and communications as they pertained to the mediated experience of how we live, work and move within the contemporary age. Anticipating something of our present condition, Virilio contemplated a city of permanent transit and internalised borders, in which the world-view based on orthogonal orthodoxy would give way to a new perception.<sup>9</sup> No longer bound in time and space, the environments we inhabit become personally-directed realities of past, present and future: memory and imagination.

### The hero's journey<sup>10</sup>

The journey begins and ends in what is known as 'Hollywood of the North'. Both Toronto and Vancouver, as exemplars of the 'east coast city' and 'west coast city' respectively, are established 'backlots' doubling for popular North American film and television locations. Yet responding to the specific (if clearly generic) qualities of each, it may be observed that Toronto mostly recurs as the day-to-day metropolis, where Vancouver regularly drifts into worlds of sci-fi and fantasy.<sup>11</sup>

Some resonance can be found in a brief consideration of their histories. What we now recognise as Toronto, grown up around trade and industry following its formal establishment as a military base, might be seen as something of an island condition. Sitting atop the land, it surveyed (and now sprawls) in all directions. Conceptually established around maintaining stasis, it looked out defensively.

In contrast Vancouver, located within an inhospitable perimeter of mountains and coastline, could be considered as a kind of oasis, active for centuries as a meeting place where it drew people in around the collection and sharing of resources. Despite isolating topology it was a place of movement and 'penetrability'. Both cities as we now know them were established by settlers around the turn of the eighteenth century upon pre-existing lands and indigenous cultures, in a swell of western-European global expansionism that led into the modern industrial age.<sup>12</sup>

The nineteenth century railway catalysed an ever-westward movement into what was (viewed from the settler perspective) open territory. With modernity came a contemporary paradox characteristic, wherein the stable placement of the passenger inside (here, in and along the rail network) coincides with destabilisation of the places outside.<sup>13</sup> Collecting such diverse locales as Toronto and Vancouver

within a singular infrastructure grand narrative, the transcontinental passenger route is experienced as an interiorised space in and of itself.<sup>14</sup> Running broadly coast-to-coast or edge-to-edge of the North American continent's central landmass, the thrust of this journey takes place in the landscape suspended 'in-between.' (Figure 4.)

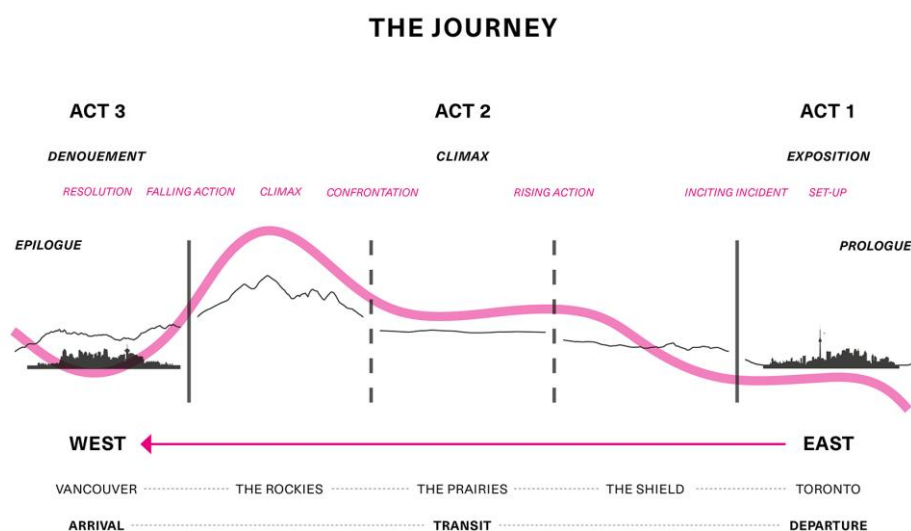


Figure 4. The Journey

### All-aboard

The rails fixed. The route pre-determined. As in the movie theatre, where the interior functions to establish a near continuous connection between audience and film (the spectacle projected within an enclosed space, on a depthless screen, directing movement into the film and out of reality) here, too, a 'suspension of perception' is maintained along the railroad track.

Yet over the unhurried duration of the transcontinental service as it variously quickens, slows, pauses, is overtaken, within the singular forwards motion there is a sensation of slippage as clouds, trees, rock formations, bodies of water, freight, and signaling infrastructure track back and forth in discordant rhythm. Between the perspective of the rails and flattened views through car windows, one's perceived position in the time and space of this expansive territory is loosened and multiplied.

A camera describes the status of the observer as being sealed in an interior to view its particular contents. The train is explored as a mobile and embodied form of spectatorship, part of a nineteenth century shift and symbol of "the articulation of subjective vision" that Foucault (writing on Kant's *Critique of Pure Reason*) recognised as the threshold of modernity.<sup>15</sup>

### JOURNEY TO THE CENTRE

The second act of the screenplay treatment describes liminal space at the narrative centre and tracks the journey through major stages of the inter-continent terrain. Interior train scenes were plotted in an imagined chronological sequence, in dialogue with the unfolding external landscape. Passenger experience of external and internal phenomena provides the central narrative. Here, the boundary

between inside and out becomes increasingly soft as we move around the train through day into night, emerging in a twilight state suspended between.

Subjective boundaries are shown to be focused by the design of the train interior through such details as colour scheme and materiality, furniture layout, lighting, window detailing, floor levels and ceiling height; the environmental design explored as a ‘mechanically-motivated body’ mediating a shifting, evolving dialogue between people and space. Camera shooting-style diagrams of each interior scene map passenger ‘lines of attention’ to describe a ‘perceived landscape’ formed between interior and exterior – an inner realm of passenger experience.<sup>16</sup> (Figure 5.)

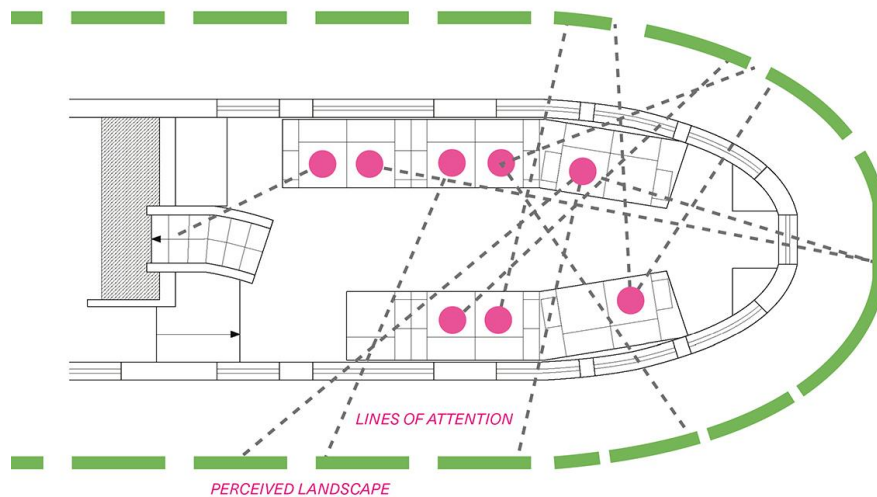


Figure 5. Lines of attention across interior-exterior

## ACT 2

### THE JOURNEY

Act 2 spans the interior of the North American continent and traverses three distinct landscapes: ‘The Shield’, ‘The Prairies’ and ‘The Rockies’, as experienced from within the train car interior. The journey is examined through its constructing elements, as related to scenographic and narrative devices: the route – the outline; the train – the set (comprising dining and lounge, sleeping and observation/viewing areas); the landscape – a rolling backdrop; and passengers – the ensemble cast (brought together over a five-day period punctuated by breakfast, lunch and dinner services in a series of evolving set pieces).

### THE SHIELD

Characterised by lakes, ponds, swamps, forests and rocky outcrops, the Canadian Shield is a vast, undulating landscape left behind from the Ice Age. The immediacy of Toronto’s urban centre dissolves into the deep time of the inter-continent, and an expanse that moves fluidly between wide and close – what anthropologists might call a conceal-and-reveal or refuge-and-prospect landscape, to be taken in quick-burst, shutter-like eye movements. (Figure 6.)

With the close-up, space expands; with slow motion, movement is extended... An unconsciously penetrated space is substituted for a space consciously explored by man ... The camera [here, the framed view of the window] introduces us to unconscious optics as does psychoanalysis to unconscious impulses.<sup>17</sup>

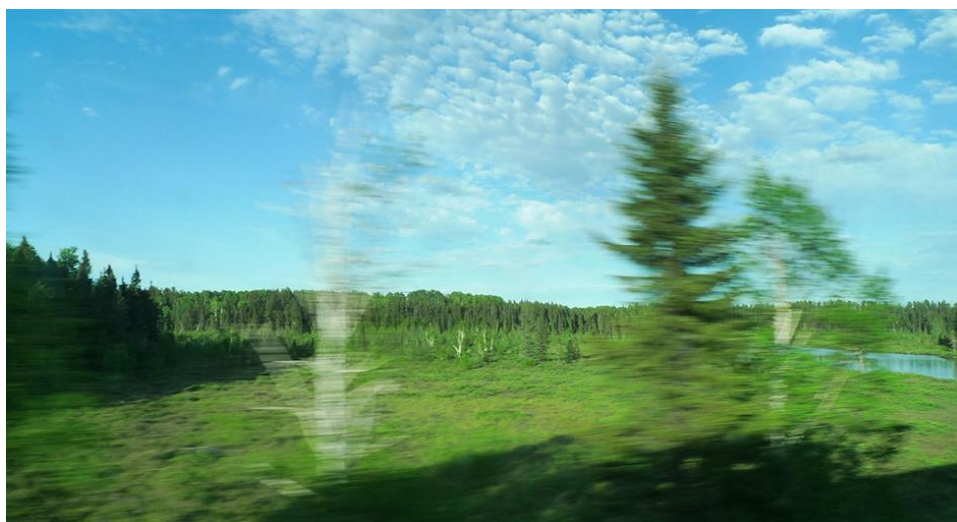


Figure 6. *The Shield*

The site of the long-distance train, begun as a branded empty vessel, has acquired meaning and memory as generated by its rolling ensemble of passengers, and those who use it to situate narratives within the wider imagination. In classical film tropes the long-distance train sets up significant plot points or transitions, serving as a framing construct wherein its anonymity and organisation around a consistent programme of spaces provides the backdrop for action and redirections of expectation.<sup>18</sup>

Such narratives are typically set up in the public, ‘open’ spaces of lounge and dining car – key interiors where characters gather and are introduced to each other. And so, in real life. But just as the landscape is rendered through the glazing as a series of framed, flattened views, fellow passengers, strangers inevitably in character sketch only (for these are ‘brief encounters’) become a series of ciphers offering alternate perspectives around one’s own preoccupations.

1. Int. Dining room car – day
2. Int. Skyline car, lounge – day (later)
3. Int. Park car, bullet lounge – day (later still)<sup>19</sup>

As the landscape outside shifts and undulates, so this section of the narrative is about movement. Getting one’s bearings as they relate to different territories of the interior: geography of the inter-continent (vaguely, for there are no distinct landmarks to reference); the train (locating the various public cars in relation to one’s private accommodations, how long does it take to walk there, when best to go where); and that of the passenger (perhaps vaguer still, how am I feeling about where I am at this point in the journey, through these outer and inner worlds?)

## THE PRAIRIES

Anticipated by passengers with a mix of marvel and dread, the central section of the interior territory and narrative arc is characterised by homogenous, wide, open flatland. Our journey through The Prairies goes on for days and there’s a feeling of happy suspension in the near total absence of anything. The ‘fear of missing out’ that underscores contemporary waking life and indeed shaped our movement through *The Shield* (both in terms of the unfolding landscape and explorations of the train) no longer applies. (Figure 7.)

Spectacular culture is not founded on the necessity of making a subject *see*, but rather on strategies in which individuals are isolated, separated, and *inhabit time* as disempowered (...) counter-forms of attention are neither exclusively nor essentially visual but rather constituted as other temporalities and cognitive states, such as those in trance or reverie.<sup>20</sup>



*Figure 7. The Prairies*

The clearest distinction between different passenger accommodations is in their physicality. Compartments with doors and roomettes with sliding panel closure remain formally defined interiors, with thresholds that communicate ‘private’. Berths are effectively returned to open space, common seating in daytime. As with any multi-person scenario it comes down to the need for assertion of personal boundaries, and in this the different accommodations engage with some of the most elemental aspects of defining interiors and constructing spatial experiences.<sup>21</sup>

#### 1. Int. Sleeper class manor car – night

In his treatise on space experienced by humans, philosopher Otto Friedrich Bollnow considers the bed and its corresponding horizontal alignment remarkable, in so far as “when we lie down in order to sleep, this is not just a movement within space where space stands still and we move in it. But there is a basic change in the relationship between man and experienced space itself.”<sup>22</sup> In sleep, the outer world is no longer of direct concern. At the same time, the removal of physical resistance and idea of surrendering to a bigger infrastructure supports a wider reflection upon how we negotiate territories and their boundaries.

### THE ROCKIES

The climax of our narrative arc builds in tandem with the external landscape. Passengers wake to the sight of The Rocky Mountain range, thrown up behind the last of grassland. Following long days of the non-descript here, finally, is a great singular, defined feature. A locus point. (Figure 8.)

The state of being suspended, a looking or listening so rapt that it is an exemption from ordinary conditions, that it becomes a suspended temporality, a hovering out of time (...) Attention [implies] the possibility of a fixation, of holding something in wonder or contemplation, in which the attentive subject is both immobile and ungrounded. But at the same time a suspension is also an interruption, a disturbance, even a negation of perception itself.<sup>23</sup>



*Figure 8. The Rockies*

Where ‘night space’ might be characterised as the removal of elements linked with visibility, the essential feature of ‘day space’ lies in the fact that we can oversee it in its entire extent.<sup>24</sup> Considering space experienced and lived by humans through the modern period, architectural historian and critic Anthony Vidler observes it to have been “increasingly defined as a product of subjective projection and introjection, as opposed to a stable container of objects and bodies.”<sup>25</sup>

1. Int. Skyline car, observation deck – day

2. Int. Park car, observation deck – night

It might be suggested that the space of modern identity therefore locates in an intermediate and un-fixed space between things – a liminal space. Where *The Shield* played out through the day, *The Prairies* at night, the final stretch of territory *The Rockies* comes to feel more like a waking dream. All sense of time and movement slows, and a peculiar distortion takes place in the foregrounding of the mountain backdrop that, in contrast to scenery through the rest of the journey, appears constant, postponed for hours on end despite progression along the track.

If each of the train interiors is based around a particular function and directed set of passenger interactions, the environment of the observation deck is an exception. Here is Bollnow’s space between the near and the distant, defined subjectively through simultaneous reflection and projection – looking in and out. (Figure 9.) Not dissimilar to immersion in cinema and its auditoria the deck feels to be an abstracted present, where one is suspended between ‘actuality’ and ‘vision’ – the external narrative of the landscape (screenplay) and inner mental space of the passenger (audience), as mediated by the environmental design of the train car (auditorium).



Figure 9. A place to learn how to look

## CONCLUSION

Expansion into the North American West was led by the grid as it subdued geography<sup>26</sup> through urbanisation of the frontier. Territory advanced indefinitely through the growth of cities and their subsequent networking of trade and industry routes. The city did not require a stable centre. Rather, “the grid enabled the possibility of infinite interchangeability, extension and realization.”<sup>27</sup> Modernity’s ideas about space and place were forged out of industrialist strategies superimposed on the world. The singular nature of this perspective has been widely established as problematic and outmoded.

The *Great Western Way* journey was taken chiefly out of curiosity. Just as the well-placed cross-section captures the extremes of a volume in one line, here the range of a territory as cut by its railway and wider industrial, social and cultural development enabled a reading of the present. And where the original railroad was led by a need to keep driving forward, towards an Act 3 and ‘arrival’, I became interested in the more contemporary state of liminal suspension and the potential for a kind of sense-making. (Indeed, a five-day break of journey in Act 2’s geographical centre and ultimate in-between space Winnipeg served as an appropriate point/state from which to reflect and project – see also note 11.)

On this journey I surrendered to a system where terrain, the train and my own mental space melded in a scenario pitched somewhere between objective and subjective reading, towards Virilio’s perceptive reality.<sup>28</sup> A systems perspective offers a way of making sense of the world, and to predict future outcomes through paying attention to interrelationships, parts within a whole. Like hyperlink cinema, it signals a shift from the grid and fixed-point perspective to assemblage of different experiences – constellations of objects, bodies, expressions come together for varying lengths of time.

The play of competing modes of engagement through opposing constructs of objectivity and interpretation shaped this journey. From the experience of a universal system that brought order through two-dimensional flattening of surface – which we may relate to projects of national land ordinance, the railroad and colonisation of the West, and consider to be about projection. To something altogether more dynamic, based as it is in evolving individual responses to situations and ambiances that shift through space and time – which we may consider to be about perception and internalisation. It’s the idea of the expansive view *and* intimate or personal realities. A duality of the near and distant, as explored over the course of one transcontinental journey. (Figure 10.)



*Figure 10. A space between the near and the distant*

As cultures move increasingly beyond fixed definitions and boundaries, representation based around roaming situations or atmospheres and navigated through multiple points of view, feels more able to engage with the post-prescriptive nature of our time. Like much of the territory traversed by the railway, there can be no singular or linear reading of its story. Instead, we respond to the world as knowledge-in-the-making, with all the shifts and inconsistencies that entails.

With a practice based in interior and exhibition design and design education, I am particularly interested in situations that form between people and sites. Constructs of non-permanent space and the value of both ephemeral and emergent experiences and learning. In a recent report on the future of immersive experience and flexing of boundaries to create more dynamic frameworks for design, the consultancy House of Cultural Curiosity (HOCC) reasoned that: “experiences aren’t events which just have external stimulation. An experience takes place in the moment when external factors cause an internal transformation within the person; changes in the way they think, feel or behave, which resonate long after the event or interaction has taken place.”<sup>29</sup> Specifically, HOCC looked to immersive, spatio-temporal experiences and such approaches as world-building, participation, multi-sensory environments, technologies and performance as routes through ideologies or narratives that frame and constrain us.<sup>30</sup>

Despite (or maybe precisely because of) the highly constructed programme within a sealed, abstracted interior state, the long-distance train was found to be a site of self-awareness and useful disruption, of “passenger vision”<sup>31</sup>:

A place to learn how to look and, more generally, to re-sensitise to space, time, people and the cause-effect elements that direct them: We require distance and time to be able to see the mechanisms we thoughtlessly submit to, to be able to both contemplate and participate, to leave and always come back.<sup>32</sup>

The screenplay treatment was developed as a series of ‘framed views’ considering intersections of place, time and representation. It ended with the question of whether the personal experience at the centre of this particular journey between states described a pertinent area of critical research around interpretative and interrogative frameworks. In which a shift of emphasis to ongoing process (journey) over static arrangement (arrival)<sup>33</sup> might give space to a more fully-dimensioned and post-prescriptive representation of our pasts and vision of futures.

## NOTES

<sup>1</sup> Access the AMPS conference presentation recording here:

<https://www.youtube.com/watch?v=mHQJZrW7sU&list=PL6zYdPI0DZ2r3CjJmhTsVeSU5VM4y0eVR&index=12>

<sup>2</sup> Jenny Odell, *How to Do Nothing: Resisting the Attention Economy* (New York: Melville House Publishing, 2019), 6.

<sup>3</sup> “Systems Thinking: The understanding of a phenomenon within the context of a larger whole; to understand things systemically literally means to put them into a context, to establish the nature of their relationships.” *Systems Thinking in Practice Glossary*, Open University.

Put simply, systems thinking brings together the overview with multiple surrounding perspectives on a situation, by means of some form of dynamic structure.

<sup>4</sup> Michel Foucault, “Of Other Spaces: Utopias and Heterotopias,” *Architecture/Mouvement/Continuité* (October 1984), 7.

<sup>5</sup> After René Descartes.

<sup>6</sup> Anthony Vidler, “The Explosion of Space: Architecture and the Filmic Imaginary,” *Assemblage* no. 21. (August 1993), 48.

<sup>7</sup> Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge MA: MIT Press, 1999), 4.

<sup>8</sup> Louis Lumière and Auguste Lumière, *Arrivée d'un train (à la Ciotat)* (France, Société A. Lumière et ses Fils, 1895).

<sup>9</sup> Paul Virilio, *The Lost Dimension*, trans. Daniel Moshenberg (New York: Semiotext(e), 1991), 30.

<sup>10</sup> Ellen Lupton, *Design is Storytelling* (New York: Cooper Hewitt, 2017), 26.

<sup>11</sup> In Toronto we find everyday ‘ordinary’ realities, viewed through the heterotopic lens of their human protagonists: From the disturbed worlds of *Crash* (David Cronenberg, 1996), *Enemy* (Denis Villeneuve, 2003) and *American Psycho* (Mary Harron, 2000), to collegiate dramas such as *Good Will Hunting* (Gus van Sant, 1997), *The Virgin Suicides* (Sofia Coppola, 1999), *Mean Girls* (Mark Waters, 2004) and *Police Academy* (Hugh Wilson, 1984). In Vancouver things tend towards the ‘other’: *The Twilight Saga* (2008-2012), *Star Trek Beyond* (Justin Lin, 2016), *Fantastic Four* (Tim Story, 2005), *Rise of Planet of the Apes* (Rupert Wyatt, 2011) and *Godzilla* (Gareth Edwards, 2014) meets machines: *Minority Report* (Steven Spielberg, 2002), *I, Robot* (Alex Proyas, 2004) and *The Predator* (Shane Black, 2018).

<sup>12</sup> This theme was picked up elsewhere during the AMPS Representing-Visioning conference, with presentations focused on the particulars and peculiarities of Winnipeg – geographical centre of the North American continent and key stop on the transcontinental route. The city developed around the railway and its associated trade and industry. The legacy of its contested land rights combines with a present-day downtown suspended in post-depression and decline-of-the-railway aspic, that lends itself to representation of situations of contemporary uncertainty and unrest: tales of ‘crime, murder and apocalypse.’ See Amps presentations: Laurence Bird, *Legacies of Trauma: Harvesting of Urban Spaces in Moving Image Media, Winnipeg, Canada* (2022) and Honore Black, *Sites of Resurgence: Decolonizing Settler Colonial Urban Space in Insurgent Indigenous Public Art in Winnipeg, Treaty One* (2022).

<sup>13</sup> Michael Marder, *Philosophy for Passengers* (Cambridge MA: MIT Press, 2022), 85.

<sup>14</sup> Mark Pimlott, *Without and Within* (Rotterdam: Episode Publishers, 2007), 315.

<sup>15</sup> Jonathan Crary, “Techniques of the Observer,” in *October* volume 45 (Summer 1988), 6.

<sup>16</sup> Marder, 97.

<sup>17</sup> Vidler, “The Explosion of Space: Architecture and the Filmic Imaginary,” 53.

<sup>18</sup> Whilst often situated in the North American territory and/or developed within the Hollywood system, many notable long-distance train films are written and directed by Europeans: *Shadow of a Doubt* (1943), *Strangers on a Train* (1951) and *North by Northwest* (1959) all by Alfred Hitchcock, *Brief Encounter* (David Lean, 1945). Elsewhere, American culture and Hollywood character tropes are transposed onto the European setting, for example in the films of Jean-Pierre Melville: *le Cercle Rouge* (1970), *Un Flic* (1972), and *The American Friend* (Wim Wenders, 1977). There’s something about the outsider perspective and these interiors that drive them.

<sup>19</sup> Scene titles extracted from the screenplay treatment, refer to presentation for full script. Titles are used here to describe the arc of time and spaces.

<sup>20</sup> Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture*, 3

<sup>21</sup> Neolithic man’s hanging of animal furs on timber props has been suggested as the original constructed space. Before architecture, it was about the configuration of textile product to create differentiated atmosphere within

nomadic settlements. Later, as sense of self evolved along with domestic standards, the need for intimate space was addressed through draped screens to recesses, corners and bed frames, which could then be reopened to day use. The sleeper train is notable for taking us back to such theatrical unfolding of story and space and special effects to alter consciousness of time, distance and our perception of the environment.

<sup>22</sup> Otto Friedrich Bollnow, *Human Space* (London: Hyphen Press, 2008), 161.

<sup>23</sup> Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture*, 10.

<sup>24</sup> Bollnow, 203.

<sup>25</sup> Vidler, *Warped Space: Art, Architecture, and Anxiety in Modern Culture* (Cambridge MA: MIT Press, 2002), 1.

<sup>26</sup> Sandra S. Phillips, "To Subdue the Continent: Photographs of the developing West," in Sandra S. Phillips et al., *Crossing the Frontier: Photographs of the Developing West from 1849 to the Present* (San Francisco: Chronicle Books, 1996).

<sup>27</sup> Pimlott, 100.

<sup>28</sup> Virilio, 30.

<sup>29</sup> Pigalle Tavokkoli, as cited in Sophie Shaw (ed.), *The Experience Shift* (HOCC, 2022), 21, <https://www.hocc.uk/the-experience-shift>

<sup>30</sup> Shaw, 20-21.

<sup>31</sup> Marder, 179.

<sup>32</sup> Odell, 61.

<sup>33</sup> Ian Buchanan, *Assemblage Theory and its Discontents* (Edinburgh: Edinburgh University Press, 2015), 383.

## BIBLIOGRAPHY

Albrecht, Donald, Ellen Lupton and Steven Skov. *Design Culture Now*. London: Laurence King, 2000.

Branzi, Andrea. *Residential Park, No-Stop City project (Plan)*. MOMA. Accessed November 3, 2022, <https://www.moma.org/collection/works/794>

Bollnow, Otto Friedrich. *Human Space*. Translated by Christine Shuttleworth. London: Hyphen Press, 2008.

Buchanan, Ian. *Assemblage Theory and its Discontents*. Edinburgh: Edinburgh University Press, 2015.

Clarke, David B. "Introduction: Previewing the Cinematic City." In *The Cinematic City*, ed. David B. Clarke. London and New York: Routledge, 1997.

Crary, Jonathan. *Suspensions of Perception: Attention, Spectacle, and Modern Culture*. Cambridge MA: MIT Press, 1999.

Crary, Jonathan. "Techniques of the Observer." In *October* volume 45. Summer 1988.

Downey, Georgina and Mark Taylor. "Curtains and carnality: Processural Seductions in Eighteenth Century Text and Space." In Chapman, M. & M. Ostwald (eds.) *27th International SAHANZ Conference*. Newcastle, 2010.

Foucault, Michel. "Of Other Spaces: Utopias and Heterotopias." In *Architecture/Mouvement/Continuité*. October 1984.

Jongerius, Marie-José. *Edges of the Experiment: The Making of the American Landscape*. Amsterdam: FW:Books, 2015.

Lupton, Ellen. *Design is Storytelling*. New York: Cooper Hewitt, 2017.

Marder, Michael. *Philosophy for Passengers*. Cambridge MA: MIT Press, 2022.

Matchbox. "Hyperlink Cinema and the Prevalence of Intertwining Stories." In *The Artifice*, 2017. Accessed November 3, 2022, <https://the-artifice.com/hyperlink-cinema-stories/>

Odell, Jenny. *How to do Nothing: Resisting the Attention Economy*. New York: Melville House Publishing, 2019.

Penz, François. *Cinema Aided Design: An Everyday Life Approach to Architecture*. London and New York: Routledge, 2017.

Phillips, Sandra S., et al., *Crossing the Frontier: Photographs of the Developing West from 1849 to the Present*. San Francisco: Chronicle Books, 1996..

Pimlott, Mark. *Without and Within*. Rotterdam: Episode Publishers, 2007.

Shaw, Sophie. *The Experience Shift*. Accessed November 3, 2022, <https://www.hocc.uk/the-experience-shift>

"Trends 2021, Three Scenes from the Future: Understanding the future Through Fiction." *Trend Report*. Accessed December 21, 2021, <https://www.frogdesign.com/designmind/trends-2021>

Vidler, Anthony. "The Explosion of Space: Architecture and the Filmic Imaginary." In *Assemblage* no. 21. August 1993.

Vidler, Anthony. *Warped Space: Art, Architecture, and Anxiety in Modern Culture*. Cambridge MA: MIT Press, 2002.

Virilio, Paul. *The Lost Dimension*. Translated by Daniel Moshenberg. New York: Semiotext(e), 1991.

Weinthal, Lois. "Bridging the Threshold of Interior and Landscape: An Interview with Petra Blaisse." In *Architectural Design*. April 2008.

# VISIONARY RUMOURS: LOST IN SPACE – BETWEEN RATIONALE AND REASON, ITS TIME TO REALIGN OUR CREATIVE PERSPECTIVES

Author:

**FABRIZIO COCCHIARELLA**

Affiliation:

MANCHESTER METROPOLITAN UNIVERSITY, UK

---

## INTRODUCTION

In confusing times of fake news and fake truths it seems feasible that people look for comfort in symbolic rumours. As we live our daily lives engaging with ‘the real’ how do we interpret what is ‘normal’? Perhaps by thinking about what is beyond our current knowledge we can find ways to encounter and explore territory we still don’t currently understand.

As artists and designers respond to ‘problems’ do we inhibit our opportunities to design ourselves into new possible futures? By focusing on fixing and being ‘realistic’ are we placing barriers in front of our creativity to re-work rather than re-invent? Are we inhibiting our opportunity as creatives or perhaps should we be celebrating being unrealistic in order to imagine things that haven’t been imagined before<sup>1</sup>. Could this be where true innovation lies? Testing the previously thought to be untestable? To imagine the previously un-imaginable.. what do we have to lose? Perhaps we should be materialising our dreams, listening to our imagination and celebrate being constructively unrealistic in order to explore new territory. Creative practices have the ability to create new methods for living and new modes of reality, enabling opportunity to mobilise change through shaping human existence in modern times. By exploring the territory between ontology (the way we make sense of being), phenomenology (the way we read our environment) and psycho-geography (the way we translate space and find meaning in the design of places) we can choose the Visionary Rumours we create that shape how we engage with ‘living the dream’.

## **Across the Pennines and the North of England people are experiencing a growing 'Psychic Disturbance'**

As rationale becomes more individualised and collectiveness more confusing a study into the re-emerging British UFO phenomena alongside current political and geographic tensions could be an interesting way from which to measure the temperature of divided societies and opportunity to realign our philosophical perspectives. As we seem to become more disconnected from collectiveness, are stranger things happening around us? Are these ‘real’ or can they be attributed to the archetypes of modern fantasy. In Victorian times this was the belief and experience of the supernatural and ghost phenomena, today the UFO (a disc like Mandala) could be the manifestation of visionary dreams that deal with conflicting traumatic issues in the self and our relationship with troubled times. Or, perhaps of course we are simply in fact being visited by aliens, can we totally discount things outside our

normal understanding? As Irwin describes, the term paranormal in this context refers to,

“a proposition that has not been empirically attested to the satisfaction of the scientific establishment but is generated within the non-scientific community and extensively endorsed by people who might normally be expected by their society to be capable of rational thought and reality testing”<sup>2</sup>

Through the common metaphysical interventions of the paranormal there is an opportunity to investigate the role of (as Carl Jung describes) the ‘psychic product’, how it is manifested and how it is encountered. As geopolitically we become more nationalistic, phenomena like Brexit illustrates how communities may detach and isolate themselves in their own confirmation bias. Independence becomes defined through a ‘psychic disturbance’<sup>3</sup> based on hopes, dreams and fantasy rationale. The notion of the paranormal is something everyone can connect with and a levelling plane across cultures and diverse communities. It permeates our histories, folklore, belief systems and values, it acts as a reference to nature and science, posing plausible explanations for the unknown. Imagination, fascination and fantasy stimulates a human desire to explore alternative ways of ‘being’, outside the commercialised world view and towards a more creative ‘nature of living’.

Through talking about paranormal experiences, exploring the plausible science (what we know or can attempt to measure and prove) and creative speculation (prediction and invention) to investigate sense making through the lens of parapsychology it is possible to mediate and translate perceptive experiences through creative practices to direct, analyse and materialise ideas into physical form. Through artistically designed tools that re-invent how we interpret the world by means of refocusing our parameters for evaluating, measuring and experiencing it. Psychic products (the new products of everyday experience) tantalise the imagination within a grounded realism. Contemporary work examining the anomalous<sup>4</sup> (e.g., haunted locations) has established associations between the designed environment through staged haunted experiential scenarios and its effect on wellbeing and behaviour<sup>5</sup> allowing opportunity to consider alternative factors in designing staged experiences. Is ‘life a stage’ to be tuned to create new experiences we want to encounter? Through creative practices it becomes increasingly important to consider how we ‘emotionally engineer’ the built environment as an interface from which to explore new experiences, ‘para-normality’ and extended visceral experience. This presents new challenges for design to look beyond what is perceived as ‘normal’ and perhaps explore the realms of fantasy rationale as a way to design new meaning, behaviours and environments. Because after all, we all understand our experience with the world differently, which is filtered by what we believe, what we would like to believe and what we feel is truly real. In the book ‘fitness for what purpose’, in an essay entitled ‘a larger reality’, Anthony Dunne talks about the Marketisation of every aspect of life. He talks about how the current economic system whilst generating vast wealth has failed to ensure fair distribution, and asks the question...

“What if our approach to design and design education is wrong? ...What if ‘making real stuff’ perpetuates everything that is wrong with the current reality, which means all possible futures are extrapolations of the dysfunctional present.”<sup>6</sup>

Could design practices better explore how to ‘emotionally engineer’ the built environment as an interface from which to explore a ‘para-normality’ and ways of unconventional thinking, innovative thinking, outside of normal parameters and away from the dysfunctional present. Perhaps towards a spiritual future, consciously designing the immaterial. The culture of how we make sense of things rather than simply how we use them.

## PARA-DESIGN

Through design research projects the term “Para-design” has been used as a word/ concept to define what could be an emerging field in design that draws inspiration from parapsychology and operates on the borders or periphery of common design practices. Para also meaning ‘for’ or ‘alongside’. Para-

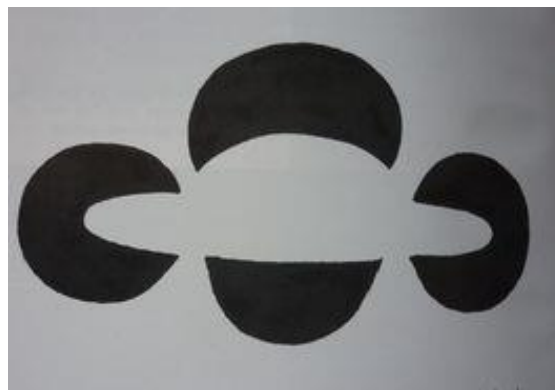
design means design that occurs outside of ‘normal’ design parameters, it’s an approach to thinking beyond constraints and notions of what is real, it explores belief and how we consider the analytical (rational) and experiential (emotional) factors that affect perceptions of the physical world in which we live.

Para-design in this sense is a form of social research that translates critical aesthetic experience into fictions that are assimilated into a world of ideas rather than market-led objects.

Through...

- Conceptual models for shaping identity, desire and fantasy
- Exploring critical and aesthetic roles for design
- Using estrangement to open space for critical discussion
- and exploring the link between people’s mental lives and their lived experience through the design of their environment
- Perhaps this forms a psychodynamic approach to design?

Through a series of designed objects and by interrogating the way we perceive paranormal phenomena research aims to investigate experiences triggered by spatial characteristics and phenomena that influence our behavior and perception through reality testing, investigating the sense of self and experience of space.



*Figure 1. Ufologist Jenny Randles talks about misperception and how we see with our mind and make sense of that based on current popular rationale.<sup>7</sup>*



*Figure 2. UFO cloud<sup>8</sup>*

“UFO clouds”, a natural phenomena called lenticular clouds, can be viewed as other worldly depending on the context and atmospheric conditions. The weather can present unusual patterns that

when rationalized in a human context can become visceral fantasy experiences. When we take these iconic symbols and start to materialize those fantasies into real places perhaps we have the opportunity to literally ‘live the dream’ as seen in figure 3 of the iconic Futuro House being transported in the early 70’s through the main street of Todmorden in the UK, this was a vision for the future of housing.



*Figure 3. Futuro House<sup>9</sup>*

Whether reported direct experiences are true for all is not the focus, the value of the research is to explore the many possible interpretations of phenomena. Current academic practices often insist on a reductionist approach to distill all experience down to a purely objective, quantitative physical process produced and understood in reference to the established laws of reference. This perspective reduces experience to purely physiological and often explains away unusual experiences as delusional.<sup>10</sup>

A non-reductionist viewpoint could be healthier, to open up opportunity for new insights, exploring how paranormal belief is mediated through the design of spatial scenarios that perhaps work beyond the plausible. So in this sense design practice has an opportunity to adopt an experimental approach, merging science (what we know or can attempt to measure and prove) and creative speculation (prediction and invention) to investigate the opportunity to explore sense making and translate perceptive experiences through what could be referred to as design alchemy, directing, analysing and materialising ideas into physical form.

## TESTING THEORIES

Through an investigative workshop to explore this new territory with psychologist Dr Ken Drinkwater, we worked with Product Design students from ArtEZ in the Netherlands on an expedition to investigate paranormal perception. Students explored locations and appraised environmental conditions and unusual experiences as part of a series of field-tests that generated design proposals to produce paranormal products. These became the centrepiece of an exhibition where interaction with each product revealed diverse experiences and understandings of the paranormal. The combination of para-psychology and para-design revealed how design can elicit, engineer and channel perceptive experiences.

Learning from the previous studies investigating other sites the aim was to collate a broader and more extensive set of experiential data investigating different types of spaces through a spontaneous case approach<sup>11</sup>. This looks at the psychogeography<sup>12</sup> of particular sites and explores notions of embedded meaning<sup>13</sup> through experiencing spatial qualities. On the first day of the workshop students investigated notions of the paranormal through discussion and debate, looking at the psychology of the paranormal and how this translates through the design of experiences. Students then used the

afternoon to rapidly model ideas for experiential scenarios. Invention gives objects distinctive identity away from linguistics of construction and manufacture, a ‘gadget’ for influencing behavior.<sup>14</sup>

For the second day we went on a day trip and spent the morning at the 20th-Century Dutch academic parapsychology, spiritualism and mediumistic art collections. Psychologist Dr Wim Kramer and assistant Lotje talked with the students about the archives and current research, explaining how the archives had accumulated over the years and also demonstrated artefacts used to make contact with the spirit world. These ‘spiritual products’ gave valuable insight into the design of objects to facilitate communication with the esoteric... Wim demonstrated a Victorian devise that signals when spirits are present during a seance. It was thought at the time that spirits were present in the breeze or drafts in a room. This lightly weighted devise would flutter in the movement of air (Wim’s breath) and light up to signal a presence.

At our first ‘haunted’ location students employed field research using a spontaneous case approach, parapsychologist Steven Parsons recently wrote a field guide for the Society of Psychical Research in London, on how to investigate spontaneous cases i.e. on location rather than in the lab. This method is concerned with data collection and verification, whilst generating ethnographic and observational data.<sup>15</sup> Specifically, field research provided students with a way of studying each location within its "natural" setting. As designers they were exploring and thinking through real experiences that they could later translate into designed responses. The following day after a morning of prototyping we conducted another study at the nearby Panopticon prison. The recently retired building was excellent inspiration for investigating a different type of perceived haunted space. Through another building study, students were able to compare perceptual experiences with the day before and analyze the different design languages employed in diverse places. The spiritualist building in Utrecht was a place to host seances and friendly contact with the spirit world whereas Arnhem Panopticon prison was a place where paranormal phenomena occurred as a consequence of an oppressive environment.

Through making, tests and conceptual mock-ups helped to model experiences from the building study into objects that either simulated phenomena through light, through exploring cultural notions of superstition or objects to act as conduits to esoteric forces as proposals for new types of experiential products that connected the physical world with psychological interpretation.



*Figure 4. The Mediumship Hand*



Figure 5. A device for seeking advice from Dead Designers

The project depicted in figure 4 allows a medium to channel a spirit through the soft arm that comes to life when in contact with the receiver. Allowing the receiver to embrace their lost loved one and physically experience their presence. Through selecting a key (figure 5) and soundtrack that represents a ‘dead designer’ the user is able to select their preferred oracle and insert the Totem key into the device that when turned presents ‘words of wisdom’ communicated from the designer’s spirit. As in reference to Denis Santachaira’s ‘Portale’,

Strange psychological and social narratives that play through interaction in a consumer-oriented society. The suspension of belief through the whimsical or satirical – the power of mockups, scenarios or fictitious narratives over prototypes as a way to present fictions<sup>16</sup>

## CONCLUSION

The workshop allowed students to think about design in different terms and identify new scenarios and territory. Students created aids to thought and contemplation through creating a ‘prosthesis of the spirit’.<sup>17</sup> Ways in which to materialise an alternative connection to products related to belief allowing as Dunne puts it...

When introduced to everyday life, they explore what is and what might be ‘para-functionality’ between desire and determinism, objects initiate the world of the ‘infra-ordinary’.<sup>18</sup>

Belief is an important factor in how we interpret the designed world, which often gets overlooked and underexamined. In exploring territory for design and the invention of innovative scenarios that effect our mental and physical connection with our surroundings, the synthesis of paranormal research and design thinking here allows opportunities to investigate these subtle and imaginative links with the environments we occupy. Manzini talks of...

The designers responsibility to contribute to the ‘habitable world’ which refers to the environment as a complex existential condition that cannot be reduced to its functional component. Rooted in the anthropological and social nature of the human race.<sup>19</sup>

In exploring this territory as a way to investigate new ways of understanding connections we have with space, places and objects we encounter, and how the 'Real' is dealt with in western design pedagogy. Designers can ask whether we focus too much on being realistic, thinking within existing realities. The social, political or economic which have got us into a situation of producing endlessly through design. But, how about if we became constructively unrealistic, breaking with conventional wisdom and experiment with new ways of thinking. Design has the ability to broadcast stories, perhaps we need to imagine radically different ways of being. As in the words of Ursula Le Guin, The direction of escape is towards freedom. So what is 'escapism' an accusation of ?<sup>20</sup>

## NOTES

- <sup>1</sup> Anthony Dunne, "A Larger Reality," in *Fitness for What Purpose? Essays on design education celebrating 40years of the Sir Misha Black Awards*, ed. Mary V Mullin et al. (Design Manchester: Eyewear Publishing, 2019) 116-117.
- <sup>2</sup> Harvey Irwin, *The psychology of paranormal belief: A researcher's handbook* (University of Hertfordshire Press, 2009), 16-17.
- <sup>3</sup> Carl Gustav Jung, *Flying saucers: A modern myth of things seen in the sky* (Psychology Press, 2014)
- <sup>4</sup> Harvey Irwin, *The psychology of paranormal belief: A researcher's handbook* (University of Hertfordshire Press, 2009)
- <sup>5</sup> Michelle Annett et al. "The living room: Exploring the haunted and paranormal to transform design and interaction," *Proceedings of the ACM Conference on Designing Interactive Systems* (2016): 1328-1340, doi: 10.1145/2901790.2901819.
- <sup>6</sup> Anthony Dunne, "A Larger Reality," in *Fitness for What Purpose? Essays on design education celebrating 40years of the Sir Misha Black Awards*, ed. Mary V Mullin et al. (Design Manchester: Eyewear Publishing, 2019) 116-117.
- <sup>7</sup> Jenny Randles, Oz Factor Books, accessed February 20, 2023 <http://www.ozfactorbooks.com>
- <sup>8</sup> Lenticular UFO clouds and other spectacular cloud formations, *The Telegraph*, (2009) image credit Gianandrea Sandri/Roberto Cavallini, accessed February 20, 2023 <https://www.telegraph.co.uk/news/earth/earthpicturegalleries/6582538/Lenticular-UFO-clouds-and-other-spectacular-cloud-formations.html>
- <sup>9</sup> Rik Moran, *Chance Encounters in the Valley of Lights* (CentreCentre, 2021) image 89
- <sup>10</sup> Jack Hunter, *Engaging the anomalous: Collected essays on anthropology, the paranormal, mediumship and extraordinary experience* (August Night Books, 2018)
- <sup>11</sup> Steven T. Parsons, *Guidance Notes for Investigators of Spontaneous Cases, Apparitions, Hauntings, Poltergeists and Similar Phenomena* (SPR: Society of Psychical Research, London, 2018)
- <sup>12</sup> Keith Bassett, *Walking as an aesthetic practice and a critical tool: Some psychogeographic experiments*, (*Journal of geography in higher education*, 2004) 28, no. 3, 397-410
- <sup>13</sup> Yi Fu Tuan, *Space and Place: The Perspective of Experience* (University of Minnesota Press, 2001)
- <sup>14</sup> Phillip Garner, *Utopia or Bust: Products for the perfect world* (Plexus, London, 1985)
- <sup>15</sup> Steven T. Parsons, *Guidance Notes for Investigators of Spontaneous Cases, Apparitions, Hauntings, Poltergeists and Similar Phenomena* (SPR: Society of Psychical Research, London, 2018)
- <sup>16</sup> Anthony Dunne, *Hertzian Tales: Electronic products, aesthetic experience, and critical design* (MIT Press, 2008) 69
- <sup>17</sup> Meyer R. Rubenstein, *Philippe Ramette* (Art Forum, May 1993)
- <sup>18</sup> Anthony Dunne, *Hertzian Tales: Electronic products, aesthetic experience, and critical design* (MIT Press, 2008) 71
- <sup>19</sup> Ezio Manzini et al. "Prometheus of the Everyday: The Ecology of the Artificial and the Designer's Responsibility," *Design Issues* 9, No.1 (1992) 5-20, doi: 10.2307/1511595.
- <sup>20</sup> Ursula K. Le Guin, *No time to spare: Thinking about what matters* (Houghton Mifflin Harcourt, 2017)

## BIBLIOGRAPHY

- Annett, Michelle, Matthew Lakier, Franklin Li, Daniel Wigdor, Tovi Grossman, and George Fitzmaurice. "The living room: Exploring the haunted and paranormal to transform design and interaction." In *Proceedings of the ACM Conference on Designing Interactive Systems* (2016): 1328-1340. doi: 10.1145/2901790.2901819.
- Bassett, Keith. "Walking as an aesthetic practice and a critical tool: Some psychogeographic experiments." *Journal of geography in higher education* 28, no 3 (2004): 397-410
- Dunne, Anthony. "A Larger Reality," In *Fitness for What Purpose: Essays on design education celebrating 40 years of the Sir Misha Black Awards*, edited by Mary V. Mullin and Christopher Frayling, 116-117. Design Manchester, Eyewear Publishing, 2019.
- Dunne, Anthony. *Hertzian Tales: Electronic products, aesthetic experience, and critical design*. MIT Press, 2008.
- Garner, Phillip. *Utopia or Bust: Products for the perfect world*. Plexus, London, 1985.

- Hunter, Jack. *Engaging the anomalous: Collected essays on anthropology, the paranormal, mediumship and extraordinary experience*. August Night Books, 2018.
- Irwin, Harvey J. *The psychology of paranormal belief: A researcher's handbook*. University of Hertfordshire Press, 2009.
- Jung, Carl Gustav. *Flying saucers: A modern myth of things seen in the sky*. Psychology Press, 2014.
- Le Guin, Ursula K. *No time to spare: Thinking about what matters*. Houghton Mifflin Harcourt, 2017.
- Manzini, Ezio, and John Cullars. "Prometheus of the Everyday: The Ecology of the Artificial and the Designer's Responsibility." *Design Issues* 9, No.1 (1992): 5-20.
- Moran, Rik. *Chance Encounters in the Valley of Lights*. CentreCentre, 2021.
- Parsons, Steven T. *Guidance Notes for Investigators of Spontaneous Cases, Apparitions, Hauntings, Poltergeists and Similar Phenomena*. Society of Psychical Research, London, 2018.
- Randles, J. Oz Factor Books, accessed February 20, 2023, <http://www.ozfactorbooks.com>
- Rubenstein, Meyer R. "Philippe Ramette." *Art Forum*, May (1993)
- Tuan, Yi Fu. *Space and Place: The Perspective of Experience*. University of Minnesota Press, 2001.

## THE ARCHITECTURE OF THE MUSÉE VISIONNAIRE IN ZÜRICH - OUTSIDER ART, SPACE & COMMUNITY (VIDEO, 12 MINUTES, DIR. NINA ZIMNIK, 2023)

Author:

**NINA ZIMNIK**

Affiliation:

UNIVERSITY OF APPLIED SCIENCES, SWITZERLAND

---

### INTRODUCTION

This text discusses the video *Musée Visionnaire in Zürich – Architecture and Outsider Art*, a documentary about the museum and its architecture, directed by Nina Zimnik (2023). The museum is situated in a matrix developed by the philosopher Henri Lefebvre in his book *The Production of Space* (1992), a work that analyses the social formation of space. Lefebvre sees space as made out of the elements of spatial practice, representations of space and representational spaces which he defined with reference to concepts of the social in political economy.

Predigerplatz 10, Zürich, Switzerland - the address of a museum for outsider art. This article discusses the video *Musée Visionnaire in Zürich – Architecture and Outsider Art*, a short documentary about the museum and its architecture. The text situates the museum in a matrix developed by the philosopher Henri Lefebvre in his book *The Production of Space* (published 1974 in the French original, 1992 in English translation), a work that investigates the social formation of space.

In 1968/69, Trix and Robert Haussmann were asked to create a gallery for Aimé and Marguerite Maeght, leading dealers of modern art (Maeght 2023), a satellite in Zuerich to promote Miro, Calder, Giacometti and the likes, the space that would later become the Musée. A block in the old town of Zuerich had been found, then, in the late 60s, a desolate urban landscape of run-down buildings with small businesses of tradespeople in a settlement that goes back to the Middle Ages. Trix Haussmann (Zimnik 2023, fig. 1) was a young architect, fresh out of the ETH, one of the eminent technical universities internationally, and the gallery was her project, the first stand-alone project of a career in design that has spanned roughly five decades. A handheld camera movement shows how one enters the museum from an idyllic square (with cobblestones and a church whose beginnings date back to the Middle Ages), and then descends from the reception area into a pristine, white modernist underground exhibition space connecting the front house with the back house like a tunnel which the architect had carved out with the characteristic boldness that foreshadows her later oeuvre.



*Figure 1: Trix Haussmann (film still, Zimnik 2023).*

In an interview, Trix Haussmann explains how she was inspired by the ideas of functional buildings (“erfüllt vom Geist des funktionalen Bauens») at the start of her career, and the camera lingers on details of the railing and the stairs that are reminiscent of Le Corbusier’s Weissenhof-Siedlung, placing the beginnings of the Haussmanns, known for their mantra “functions follows form”, a playful attitude towards modernist design, elsewhere (see figure 2, Zimnik 2023).



*Figure 2: film still of the underground exhibition space with details of the railing / stairs leading down from the mezzanine (film still, Zimnik 2023).*

White in white and shades of grey – the film spends many minutes on architectural details, scanning them, and marking them with a sound score composed by Olav Lervik, the experimental composer known for his work on the new soundtracks of the classics of German silent cinema. Scratching, haunting, artificial noises accompany the camera shots, the soundtrack mimicking aspects of the art that is shown these days in the space: outsider art, unconventional approaches to expression.

Founded in 2013 by the family of Susi Brunner (1948-2018), the Musée finished its first decade with a yearlong celebration of the sprayer of Zuerich, Harald Naegeli (\*1939), considered one of the milestones, if not a founding father of graffiti art (“Harald, my hero”, Banksy supposedly said).

Naegeli started spraying in the late seventies; in his practice, graffiti has been an expression critical of how we treat our environment and the natural world. -- A bit of history<sup>1</sup>: at the beginning of the seventies, Brunner had become the right hand of Bruno Bischofberger (handling mostly his contacts in NYC), with the intent of starting a gallery (Furrer 2023). 25 when she left, she was able to acquire a part of Bischofberger's own collection of "naïve" art from the region that was then called Yugoslavia as well as a few other pieces. Over the decades, Brunner continued to exhibit marginalized forms of artistic expression in her gallery. Eventually, when art history started to grapple with its racist and discriminatory reception of artists deemed "brut", other concepts proliferated. Formulated in 1972 by art critic Roger Cardinal, the epithet "outsider" was partially superimposed on to older art historical categories that had become politically questionable, with "outsider art" designating a body of artistic production that has encompassed works produced by indigenous and "naïve" artists, by people confined to mental asylums, by street people, by street artists, "folk" artists, etc. In general, outsider art has referred to art by self-taught people who, often by virtue of their biographies, were "outsiders", i. e. people living on the fringes of hegemonic societal structures that persecuted or discriminated against them and / or outsiders to mainstream art markets. Now, while 19<sup>th</sup> c. autodidactic artists like Henri Rousseau or Séraphine de Senlis had almost no or limited exposure - in the case of Rousseau later in life - to what the academy, the dealers and influencers in the field then considered "art" (or preconceptions they wanted to challenge), the case changes over the decades and an exponentially different situation opens up with arrival of the internet: information becomes increasingly available to those who seek it and anybody with a running internet can start to educate themselves about art, how to make it, its history and markets. Thus, the entire category of the artistic production that nowadays figures under the epithet of "outsider" art remains under construction because there is no naïve gaze anymore if there ever was one. To complicate matters, not all "outsiders" are societal outcasts at all times, artists drop in and out of schools, words like "brut" mean different things in different historical traditions, etc. Furthermore, the loftier attributes historically ascribed to marginalized art have been up for analysis. The narrative used to go like this: when marginalized people express themselves (think of patients in asylums, the uneducated and poor, e.g.), they supposedly do so with a heightened authenticity because they have not been indoctrinated by hegemonic values, by an education; their art would thus be dubbed "wild", raw", "crazy", seen as unobstructed by representational conventions, etc. Needless to say, this determinism and the essentialism behind it have been challenged.

Harald Naegeli, for instance, whose drawings can be seen in the film, comes from a bourgeois home and trained in academic drawing. Fining him was no deterrence; when he ended up asking for political asylum in Germany and was thrown into solitary confinement for his anarchic graffiti, the story changed. The film complements the ethereal presentation of the space's architectural details with parts of the oeuvre of Harald Naegeli that were mostly unknown, at least to Swiss audiences. In the film, his so-called "Wolkenbilder" (cloud images, see figure 3) can be seen, ethereal compositions of thousands of tiny pencil strokes, each addition meticulously dated on the back of the paper, and meant, according to the artist, to mimic the beginnings of the universe coming together in ever so vague formations.



Figure 3: “cloud images” on easels (film still, Zimnik 2023).

Thus, the film shifts between traditional forms of documentary style and experimental visuals, with the experiments mostly being relegated to the forms of and perspectives on the architectural details. In an interview, Manuela Hitz, artistic director of the museum, explains the history of the museum and its dedication to those on the “bottom of society” à propos Ben Wilson, the so-called “chewing gum painter” (Ben Wilson 2023) who turns spit-out chewing gums into miniature art. Hitz` commentary on the social aspects of the museum evokes Henri Lefebvre (1901-1991), a French thinker who published dozens of books and hundreds of articles on a variety of subjects, including architecture. A key figure in the philosophy of modernity, he started embarking on a *Critique of everyday life*, his seminal work from 1961, whose title alludes to central concerns that figure in the film as well. Recurring threads throughout his oeuvre investigate the topic of space: how concepts of space are constituted in disciplines like sociology, philosophy and history; the links between spatiality and temporality, how human beings “produce” space.

In *The Production of Space* (2010, 1974 in French), Lefebvre`s question of how human beings constitute social spaces and themselves in space and time involves a return to what German idealism and Marx whom he cites extensively understood by “critique”: critique in the sense of what allows us to think to begin with. Space and time are so-called *a priori* categories in Kant that allow for the constitution of thought (if there was no time and space, we could not think according to Kant). Yet to Lefebvre, critique is the activity of the *engagé* leftist who was critical of global capitalism and its ideologies, and as the film mentions who, like many of his intellectual contemporaries, had entered into a dialogue with Jacques Lacan. Deeply steeped in continental philosophy, Lefebvre (himself a devotee of trinities) re-articulated the famous Lacanian triad of the imaginary – the symbolic – and the real whose development, modifications and politicizations can be seen as the defining aspects of Lacan`s oeuvre, which appears itself famously difficult and inaccessible to the uninitiated.<sup>2</sup> Add to this a series of interpretations and transpositions and that Lefebvre`s triad has seen itself.

However, it is in the nexus of these discourses that the film situates itself. Why? The Musée is not just housed in a remarkable architectonic space but it precipitates community across time and space and it does so in the vein of Lefebvre, engaging with contemporary societal and political predicaments and their aesthetics. On a mundane level, the Musée brings together those who make outsider art, artists who have come before us and will live after us, with those enjoy outsider art, and with the larger community, e.g. entire school classes conduct their regular curricular education in the museum instead of in the classroom.

Let us turn to the intricacies of the *Production of Space* (published in 1974, i.e. after the pivotal historical moments of the 1968 protests and their aftermath when, as Lefebvre puts it, “the class struggle is inscribed in space”<sup>3</sup> before we see how the museum can be addressed with reference to Lefebvre. In his book, the author discusses what he calls “spatial practice”, “representations of space” and “representational spaces”<sup>4</sup> – three dimensions he deems interrelated in the “production of space”. What does Lefebvre mean by “space” and “production” (or doesn’t because a large part of his discourse is carved out *ex negativo*, in distinction to what “space” is not) and how does he bring these concepts together? In a veritable *tour de force* which seems to encompass most every canonical thinker whom students of continental philosophy or some of architectural theory might study, he debunks traditional definitions of space emanating from the tradition from Euclid to Heidegger, because his central concern, which is the “social relationship”<sup>5</sup>, has not been adequately addressed by these definitions. Space is not an abstract given to people by God or mathematicians, space “is not a thing”<sup>6</sup>, space is not “a form or a container of a virtually neutral kind”<sup>7</sup>, but “a means of production” as well as a “product”<sup>8</sup>. Thus, it is safe to say, foremost, space must be analyzed from a Marxist perspective; talking about space should be a critique of political economy.<sup>9</sup> To set himself off from his contemporaries in psychoanalysis, he terms space a “reality” of the social realm (no longer Lacan’s “real”), it is fabricated out of “a set of relations and forms”<sup>10</sup>.

Christian Fuchs combed through the booked and schematized Lefebvre’s discourses in table 1, differentiating between what he, Fuchs, calls “subjects” (the distinct psychoanalytic concept for what other disciplines might call “people”) and “objects” of the three dimensions of space of space, and the “activities” associated with these three dimensions:<sup>11</sup>

	Spatial Practice	Representations of Space	Representational Space
Subjects	Members of society, family, working class	Experts, scientists, planners, architects, technocrats, social engineers	Inhabitants and users who passively experience space
Objects	Outside world, Locations, spatial sets, urban transport routes and networks, places that relate the local and the global, trivialised spaces of everyday life, desirable and undesirable spaces	Knowledge, signs, codes, images, theory, ideology, plans, power, maps, transportation and communications systems, abstract space (commodities, private property, commercial centers, money, banks, markets, spaces of labor)	Social life, art, culture, images, symbols, systems of non-verbal symbols and signs, images, memories
Activities	Perceiving, daily routines, reproduction of social relations, production	Conceiving, calculation, representation, construction	Living, everyday life and activities

Table 1. schematic analysis of the subjects, objects and activities of Lefebvre’s three dimensions of space by Fuchs <sup>12</sup>

An example of spatial practice, also called “lived” space,<sup>13</sup> could be our way to work: we might drop of the kids at the day-care center, get a cup of coffee and a bagel before we hop onto the subway, preferring a certain exit. In short, we construct a practice and thus a space for this practice; and society, as Lefebvre points out, “neo-capitalism”, can be understood when we analyze its various spatial practices.<sup>14</sup> The category “representations of space”, also called “conceived space”<sup>15</sup> is closest to the work of architects and engineers who with mathematical precision and a trained perception create, let us say, a certain building and an atmosphere, e.g. a functional, yet welcoming city hall where people can easily find their way around. “Representational spaces”, also called “perceived”,<sup>16</sup> have “their source in history – in the history of a people as well as in the history of each individual belonging to that people”,<sup>17</sup> Lefebvre writes. Examples are “Ego, bed, bedroom, dwelling, house; or: square, church, graveyard”<sup>18</sup> or, perhaps less emotionally loaded, the “Western town”<sup>19</sup> where the “Etruscans, which had survived all the centuries of Roman and Christian dominance”<sup>20</sup> and their culture (and a vision not conforming to the central perspective) can still be seen.

Not unlike Lacan in his Borromean knot, Lefebvre goes through elaborate articulations of how these dimensions are reflected in each other and constituted in dialectical exchange while still conceived as separate. And he stresses that in various historical modes, the three dimensions are mixed and articulated differently. However, for all its epistemological gestures, the book asks us vehemently to think about who owns space, who performs what in space, what aesthetics emanate accordingly, what ideologies are behind discourses about space, what power people have today. Ultimately, he wants his book to serve as an “orientation”<sup>21</sup>, concluding as follows: “On the horizon, then, at the furthest edge of the possible, it is a matter of producing the space of the human species [...] on the model of what used to be called ‘art’”.<sup>22</sup> He continues: “The creation (or production) of a planet-wide space as the social foundation of a transformed everyday life open to myriad of possibilities - such is the dawn now beginning to break on the far horizon.”<sup>23</sup>

The film shows how the Musée works within these three dimensions of space and how Lefebvre’s vision of a transformed everyday life, modelled on art, found an architectonic structure. Firstly, a public building invites certain spatial practices: people come and go and create social relations. The building also serves as a meeting point for the neighborhood of the Niederdorf, traditionally home to many local, by now older, artists, and their works have been included in exhibitions and the museum’s archives. The didactic USP is the museum’s reach-out program to local schools: for many years, entire classes have come and used the museum as a schoolhouse for the semester. In January 2023, the French “Museum Connections” conference (2023) invited the Centre Pompidou-Metz, the *Fondation Cartier* Paris, and the Musée – surprised they were – to discuss measures promoting museums to the young. Public schools, sometimes children who have never been to a museum before, come. And so do some “outsiders”, so do the volunteers (except for two part-time staff positions, the museum staff is comprised of volunteers, interns, and workers paid by the hours). And so do the patrons and sponsors who have kept the institution afloat for a decade.

Museums are *per se* representational spaces, sites of dialogue across cultures and time, perhaps even sites of identification with whatever the art works themselves suggest. Currently, works from a local Zuerich Niederdorf artist community from the fifties are exhibited and their debonair lifestyle is documented. The film shows an opening of a show of Italian outsider artists evoking the revolutionary traditions of psychiatry of the 70s in places like La Tinaia in Florence.

The gist of Haussmann’s design has not been changed for 50 years except for updates in the kitchen or the electrical wiring. The space is as modern as it ever was, down to the conic fire extinguishers she had commissioned for the museum and that are still intact today, periodically assessed by the authorities for functionality.

In summary, the film`s story line told via interview, narration, poetic imagery, the reflection of the of the art in the soundtrack etc. reflects the vision of the museum whose purpose it is to exhibit tangible and intangible heritage, thus providing a space for the constitution of the social.

## NOTES

<sup>1</sup> Details on the history of the museum and its doyenne were obtained by the author Nina Zimnik in an interview (02/16/2023) with Dr. Jörg Furrer, husband of the late Susi Brunner.

<sup>2</sup> It is symptomatic that Lefebvre distinguishes himself from Lacan via the category of the real, the category that has since the early nineties precipitated a plethora of political analyses of aspects of society like race and gender. He writes: “It is true that explaining everything in psychoanalytic terms, in terms of the unconscious, can only lead to intolerable reductionism and dogmatism; the same goes for the overestimation of the ‘structural’. Yet structures do exist, and there is such a thing as the ‘unconscious’. Such little understood aspects of consciousness would provide sufficient justification in themselves for research in this area. If it turned out, for instance, that every society, and particularly (for our purposes) the city, had an underground and a repressed life, and hence an ‘unconscious’ of its own, there can be no doubt that interest in psychoanalysis, at present on the decline, would get a new lease on life.” (*Production of Space*, Lefebvre 2010, 36) Lefebvre wanted the “social” to supersede the “real”, he wanted the real be re-defined in terms of sociological definitions of reality. Fast forward to two decades later, the Lacanian “real” has been resuscitated, starting what Lefebvre envisioned only in the future conditional tense, namely, investigations into systems of discrimination beyond the class struggle.

<sup>3</sup> Henri Lefebvre. *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford: Blackwell Publishing, 2010, p55. Originally published as *La production de l’espace* (Paris: Éditions Anthropos, 1974).

<sup>4</sup> Henri Lefebvre. *The Production of Space*, 33.

<sup>5</sup> Henri Lefebvre. *The Production of Space*, 85.

<sup>6</sup> Henri Lefebvre. *The Production of Space*, 73

<sup>7</sup> Henri Lefebvre. *The Production of Space*, 94

<sup>8</sup> Henri Lefebvre. *The Production of Space*, 85.

<sup>9</sup> For a discussion of Lefebvre’s political persuasions, see Michael Kelly, “Henri Lefebvre, 1901-1991”, *Radical Philosophy* 060, Spring 1992.

<sup>10</sup> Henri Lefebvre. *The Production of Space*, 117.

<sup>11</sup> Henri Lefebvre. *The Production of Space*, 137.

<sup>12</sup> Christian Fuchs. “Henri Lefebvre’s Theory of the Production of Space and the Critical Theory of Communication,” *Communication Theory*, volume 29, issue 2 (May 2019): 137.

<sup>13</sup> Henri Lefebvre. *The Production of Space*, 40.

<sup>14</sup> Henri Lefebvre. *The Production of Space*, 38.

<sup>15</sup> Henri Lefebvre. *The Production of Space*, 40.

<sup>16</sup> Henri Lefebvre. *The Production of Space*, 40.

<sup>17</sup> Henri Lefebvre. *The Production of Space*, 41.

<sup>18</sup> Henri Lefebvre. *The Production of Space*, 42.

<sup>19</sup> Henri Lefebvre. *The Production of Space*, 40.

<sup>20</sup> Henri Lefebvre. *The Production of Space*, 41.

<sup>21</sup> Henri Lefebvre. *The Production of Space*, 423.

<sup>22</sup> Henri Lefebvre. *The Production of Space*, 422.

<sup>23</sup> Henri Lefebvre. *The Production of Space*, 422.

## BIBLIOGRAPHY

Fuchs, Christian. “Henri Lefebvre’s Theory of the Production of Space and the Critical Theory of Communication,” *Communication Theory*, volume 29, issue 2 (May 2019): 129–150.

<https://academic.oup.com/ct/article/29/2/129/5113030>. <https://doi.org/10.1093/ct/qty025>.

Furrer, Jörg. Interview by Nina Zimnik (Zürich, CH), February 16, 2023.

Kelly, Michael. “Henri Lefebvre, 1901-1991,” *Radical Philosophy* 060, Spring 1992.

<https://www.radicalphilosophy.com/article/henri-lefebvre-1901-1991>.

Lefebvre, Henri. *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford: Blackwell Publishing, 2010. Originally published as *La production de l’espace* (Paris: Éditions Anthropos, 1974).

Maeght foundation (website), accessed February 1, 2023. <https://www.fondation-maeght.com/about/>.

Musée Visionnaire, “Christina Studer und Manuela Hitz können das Projekt ‘Schule im Museum’ an der Museums Connections in Paris vorstellen,” Facebook, January 18, 2023, [https://www.facebook.com/profile/100063591732733/search/?q=Centre%20Pompidou-Metz%20Fondation%20Cartier%20Paris&locale=fr\\_FR](https://www.facebook.com/profile/100063591732733/search/?q=Centre%20Pompidou-Metz%20Fondation%20Cartier%20Paris&locale=fr_FR).  
#museevisionnaire #schuleimmuseum #museumsconnections.  
#schulemalanders #alternativelernorte #ganzheitlicheslernen.  
Museum connections (website), accessed February 1, 2023.  
<https://www.museumconnections.com/en/young-audiences-impact-when-the-cultural-place-becomes-a-school/>.  
Pohl, Lucas. “Architectural Enjoyment: Lefebvre and Lacan.” In *Psychoanalysis and the Global*, edited by Ilan Kapoor, 142-163. Lincoln: University of Nebraska Press, 2018.  
[https://www.researchgate.net/profile/Lucas-Pohl/publication/333369291\\_Architectural\\_Enjoyment\\_Lefebvre\\_and\\_Lacan/links/5ce8a3ae458515712ebfcb3b/Architectural-Enjoyment-Lefebvre-and-Lacan.pdf](https://www.researchgate.net/profile/Lucas-Pohl/publication/333369291_Architectural_Enjoyment_Lefebvre_and_Lacan/links/5ce8a3ae458515712ebfcb3b/Architectural-Enjoyment-Lefebvre-and-Lacan.pdf).  
Wikipedia, s.v. “Ben Wilson,” last modified November 13, 2021, 01:11, [https://en.wikipedia.org/wiki/Ben\\_Wilson\\_\(English\\_artist\)](https://en.wikipedia.org/wiki/Ben_Wilson_(English_artist)).  
Wikipedia, s.v. “Outsider Art,” last modified April 28, 2023, 21:11, [https://en.wikipedia.org/wiki/Outsider\\_art](https://en.wikipedia.org/wiki/Outsider_art).  
Wikipedia, s.v. “Robert Haussmann,” last modified May 12, 2023, 11:54, [https://de.wikipedia.org/wiki/Robert\\_Haussmann](https://de.wikipedia.org/wiki/Robert_Haussmann).  
Zimnik, Nina, dir. *The Architecture of the Musée Visionnaire in Zürich - Outsider Art, Space & Community*. Video filmed in 2023. 12 minutes.

# **(UN)MONUMENTS OF THE EVERYDAY. MARKING THE JOURNEY FROM HOME TO WORK THROUGH THE EXPERIENCE OF VENETIAN WEAVING FACTORY'S WORKERS**

Authors:

**ELENA COLOGNI**

Affiliation:

CAMBRIDGE SCHOOL OF ART, ANGLIA RUSKIN UNIVERSITY, UK

---

## **INTRODUCTION**

How does an investigation of women's attachment to workplaces uncover instances of care, and indeed uncare, within power relations in/and place? Can we consider interventions in public space as forms of (un)monuments celebrating hidden or invisible experiences of place in the everyday<sup>1</sup>? Taking inspiration from an image of the public space in Venice in the Barbara Hepworth Archive, in the ongoing project 'The Body of/at Work' (premiered at the Italian Pavilion, 17a Mostra di Architettura, la Biennale di Venezia, 2021) these questions were investigated through the dialogic 'caring-with'<sup>2</sup> methodology, including conversations and situated interventions in the form of 'experiential exercises' with the use of dialogic sculptures. The attachment to place<sup>3</sup> is central to the development of one's own identity, and it develops in relation to others. The routes that one regularly takes in the city, the city ballets<sup>4</sup> are one of the contributing factors<sup>5</sup> in this process. "People encounter the world as they move and rest, dwell and journey"<sup>6</sup> and this is bound up in social memory, and embodied knowledge.<sup>7</sup> The project developed through stages in relation to specific contexts in the city, and starting from dialogues with the workers from the Venetian Bevilacqua weaving company. They discussed how they relate to places in the city on their daily routes to, and back from, work, as well as within the place of work. The archive research in the Venice City Council libraries revealed areas in the city where places of women paid and unpaid labour<sup>8</sup> once was undertaken. Most of these were, and some still are, public spaces, and some of these jobs we considered to be domestic and part of women's caring responsibilities. By uncovering a dynamic of an ever-shifting threshold<sup>9</sup> in the caring/uncaring power dynamics in private and public space, the performative 'experiential exercises', carried out in pairs, mark these locations as (un)monuments to the everyday.

## **CARING IS POLITICAL**

My work focuses on the theme of care understood as a relational commitment, *caring-with*.<sup>10</sup> The idea of social bond and the awareness of the interdependence between persons, and with the community and the environment guide my artistic practice, which is thus underpinned by the philosophical/psychological context of the Ethics of Care<sup>11</sup> and the feminist approach within it,<sup>12</sup> to point to a post disciplinary 'feminist care aesthetics' also looking common vulnerability and

precarity.<sup>13</sup> Joan Tronto,<sup>14</sup> in addition to the four ethical qualities of care: Attentiveness, Responsibility, Competence, Responsiveness, added a fifth ethical quality — *caring with*, my own approach builds on.<sup>15</sup> Tronto states, that these are the qualities necessary for people to come together to take collective responsibility, and to take seriously the nature of caring needs in society. This is in tune with the dialogic approach I use which speaks to art within a new ‘social turn’ (pioneered by Mother Art Collective in the 1970s)<sup>16</sup>, including other dialogic art approaches, feminist relational aesthetics<sup>17</sup> and ‘everyday aesthetics’<sup>18</sup> while addressing women's practices and labour, central to the feminist debate since the 60s (eg Manifesto for Maintenance Art, 1969! by Laderman Ukeles<sup>19</sup>).

Curator Gabi Scardi I worked with for the project ‘the body of at work’ states that through the artwork, this awareness of the interdependence between persons ‘origin’s lies in the challenges of physical and psychological remoteness, was heightened during the pandemic. Scardi suggests that ‘metaphorically subtracting the individual from separateness in the name of an attitude to “take care” understood as an individual and collective experience is the intent of drawings, sculptures, and actions in public space’ forming the project.<sup>20</sup>

By embracing the understanding of caring as political,<sup>21</sup> and adopting such *caring with* approach in the investigation of women’s attachment to workplaces I set out to uncover instances of care, and indeed *uncare*, and asymmetries within power relations in/and place, and through the body of/at work. Both dialogic and performative approaches embed a spatial dimension where space “in between” is activated, and which I had previously called the *intraplace*.<sup>22</sup> This highlights the distance, as well as a space which implies the possibility of an exchange and proximity where sharing and exchange happen. The mutual interest in this represents a reciprocal caring approach, overcoming the dichotomy between self and other, and self and place.

I am proposing that these interventions in public space can be considered as forms of (un)monuments celebrating hidden or invisible experiences of place in the everyday, the fragility of interpersonal connections, and the need to do so is the driving force behind her work. Ultimately, caring as a political endeavour, speaks to our most fundamental way of being in the world with others in our local as well as global social groups. We exist in this togetherness because of this common vulnerability and precarity. Care is political, as it addresses unbalances of power and responsibilities. Care shows that we need to negotiate these in the context of our homes, as families, and at work and more widely.

## PRACTICES: BODY AND SPACE AS DIALOGUES

Taking inspiration from an image of the public space in Venice in the Barbara Hepworth Archive, I developed the ongoing project ‘The Body of/at Work’<sup>23</sup>.

For this these questions were investigated through the dialogic ‘caring-with’ methodology, including through conversations with participants workers of the Bevilacqua weaving company, as well as in dialogue with place through archive research and situated interventions in the form of ‘experiential exercises’ with the use of dialogic sculptures.



Figure 1. 'The Body of/at Work', ©Elena Cologni, Padiglione Italia, 'Resilient Communities' program, Biennale di Venezia 17a Mostra di Architettura, 2021

The body is at the centre of differential embodiment as a political and spatial practice,<sup>24</sup> and for Environmental psychologist David Seamon<sup>25</sup> a phenomenological approach considers 'person and world as intimately part and parcel', while admitting that 'A major phenomenological challenge is to describe this person-world intimacy in a way that legitimately escapes any subject-object dichotomy' he goes on to explain that 'One broad theme that phenomenologists have developed to overcome this dichotomy is intentionality- the argument that human experience and consciousness necessarily involve some aspect of the world as their object, which, reciprocally, provides the context for the meaning of experience and consciousness.'<sup>26</sup> Intentionality, as "a basic structure of human existence that captures the fact that human beings are fundamentally related to the contexts in which they live or, more philosophically, that all being is to be understood as being-in-the-world".<sup>27</sup> Intentionality is discussed by Maren Wehrle<sup>28</sup> with reference to Husserl's in relation to perception by the body and of the body itself. Seamon states that in examining peoples' intentional relationships with their worlds, *lifeworld, place and home*, 'the body is fundamentally a spatial body—a complex of surfaces, symmetries, forces, desires, and possibilities—through which we become oriented and capable of meaningful action in the world'.

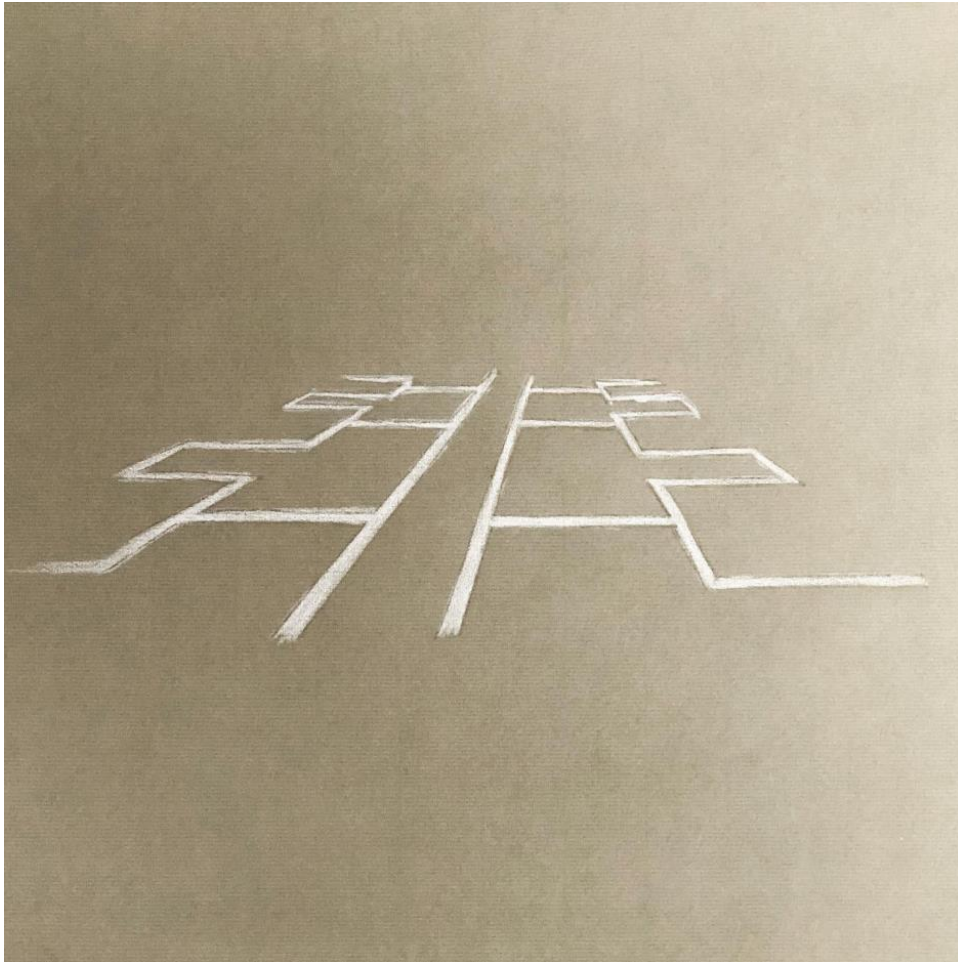
Furthermore, Eden Kinkaid states that by attending to Lefebvre's theorizations of practice and the body alongside those of Merleau-Ponty, we can understand that lived space is not one "dimension" of space among others, but the phenomenal ground of space, the realm in which space is synthesized into a practical-sensory, phenomenological, totality in which we perceive and act in the world. According to Kinkaid, thus Merleau-Ponty and Lefebvre's ideas of space and practice find in the 'centrality of the embodied subject in the production of space and the synthetic role of practice in establishing space as a phenomenological totality or ensemble'<sup>29</sup>

This is a useful paradigm for thinking at the manifestation of tangible shared dialogic experiences with others and space. These are built on an abstract visualisation of subjective cognitive and social processes involved in an (un)mapping activity. While considering feminist understanding of space, I engage with spatialization Donna Haraway defines as the cartesian grid thrown over the world, while I am attempting to engage in a process of *un-spatialization*,<sup>30</sup> since Descartes privileged the geometric method as a means of ascertaining truth, and used the ideal line as a model for his disembodied thinking subject, geometry has been the foundation for objective truth, then geometric representations could indeed have special neutralizing authority. A feminist reading of spatialization referred to by

Geographer Linda McDowell in 1996, as well as the notion of power geometry by Doreen Massey before her, indicating the ways in which spatiality and mobility are shaped by, and reproduced on different models of power in society.<sup>31</sup> McDowell suggested that if we move towards a definition of identity and place as “a network of relationships, disconnected and unstable, rather than fixed, we are able to challenge the essentialist notions of place and being”<sup>32</sup>. As a goal and as a possibility for knowledge, objectivity has been extensively questioned by feminist critics<sup>33</sup> who point out that no knowledge can be neutral. The ‘narratives of objectivity’ (such as the geometric representation of the world) “have a magical power-they lose all trace of their histories as stories, as products of partisan projects, as contestable representations, or as constructed documents in their potent capacity to define the facts”.<sup>34</sup>

In this project the adopted unit of measurement is not numerical, but it is the physical, sensitive body that defines and designs space in an experiential and emotional way. The locations are linked with personal stories or those which have become invisible or go unnoticed. This takes place in the duration of the present of the dialogue, and in relation to the memory of the body as it coincides with the daily exploration of our place by tracing our routines. This process includes proto-geometric drawings and tools, and different dialogic approaches incorporating subjective and collective experience of place that leads to investigating an attachment to it while creating different kinds of maps, by mapping difference. Care ethicist Virginia Held states that ‘experience is central to feminist thought’. Feminist experience is what art and literature as well as science deal with. It is the lived experience of feeling as well as thinking, of performing actions as well as receiving impressions, and of being aware of our connections with other persons as well as of our own sensations.<sup>35</sup>

According to David Seamon, the attachment to place is central to the development of one’s own identity, and it also develops in relation to others. In this context, the routes that one regularly takes in the city, the city ballets<sup>36</sup> are one of the contributing factors in this process. “People encounter the world as they move and rest, dwell and journey”<sup>37</sup> and this is bound up in social memory, and embodied knowledge. To develop a site responsive strategy, I looked at the concept of “affordance”<sup>38</sup> which indicates complementarity between animal and man with the environment to imply an unfinished possibility, a proposal waiting to be implemented. This was understood both in relation to place as well as the dialogic sculptures, tools which were used for the experiential exercises for interventions in the city.



*Figure 2. 'Affordances', Elena Cologni, (white pastel on paper), 2019*

More specifically, the "affordances of the place" are defined by Cathrine Degen<sup>39</sup> as "the ways in which the place is usually perceived and maneuvered through and around, settling into an "habituated" body. My work considered the punctuations found in our cities' grounds since 2018, which became subsequently eerily evident in the empty public squares during covid. A connection between the spatiality of place and that of dialogue, as mentioned, was inspired by a postcard in sculptor Barbara Hepworth Estate collection (Venice, circa 1950). In a note she refers to it in terms of the "space between people, it's relational and social aspects". I thus wondered how these might influence our movements and behaviour in public space, and in relation to each other. As I was posing these questions, they became timely, as the work had to pause due to covid, but I would take photographs of places where I could go. As the pandemic unfolded, we were made more aware of the ways in which we are using public spaces, including questioning the general understanding that they are indeed accessible and public. How power dynamics are laid out starting from the way in which we are directed to walk, and how the marks on the tarmac indicate inaccessibility to certain areas. We react consciously and unconsciously to what is presented to us.

One of the overarching aims in my dialogic art research is to activate the awareness of how the relationship with place affects our sense of self<sup>40</sup> and ultimately impacts wellbeing<sup>41</sup>. In the project in Venice, I collaborated with the workers from the Venetian Bevilacqua weaving company to focus on places of work. It developed through stages and in relation to the private and public spaces involved in the workers' routinely taken journeys to and from work, aiming at co-creating a different kind of

map. The mapping process included conversations, field research and the reactivation of relevant places in the city as defined by the bodies.<sup>42</sup>

In the project ‘the body of/at work’ the title alludes to both its artistic nature – as the expression ‘body of work’ often indicates artist’s grouped artifacts – as well as to ‘the body at work’.<sup>43</sup> And again, in the way in which ‘at work’ is understood – whether it indicates ‘being at the place of work’, or whether it is considered as a verb meaning ‘in action’ – this points to different but converging directions in the research, narrative and underpinning theories opening new understandings. Within this, thus the body is at work as it is the site itself of the processing of experiences, while these are also sedimented into memories. These, according to most environmental psychologists in turn have a role in how place attachment is formed. The dialogic art approach adopted tries to enter and interfere with this active process.

## DIMENSIONS OF DIALOGUE

The dialogic art approach adopted here tries to enter and to interfere with this very process. Artist and participants are both aware of the implications of giving one another’s own perspective. Building on previous reciprocal strategies in artist and audience or participant engagements<sup>44</sup> the most recently defined one *caring with* is here adopted as before to visualize specifically the spatiality implied in dialogues at different stages of the project.

These are:

1. the verbal dialogue which took place online, where the positions were clearly defined.
2. the nonverbal dialogue implied by the artist, in the engagement with places the participants had indicated.
3. the dialogue with the past through the archival research of places of women labour.
4. the nonverbal dialogue with that past, through the enactment of those memories by local facilitators in those very places in the present.
5. The *map of difference* (in progress) including all these time and space dimensions and dynamics and is still in process.

In this context it is useful to briefly mention these perspectives by way of framing one of the aims of the project this account will focus on. This is the process of co-creating an organic map of difference of the routes from home to the place of work and back in collaboration with the workers.

1. The dialogues took place online, in March 2021, when we were still under Covid19 restrictions, therefore, the interviewees were in their place of work, while I was at home. The answers to some questions guided by the above discussed context were embedded in the conversations with the workers, with a semi-structured interview stile included the following questions:

*What is your name?*

*Where do you live?*

*Can you describe your journey going to work?*

*What is the first thing you do when you get there?*

*Can you describe your process of work?*

*Can you tell me if you have a favourite spot at work?*

*Can you tell me if you have a favourite object?*

*What is your relationship with your peers?*

C. replied including the following:

*I take the bus to Venezia Piazzale Roma, and it takes around twenty minutes to half an hour, depends on the traffic, and then I have seven to ten minutes from Piazzale Roma, depends on whether I am in a rush.*

*When I am on the bus on my way to work, I usually double check with my husband, in case I forgot something about the children, whether they have got their homework on them, lunch. I usually walk by Giardini Papadopuli, then I take the under passage that leads to the university and after passing through the pastry shop on the corner of the bridge, there is a supermarket, I take the other alley which I find immediately on the right. At the tobacconist's you go straight on and after the last alley I get to work.<sup>45</sup>*

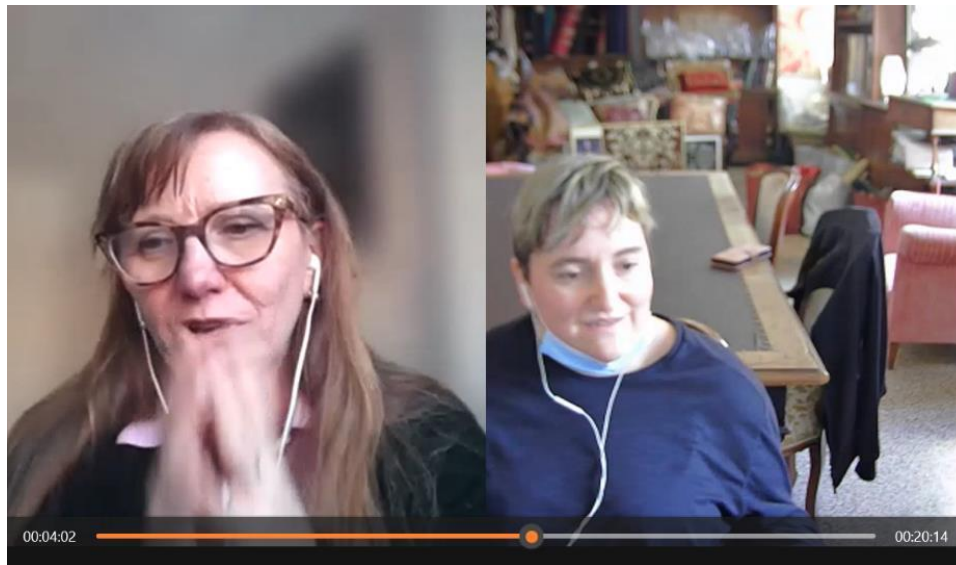


Figure 3. screenshot, Elena Cologni and C., March 2021

The degree of attachment to the place varies according to age and gender, for example women show a greater attachment to the place than men.<sup>46</sup> In the case of these workers they all have a loom they are responsible for, and this coincides with their position in the workplace.

C: *The distance between the loom and the entrance is around 4 meters.*

The strength of the bonds with the community consistently and positively predicts attachment to place<sup>47</sup> as C. talks about the caring relationships at the place of work, clearly indicating the sense of belonging to this community.

C: *Before Covid every so often I crossed paths with G, halfway through, we would aim at having breakfast or a cup of coffee together at a nearby pâtisserie*

She also told me how an experienced worker who taught her the rare skill she has today, including a specific slang developed in this context. C said:

*I learnt from an experienced lady who, at around 64, was still working at the loom, and at the beginning she was using many words I could not grasp*

The old looms, these 17<sup>th</sup> century machines belong to the preindustrial era, when manual labor was testament to a time when there was little if no effects of international competition, social changes and technological innovations in favor of the development of a sense of community in its employees and consequently their attachment to the workplace.<sup>48</sup> In this vein the Bevilacqua still has a manual stamp machine to record its workers time on duty.

C: *'the first thing I do as I come to work it to stamp my card. We have an old stamp machine, so we record our arrive for the day'.*

Afterwards workers get ready for the day ahead, and they do so every day. These repetitive acts contribute to develop an attachment to place, and this is further emphasized as they express the desire to transform this space into a personal place.

C: *we get changed into our working clothes and put our personal items into a locker, as well as our tools, including the 'rebotto'.*

The rebotto in particular is a typical work tool which experienced weavers, used to pass down to novices, some are as old as the looms. However, the interest in the way in which women experience attachment to the places of work, is not to point to job satisfaction or so that the employer will find new ways to optimise production. Why then? After the conversations, the understanding of the body as instrument in the work, and how the embodiment of the experience of labour makes this daily activity impossible to detach from one's own process of identity formation. This also becomes a metaphor for my artistic research approach.

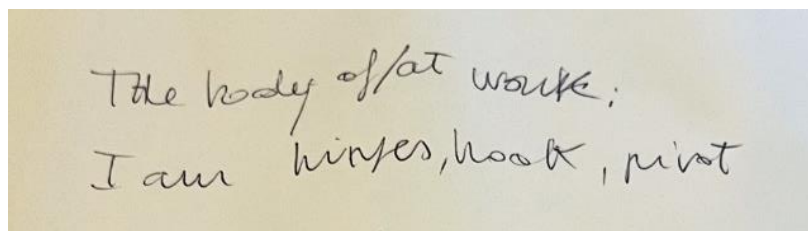


Figure 4. Detail of page 109 of sketchbook (©Elena Cologni, 2020/21)

This note refers to my position as facilitator of conversations, and artist, and how the sculptural instruments are used, shared, moved, carried around the city as part of this *caring with* approach.

## PUBLIC AND PRIVATE.

By talking to the workers of the Alberto Bevilacqua company, I became more aware of how women in recent years had thought to having gained some ground in terms of their position in the family and society, but then Covid struck. Suddenly the blurred boundaries between home and workplace took them right back to a time when the work of women was carried out mainly at home, including weaving, but also providing clean laundry.

Elke Krasni<sup>49</sup> proposes a criticism of the historic dichotomy of private/public and indoor/outdoor space, while Italian care ethicist Elena Pulcini proposes a critique to modernist understanding of the same dichotomies in relation to the view that care might be a legitimizing element of that public/private separation which corresponds to one of the many dualisms of Western thought. This includes in the male/female one which means that the destiny of care coincides with the destiny of women, as subjects identified with the private. According to Krasni, the historic perpetuation of the dichotomy between the private and the public passes on and prolongs thus the formation of public space. Such binary oppositions or dichotomies are characterised by the logic of depreciation and appreciation with which the two parts relate to one another. The Western idea of Modernism which has been analysed and deconstructed by feminism, postmodern criticism, and postcolonial criticism was caught in dichotomies or binary oppositions that regulated power relations and gender relations through inequality. Private/public is one of those historically constructed dichotomies, and this also relates to home and work. In this sense then going from home to work passing through public space in the city has a conceptual and historical connotation. It carries the anger, hopes and paradoxes in this very discourse and traditions. The journey is interesting to me in its transitional quality between private space, and public to private/public, also connected to the element of time, public time.<sup>50</sup>

The archive research in the Venice City Council libraries revealed areas in the city where places of women paid and unpaid labour once stood, including the Giardini area of the Venice Biennale, most of these were and still are public spaces, where these jobs used to be undertaken. These uncover a dynamic of ever-shifting threshold<sup>51</sup> in the caring/uncaring power dynamics in private and public

space. These were activated through a dialogue with instances of invisibility from the past, through the enactment of those memories in those very places in the present. The performative ‘experiential exercises’, carried out in pairs, mark these locations as (un)monuments to the everyday.



Figure 5. ‘The Body of/at Work’, © Elena Cologni, Padiglione Italia, ‘Resilient Communities’ program, Biennale di Venezia 17a Mostra di Architettura, 2021

## CONCLUSION

More research is needed to investigate women’s attachment to workplaces to uncover instances of care, and indeed *uncare*, within power relations and place. Considering interventions in public space as forms of (un)monuments celebrating women’s<sup>52</sup> hidden or invisible experiences of place in the everyday, might point to look at the wider use of public space. The study of women’s use of public space to access and enjoy their cultural rights is timely, as the United Nations recognized the importance of a woman’s access to public space as part of the Sustainable Development Goals (SDG). Sustainable Development Goal 11.7 seeks to ensure by 2030, “universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.”<sup>2</sup> SDG 11.7, in combination with SDG 5 - achieve gender equality and empower all women and girls – places women at the forefront of the SDG platform and recognizes the impact that equality in all areas of human life, including public spaces, will have on the increased well-being of all people globally.

## ACKNOWLEDGEMENTS

This paper has been produced through researched funded by Arts Council England and British Council (*Practices of care as ecofeminist and spatialized art*, Artist International Development Fund, 2018/19); Arts Council England (Emergency Fund 2020); Artist Newsletter (bursary 2019); Anglia Ruskin University Conference Attendance Grant, Research and Innovation Development Office/Arts Humanities Social Sciences (2022); Anglia Ruskin University, Research Funding, Arts Humanities Social Sciences Faculty Research and Innovation Funding Stream, Quality Research (2021/2022). I wish to thank Alessandro Melis (curator of the Italian Pavilion Resilient Communities, 2021, La Biennale di Venezia), Gaby Scardi, Stefano Coletto, Alberto Bevilacqua, Maddalena Vianello, Giulia Incipini, Giulia Cibir, Ilaria Santoro, Carlotta Corò, Emanuele Bevilacqua, Giulia Deganello, Alice Centazzo, Ilaria Salvagno, Miriam Balladelli, Ignazio Ferrante, Reyna, Luca Pranovi. The project’s

partners include: Laboratorio PRIDE, IR.IDE, Università Iuav di Venezia; Comune di Venezia, Settore Cultura - Biblioteca civica VEZ, Fondo Archivio Giacomelli; Comune di Venezia, Direzione Sviluppo del Territorio e Città Sostenibile AFU - Archivio Fotografico di Urbanistica; Associazione Crespi d'Adda, Comune di Capriate San Gervasio; The Hepworth Collection, UK; Cave Montemerlo srl; Luigi Bevilacqua Tessiture; Anemotech theBreath; Wysing Arts Center.

## NOTES

- <sup>1</sup> Carolyn Korsmeyer, "Feminist Aesthetics". In Lorraine Code (ed.). *Encyclopedia of Feminist Theories*. (Taylor & Francis Group, 2002).
- <sup>2</sup> Elena Cologni, "Caring-With Dialogic Sculptures. A Post-Disciplinary Investigation into Forms of Attachment". *PsicoArt – Rivista Di Arte E Psicologia*, 10(10) 2020: 19–64.  
<https://doi.org/10.6092/issn.2038-6184/11444>
- <sup>3</sup> David Seamon, *A Geography of the Lifeworld: Movement, Rest, and Encounter* (New York: Routledge, 1979).
- <sup>4</sup> David Seamon, *A Geography of the Lifeworld: Movement*.
- <sup>5</sup> Cologni, "Caring-With Dialogic Sculptures. A Post-Disciplinary Investigation into Forms of Attachment".
- <sup>6</sup> Seamon, *A Geography of the Lifeworld: Movement, Rest, and Encounter*, p. 139
- <sup>7</sup> Cathrine Degnen, "Socialising place attachment: place, social memory and embodied affordances." In *Ageing & Society*, 36, 8. (Cambridge: Cambridge University Press, 2016) 1645-1667.
- <sup>8</sup> Silvia Federici, *Wages Against Housework* (London: Power of Women Collective and Falling Wall Press, 1975)
- <sup>9</sup> Margherita Vanore, "The Landscapes City as Care. Places of Urban Wellbeing between Thresholds and Edges" in *Elena Cologni. The Body of/at Work* (Venice: Padiglione Italia, Resilient Communities events program, 17a Mostra di Architettura, LaBiennale di Venezia, 2021)
- <sup>10</sup> Joan C. Tronto, *Caring Democracy: Markets, Equality, and Justice* (New York: NY Press, 2013)
- <sup>11</sup> Carol Gilligan, *In A Different Voice: Psychological Theory and Women's Development* (Boston: Harvard University Press:1982)
- <sup>12</sup> Including Nel Noddings and Virginia Held.
- <sup>13</sup> Robert E. Stake and Merel Visse, *A Paradigm of Care* (United States: Information Age Publishing, Incorporated, 2021); Elena Pulcini, *Care of the World: Fear, Responsibility and Justice in the Global Age* (Netherlands: Springer Netherlands, 2012).
- <sup>14</sup> Tronto, *Caring Democracy: Markets, Equality, and Justice*
- <sup>15</sup> Cologni, "Caring-With Dialogic Sculptures. A Post-Disciplinary Investigation into Forms of Attachment".
- <sup>16</sup> Maria Lind, "Returning on Bikes: Notes on Social Practice," in *Living as Form: Socially Engaged Art from 1991-2011*, ed. Nato Thompson (Cambridge, MA: MIT Press, 2012), 49; Claire Bishop, *The Social Turn: Collaboration and its Discontents* (London: Artforum. Feb 2006) 178-182; Claire Bishop, *Artificial Hells* (London: Verso, 2012)
- <sup>17</sup> Helena Reckitt, "Forgotten Relations: Feminist Artists and Relational Aesthetics". In: Angela Dimitrakaki and Lara Perry, eds. *Politics in a Glass: Case Feminism, Exhibition Cultures and Curatorial Transgressions*. (Liverpool: Liverpool University Press, 2013), 131-156
- <sup>18</sup> Carolyn Korsmeyer, "Feminist Aesthetics".
- <sup>19</sup> As referred to also in Cologni, "Caring-With Dialogic Sculptures. A Post-Disciplinary Investigation into Forms of Attachment". Also discussed in Silvia Federici, *Wages Against Housework* (London: Power of Women Collective and Falling Wall Press, 1975)
- <sup>20</sup> Elena Cologni, Gabi Scardi, "Care: Spacings, Collocations, Connectivity". In Melis, A. *Comunita' Resilienti. Resilient Communities. Contributi Transdisciplinari Volume 02. Catalogo del Padiglione Italia Comunita' Resilienti alla Biennale Architettura 2021* (Rome: D Editore, 2021) 230-237.
- <sup>21</sup> Deva Woody, Rachel H. Brown, Mara Marin, Shatema Threadcraft, Christopher Paul Harris, Jasmine Syedullah & Miriam Ticktin *et al.* "The politics of care". *Contemp Polit Theory* 20, 890–925 (2021).  
<https://doi.org/10.1057/s41296-021-00515-8>
- <sup>22</sup> Elena Cologni, *Nomadic and Dialogic: Art and Ecofeminism*, (University of Cambridge, The Woman's Art Collection, 2018) <https://vimeo.com/manage/videos/257033094> [accessed on 29/05/2023]
- <sup>23</sup> This premiered at the Italian Pavilion, 17a Mostra di Architettura, la Biennale di Venezia, 2021 curated by Alessandro Melis
- <sup>24</sup> Eden Kinkaid, "Re-encountering Lefebvre: Toward a critical phenomenology of social space" *EPD: Society and Space* 2020, Vol. 38(1) 167–186 DOI: 10.1177/0263775819854765
- <sup>25</sup> Eden Kinkaid, "Re-encountering Lefebvre", 167-186.
- <sup>26</sup> David Seamon, "A Way of Seeing People and Place: Phenomenology in Environment-Behavior Research," in S. Wapner, J. Demick, T. Yamamoto, and H Minami (eds.) *Theoretical Perspectives in Environment-Behavior Research* (New York: Plenum, 2000), 157-78).
- <sup>27</sup> David Seamon, "A Way of Seeing People and Place", 157-78
- <sup>28</sup> Wehrle, M. Being a body and having a body. The twofold temporality of embodied intentionality. *Phenom Cogn Sci* 19, 499–521 (2020). <https://doi.org/10.1007/s11097-019-09610-z>.

- <sup>29</sup> Eden Kinkaid, “Re-encountering Lefebvre: Toward a critical phenomenology of social space”
- <sup>30</sup> The performance Elena Cologni, “Un-Spatializing. A Geography of Difference Through Caring” was presented as part of ‘Ecologies of Care: Feminist Activism’, curated by Basia Sliwiska (108TH CAA Annual Conference, Chicago, US: 2020). This was also based on the previously presented paper Elena Cologni, ‘Intraplaces: Ecofeminism, Care, and Spatialized Art’, in *Spatial Dialogues in Feminism*, with Melinda Guillen, and Fernanda Isobel Villarroel (107TH CAA Annual Conference, New York: 2019)
- <sup>31</sup> Doreen Massey “Power-geometry and a progressive sense of place.” In Bird J. *et al.* (eds). *Mapping the Futures: local cultures, global change* (London and New York, Routledge: 1993) 59-69
- <sup>32</sup> Linda McDowell, “Spatializing feminism: geographic perspectives.” In Duncan N. (ed). *Bodyspace: Destabilizing Geographies of Gender and Sexuality*. New York: Routledge, pp. 28-44.
- <sup>33</sup> Sandra Harding, *The Science Question in Feminism* (Ithaca, Cornell University Press: 1986)
- <sup>34</sup> Donna Haraway, “Feminism and Technoscience”. *Journal of the History of Biology* 30 (3) 1997:494-497.
- <sup>35</sup> Held, Virginia. *The ethics of care: personal, political, and global* (Nigeria: Oxford University Press, USA, 2006).
- <sup>36</sup> Seamon, *A Geography of the Lifeworld: Movement, Rest, and Encounter*
- <sup>37</sup> David Seamon, *A Geography of the Lifeworld: Movement, Rest, and Encounter*, 139
- <sup>38</sup> Gibson J. J. *The senses considered as perceptual systems*. Boston: Houghton Mifflin, 1966.
- <sup>39</sup> Cathrine Degnen. “Socialising place attachment: place, social memory and embodied affordances.”, 2016.
- <sup>40</sup> Joseph D Lichtenberg. The Development of the Sense Of Self. *Journal of the American Psychoanalytic Association*, 23(3), (1975):453–484.
- <sup>41</sup> Leila Scannell, Robert Gifford “The experienced psychological benefits of place attachment”. In *Journal of Environmental Psychology* 51 (2017)
- <sup>42</sup> Nancy Duncan, *Bodyspace destabilizing geographies of gender and sexuality* (New York: Routledge, 1996).
- <sup>43</sup> Carol Wolkowitz, *Bodies at Work* (SAGE Publications Ltd, 2006)
- <sup>44</sup> since Elena Cologni’s video live installation *Mnemonic Present, Un-Folding* (AHRC, 2004/06), but also and more recently in Elena Cologni “A Dialogic Approach for The Artist as an Interface in an Intercultural Society”. In Burnard, Mackinlay, Powell, *The Routledge International Handbook of Intercultural Arts Research* (New York London: Routledge, 2016)
- <sup>45</sup> An upcoming book publication will include an extensive discussion on this aspect
- <sup>46</sup> Maria Carmen Hidalgo, Bernardo Hernández, “Place attachment: Conceptual and empirical questions”. *Journal of Environmental Psychology*, 21(3), 2001: 273-281.
- <sup>47</sup> Fabrizio Scrima, Giovanni Di Stefano, Cinzia Guarnaccia, and Lucrezia Lorito. “The impact of adult attachment style on organizational commitment and adult attachment in the workplace.” *Personality and Individual Differences*, 86,, 2015: 432-437
- <sup>48</sup> W. Hubiak, and J. H. Banning. The implication of place attachment for campus workplaces. *The Campus Ecologist*, (1994): 12(3), 1-4.
- <sup>49</sup> Elke Krasni, Angelika Fitz, *Critical Care. Architecture and Urbanism for a Broken Planet* (MIT, 2019)
- <sup>50</sup> Elke Krasni, *Critical Care*.
- <sup>51</sup> Margherita Vanore “The Landscapes City as Care. Places of Urban Wellbeing between Thresholds and Edges”
- <sup>52</sup> Johanna Kanés, Jolynn Shoemaker, and Andrea Carlise, *Women, Cultural Rights, And Public Spaces, Analysis and Recommendations to Advance Women’s Human Rights*, 2019 46\_IANGEL\_report.pdf (ohchr.org)

## BIBLIOGRAPHY

- Bishop, Claire, *The Social Turn: Collaboration and its Discontents* (London: Artforum. Feb 2006) 178-182;
- Bishop, Claire, *Artificial Hells* (London: Verso, 2012)
- Cologni, Elena “A Dialogic Approach for The Artist as an Interface in an Intercultural Society”. In Burnard, Mackinlay, Powell, *The Routledge International Handbook of Intercultural Arts Research* (New York London: Routledge, 2016)
- Cologni, Elena and Scardi, Gabi “Care: Spacings, Collocations, Connectivity”. In Melis, A. *Comunita’ Resilienti. Resilient Communities. Contributi Transdisciplinari Volume 02. Catalogo del Padiglione Italia Comunita’ Resilienti alla Biennale Architettura 2021* (Rome: D Editore, 2021) 230-237.
- Cologni, Elena, “Caring-With Dialogic Sculptures. A Post-Disciplinary Investigation into Forms of Attachment”. *PsicoArt – Rivista Di Arte E Psicologia*, 10(10) 2020: 19–64. <https://doi.org/10.6092/issn.2038-6184/11444>

- Cologni, Elena, "Locating Oneself." In Capucci P. L. and Cipolletta G. (eds). *The New and History – art\*science 2017/Leonardo 50 Proceedings* (Bologna: Noema Media and Publishing, 2018)
- Cologni, Elena, *Nomadic and Dialogic: Art and Ecofeminism*, (University of Cambridge, The Woman's Art Collection, 2018) <https://vimeo.com/manage/videos/257033094> [accessed on 29/05/2023]
- Degen, Cathrine, "Socialising place attachment: place, social memory and embodied affordances." In *Ageing & Society*, 36, 8. (Cambridge: Cambridge University Press, 2016) 1645-1667.
- Duncan, Nancy, *Bodyspace destabilizing geographies of gender and sexuality* (New York: Routledge, 1996).
- Federici, Silvia, *Wages Against Housework*.
- Gibson, Eleanor. J., *Perceiving the affordances: A portrait of two psychologists* (Mahwah, NJ: Erlbaum, 2002).
- Gibson, James, J. *The senses considered as perceptual systems* (Boston: Houghton Mifflin, 1966)
- Gilligan, Carol, *In A Different Voice: Psychological Theory and Women's Development* (Boston: Harvard University Press:1982)
- Haraway, Donna, "Feminism and Technoscience". *Journal of the History of Biology* 30 (3) 1997: 494-497.
- Harding, Sandra, *The Science Question in Feminism* (Ithaca: Cornell University Press, 1986)
- Held, Virginia, *The ethics of care: personal, political, and global* (Nigeria: Oxford University Press, USA, 2006).
- Hidalgo, Maria Carmen, and Hernández, Bernardo, "Place attachment: Conceptual and empirical questions". *Journal of Environmental Psychology*, 21(3), 2001: 273-281.  
<https://doi.org/10.1006/jevp.2001.0221>
- Hubiak, Walter, & Banning, James. H. The implication of place attachment for campus workplaces. *The Campus Ecologist*, 12(3), 1994: 1-4.
- Kanes, Johanna, Shoemaker, Jolynn and Carlise, Andrea, *Women, Cultural Rights, And Public Spaces*, Analysis and Recommendations to Advance Women's Human Rights, 2019 46\_IANGEL\_report.pdf (ohchr.org)
- Kinkaid, Eden, "Re-encountering Lefebvre: Toward a critical phenomenology of social space" EPD: *Society and Space* 2020, Vol. 38(1) 167–186 DOI: 10.1177/0263775819854765 #
- Korsmeyer, Carolyn, *Gender and Aesthetics: An Introduction* (London: Routledge, 2004)
- Korsmeyer, Carolyn, "Feminist Aesthetics". In Code, Lorraine (ed.). *Encyclopedia of Feminist Theories*. (Taylor & Francis Group, 2002).
- Krasni, Elke and Fitz, Angelika, *Critical Care. Architecture and Urbanism for a Broken Planet* (MIT, 2019)
- Lichtenberg, Joseph. D., (1975). The Development of the Sense Of Self. *Journal of the American Psychoanalytic Association*, 23(3), 453–484. <https://doi.org/10.1177/000306517502300301>
- Lind, Maria, "Returning on Bikes: Notes on Social Practice," in *Living as Form: Socially Engaged Art from 1991-2011*, ed. Nato Thompson (Cambridge, MA: MIT Press, 2012), 49
- Perry, Lara eds. *Politics in a Glass: Case Feminism, Exhibition Cultures and Curatorial Transgressions*. (Liverpool: Liverpool University Press), 131-156
- Pulcini, Elena, *Care of the World: Fear, Responsibility and Justice in the Global Age* (Netherlands: Springer Netherlands, 2012).
- Reckitt, Helena, "Forgotten Relations: Feminist Artists and Relational Aesthetics". In: Angela Dimitrakaki and Scannell, Leila and Gifford, Robert "The experienced psychological benefits of place attachment". In *Journal of Environmental Psychology* 51 (2017)
- Scrima, Fabrizio, Di Stefano, Giovanni, Guarnaccia, Cinzia, & Lorito, Laura. "The impact of adult attachment style on organizational commitment and adult attachment in the workplace." *Personality and Individual Differences*, 86, 2015: 432-437
- Seamon, David, "A Way of Seeing People and Place: Phenomenology in Environment-Behavior Research," in S. Wapner, J. Demick, T. Yamamoto, and H Minami (eds.) *Theoretical Perspectives in Environment-Behavior Research* (New York: Plenum, 2000), 157-78).
- Seamon, David, *A Geography of the Lifeworld: Movement, Rest, and Encounter* (New York: Routledge, 1979).
- Stake, Robert E., Visse, Merel. A *Paradigm of Care* (United States: Information Age Publishing, Incorporated, 2021)
- Tronto, Joan C., *Caring Democracy: Markets, Equality, and Justice* (New York: NY Press, 2013)
- Vanore, Margherita, "The Landscapes City as Care. Places of Urban Wellbeing between Thresholds and Edges" in *Elena Cologni. The Body of/at Work* (Venice: Padiglione Italia, Resilient Communities events program, 17a Mostra di Architettura, LaBiennale di Venezia, 2021)
- Wehrle, M. Being a body and having a body. The twofold temporality of embodied intentionality. *Phenomenology Cognition Science* 19, 499–521 (2020). <https://doi.org/10.1007/s11097-019-09610-z>.
- Wolkowitz, Carol, *Bodies at Work* (SAGE Publications Ltd, 2006)

# EITHER YOU STAY OR GO: *PACIFCTION* BY ALBERT SERRA AS A PERFECT LOOP

Author:

ALEXANDRA SEMENOVA

Affiliation:

AUTONOMOUS UNIVERSITY OF MADRID, SPAIN

---

## INTRODUCTION

*Pacifiction* (2022), the latest work of the Catalan film director, admired more in nearby France than in his own land (the lack of nominations for the Spanish Goya prizes this year and multiple nominations for the César speak for themselves) tends to be defined as a *political thriller*, a formula which is as ambiguous as the whole image of this film is. While the political agenda can still be justified, at least due to the figure of the protagonist - the white-suited and dark-sunglassed high commissioner in French Polynesia (Benoît Magimel), the concept of a thriller, if used, should be situated in allegorical context. Any attentive spectator or one who is used to Serra's optics and pays attention to his public discourses, would be aware of the fact that just like his previous works, such as *Story of my Death* (2013), *Pacifiction* can be identified as thriller only through the perspective of refined parody. Nevertheless, there are some traits characteristic of a genre to be found: a tension, an ambiguity, a suspense, a paranoid fear, a whimsical cyclic dynamic. As any film cannot exist outside of its spatial form,<sup>1</sup> the vision of architecture that Serra provides, also deserves consideration, since it is inseparable from the general sensation of distortion that this almost three hours long movie leaves us with.

## LOOP OF THE NIGHT

The *loop* is a notion that probably would be the most appropriate to be called a leitmotiv of the film, both on a conceptual and a visual level. The perpetual movement of the main character doesn't offer to an audience any kind of development, which together with his increasing paranoia and the fact that everything that we see is happening on the island, makes us think of circular, loop-like dynamics. Besides, nearly the entire action takes place either in the middle of the night or at twilight, with a few rare moments of a day. This is not the first time that Serra involves this strategy: in his previous work, *Liberté* (2019), we have seen something similar - a never-ending darkness on a big screen, that begins and ends with a barely pronounced twilight. The concept that attracts Serra, resides in the idea of a night as a lack of progress: while the daytime activities tend to a certain evolution, hoarding and expansion, night practices are the complete opposite: the waste, the expense, the loss of temporal and spatial notions. While several days may form a sequence, night tends to singularity, to atomization, while days accumulate, nights typical practice is non-sense without achievement.

Nevertheless, if we dig deeper, we might come across some concrete spaces, such as nightclubs and discotheques, to be involved, "disorienting spaces"<sup>2</sup> which are hermetic or almost hermetic in order to create and preserve alternative temporal sensitivity in their visitors. The 'Paradise night' that we see in *Pacifiction* is an excellent example. The title, that on the first sight, looks like some kind of

empty sound, if we look closer, links to variety of concepts: the atemporal notion of paradise multiplied by the loop-like notion of night. Although we should also keep in mind the fact that Serra never works with any symbolism, what he is interested in are the atmospheres. The image of a disco is multifaceted: it is something fun, exhausting, shamanic, artificial, where time reckoning does not coincide with the objective temporal margins. The idea of an island makes this effect even more prominent: “It is an island: leaving point *a* you arrive at point *a*” summarizes one of the characters, favoring the idea of loop-like vision. Speaking of the atmosphere that we find inside Serra's ‘Paradise Night’, we may refer, both aesthetically and essentially, to Fassbinder’s heritage, especially to his latest films, such as *Querelle* (1982), the one that the author himself called the “utopian sketch”<sup>3</sup> and which ambience Serra defines as the a “tension between control and chaos”<sup>4</sup>. The colors, the texture, the baroque, and just like in Fassbinder's case, the atmosphere is not just mesmerizing, but fully hypnotic. Worth mentioning that *The Three Little Pigs*, Serra’s 101 hours long multimedia project created during and for the dOCUMENTA (13) of Kassel in 2012 was built around three pillars of German history, and Fassbinder, together with Goethe and Hitler, was one of its protagonists. There is no doubt that the gloomy baroque atmosphere of typical Fassbinder’s *cabaret* in some sense, germinated the ‘Paradise Night’.

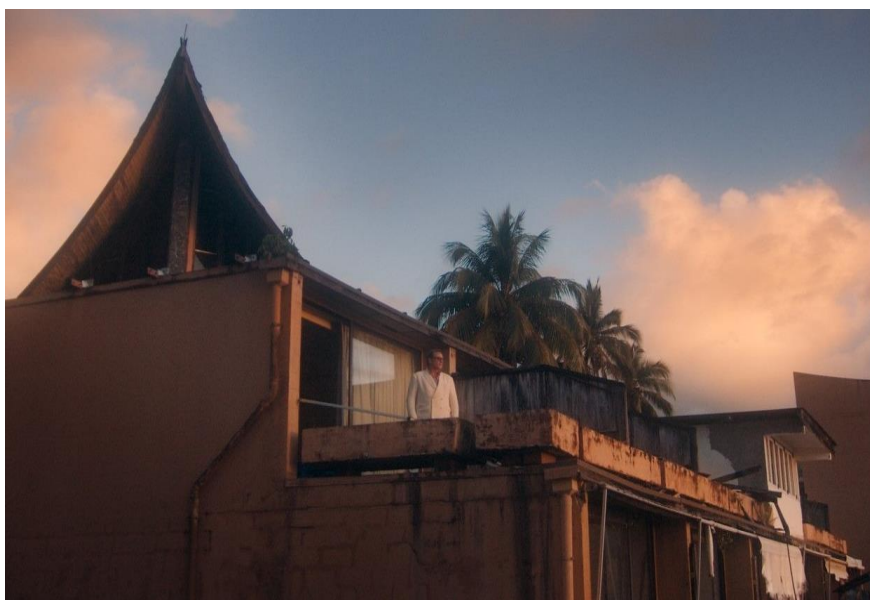


Figure 1. Benoît Magimel in *Pacifiction*

Another element of the *loop-theory* is the image of an enigmatic submarine. It is as if the already mentioned, director's obsession with the notion of the night were multiplied or, better to say, extracted to its very essence. Together with the nightclub, a submarine can be conceptualized as another metaphor for the specific space that is not simply hidden, isolated, but hermetic. On a top of it, it also represents statics and dynamics simultaneously, therefore its image corresponds to perpetual confusion. Any submarine possesses, on the one hand, the traits of something immaterial, a phantom, a myth (an object), and on the other, traits of a *voyeur*, of an eye of the *other* (a subject), being at the same time predisposed to escape from one’s gaze, to remain undercover. The very attraction of it resides in its ambiguous nature: together with the high commissioner De Roller (Fig.1), the spectator falls into temptation to believe that *the submarine* exists and that it does not. This ambiguity makes the object even more desirable - like Gogol's overcoat, or Flaubert’s stuffed parrot Lulu, Serra's submarine is material, but it is also a delirium, an obsession of the protagonist, therefore is a capable

image, which is more significant than the matter itself. At some point, Serra's submarine is an object close to the concept of Magritte's pipe, whose manifested artificiality turns into trustworthiness. For the Catalan director the absolute unnaturalness is one of key points. In the *Diary of Kassel* he desacralizes the idea of filmic mimesis, referring to the case of Curtiz in *Casablanca*, where the actors, according to Serra, were tending to believe not only in their characters but into the whole artificially built scenario, meanwhile his own practice is the opposite: basing himself on the credible elements, he introduces to an audience some complex composition, which openly demonstrates its inconsistencies and contradictions. However, the spectator, tends to, *crea quia absurdum*, trust in *treacherous* images, although permanent doubting and distancing would be probably a wiser strategy, since "art, of course, has never been a question of truth, but of illusion".<sup>5</sup>

### SOME TRAITS OF THRILLER

The first scene of the film can serve as the beneficial metaphor for all its subsequent development (if the word *development* can be even used in this context): on the one hand, Serra offers us a rather fast, linear movement, on the other, here is the first confusion: it is undeniable that there is a shift taking place, but we are not able to deduce what is stable in this episode and what is not. Alerted by this mismatch, we focus on a barge in the foreground, but once we start to follow its movement, the second doubt starts to tickle us: is it fair that precisely the barge is the moving one, or it is not? And then we, the spectators, deeply confused, start to follow the shore, and its *dynamics* also seem convincing. But the third sensation is even more radical: we, as an audience sitting in the darkness of the movie theater, find ourselves *floating*. This episode of *Pacifiction* may in a certain sense be understood as an epigraph for the film, the key which is just as perplexing as the door it is supposed to (does not) unlock. The director makes fun of us from the first moment, offering legible, understandable elements, but in such a way that the viewer has no choice but to get dazed without knowing "where he is". The moving image represented on the screen is not surreal or metaphysical, however, do we even know what we are looking at? In his essay "Dramaturgy of the presence", a homage to the American film critic, Serra acknowledges his own affiliation with what Manny Farber formulated as the "termite" art, that rises against an Antonioni-like cinema, that of the "white elephant". In this sequence the presence of Farber's termite, - although probably dressed as a white elephant, as to say, pretending to be a conventional film, - is easy to detect. Serra's cinema is one that gnaws its way in the absolute darkness, playing with the concept of large scale and a legible speech, but never taking it seriously or heading to any point *b*.

Returning once more to the concept of thriller, we should not forget another category, the Kantian one: "the fearful power of nature judged aesthetically by us as sublime"<sup>6</sup>. Schiller claims in his treatise that only that belongs to the *sublime* that terrifies but does not produce real fear and, dividing the concept into the theoretically sublime and practically sublime, offers us an example of the first as the ocean at peace; and the ocean in a storm as an example of the second.<sup>7</sup> This optic is more than appropriate for studying the film: the image of the ocean plays a large role in *Pacifiction*, and the effect it produces can be entirely attributed to Schiller's reading of Kant – fearful, confusing, sublime. In order to raise the tension in the audience, even on a purely physiological level, Serra who in his own words is "the one of those who fish in rough rivers", implies some torturing practices, for instance, provoking the sensation of collective dizziness. In the first part of the film, there is a sequence of scenes, where the very movement of the camera gives the sensation of almost unbearable dizziness: traditional three digital cameras float repeating the ocean waves. Consequently, the entire cinema hall "gets dizzy", which in certain lights, can even be considered a curious collective experience. Another way of torturing the viewer reminds us of various cinematographic traditions: De Roller, during one of his most passionate searches for the submarine, blinds the audience with a

flashlight (Fig.3) and this episode accumulates a series of references and sensations, both referential and physical. The flashlight aimed directly at us (another firm reason to see *Pacifiction* on a big screen) blinds, annoys, irritates the eye, and already entirely identified with the figure of the commissioner, his searching and his mindset, we suddenly find ourselves *on the other side*: under his suspicion. All of a sudden, we start to be aware of our physical presence, while in the context of film history, it may remind us of an interrogation scene from the *noir movies*. “The subject is the one who has the world before his eyes, in front of him. By occupying this position, he immediately experiences himself as the other of the world. The correct distance acts, here, as the condition of visibility and, at the same time, it is cause for surprise”.<sup>8</sup> Nevertheless, the good thing about Serra is that by showing a lot, he doesn't impose anything, leaving a lot of space for the spectator to cultivate his (her) own interpretation.



Figure 3. Scene with the flashlight

### THE IDENTIFICATION LOOP

The conceptualized confusing is omnipresent in the film; therefore, we can find it also when it comes to identification of the main female character, the Polynesian actress Pahoah Mahagafanau (Fig.4). The creators of *Pacifiction* claim that after the series of collapses with the previous candidates, during filming (which lasted only twenty-five days) the story was once again left without a female protagonist. So, it was decided to expand the part of Shanna, who at first appeared only in an episodic role as a hotel employee. The love story between her and De Roller, like everything in the film, remains unresolved, unexplained, unidentified. Speaking of explanations, it should be mentioned that the prehistory of the title of the movie also reflects an ambiguity: at first called *Bora Bora* (this working title existed during the shooting), at the time of post-production it became *Tourment sur les Îles* to later be incorporated into the official program of the Cannes Film Festival under the current name, *Pacifiction*. Again, putting such notions as *pacification* (appeasement) on one side, while on the other: *the Pacific* (an obvious geographical reference) and *fiction* (as a literary genre, or as the act or fruit of pretending), Serra declares an irony as his method of interpretation, “an irony as a universal and spiritual form of the disillusion of the world”.<sup>9</sup>

One more “memorable scene of a special nature”<sup>10</sup> that is particularly significant in the context of identification is the one of the cockfights. This sequence leaves us bewildered not only by its visual aspect and sound, but also by the fact that, on the one hand, we are offered such a conventional metaphor that almost makes us feel uncomfortable by its simplicity (comparing politics with the cockfight), on the other, the image is so complex that basically remains indecipherable. While the

spectator follows the actual fight blending with a folkloric dance, layer through layer, like drawing on a tracing paper, what really remains unanswered (and absurd) is why the high commissioner literally *conducts* these processes? Has the politician occasionally become an eccentric choreographer, a peacock enchanter or he just gone insane? Nowadays we are used to see art insisting on being political, but, paradoxically, Serra's film can be called political only, as we already mentioned, in an allegorical way: loaded with agenda, atmospheres and oddities, *Pacifiction* stays away of any ideology tending to what Baudrillard defined as a "pure event of form".<sup>11</sup> "I don't want to teach anything; the meanings arise spontaneously during filming, and only then they can reflect the world with the visual complexity typical of cinema and with the moral ambiguity typical of the world in which we live"<sup>12</sup>, the director affirms.



Figure 4. Benoît Magimel and Pahoa Mahagafanau

Serra seems to make fun of political correctness, turning an old-fashioned figure of a middle-aged European man in a white suit into the protagonist, making fun of the viewer by creating artificial but believable images, making fun of paradisiacal landscapes turning their perfection into extreme, making fun of conventional cinema and, he seems to be ironic about his own *highbrow* posture, making a conventional film. Constantly self-observing, the general discourse of *Pacifiction*, tends to be some sort of cinematographic uroboros. The visual part of *Pacifiction* plays with various optics simultaneously. The images, paradisiacal *per se*, that remind us of Gauguin and the Windows XP start screen, constantly suffer a certain distortion. It is noticeable that they have gone through a scrupulous modification during post-production to reach this point of 'controlled kitsch': excessive fluorescent colors with a touch of humidity as if we were seeing that embarrassing mobile ad that suggests, "with a clean lens the photos come out better". Here, our gaze is constantly under pressure and forced to exert itself. In some way, images which are extremely rich pretend to be poor, noisy and trembling, or *vice versa*.

## THE FANCY RUINS

Studying of architecture in *Pacifiction* is impossible out of the context of how it had been represented in Serra's previous works; despite the fact that mostly his earlier films were historically set, there are still some similarities. Together with mentioned in the beginning of the article 'Paradise Night', a hypnotic space with its acid-colored dancefloor and claustrophobic bar, there are some well pronounced traditional Polynesian indoor interiors, surprisingly cozy (Fig.5). But there are also some ruins in the film, some elegant good-looking ruins that remind us both of *Liberté* and *Story of my death*. The whimsical abandoned hotel with its half-broken terrace windows recalls an image of Helmut Berger's gaze in *Liberté* through the cracked glass of the carriage or the memorable scene of

window crashed by Casanova during the intense gallant scene. The idea of disconnection, of observation limited by the screen together with the image of “destroyed” or “distorted” optics are those that traditionally form a part of Serra’s discourse. At some point it reminds us of the concept of the *picturesque*, typical for the Romanticism and the idea of an artist who “sings what is in ruins”<sup>13</sup>, in Pascal Quignard’s terms. On the other hand, some scenes of the film from the architectonical point of view are precise, nearly on a documentary level. For instance, the scene where De Roller receives the local community representatives in his dining room took place in the actual high commissioner’s residence, where he had been visited by Emmanuel Macron just a few days before shooting.



Figure 5. Indoor scene

The cathartic scene of the protagonist in the middle of an empty stadium under the heavy rain is probably connected more to the representation of time, since in this case the downpour brings the sensation of the inseparable flow of time, in the terms of Bergson, while the insistent counting sound contradicts the image (in an arithmetical Aristotelian way). Nevertheless, the image of the stadium together with the discotheque fits the archetypical “desired” image of mass cinema, described by Manny Farber: “what the characters share are successful lives [...] which are carried out in dramatic places like a night club in Casablanca, in a cave in Spain or on the baseball field at Yankee Stadium”<sup>14</sup>.

## CONCLUSION

Serra’s *Pacifiction* seems to be a good example of, in terms introduced by Baudrillard, “the post figurative world (it is neither figurative nor non-figurative, but mythical)”<sup>15</sup>, with its interest for the pure form, its connection and disconnection with the audience, that after suffering from the “violence of indifference”<sup>16</sup> at one point in the next moment gets involved in such an intense manner that feels it on a physiological level. The lack of ideology or narrative lets the spectator experience the artwork, a film in this case, in its integrity and complexity. As Michael Jacob, although referring to visual arts in this case, says in *What is Landscape?* “The sense of metaphysical void has, however, other consequences as well: given that almost nothing can be identified, we are encouraged to look differently to the painting and to discover its more abstract qualities”<sup>17</sup>. *Pacifiction* has various forms to treat the spectator in order to have us perpetually under pressure, but what remains unchanged from the first minute to the last one is a sense of being hypnotized, of being involved in cinematographic space, which atmosphere has never been seen before and that can be anything but a commonplace.

## NOTES

- <sup>1</sup> Manny Farber and Robert Polito, *Farber on Film. The Complete Film Writings of Manny Farber*, (New York: Library of America, 2016), 695.
- <sup>2</sup> Manny Farber and Robert Polito, *Farber on Film. The Complete Film Writings of Manny Farber*, (New York: Library of America, 2016), 694.
- <sup>3</sup> Reiner Werner Fassbinder and Robert Fischer. *Fassbinder por Fassbinder. Las Entrevistas Completas*, trans. Ariel Magnus, (Santiago de Chile: Hueders, 2018), 489.
- <sup>4</sup> Albert Serra. "Life and Emphasis". *Cahiers du Cinema* 789, (2022): 29.
- <sup>5</sup> Jean Baudrillard. *The Conspiracy of Art*. Translated by Ames Hodges. (London and New York: Semiotext(e), 2005), 64.
- <sup>6</sup> Friedrich Schiller. "Of the Sublime. Towards the Further Realization of Some Kantian Ideas", trans by William F. Wertz, Jr. *Fidelio Magazine* 13, (2004): 94.
- <sup>7</sup> Friedrich Schiller. "Of the Sublime. Towards the Further Realization of Some Kantian Ideas", trans by William F. Wertz, Jr. *Fidelio Magazine* 13, (2004): 95.
- <sup>8</sup> Michael Jacob. *What is Landscape?* (Barcelona and Trento: ListLab, 2018), 37.
- <sup>9</sup> Jean Baudrillard. *The Conspiracy of Art*, trans. Ames Hodges. (London and New York: Semiotext(e), 2005), 121.
- <sup>10</sup> Manny Farber and Robert Polito, *Farber on Film. The Complete Film Writings of Manny Farber*, (New York: Library of America, 2016), 98.
- <sup>11</sup> Jean Baudrillard. *The Conspiracy of Art*, trans. Ames Hodges. (London and New York: Semiotext(e), 2005), 58.
- <sup>12</sup> Fabrice Lauterjung, "Albert Serra, A Calm Anarchist. Interview with Albert Serra". *Art Press* 503, (2022): 34.
- <sup>13</sup> Pascal. Quignard. *Sur L' Idée D'Une Communauté de Solitaires*. (Paris: Arléa, 2015), 56.
- <sup>14</sup> Manny Farber and Robert Polito, *Farber on Film. The Complete Film Writings of Manny Farber*, (New York: Library of America, 2016), 112.
- <sup>15</sup> Jean Baudrillard. *The Conspiracy of Art*, trans. Ames Hodges. (London and New York: Semiotext(e), 2005), 44.
- <sup>16</sup> Jean Baudrillard. *The Conspiracy of Art*, trans. Ames Hodges. (London and New York: Semiotext(e), 2005), 145.
- <sup>17</sup> Michael Jacob. *What is Landscape?* (Barcelona and Trento: ListLab, 2018), 75.

## BIBLIOGRAPHY

- Baudrillard, Jean. *The Conspiracy of Art*. Translated by Ames Hodges. London and New York: Semiotext(e), 2005.
- Farber, Manny and Polito, Robert. *Farber On Film. The Complete Film Writings of Manny Farber*. New York: Library of America, 2016.
- Fassbinder, Reiner Werner and Fischer, Robert. *Fassbinder por Fassbinder. Las Entrevistas Completas*. Translated by Ariel Magnus. Santiago de Chile: Hueders, 2018.
- Jacob, Michael. *What is Landscape?* Barcelona and Trento: ListLab, 2018.
- Lauterjung, Fabrice. "Albert Serra, A Calm Anarchist. Interview with Albert Serra". *Art Press* 503, (2022): 34-37.
- Quignard, Pascal. *Sur L' Idée D'Une Communauté de Solitaires*. Paris: Arléa, 2015.
- Schiller, Friedrich. "Of the Sublime. Towards the Further Realization of Some Kantian Ideas". Translated by William F. Wertz, Jr. *Fidelio Magazine* 13, (2004): 90-99.
- Serra, Albert. Director. *Cubalibre*. Andergraun Films: Spain, 2014.
- Serra, Albert. *Diari de Kassel*. Barcelona: Núvol, 2018.
- Serra, Albert. Director. *Liberté*. Andergraun Films, Lupa Film, Idéale Audience, Rosa Filmes: France, Portugal, Spain, 2019.
- Serra, Albert. "Life and Emphasis". *Cahiers du Cinema* 789, (2022): 28-29.
- Serra, Albert. Director. *Pacifiction*. Andergraun Films, Rosa Filmes, Idéale Audience, TamTam Group: France, 2022.
- Serra, Albert. Director. *Story Of My Death*. Andergraun Films, Rosa Filmes: France, Spain, 2012.

Serra, Albert. Director. *The Death of Louis XIV*. Andergraun Films, Capricci Productions, Rosa Films: France, 2017.

Serra, Albert. "The Dramaturgy of Presence". *Comparative Cinema* 4, (2014): 93-96.

Serra, Albert. Director. *The Three Little Pigs*. Andergraun Films and Rosa Films: France, 2017.

# VISUALIZATION AND PARAMETRIC DESIGN OF SUSTAINABLE DOMES, INSPIRED BY HISTORICAL PERSIANATE GEOMETRY

Authors:

**ATEFEH AMRAEI<sup>1</sup>, SOROUSH SAFFARI<sup>2</sup>, SEPIDEH SAFFARI<sup>3</sup>**

Affiliation:

<sup>1 & 2</sup> IMAM KHOMEINI INTERNATIONAL UNIVERSITY (IKIU), IRAN.

<sup>3</sup> CORRESPONDING AUTHOR, THE UNIVERSITY OF BRITISH COLUMBIA, CANADA.

---

## INTRODUCTION

Sustainable architecture is considered a current and popular design trend due to the challenging environmental crises. Moreover, emerging powerful software contributes to enhancing the generative design and parametric architecture. In this sense, this paper suggests combining sustainable architecture with parametric design to boost environmental sustainability and architectural forms simultaneously. In other words, this study adopts a 3D visualization methodology to reduce solar energy absorption over a historical architectural element i.e., a random dome as a case study while enhancing the dome's outer surface's aesthetic values using parametric design. To accomplish that, the paper investigates the impact of adding the elevated parametric ornament, which is inspired by traditional 10-pointed star geometry, over a random dome to measure the shadowing surfaces in two states: the shadowing rate of the dome with elevated parametric ornaments, and the shadowing rate of a simple dome without any decorations. This investigation was conducted within the hours and months in which solar radiation is at its peak. Results demonstrate a significant rise in the shaded areas over the dome that contributes to thermal comfort.

Several reasons prompted this study to choose dome-shaped roofs. Vaults and domes are the archetypes of Persian traditional architecture that are exposed to more direct solar radiation and thermal energy absorption than other outer surfaces of a building. This type of roof used to be widely adopted as a climatic approach in most regions of Iran, especially within warm and arid areas. The following factors effectively contributed to the popularity of these roofs: The creation of natural ventilation, provision of thermal comfort in warm seasons, decrease in heat absorption thanks to its special geometry, and structural resistance against lateral forces. Their forms also provide great opportunities for aesthetic considerations on both inner and outer surfaces.

Reflecting on the history and functionality of Persian domes and arches, Iranian architects seek ways to develop novel architectural ideas using these forms. The transformation of formal and conceptual traditions of Persian domes, arches, and vaults is obvious in the well-known designs of The Mausoleum of Omar Khayyam by Hooshang Seyhoun and Shahyad Monument / Azadi Square by Hossein Amanat (Fig 1). Since the timing of these projects was far behind the emergence of sustainable and parametric architecture, they represented the past either conceptually or formally.

Focusing on the current environmental issues and the emergence of parametric design, this study plans to draw inspiration from the past to visualize future domes using novel approaches. The paper's outcome simultaneously speaks to historical identities and future demands.

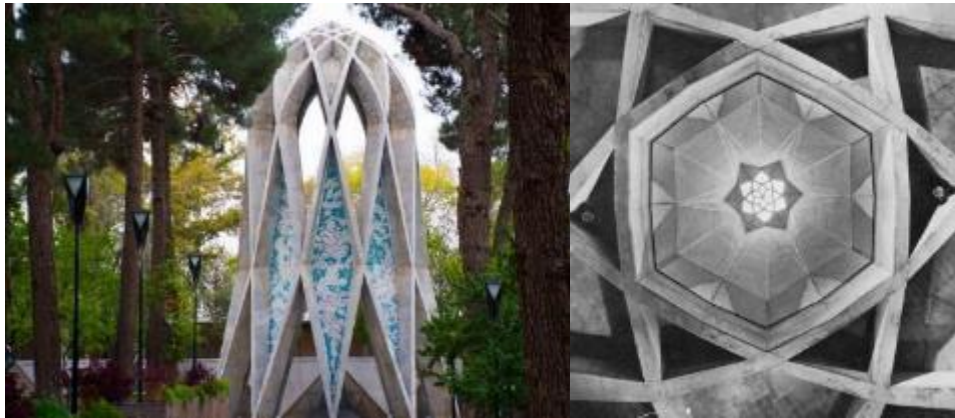


Figure 1. From left to right: The Mausoleum of Omar Khayyam, (Iran: Wikipedia, the free encyclopedia, 2015- [https://en.wikipedia.org/wiki/Mausoleum\\_of\\_Omar\\_Khayy%C3%A1m](https://en.wikipedia.org/wiki/Mausoleum_of_Omar_Khayy%C3%A1m)), Hossein Amanat, Shahyad / Azadi Monument: view of dome gallery, (Iran: Amanat Architect, 1971- <http://www.amanataarchitect.com/shahyad/index.php>).

## LITERATURE REVIEW

The possibility of analyzing and modelling behavioural patterns of building in an actual environment prior to construction is a new opportunity to optimize designs. Several parametric shells have been simulated and examined to investigate the absorption rate of daylights. One of the outcomes of these studies is making a path toward architecture based on open performance.<sup>1</sup> As a result, buildings can process data in real time and respond to the environment.

Pesenti et.al designed a flexible shading surface based on the kinetic behaviour of origami geometry. This self-folding surface can act as a responsive facade without using any external or mechanical tool for its movement. In fact, with the application of Shape Memory Alloy (SMA) wires, origami patterns can switch to the alternative shape and produce a responsive system.<sup>2</sup>

Elotefy et.al. displayed that there is a further saving in consumption of energy if high-rise buildings include folded patterns on their facades. In other words, the patterns reduce the impact of solar radiation on the building's facades by increasing shadowed areas.<sup>3</sup>

Eltaweel and Su provided a literature review of parametric design application in daylighting and solar radiation enhancement. Al-Bahr Towers in terms of Façades design and Tetra-Script 155 pavilion regarding Skylight design are examples of this study. Concerning adaptive shading systems, Al-Bahr Towers (Fig 2) are well-known examples with parametric design inspired by an Islamic architectural element called “Mashrabiya”. The façade consists of 1000 hexagonal panels responding automatically to the sun movement. These folding panels, which protect the façade from direct solar radiation, succeeded in reducing heat gain and glare by 50%, meanwhile, giving the traditional atheistic shape.<sup>4</sup>

Barozzi et.al. showed how dynamic and adaptive building facades enhance sustainability in different aspects, particularly in terms of sun-shading elements. Since solar radiation varies during day and year, kinetic systems appear more suitable than fixed ones. Although shading elements such as blinds, shutters, and louvers perform well when applied on planar façades, applying them to curved surfaces seems impossible. To solve this issue, new flexible shading systems have been developed. The project Garden by the Bay (Fig 2) is a successful example of an adaptive shading system applied to large-

scale curved structures. In this project, the retractable system consists of canvas shades positioned externally to allow light transmission while they protect the façade from overheating.<sup>5</sup>



Figure 2. Left to right: Al-Bahr Tower in Abu Dhabi,<sup>6</sup> Garden by the Bay, Singapore, Un-folded roof structure of Barahat Al Nouq square

Grunwald et.al. investigated a folding roof structure of Barahat Al Nouq square (Fig. 2) as a case study of the kinetic roof structure. The roof, which was inspired by traditional Arabic architecture, functions dynamically regarding the sun's position. It consists of 1080 individual membrane-covered frame modules suspended on 60 structural cables. Each module is hung from a moving beam running along a pair of structural cables. The whole structure has been installed above the square and different ceiling patterns can be created based on the position of the Sun.<sup>7</sup>

Nady provided several case studies in which Dynamic facades respond to their environmental conditions and modify them. Façade of Kiefer Technic Showroom changes according to the outdoor conditions to optimize the internal climate. Another notable example of a dynamic façade with a capacity for light control is Arab Institute designed by Jean Nouvel. The façade is composed of a 20x10 grid square adopted from the geometry of traditional Arab screens. These squares shrink and widen in response to sensors and then control the penetration of sunlight.<sup>8</sup>

While there are many scholarships on the technical aspects of this interdisciplinary field of parametric and sustainable architecture, little provides references to historical forms in their technical design. Surprisingly, there is still much room to discuss this subject matter with historical references to Persian architecture. Since the traditional architecture of Iran offers an enriched context of inspiration either climatically or aesthetically, this study plans to follow the path of existing scholarship while also emphasizing how Persian historical architecture casts light on future sustainable design.

## METHODOLOGY

Over the last decades, software development has facilitated the simulation of buildings' behavioural patterns. Analyses can be performed in all design phases to optimize existing conditions.<sup>9</sup> Built upon this development, we apply several software and plugins in sustainable architecture and parametric design to optimize the dome-shaped parametric shell. In other words, we employ a 3D visualization approach to model a prototype as a method of inquiry.

### Software and plugins

We used Rhinoceros 3D and its well-known plugins, including Grasshopper and Ladybug to achieve our research aims. Rhinoceros 3D is a NURB-based software capable of creating, editing, and analysing 3D models. NURBS are mathematical representations of 3D geometry that can accurately define any shape, from a simple 2D line or curve to the most complex 3D free-form models.<sup>10</sup> We also used the Grasshopper plugin to design a parametric model. This plugin is a graphics-based coding tool for Rhinoceros 3D that allows the design of complex parametric models using visual logic.<sup>11</sup> Then, we applied the Ladybug plugin to simulate climate conditions and solar radiation. Ladybug is an open-source plugin that supports the environmental design and daylight analyses.<sup>12</sup>

### Formation of geometry

This study is grounded on a basic pattern to create a large-scale geometrical ornament. Hence, we considered a fundamental Persian geometry entitled "Two and Five Sluggish Garih (10-pointed star)" as a basic module to develop decoration. This geometry can be seen in different variations across traditional Iranian architecture, such as Chahar-Bagh School (Safavid Historical Monument). We modelled this geometry with the Grasshopper plugin's assistance and transferred the developed geometry to the dome's surface (Fig 3).

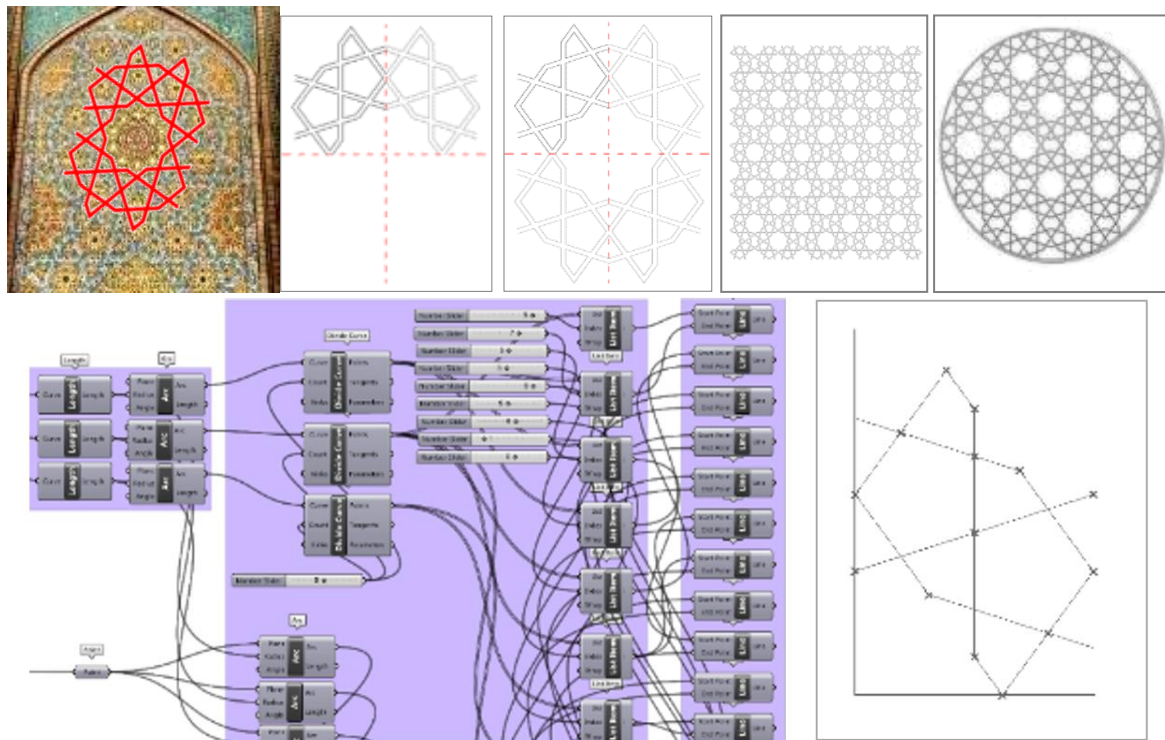


Figure 3. The top row shows Chahar-Bagh School, Isfahan (left) and the process of geometrical pattern formation. The bottom row illustrates how a basic part of the pattern's design created with the assistance of the Grasshopper plugin.

After designing the parametric shell, the Ladybug plugin helped us simulate the climatic conditions of the case study location (Yazd), considering the peak hours and months of solar radiation. By adopting a parametric design, the height of the geometrical pattern over the dome is dynamically increased considering the sun's position to expand the shadowing rate. In other words, parts of the parametric shell over the dome, which are closer to the sun, benefit more from shadowing effects due to the variable heights of the shell. To this end, the grasshopper plugin helped calculate the distance between different points over the dome and the sun. Then, the height of the second shell was defined regarding the various distances between two variables, including "a" and "b," which are a domain relating to minimum and maximum distances to the sun, respectively (Fig 4).

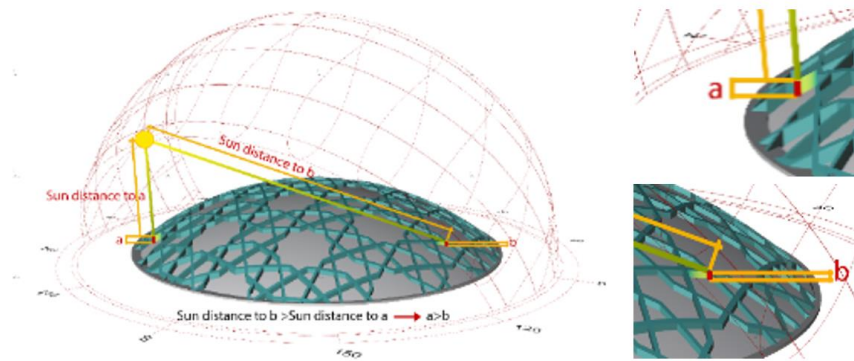


Figure 4. Changing geometrical pattern height to increase shadowing area based on the position of the sun.

In the subsequent stage, daylight and shadowing rate analyses were conducted regarding the sun's position and path through the Ladybug plugin (Fig 5). Finally, the study finds the overall shadowed areas of both domes, including simple dome and dome with the parametric shell. The results helped us realize how much the second shell can modify the solar radiation impacts over the initial dome during the hottest months of the year in Yazd (table 1).

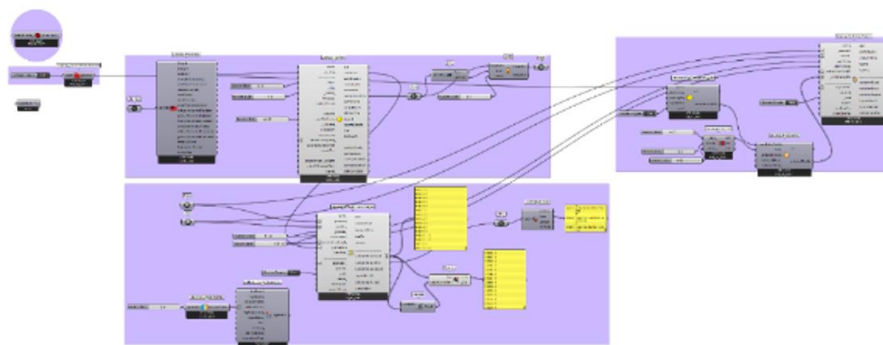


Figure 5. Convert case studies Breps to climatic zone

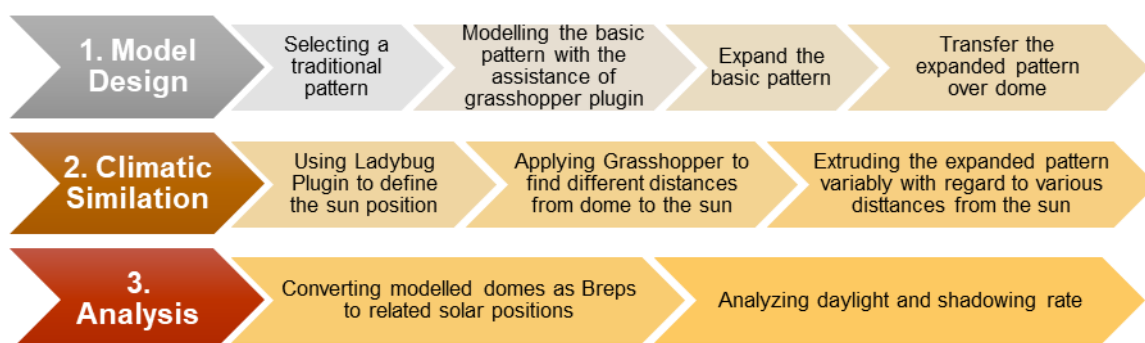


Figure 6. The process of design and climatic analysis

### Dimensions and geometry

The geometry of the initial dome is inspired by the Colombo vault (a small-sized Iranian dome). These domes are one of the most widely used and durable vault structures in Iran.<sup>13</sup> Furthermore, since the study aims to focus on the shadowing effect of the second shell (parametric shell), we need to minimize the shadowing impact of the simple dome over itself. Hence, we selected this type of

dome, which provides the minimum level of shadowing due to its low height. Precisely, the simple dome's height proportion to its span is 1 to 6 (Fig 7).

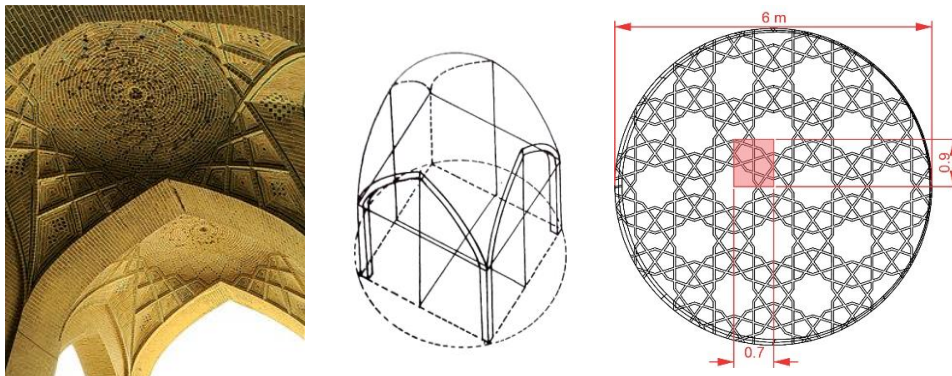


Figure 7. Left to right: Colombo vault in Vakil Mosque,<sup>14</sup> Colombo vault,<sup>15</sup> The size of the 10-pointed star

### Dynamic patterns

Since the dynamic parametric shell reacts to the solar parameter, the position of the shell is considered empty on the simple dome to facilitate its movement. This way, the second geometrical shell (a schematic blue dome in can rotate freely under the first dome (Fig 8). Thus, with the rotation of the parametric shell around the central point of the horizontal axis, we have the geometrical shell, which is higher next to the solar parameter.

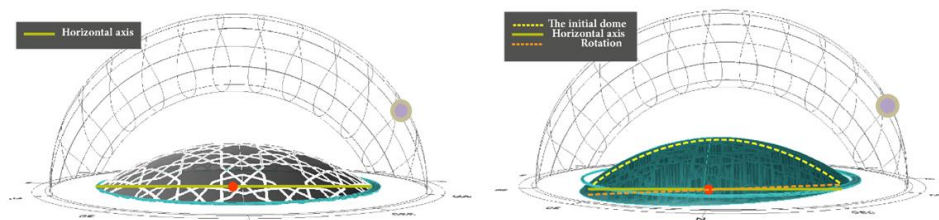


Figure 8. On the left: The initial dome, On the right: The second shell and its rotation regarding the sun's position

### RESULTS AND DISCUSSION

Decision-making on location in which this study was conducted was a key step in the research process. We have chosen Yazd as an appropriate example of a warm and dry city with numerous traditional domes. It is located in the deserts of Iran and close to the Silk Road. Thanks to its unique architecture, this historical city is recognized as a World Heritage Site by UNESCO.<sup>16</sup> The weather conditions of this city are presented in table 1.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	6.3	9	13.8	18.7	24.5	29.4	31.7	29.9	25.4	19.3	11.7	6.9
Min. Temperature (°C)	-0.3	2.2	7	11.5	16.8	21.7	23.8	21.8	16.9	11	4.2	-0.1
Max. Temperature (°C)	12.9	15.9	20.6	26	32.2	37.2	39.6	38.1	34	27.6	19.3	14
Avg. Temperature (°F)	43.3	48.2	56.8	65.7	76.1	84.9	89.1	85.8	77.7	66.7	53.1	44.4
Min. Temperature (°F)	31.5	36.0	44.6	52.7	62.2	71.1	74.8	71.2	62.4	51.8	39.6	31.8
Max. Temperature (°F)	55.2	60.6	69.1	78.8	90.0	99.0	103.3	100.6	93.2	81.7	66.7	57.2
Precipitation / Rainfall (mm)	10	11	8	11	6	0	0	0	0	2	3	4

*Table 1. Climatic Table of Yazd city<sup>17</sup>*

Considering the climatic model of Yazd, three months of the year (July- August) were selected, during which solar radiation reaches its peak. Subsequently, three hours were considered on the 21st of each month, namely 10, 13, and 16. Then, the Ladybug plugin simulated the sun's position and path at mentioned hours. Furthermore, the shadowing model of the parametric shell was modelled on the simple dome at each of these hours. Ultimately, the sum of shaded areas was calculated and compared with the shaded areas of the simple dome without parametric patterns. This study found a considerable difference between these two numbers. This significant discrepancy can lead to more climatic comfort and less absorption of solar radiation on these kinds of roofs.

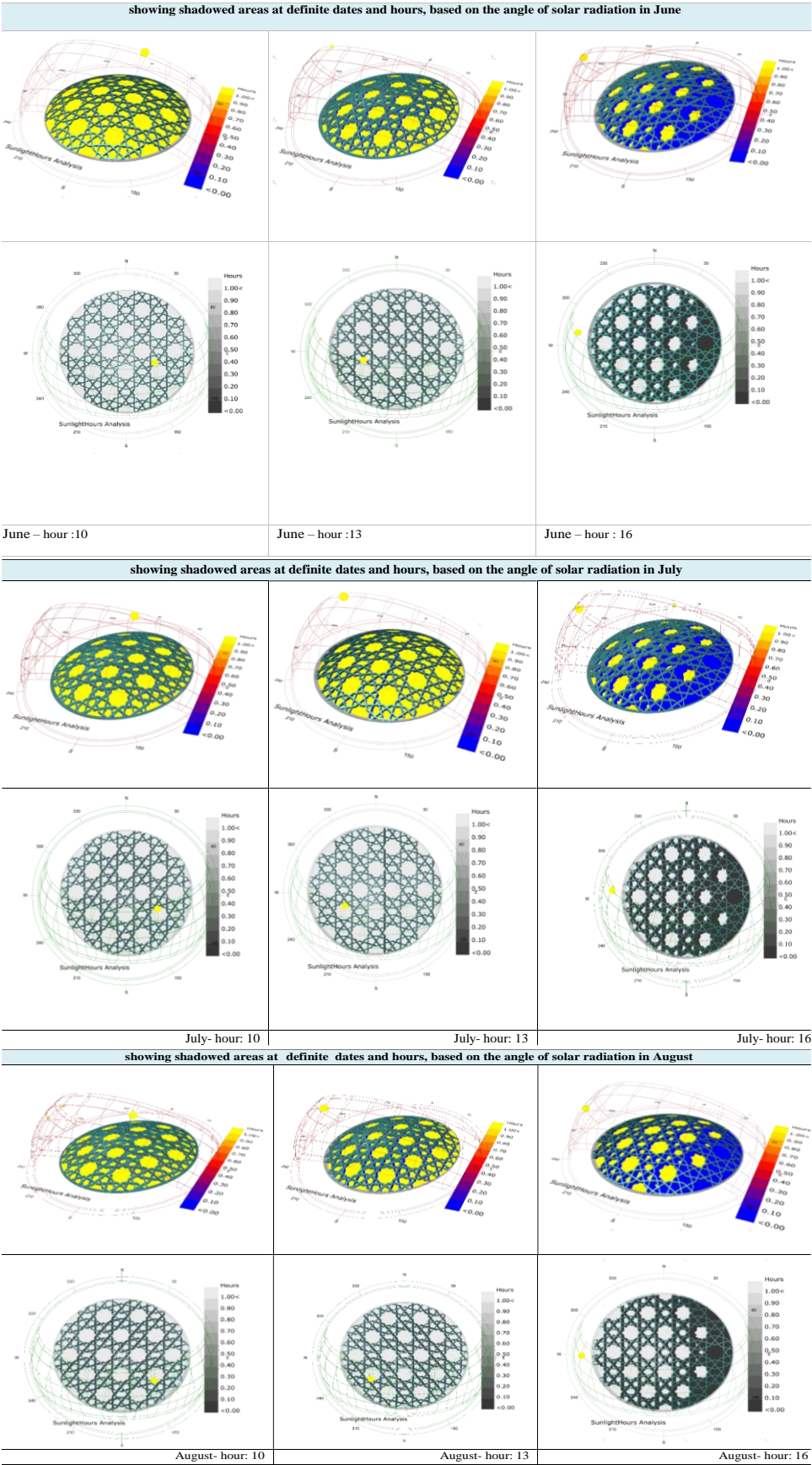


Table 2. Showing shadowed areas at definite dates and hours, based on the angle of solar radiation in June, August, and July

The first row of table 2 shows the absorption rate of sunlight constitutes a range of colours from blue to yellow. This range of colours shows to what extent the surfaces have been exposed to solar radiation at a specific hour. While yellow displays the maximum absorption of sunlight, blue colour shows the least. The second rows of mentioned figures illustrate the rate of shaded surfaces containing the dark to pale grey spectrum. As mentioned earlier, the ornamental parametric shell is an intelligent structure that can regulate its height concerning the sun's position. In other words, the heights of geometrical patterns can increase or decrease concerning their distance from the sun. As a result, shaded areas increase in regions that are closer to the sun (table 2).

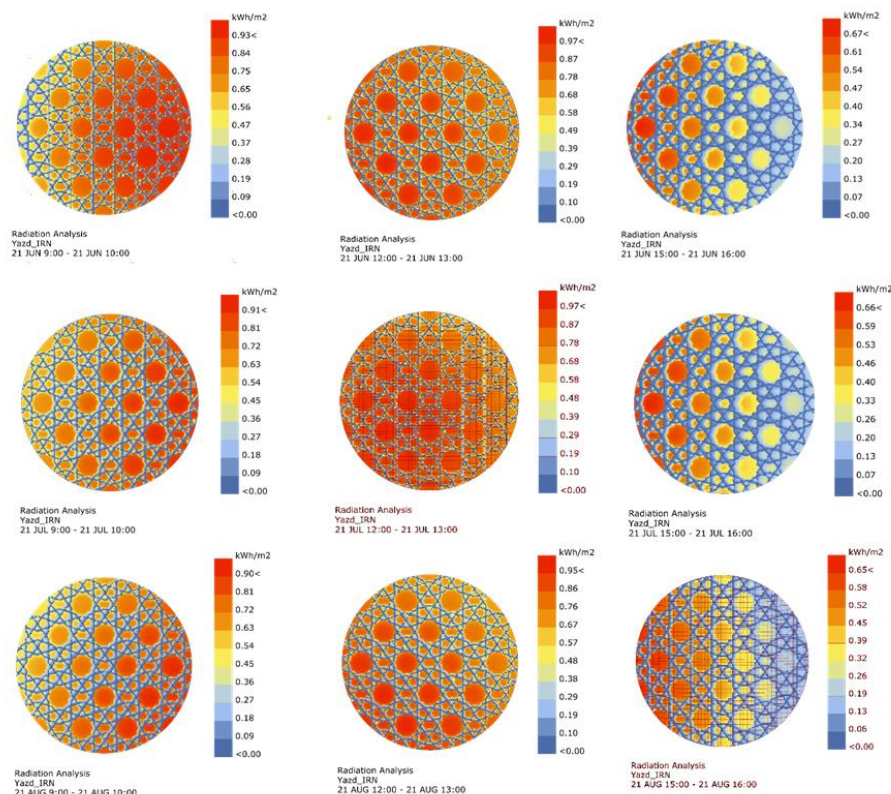


Figure 9. The intensity of solar radiation absorbed by surfaces of dome (Calculated with Ladybug Plugin)

Apart from calculating shaded areas, the intensity of solar radiation over the dome on the three chosen dates was studied. The intensity of solar radiation is depicted through the spectrum ranging from red (1kwh/m<sup>2</sup>) to blue, showing intensive and almost zero solar radiation (shaded surfaces). The lowest solar radiation intensity is across areas where the parametric geometry was installed as a second shell. (Fig 9)

To quantify the results from modelling, the Ladybug plugin helped divide the dome surface into equal square-shaped units. Then, the proportion of units that did not absorb sunlight to the total number of units was calculated. By comparing the proportions, the shadowing rate of the parametric shell over the dome was evaluated at almost 49% at its peak. The lowest amount of shadowing rate, which marks roughly 24% increase in the shadowing surface, was recorded in June. The difference between these two phases has also been illustrated in the line graph in Figure 10.

Month	Day	Hour	Percentage of shaded surfaces (phase 1)	Percentage of shaded surfaces (phase 2)	Percentage of added shadow (difference between phase 1 and 2)
June	21	10	≈33%	≈57%	≈24%
		13	≈33%	≈58%	≈25%
		16	≈34%	≈82%	≈48%
July	21	10	≈33%	≈58%	≈25%
		13	≈33%	≈59%	≈26%
		16	≈34%	≈82%	≈48%
August	21	10	≈33%	≈60%	≈27%
		13	≈33%	≈61%	≈28%
		16	≈37%	≈86%	≈49%

Table 3. Comparative study of shaded surfaces on the dome in first phase (without a parametric pattern), and in the second phase (with parametric pattern)

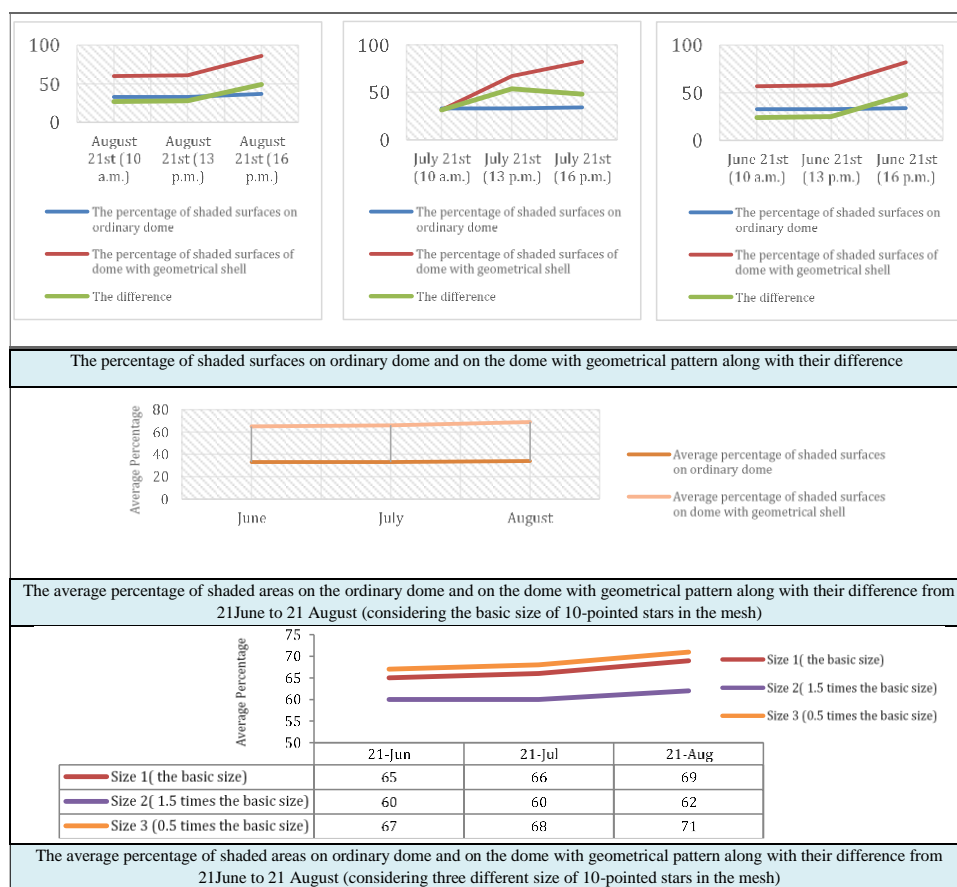


Figure 10. The intensity of solar radiation absorbed by surfaces of the dome (Calculated with Ladybug Plugin)

Moreover, the average percentage of shaded areas on the dome during the three hottest months of the year in Yazd (Table 4) was calculated. Figure 10 shows that the existence of the parametric shell increases the average shaded areas by 30 percent, compared to the simple dome from June 1st to the end of August.

	0.5 times the basic size 10-pointed stars	the basic size 10-pointed stars	1.5 times the basic size 10-pointed stars
The average percentage of shaded surfaces	≈58%	≈57%	≈54%
	≈59%	≈58%	≈55%
	≈85%	≈82%	≈72%
	≈59%	≈58%	≈54%
	≈60%	≈59%	≈55%
	≈85%	≈82%	≈72%
	≈62%	≈60%	≈55%
	≈63%	≈61%	≈56%
	≈89%	≈86%	≈76%

*Table 4. The impact of changing the size of 10-pointed star on the area of shaded surfaces*

Additionally, changes in the size of 10-pointed stars have significant results in shading percentage. While the outcomes in the percentage of shaded surfaces at 10 and 13 in each month of this study are subtle, the significant difference in result from this change can be seen at 16:00. To be more precise, the area of shaded surfaces decreases by 3 percent at 10 and 13 in June when the size of 10-pointed stars increases 1.5 times. However, we witness a 10 percent decrease at 4 pm in the same conditions. As a result, the size of the 10-pointed stars plays a substantial role in rising shadowed areas (Figure 10).

## CONCLUSION

Creative approaches to optimize energy efficiency have become increasingly popular because of climatic changes and challenges. This study presented an approach to combine traditional and parametric designs to increase sustainability and thermal comfort. To accomplish that, a dome-shaped roof and a basic Persian geometry (10-pointed star) were selected as prototypes of traditional Iranian architecture. The study intends to recreate and visualize the dome by adding a parametric Persian ornament over it.

This modification was made with the aim of decreasing the effect of solar radiation on the dome in the three hottest months of the year. 3D modelling software and plugins such as Rhinoceros, Grasshopper and Ladybug analytical plugins were applied to simulate dome geometry in two phases, including the dome with parametric shell and the simple dome. Then, the shadowed areas regarding specific sun positions were calculated in both domes. The finding shows a substantial increase (30 percent) in shadowing rate over the dome throughout three warm months of the year. Since the parametric ornament can change its height concerning the sun's position, more intensity in shadowed areas can be observed in parts of the dome closer to the sun. The study also investigates the relationship between the size of 10-pointed stars and areas of shaded surfaces. If the size of 10-pointed stars increases 1.5 times, 5 percent decrease in shaded surface areas can be seen on average. Hence, the height of the parametric shell and the size of 10-pointed stars can remarkably optimize thermal comfort. It is also clear that many parameters should be assessed in the process of reaching thermal comfort, which are suggested to investigate as the subject of another research. Thanks to the modification of solar radiation offered through this method, this study provides a creative environmental solution for areas exposed to intensive solar radiation.

## NOTES

- <sup>1</sup> Rivka Oxman, "Performance-Based Design: Current Practices and Research Issues," *International Journal of Architectural Computing* 6, no. 1 (2008): 1–17.
- <sup>2</sup> Marco Pesenti, Gabriele Masera, Francesco Fiorito, and Michele Sauchelli, "Kinetic Solar Skin: A Responsive Folding Technique," *Energy Procedia* 70 (May 1, 2015): 661–72. <https://doi.org/10.1016/j.egypro.2015.02.174>.
- <sup>3</sup> Hazem Elotefy et al., "Energy-Efficient Tall Buildings Design Strategies: A Holistic Approach," vol. 74 (International Conference on Technologies and Materials for Renewable Energy, Environment and Sustainability, *Energy Procedia*, 2015), 1358–69.
- <sup>4</sup> Ahmad Eltaweel and Yuehong SU, "Parametric Design and Daylighting: A Literature Review," *Renewable and Sustainable Energy Reviews* 73 (2107): 1086–1103.
- <sup>5</sup> Marta Barozzi et al., "The Sustainability of Adaptive Envelopes: Developments of Kinetic Architecture" (International Symposium on "Novel Structural Skins: Improving sustainability and efficiency through new structural textile materials and designs," *Procedia Engineering* 155, 2016), 275–84, <https://www.sciencedirect.com/science/article/pii/S1877705816321701>.
- <sup>6</sup> "Author talk: Russell Fortmeyer shares insights on dynamic building envelopes", Urban Green Council, accessed January 14, 2023, <https://www.urbangreencouncil.org/content/news/author-talk-russell-fortmeyer-shares-insights-dynamic-building-envelopes>
- <sup>7</sup> Gregor Grunwald, Thomas Hermeking, and Thomas Prang, "Kinetic Roof Structure: Msheireb Heart of Doha," vol. 155 (International Symposium on "Novel structural skins - Improving sustainability and efficiency through new structural textile materials and designs," *Procedia Engineering*, 2016), 289–269, <https://cyberleninka.org/article/n/1434585/viewer>.
- <sup>8</sup> Riham Nady, "Dynamic Facades Environmental Control Systems for Sustainable Design," *Renewable Energy and Sustainable Development (RES D)* 3, no. 1 (2017): 118–27.
- <sup>9</sup> Ionuț Anton and Daniela Tănase, "Informed Geometries. Parametric Modeling and Energy Analysis in Early Stages of Design," *Sustainable Solutions for Energy and Environment*, 2016, 18–20.
- <sup>10</sup> "Features", Rhinoceros. (n.d.), accessed January 20, 2023, <https://www.rhino3d.com/features/>
- <sup>11</sup> Eleftheria Touloupaki and Theodoros Theodosiou, "Optimization of Building Form to Minimize Energy Consumption through Parametric Modelling," *Procedia Environmental Sciences* 38 (2017): 509–14.
- <sup>12</sup> Ahmed Toutou, Mohamed Fikry, and Waleed Mohamed, "The Parametric Based Optimization Framework Daylighting and Energy Performance in Residential Buildings in Hot Arid Zone," *Alexandria Engineering Journal* 57 (2018): 3595–3608.
- <sup>13</sup> Afroz Rahimi Ariaei and Zahra Sadat Etezadi, "The Methodology of Iranian Curved Arches (Sagh) Based on Their Geometry," *Journal of Applied Environmental and Biological Sciences*, 2015, 648–62.
- <sup>14</sup> "Vault (architecture)", Wikipedia. (n.d.), accessed January 20, 2023, [https://en.wikipedia.org/wiki/Vault\\_\(architecture\)](https://en.wikipedia.org/wiki/Vault_(architecture))
- <sup>15</sup> Mohammad Karim Pirnia and Gholamhossein Memarian, *About Iranian Architectural Styles* (Memar press, 2008).
- <sup>16</sup> "Historic City of Yazd", World Heritage Center, accessed March, 2019, <https://whc.unesco.org/en/list/1544>
- <sup>17</sup> Climate Yazd, accessed August 09, 2015, <https://en.climate-data.org/asia/iran/yazd/yazd-6126/>

## BIBLIOGRAPHY

- Anton, Ionuț, and Daniela Tănase. "Informed Geometries. Parametric Modeling and Energy Analysis in Early Stages of Design." *Sustainable Solutions for Energy and Environment*, 2016, 18–20.
- Barozzi, Marta, Juian Lienhard, Alessandra Zanelli, and Carol Monticelli. "The Sustainability of Adaptive Envelopes: Developments of Kinetic Architecture," 275–84. *Procedia Engineering* 155, 2016. <https://www.sciencedirect.com/science/article/pii/S1877705816321701>.
- Climate Yazd. Accessed August 09, 2015. <https://en.climate-data.org/asia/iran/yazd/yazd-6126/>
- Elotefy, Hazem, Khaled Abdelmagid, Ezzat Morghany, and Tarek Ahmed. "Energy-Efficient Tall Buildings Design Strategies: A Holistic Approach," 74:1358–69. *Energy Procedia*, 2015.

- Eltaweel, Ahmad, and Yuehong SU. "Parametric Design and Daylighting: A Literature Review." *Renewable and Sustainable Energy Reviews* 73 (2107): 1086–1103.
- Grunwald, Gregor, Thomas Hermeking, and Thomas Prang. "Kinetic Roof Structure: Msheireb Heart of Doha," 155:289–269. *Procedia Engineering*, 2016. <https://cyberleninka.org/article/n/1434585/viewer>.
- Nady, Riham. "Dynamic Facades Environmental Control Systems for Sustainable Design." *Renewable Energy and Sustainable Development (RES D)* 3, no. 1 (2017): 118–27.
- Oxman, R. "Performance-Based Design: Current Practices and Research Issues." *International Journal of Architectural Computing* 6, no. 1 (2008): 1–17.
- Pesenti, Marco, Gabriele Masera, Francesco Fiorito, and Michele Sauchelli. "Kinetic Solar Skin: A Responsive Folding Technique." *Energy Procedia* 70 (May 1, 2015): 661–72. <https://doi.org/10.1016/j.egypro.2015.02.174>.
- Pirnia, Mohammad Karim, and Gholamhossein Memarian. *About Iranian Architectural Styles*. Memar press, 2008.
- Rahimi Ariaei, Afrooz, and Zahra Sadat Etezadi. "The Methodology of Iranian Curved Arches (Sagh) Based on Their Geometry." *Journal of Applied Environmental and Biological Sciences*, 2015, 648–62.
- Rhinoceros. (n.d.). "Features". Accessed January 20, 2023. <https://www.rhino3d.com/features/>
- Touloupaki, Eleftheria, and Theodoros Theodosiou. "Optimization of Building Form to Minimize Energy Consumption through Parametric Modelling." *Procedia Environmental Sciences* 38 (2017): 509–14.
- Toutou, Ahmed, Mohamed Fikry, and Waleed Mohamed. "The Parametric Based Optimization Framework Daylighting and Energy Performance in Residential Buildings in Hot Arid Zone." *Alexandria Engineering Journal* 57 (2018): 3595–3608.
- Urban Green Council. "Author talk: Russell Fortmeyer shares insights on dynamic building envelopes". Accessed January 14, 2023. <https://www.urbangreencouncil.org/content/news/author-talk-russell-fortmeyer-shares-insights-dynamic-building-envelopes>
- Wikipedia. (n.d.). "Vault (architecture)". Accessed January 20, 2023. [https://en.wikipedia.org/wiki/Vault\\_\(architecture\)](https://en.wikipedia.org/wiki/Vault_(architecture))
- World Heritage Center. "Historic City of Yazd". Accessed March, 2019. <https://whc.unesco.org/en/list/1544>

# **‘ZOOM-WALKS’ AND CYANOTYPES: MATERIALIZING SCREEN ONTOPHONIES**

Author:

**ALYSSA GROSSMAN**

Affiliation:

THE UNIVERSITY OF LIVERPOOL, UK

---

## **INTRODUCTION**

Shortly after the onset of the Covid pandemic in 2020, as people across the globe were confronting the sudden and all-consuming shift from in-person to screen-based communication, I embarked on a series of lockdown experiments with my long-time artistic collaborator and friend, Selena Kimball.<sup>1</sup> As an anthropologist and lecturer in the University of Liverpool’s Communication and Media department, I was living in the UK, and Selena, an artist and associate professor at Parsons The New School, was based in New York. Having worked together over the course of nearly two decades while living on different continents, we were accustomed to communicating with each other through regular video calls. Following lockdown, however, these types of virtual meetings quickly became the default mode for nearly all our daily forms of social interaction.

Our conversations soon turned to the fact that our lives (and those of most people we knew) were now almost entirely mediated by online video-call platforms such as Zoom. We talked about the feelings of dislocation and distance stemming from the new circumstances that had led to the stark absence of in-person contact and our dependence upon screen-based communication. As Selena wrote to me in an email at the time: “I miss the kind of knowing that you can absorb through your skin. I miss the kind of spatial perception that comes from seeing things from multiple angles, from using my peripheral vision. I miss the awareness that comes from the physical agency of crossing my arms or tilting my head. We act as very different kinds of receivers when we communicate through the screen.”<sup>2</sup>

Changes in media forms and technologies have continuously impacted how we perceive and dwell in the world.<sup>3</sup> Research on the disembodied nature of the digital image, “digital dualism” and screens as disconnected from lived space and time<sup>4</sup> has been increasingly challenged and complicated by more recent work in the arenas of new media, posthumanism and affect studies. N. Katherine Hayles, for example, writes that concrete technologies are always entangled with abstract ideas, defining the concept of virtuality as the “cultural perception that material objects are interpenetrated by information patterns.”<sup>5</sup> Patricia Tincineto Clough argues that digitization brings about a “profound technical expansion of the senses.”<sup>6</sup> Mark N. B. Hansen similarly writes that in digital regimes, the human body acts to “enframe” digital information in ways that transform it into affective, haptic and “experienceable image-worlds.”<sup>7</sup>

Such theorizations, however, can often be difficult to identify and reconcile in practice. Despite our awareness of this literature, Selena and I were still viscerally struggling with the feelings of flatness

and detachment in the Zoom-gridded interactions that had become such familiar parts of our lockdown lives. Instead of simply accepting these dynamics, we decided to examine them more closely, exploring what might happen if we subverted and challenged our habitual, everyday uses of this technology. We were curious about Zoom’s material structures of representation, and how we could harness them to directly engage with the haptic qualities of the screen, and access its sensory, affective and spatial dimensions. In 2021 we co-wrote an article examining how the scarcity of face-to-face interactions and the predominance of screen-mediated exchanges during the pandemic were impacting our experiences of physical space, the environment, and relationships with others.<sup>8</sup> After the article’s publication, Selena and I decided to pursue this research further through artistic practice, veering away from text-based investigations towards more embodied, material approaches. In 2022, we produced two artworks related to this theme: an experimental Zoom-based video and a series of cyanotypes of computer screens printed on cloth.

### **ONTOPHANY, INFLECTED SEEING-IN, HAPTIC VISUALITY**

Three concepts have been central to informing our approach to working with screens. First is the phenomenological notion of “ontophany,” or the experience of how things and beings appear and affect our perceptions of our surroundings. Media do not merely describe phenomena; they bring them into being and shape them, directly informing our physical and social experiences of the world. As Stéphane Vial writes, “technologies are first the perceptual structure of our existence; they are the ‘devices’ or the invisible matrixes, produced by culture and history, into which our potential experience-of-the-world is cast.”<sup>9</sup> Face-to-face, mechanical, and digital ontophanies have all catalyzed phenomenological revolutions generating unique structures of perception.<sup>10</sup> Particularly in the wake of the Covid-induced upsurge of computer-mediated communication, it is crucial to understand the social and corporeal impacts of these ubiquitous digital technologies, and how these new ontophanies point to distinct experiences of the world and relationships within it.

To experience an image in a phenomenological way, and to be actively aware of this experience, requires a disruption in the image’s presumed transparency. Such disruptions often result from breakdowns in normal mental processing operations, where an image or tool no longer functions in the ways it was originally intended.<sup>11</sup> When we cease to take a technology for granted, we begin to see differently, as we no longer merely look through the technology to the contents of its representation, but rather become aware of the quality of the representation itself.<sup>12</sup> This kind of visual perception is referred to in philosophy as “inflected seeing-in,” a term coined by art historian and philosopher Richard Wollheim in 1980.<sup>13</sup> Less common to processes of looking generated by direct, in-person encounters, inflected seeing-in requires carefully attending to how a depicted object “emerges” in a particular context and how it is “recruited” into the depicted scene.<sup>14</sup>

This simultaneous cognizance of both surface and scene relates to the third key concept informing my work with Selena, the notion of the haptic image. As Laura U. Marks writes, “haptic visuality” can be described as an embodied and multisensory way of looking, which “does not isolate, master, or seek to identify what is beheld, but instead merges with it. It usually works in a dialectic with optical visuality.”<sup>15</sup> Haptic images foster a “bodily relationship between the viewer and the image,”<sup>16</sup> raising awareness about the materiality of the medium through which the image is perceived. When you encounter a thread in the viewfinder, or a highly grainy or pixelated sequence, or a partially obscured frame, such haptic images can invite you to engage with their suggestive surfaces and indefinite textures even before you register their specific meanings. Haptic looking, according to Marks, is mobile and lingering, intersubjective and erotic, a “thinking with the skin” and a “visual caress” rooted in lived, corporeal sensation.<sup>17</sup>

Below, I elaborate on the two screen-related works that Selena and I made in response to our experiences with Zoom during the Covid pandemic, describing the ways in which our experimentations with inflected seeing-in and haptic visibility served to catalyze embodied, sensory perceptions of screens and screen-based communication. Exploring the possibilities and limitations of digital ontophany, these projects contribute in material ways to contemporary debates regarding the phenomenological nature of digital images.<sup>18</sup> I situate our particular collaborations as innovative examples of “art-ethnography”<sup>19</sup> that resonate with other contemporary media art seeking to challenge the ocularcentrism of conventional interpretations of digital media technology, encouraging alternative ways of conceptualizing and experiencing digital images through processes of “bring[ing] the body into the very fabric of the work.”<sup>20</sup>

### **“Zoom-Walk” Video: *Lines Made by Walking***

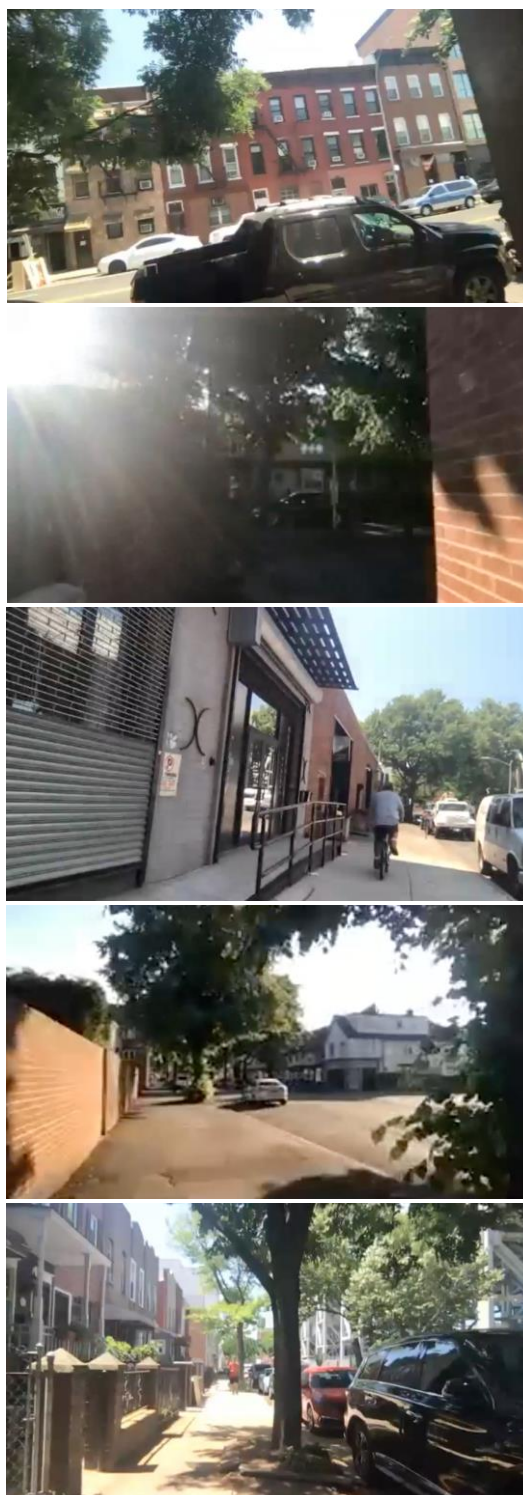
Our experimental video, entitled *Lines Made by Walking*, is a digital video in the structuralist film tradition, and a response to the sculptor Richard Long’s 1967 conceptual land-art piece, *Line Made by Walking*. Long’s work consisted of the photographic documentation of a line he created on the ground by walking back and forth over a field of grass in Wiltshire, England (see Figure 1). In this case, Long used walking itself as his artistic medium, demonstrating that place is not something to be conveyed visually, from the perspective of a distant spectator, but to be actively constructed through physical and bodily engagements with a space.<sup>21</sup> Rather than presenting an objectified visual depiction of a landscape, the piece offers an embodied impression of the artist’s experience of moving through that landscape. The resulting photograph may be a fixed image, but it demarcates a dynamic and transfigured scene that has a recognizable reference to Long’s own active and situated body.



Figure 1. “Line Made by Walking” (Richard Long, 1967)

In dialogue with Long’s work, Selena and I used the digital platform of Zoom to document our coordinated movements through space, but also to reveal the haptic and corporeal qualities of the screen-based relationship between each other and our geographically separate surroundings. One day after several months of living in lockdown, we connected to each other over Zoom and carried our computers around our respective neighborhoods, using the platform to video-record our trajectories throughout the duration of the call. We held our laptops at waist-height, with cameras facing outwards, so that our screens would show the street in front of us. Our trans-Atlantic “Zoom-walk” lasted about 15 minutes, beginning at our front doors, following a rough square several blocks long, and returning where we started. We did not speak to each other during the call, but we set Zoom to speaker view so that the ambient noises in our environments (the voices of passersby, the revving of a car engine, the chirping of birds) would serve as triggers for the platform to continually switch frames

depending on the source of the sounds, automatically cutting between the streets of Liverpool and Brooklyn as we walked (see Figure 2).



*Figure 2. Stills from “Lines Made by Walking” (Grossman and Kimball, 2020)*

Physically navigating the three-dimensional spaces of our neighborhoods with our bodies and our laptops, Selena and I were interested in the literal and conceptual spaces of our screens, and what it would mean to engage with them not just as static backgrounds for our own figures, but as moving

spaces, foregrounded as subject. Our experiment employed what Sarah Pink calls a “walking with video” methodology, a phenomenological and multisensory practice of “going forward through” an environment, describing and inscribing bodily traces and the experience of making them.<sup>22</sup> The walk itself was not about arriving at a destination, but more of a process of wayfaring, which according to anthropologist Tim Ingold is a practice of making lines through “moving along” paths of travel, engaging with the landscape, maneuvering around it, responding to its sights and sounds, instantiating the body into its physical contours.<sup>23</sup> As wayfarers through our lockdown landscapes that were mediated through the platform of Zoom, Selena and I were laying new digital and bodily trails, generating unexpected spatial relationships between ourselves and our virtual and physical environments.

Our video features a jagged succession of streets, houses, cars, trees, people. The automatic cuts in the footage, determined by Zoom’s detection of ambient noise as we moved through our respective environments, create palpable ruptures as well as connections between the two locations. The moments when sounds force a change in the recording’s image are visually unsettling, shifting from one urban setting to another with no explanation and through seemingly arbitrary jump cuts. The constant forward movement of the cameras incorporates the cadence of our gaits along uneven pavements, through patches of grass, over curbs, across parking lots. The images themselves are fragmented and unclear, their legibility impaired by Zoom’s low frame rate and blurry resolution. These haptic elements and visual discontinuities draw attention to both the *scene* and the *surface* of the screen, defamiliarizing and reframing expectations about how a Zoom conversation usually looks and feels, catalyzing new screen ontophanies<sup>24</sup> and prompting the process of inflected seeing-in.

### **Cyanotype: Screen Series**

Selena and I additionally explored the medium of cyanotype to elaborate upon the perspectival shifts we had engineered through our “Zoom-walk,” and to convey through a different format the new screen ontophanies emerging through our embodied reconfigurations of digital space. Introduced in 1842 by John Frederik William Herschel, an English astronomer, mathematician and chemist, cyanotype is a cameraless photographic method involving the process of treating a surface with an iron-salt solution and exposing it to sunlight.<sup>25</sup> The ultraviolet light reacts with the surface to form ferric ferrocyanide, turning the exposed areas a vibrant Prussian blue color. Historically cyanotypes were utilized for image duplication, often for botanical records and blueprints. A camera-based cyanotype is when a photographic negative is exposed onto a light-sensitive surface, producing a blue-tinted, negative-sized photograph; a photogram cyanotype is a contact print of an actual object, with the image retaining the object’s original size and contours.

Our cyanotypes were the photogram variety. Placing our laptops onto one-meter squares of treated cloth, we exposed them outdoors for roughly five to ten minutes, ultimately producing *Screen Series*, sixteen prints of computer screens in a range of positions and from different angles (see Figures 3 and 4).



Figure 3. "Screen Series" installation view (Grossman and Kimball, 2022)



Figure 4. "Screen Series" prints (Grossman and Kimball, 2022)

Decontextualized and floating in an undefined deep blue space, the monochrome prints are not necessarily immediately recognizable as laptops. The shapes of the prints in our series vary, depending on the laptop's physical orientation on the cloth, the atmospheric conditions, the time of day and angle of the sun during exposure. Because a cyanotype representation flattens a three-dimensional form into a two-dimensional shape, it is less stable or reliable than a conventional index. These qualities point to what Kristina Wilson describes as the cyanotype's capacity for "slippage between represented contours and imagined bodies,"<sup>26</sup> inviting viewers to activate their imagination when they read into the images. Its ability to create objective documents that are also subjective interpretations lends this medium a peculiar and compelling power; as Geoffrey Batchen notes, it is "part art, part science, and, let's confess it, part magic..."<sup>27</sup>

Notably, cyanotype prints are not layered on a substrate, as is the case with gelatin or silver photographic prints. Instead, as the iron solution soaks into the very fibers of the paper or cloth, the exposure forms a chemical bond that fuses the image into the substrate itself. The image is no longer merely a visual surface representation but a palpable material substance, a physical object that can be viscerally perceived.<sup>28</sup> In addition, because a cyanotype print is essentially a negative, an interesting effect occurs when producing an image using an object that itself is a source of light. As the glow of the laptop screen did not provoke a chemical reaction on the cloth during the brief exposure time, the stark contrast between the resulting white figure and the surrounding sea of blue it makes it seem as if light is emanating from the very fabric of the print itself, simulating the luminosity of a digital screen through analogue means. As Batchen writes, cameraless photography's capacity to create images that appear to emit their own light lends it the status of a physical object, rupturing our illusions about the transparency and realism of the medium, and exposing the inherently artificial nature of photographic representation.<sup>29</sup>

When exposing a cyanotype, it is not just material substances but also their shadows that can block the sun and prevent the chemical reaction. Such a condition allows an immaterial silhouette to contribute to the image's form, giving shadows a representational capacity similar to that of three-dimensional objects. Our laptop cyanotypes thus comprise shapes that both encompass and exceed their referent, suggesting the presence and absence of physical volume, something simultaneously tangible and ungraspable, concrete and abstract. There is no way we can look at a cyanotype, even when it is highly realistic, and ignore the fact that we are seeing something that is also highly mediated. Yet the images still retain causal, physical, indexical connections to their referent, with the direct contact between the computer and the cloth evoking the material, sensory and haptic aspects of screens and digital communication.

## CONCLUSION

This work was not a significant departure from my other collaborations with Selena, which have involved various forms of fieldwork, writing, filmmaking, collage and installation to explore contemporary cultural narratives, site-based histories, memories and everyday material traces.<sup>30</sup> This new cyanotype series and video were different from our previous projects, however, in that they explicitly drew upon what Martínez et al. have labelled “peripheral methodologies”: forms of knowing that go “against the grain of seeing only the empirically admissible as being worthy of scientific investigation.”<sup>31</sup> Situated between theory and practice, such methods incorporate a kind of “defocused vision” to circle around the messy, uncertain or invisible realms of existence and generate questions that are not readily translatable into conventional forms of data or information.<sup>32</sup>

These projects could also be interpreted as new forms of art-ethnography<sup>33</sup> which amplify but also depart from the research and writing on Zoom and digital screens that Selena and I had previously conducted. As Arnd Schneider defines it, as an expanded field of practice or “zone of convergence,” art-ethnography is not just the application of visual forms of research and representation into the anthropological field, but rather a radical, multi-sensory approach to producing knowledge outside the conventions of scholarly writing.<sup>34</sup> Rather than serving as mere visual counterparts to our written theoretical conceptualizations, our video and cyanotype series created new material and self-reflective dialogues with experimental film practices and photographic techniques in order to move beyond the realist-naturalist paradigm that continues to pervade the field of anthropology,<sup>35</sup> generating haptic and embodied understandings of screen-based communication.

As cognitive psychologists Barbara Tversky and Holly A. Taylor have argued, knowledge of space is key to our interactions with each other and the world, incorporating a diverse range of sensory input stemming from sight, sound and touch.<sup>36</sup> Engaging with the sensory and tangible conditions of screens and digital communication allowed us to physically disrupt common assumptions about the abstract and disembodied nature of the digital image and its ontophanies. These hands-on acts of making opened up new modes of interrogating the material conditions of the digital, and actuating the familiar, flat computer screen as an unexpectedly powerful producer of sensory, visceral and multi-dimensional experience.

## NOTES

<sup>1</sup> Working between and beyond the disciplines of contemporary art and visual anthropology, our methods have involved sustained research alongside spontaneous play, with collaborative dialogues and ideas that are inextricably linked to our longstanding friendship and many years of intellectual exchange.

<sup>2</sup> Alyssa Grossman and Selena Kimball, “Beyond the Edges of the Screen: Longing for the Physical ‘Spaces Between,’” *Anthropology in Action: Journal for Applied Anthropology in Policy and Practice* 28, no. 2 (2021), 1.

<sup>3</sup> See, for example, Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction,” in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1969); Sean Cubitt, Daniel Palmer and Nathaniel Tkacz, eds., *Digital Light* (London: Open Humanities Press, 2015); Jay Emerling, *Photography: History and Theory* (New York: Routledge, 2012); Stéphane Vial, *Being and the Screen: How the Digital Changes Perception* (Cambridge, MA: The MIT Press, 2019).

<sup>4</sup> See Vivian Sobchack, “The Scene of the Screen: Envisioning Photographic, Cinematic, and Electronic ‘Presence,’” in *Post-Cinema: Theorizing 21st Century Film*, eds. Shane Denson and Julia Leyda (Falmers: Reframe Books, 2016), 115; Sherry Turkle, *Alone Together: Why We Expect More from Technology and Less from Each Other* (New York: Basic Books, 2013).

<sup>5</sup> N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* (Chicago and London: University of Chicago Press, 1999), 13-14.

<sup>6</sup> Patricia Ticineto Clough, *The User Unconscious: On Affect, Media and Measure* (Minneapolis: University of Minnesota Press, 2018), 2.

<sup>7</sup> Mark B. N. Hansen, *New Philosophy for New Media* (Cambridge, MA: The MIT Press, 2004), 110.

<sup>8</sup> Grossman and Kimball, “Beyond the Edges of the Screen.”

<sup>9</sup> Stéphane Vial, “Ontophany Theory: Historical Phenomenology of Technology and the Digital Age,” in *French Philosophy of Technology*, eds. Sacha Loeve et al. (New York: Springer International Publishing, 2018), 385.

<sup>10</sup> Vial, *Being and the Screen*, 127.

<sup>11</sup> Josef Ledvina, “Strangely Unique: Pictorial Aesthetics in the Age of Image Abundance,” in *Photography Off the Scale: Technologies and Theories of the Mass Image*, eds. Tomáš Dvořák and Jussi Parikka (Edinburgh: Edinburgh University Press, 2021), 167.

<sup>12</sup> Ledvina, 166.

<sup>13</sup> Bence Nanay, “Inflected and Uninflected Experience of Pictures,” in *Philosophical Perspectives on Depiction*, eds. Catharine Abell and Katerina Bantinaki (Oxford: Oxford University Press, 2010), 183.

<sup>14</sup> Nanay, 195; see also Ledvina, “Strangely Unique”, 165.

<sup>15</sup> Laura U. Marks, “Haptic Entanglements, Organs of Touch,” interview with Rahel Spöhrer and Joshua Wicke, *Schauspielhaus Journal*, September 20, 2021, <https://www.schauspielhaus.ch/en/journal/20831/haptic-entanglements-organs-of-touch-a-mail-conversation-with-laura-u-marks>

<sup>16</sup> Laura U. Marks, *Touch: Sensuous Theory and Multisensory Media* (Minneapolis: University of Minnesota Press, 2001), 3.

<sup>17</sup> Marks, 14.

<sup>18</sup> Tim Lenoir, “Foreword: Haptic Vision: Computation, Media and Embodiment in Mark Hansen’s New Phenomenology,” in *New Philosophy for New Media*, Mark B. N. Hansen (Cambridge, MA: The MIT Press, 2004), xii.

<sup>19</sup> Arnd Schneider, *Expanded Visions: A New Anthropology of the Moving Image* (Oxon and New York: Routledge, 2021), 145.

<sup>20</sup> Mark B. N. Hansen, *New Philosophy for New Media* (Cambridge, MA: The MIT Press, 2004), 25.

<sup>21</sup> Annika Schlitte, “Lines Made by Walking: On the Aesthetic Experience of Landscape,” *Continental Philosophy Review* 55 (2022), 514. (Selena and I decided on the title of our own video piece before we encountered this article.)

<sup>22</sup> Sarah Pink, “Drawing with Our Feet (and Trampling the Maps): Walking with Video as a Graphic Anthropology,” in *Redrawing Anthropology*, ed. Tim Ingold (New York: Routledge, 2011), 145.

<sup>23</sup> Timothy Ingold, *Lines: A Brief History* (New York: Routledge, 2007), 75.

<sup>24</sup> Vial, *Being and the Screen*, 51.

<sup>25</sup> Geoffrey Batchen, *Emanations: The Art of the Cameraless Photograph* (New York: Del Monico Books/Prestel, 2016), 10.

<sup>26</sup> Kristina Wilson, “True Blue: Cynaotypes, The Index and Truthfulness,” in *Cyanotypes: Photography’s Blue Period*, eds. Nancy K. Burns and Kristina Wilson (Worcester: Worcester Art Museum, 2016), 28.

- <sup>27</sup> Batchen, *Emanations*, 5.
- <sup>28</sup> Many thanks to Selena Kimball for pointing this idea out to me.
- <sup>29</sup> Batchen, *Emanations*, 37.
- <sup>30</sup> Additional recent publications describing our work together include Alyssa Grossman, “Little Familiar Objects: Unfixing Taxonomies in the Ethnographic Museum Archive,” *Anthropology and Art* 8 (2023, forthcoming); Alyssa Grossman, “Counter-Factual Provocations in the Ethnographic Archive,” *Oxford Artistic and Practice Based Research Platform 2* (2017), 126-138; Alyssa Grossman, “Memory Objects, Memory Dialogues: Common-sense Experiments in Visual Anthropology”, in *Experimental Film and Anthropology*, eds. Arnd Schneider and Caterina Pasqualino (London: Bloomsbury, 2014), 131-145.
- <sup>31</sup> Francisco Martínez, Martin Demant Frederiksen and Lili Di Pippa, “Introduction: Welcome to the Corners of the Periphery,” in *Peripheral Methodologies: Unlearning, Not-Knowing and Ethnographic Limits*, eds. Francisco Martínez, Lili Di Pippa and Martin Demant Frederiksen (London: Routledge, 2021), 9.
- <sup>32</sup> Lili Di Pippa, Francisco Martínez and Martin Demant Frederiksen, “Conclusion: Catching a Glimpse of Peripheral Wisdom,” in *Peripheral Methodologies: Unlearning, Not-Knowing and Ethnographic Limits*, eds. Francisco Martínez, Lili Di Pippa and Martin Demant Frederiksen (London: Routledge, 2021), 171.
- <sup>33</sup> Arnd Schneider, *Expanded Visions*, 145.
- <sup>34</sup> Schneider, 144.
- <sup>35</sup> Schneider, 15.
- <sup>36</sup> Holly A. Taylor and Barbara Tversky, “Perspective in Spatial Descriptions,” *Journal of Memory and Language* 35 (1996), 371-391.

## BIBLIOGRAPHY

- Batchen, Geoffrey. *Emanations: The Art of the Cameraless Photograph*. New York: Del Monico Books/Prestel, 2016.
- Benjamin, Walter. “The Work of Art in the Age of Mechanical Reproduction.” in *Illuminations*, edited by Hannah Arendt and translated by Harry Zohn, 217-251. New York: Schocken Books, 1969.
- Clough, Patricia Tincineto. *The User Unconscious: On Affect, Media and Measure*. Minneapolis, University of Minnesota Press, 2018.
- Cubitt, Sean, Daniel Palmer and Nathaniel Tkacz, eds. *Digital Light*. London: Open Humanities Press, 2015.
- Di Pippa, Lili, Francisco Martínez and Martin Demant Frederiksen. “Conclusion: Catching a Glimpse of Peripheral Wisdom.” In *Peripheral Methodologies: Unlearning, Not-Knowing and Ethnographic Limits*, edited by Francisco Martínez, Lili Di Pippa and Martin Demant Frederiksen, 165-175. London: Routledge, 2021.
- Emerling, Jay. *Photography: History and Theory*. New York: Routledge, 2012.
- Grossman, Alyssa. “Little Familiar Objects: Unfixing Taxonomies in the Ethnographic Museum Archive.” *Anthropology and Art* 8 (2023, forthcoming).
- Grossman, Alyssa. “Counter-Factual Provocations in the Ethnographic Archive.” *Oxford Artistic and Practice Based Research Platform 2* (2017), 126-138.
- Grossman, Alyssa. “Memory Objects, Memory Dialogues: Common-sense Experiments in Visual Anthropology.” In *Experimental Film and Anthropology*, edited by Arnd Schneider and Caterina Pasqualino, 131-145. London: Bloomsbury, 2014.
- Grossman, Alyssa and Selena Kimball. “Beyond the Edges of the Screen: Longing for the Physical ‘Spaces Between.’” *Anthropology in Action: Journal for Applied Anthropology in Policy and Practice* 28, no. 2 (2021), 1-11.
- Hansen, Mark B. N. *New Philosophy for New Media*. Cambridge, MA: The MIT Press, 2004.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. Chicago and London: University of Chicago Press, 1999.
- Ingold, Timothy. *Lines: A Brief History*. New York: Routledge, 2007.
- Ledvina, Josef. “Strangely Unique: Pictorial Aesthetics in the Age of Image Abundance.” In *Photography Off the Scale: Technologies and Theories of the Mass Image*, edited by Tomáš Dvořák and Jussi Parikka, 185-182. Edinburgh: Edinburgh University Press, 2021.
- Lenoir, Tim. “Foreword: Haptic Vision: Computation, Media and Embodiment in Mark Hansen’s New Phenomenology.” In *New Philosophy for New Media*, Mark B. N. Hansen, xiv-xxix. Cambridge, MA: The MIT Press, 2004.

- Marks, Laura U. "Haptic Entanglements, Organs of Touch," interview with Rahel Spöhrer and Joshua Wicke. *Schauspielhaus Journal*, September 20, 2021. <https://www.schauspielhaus.ch/en/journal/20831/haptic-entanglements-organs-of-touch-a-mail-conversation-with-laura-u-marks>
- Marks, Laura U. *Touch: Sensuous Theory and Multisensory Media*. Minneapolis: University of Minnesota Press, 2001.
- Martínez, Francisco, Martin Demant Frederiksen and Lili Di Pippa. "Introduction: Welcome to the Corners of the Periphery." In *Peripheral Methodologies: Unlearning, Not-Knowing and Ethnographic Limits*, edited by Francisco Martínez, Lili Di Pippa and Martin Demant Frederiksen, 1-14. London: Routledge, 2021.
- Nanay, Bence. "Inflected and Uninflected Experience of Pictures." In *Philosophical Perspectives on Depiction*, edited by Catharine Abell and Katerina Bantinaki, 181-207. Oxford: Oxford University Press, 2010.
- Pink, Sarah. "Drawing with Our Feet (and Trampling the Maps): Walking with Video as a Graphic Anthropology." In *Redrawing Anthropology*, edited by Tim Ingold, 143-156. New York: Routledge, 2011.
- Schlitte, Annika. "Lines Made by Walking: On the Aesthetic Experience of Landscape." *Continental Philosophy Review* 55 (2022), 503-518.
- Schneider, Arnd. *Expanded Visions: A New Anthropology of the Moving Image*. Oxon and New York: Routledge, 2021.
- Sobchack, Vivian. "The Scene of the Screen: Envisioning Photographic, Cinematic, and Electronic 'Presence.'" In *Post-Cinema: Theorizing 21<sup>st</sup> Century Film*, edited by Shane Denson and Julia Leyda, 88-128. Falmer: ReFrame Books, 2016.
- Taylor, Holly A. and Barbara Tversky. "Perspective in Spatial Descriptions." *Journal of Memory and Language* 35 (1996), 371-391.
- Turkle, Sherry. *Alone Together: Why We Expect More from Technology and Less from Each Other*. New York: Basic Books, 2013.
- Vial, Stéphane. *Being and the Screen: How the Digital Changes Perception*. Cambridge, MA: The MIT Press, 2019.
- Vial, Stéphane. "Ontophany Theory: Historical Phenomenology of Technology and the Digital Age." In *French Philosophy of Technology*, edited by Sacha Loeve et al., 385-400. New York: Springer International Publishing, 2018.
- Wilson, Kristina. "True Blue: Cynaotypes, The Index and Truthfulness." In *Cyanotypes: Photography's Blue Period*, edited by Nancy K. Burns and Kristina Wilson, 22-29. Worcester: Worcester Art Museum, 2016.

# **DRAWING FOR INCLUSION: ARCHITECTURAL REPRESENTATION THROUGH COMICS AS ACCESSIBLE COMMUNITY DESIGN PRACTICE**

Authors:

**INGE ROECKER, ANDREA HOFF**

Affiliation:

THE UNIVERSITY OF BRITISH COLUMBIA, CANADA

---

## **INTRODUCTION**

In combining the storytelling practices of comics and architecture we seek to better understand how the “multifaceted networks of interacting agents and controversies intertwine. Thus, giving thought to the architecture of housing [as] a collective task, a common responsibility demanding broader perspectives and new conceptual frameworks...”<sup>1</sup>

This paper explores the interdisciplinary relationship between comics and architecture. Set within the practice of ongoing research between the writers: comics scholar and graphic novelist Andrea Hoff and, architect and housing researcher Inge Roecker, this work investigates the transfer of knowledge between fields through the collaborative creation of sequential visual narratives as a means to foster engagement and co-design between architects and communities. AIRstudio, Roecker’s research-intensive architecture firm, recently re-focused its design strategy on inclusion and community engagement in housing design, specifically in multigenerational housing design. Seeking to address a lack of accessible and collaborative community practices currently practiced in the field, AIRstudio reached out to Hoff as an experienced arts-based researcher and comics creator.

The questions central to this partnership are,

- 1) How can comics explore inclusive design strategies in new and more accessible ways?
- 2) How can architects increase participation in inclusive design strategies through the visual storytelling of comics?

The resulting research between artist/writer and architect/housing researcher is based on the premise that comics may offer architecture a way to explore lived experiences in new ways and to share that information with a wider audience, revealing unexplored visual narrative methodologies within architecture’s cannon of visual forms. What’s more, approaching inclusive design strategies through the visual-textual narrative form of comics may open other ways of envisioning future housing design and better incorporate methodologies that engage communities as participants. The anticipated outputs of the project are two-fold: firstly, to create a comic book that visualizes current challenges in inclusive design practices in the built environment, and secondly, to create a resulting set of visual cards that can be used as prompts, initiating new dialogues in inclusive practices, and available to wider audiences. The aim of this ongoing research is to offer future residents, communities, and design professionals new avenues for centring inclusion and collaboration in housing design. The following writing presents the collaboration in process and highlights opportunities to expand

research methodologies and knowledge sharing strategies across disciplines in order to better position housing design as a community practice.

### **How to Better Serve People: An Architect's Perspective**

In 2000, I founded AIRstudio (formerly ASIRstudio) in Stuttgart, Germany. Having studied in Canada and practiced architecture in Canada and Germany, I have led projects in housing design in both countries, as well as internationally. As an Associate Professor at the University of British Columbia, my academic research explores approaches to housing design that addresses gaps in contemporary practice: the ways in which housing standards, set out by government and developers, have long neglected people's lived experience, thus creating environments that underserve entire communities. At the core of both my academic and architectural practice is the recognition of lived experience as expertise and that housing design challenges can best be met through co-creation. As much as my architectural practice reflects my academic interests, it has also been described as a practice that "demonstrate[s] that committed architecture is possible"<sup>2</sup> in a context where access to housing is often influenced by external forces. As an architecture firm, focused specifically multigenerational housing design, AIRstudio's work can be described as strongly intentional. The office's philosophy is and has been, from its very onset, to put people at the center of design and firmly believes that by making spaces that support sustainability the studio is making spaces that support people.

Urbanisation is an unstoppable phenomenon, and as more and more people live in cities, it is the cities that have taken centre stage as key players in the future of human populations. City management, governance, urban mobility, liveability and density have all become key themes of focus for politicians and decision-makers to succeed in managing urbanisation, but in conditions of rapid urbanisation controlled sustainable development and carefully considered urban regeneration has not always been achieved.<sup>3</sup>

We live in an era of accelerated change. World demographics and social constructs have altered drastically during the last century, and even more rapidly over the past three years due to the worldwide pandemic. People are living alone longer, marrying later, and having smaller families. With this shift, whether voluntary or involuntary, lifestyles are becoming increasingly virtual, mobile, and unstable. Despite the fact that today's world is more diverse, housing and the way it is procured appears to be stuck in a different and incompatible era. There is an ambition to innovate for a universal humanity and streamline every process, design included. As such, this universality needs to be questioned as it was characterized in the twentieth century as a world tailored for the middle-class, white, heterosexual man.

In 2021, as a means to better address the changes in AIRstudio transitioned to be part architecture and design studio, part research-to-action office. Our new focus is on delivering livability, resiliency, comfort, and cost-effective construction. The need to recenter the studio was based in a value system as well as design sensibilities.

We work with people to create multigenerational, senior, student and specialty housing. We are passionate about community-oriented models of housing, including Baugruppen: self-developed urban co-housing. Our values materialize into prefabricated, decarbonized, climate-adaptive, low-energy urban buildings.<sup>4</sup>

We do not inhabit an atavistic version of the world. In fact, as Subrahmanian, Reich, and Krishnan explain, "we have sculpted the world we inhabit extensively, and what ails us is a dissonance of our own making. The dialogue between us—the one between the material world of our creation and the natural world—lies broken because the dialogue in designing this world of our creation is broken."<sup>5</sup> As designers, we have an ethical responsibility to question and challenge such incompatibilities while addressing the core issue: the need for shelter. The right to housing that is versatile, accessible, and

able to respond to the lived experiences and needs of its inhabitants should be the focus of design. That is the ideal scenario.<sup>6</sup>

### How to Better Serve People: A Graphic Novelist's Perspective



*Figure 1. Community Coming Together Through Comics, Concept Sketch by Andrea Hoff (2022)*

Comics can do many things; they can draw together ideas as well as people. As a literary form, comics' unique narrative expression can be understood as, "juxtaposed pictorial and other images in deliberate sequence"<sup>7</sup>. As comics scholar and graphic novelist, Nick Sousanis describes (also referencing the writing of Alaniz on the comic "From Hell" by Moor and Campbell), The reader stitches together and gives meaning to the sequence of static elements the author has assembled. This is time as a linear experience – a chain of events, one following directly after another. But, because comics are a visual medium, we cannot help but see the entire page and all of its separate elements all at once.<sup>8</sup>

Sousanis further expounds, "[w]e thus make connections not just from one panel to the next, but across the page and back and forth, in all directions."<sup>9</sup> As a narrative form, comics require active participation of the reader in both the sense-making (of images and text) as well as in the narrative progression of the story conveyed by the author and illustrator (or author-illustrator) to the reader. As a comic book author-illustrator and a comics scholar—with a background in architecture—this necessity for active readership of the comics form intrigued me, especially regarding the possibilities it offers in opening up access to the housing design process with communities outside the field of architecture. My work as a comics scholar is focused on the creation of comics as a means to access agency, specifically with teenagers in relationship to the Climate Crisis. When Inge Roecker and AIRstudio approached me to work collaboratively on a comic book situated in community-based housing design, the opportunity to expand my own research in the comics form as well as to test out theories of comics' active narrative process through the craft of comics provided equal incentive.

The active collaboration between writer and reader in comics is inherently part of the form. Could this active collaboration also extend to other communities such as the stakeholders—particularly future residents—in housing design? I thought of the number of researchers and practitioners in housing design who have been striving to expand the methodologies of both research and practice across disciplines. The ways in which practitioners of spatial enquiry in architecture such as Robyn Creagh and Sarah McGann have been using "spatial research diagramming...as a method to synthesise

complex concepts into a succinct picture, whereas metaphors can add the richness of lived experiences.”<sup>10</sup> Or the over two-year long (2016-2018) participatory community-based project by Steffen Lehrman, where “the aim was to create a set of shared guiding principles, like an urban manifesto of sorts, for effective city transformation and to discuss how our city could best transform its neglected sites and post-industrial brownfields into a series of mixed-use and affordable housing quarters, which would help to alleviate the socio-economic divide between the city centre and the periphery.”<sup>11</sup> The ways in which practitioners are already crossing disciplinary divides to reach wider audiences and involve communities on a deeper level. As Lehrman elicits, “[t]o achieve sustainable urban regeneration, urbanists increasingly draw input and expertise from other disciplines to integrate directly into architectural and urban strategies, and to provide new directions in urban research that will help us achieve the regenerated cities we want now and in the future. Demand-forecasting and visualisation of alternative future scenarios has become a major instrument for successful community engagement.”<sup>12</sup> Projects working to connect designers to the lived experience of future residents such as the work of Denicke-Polcher, in which architecture students live in the communities of people whom they will be designing for.<sup>13</sup> And how the comics form is already exploring possibilities to expand on architectural theory and questing for better practices in the field, such as in the 2021, architecture comic titled, *Practiceopolis*, in which the visual narrative form works to “depict and dramatise the value conflicts between the different cultures of practising architecture and between the architectural profession and other members of the building industry as political conflicts around the future of *Practiceopolis*”<sup>14</sup>. With the aim of representing the field of architecture through comics, “[b]y vividly illustrating and narrating the critical issues he interrogates, the author has created a world which any architect, student or professional, will both instantly recognise and simultaneously reject, provoking the reader to challenge themselves and the profession at large.”<sup>15</sup>

### **Why Make a Comic Book on Architecture?**

“The ability to break the planning rules must be one of the top tools in our city-regenerating tool box”<sup>16</sup>

Recognizing the multiplicities of influence and need in contemporary housing design, architects and designers are working through multiple forms in order to integrate the lived experiences of residents into design. In searching for methodologies that facilitate the translation of lived experience into design processes, AIRstudio leans on Hoff’s expertise to question: How can visual storytelling impact architectural design for inclusion, i.e., architecture’s potential for participatory practices in research, design, collaboration, and communication? This research project, titled *Drawing to Inclusion*, works from the premise that storytelling, especially visual storytelling in comics form, may also offer architecture a way to explore lived experiences in order to create designs with a focal point of inclusion. Hoff’s work with AIRstudio will be to engage with the work already being done through Design for Inclusion and to bring her unique expertise in visual storytelling in conversation with the built environment. As Adam Sharr, Professor of Architecture and Head of the School of Architecture, Planning and Landscape at Newcastle University in the UK posits in the Forward to the architectural comic book, *Practiceopolis*, “it shows how cartooning and storytelling can yield methods for architectural research.”<sup>17</sup>

The need for interdisciplinary and collaborative efforts in architecture have never been more necessary. We need to be ready to adapt our methods as “new questions are to be asked, and new research inquiries to be made, that keep our professions relevant. The main drive for research in the field of cities is that urban projects are becoming more complex and increasingly concerning issues of sustainability and urban ecology.”<sup>18</sup> Further considering the form and function relationship of the comics medium and architecture, consider the description from comics scholar Nick Sousanis of an

exercise he practices and shares with other educators, one that works especially well when creating comics with people who don't necessarily identify as artists:

“Let us pull our attention out from the comics and briefly take in our surroundings. From building exteriors to storm grates to the very way the rooms we inhabit are broken up by windows, blinds, fixtures, and other elements, this geometry of our built environment can serve as material to inspire ways in which we organize a comics page. Look at the arrangement of tiles and other features on the ceiling (or wall) and imagine these spaces being translated into music. Perhaps we hear a series of long regular notes, and then the slats of an air vent produce a quick staccato, before moving on to another region with its particular arrangement. Now transfer this thinking about architectural elements back to the layout of a comics page.”<sup>19</sup>

### The Need for New Models

Architecture has always been an active practice that operates as an agent of cultural transformation and interdisciplinary change. We must now ask: What are the research agendas and the most suitable forms of intellectual inquiry that can resolve urban challenges and facilitate working across traditional disciplinary boundaries to create a new Science of Cities?<sup>20</sup>

When we consider the relationships embedded in housing design, as Gutiérrez-Mozo, Parra-Martínez, and Gilsanz-Díaz posit in “Extending the Architecture of Collective Housing: Towards Common Worlds of Care”, then we realize that “[r]ather than a private question, home is a permeable space of great political complexity. It is the product of, among other factors, cultural norms, class rituals, and changing lifestyles. Housing is also the result of multi-layered legislations enforcing regulations and building codes, as well as of advertising and commercial practices informing uses and esthetics.”<sup>21 22</sup>

In order to understand the complex layers of personal narratives inherent in the people who would hypothetically live in these spaces, it was important from the onset of the design process to understand their own positionality and the unique personal narratives they each carry with them as designers. Through the use of alternative creative methods in the design process, such as the role of graphic communication, visual storytelling, and the concept of design co-creation<sup>23</sup> When we consider the ethics of care and its focus on the relationships between people,<sup>24</sup> the role of the architectural designer can be understood to bridge the gap between people's well-being and the spaces they inhabit. This also implies that when the architect centres the needs of the people (the client) at the centre of the design process, especially those communities who historically have been left out of consideration in the process, the design process and consequently the resulting designs, have the possibility to radically shift towards the agency of inhabitants. As such, the concept of “spatial agency”<sup>25</sup> as defined by Nishat Awan, Tatiana Schneider, and Jeremy Till connects the ethics of care and that of agency felt by inhabitants, the feeling of ‘making a difference’ and the experience of quality of life when considerations of how one lives as connected to what space one inhabits are prioritized in the design process. They identify five realms of influence that have motivated the need to address spatial agency in architecture: politics, the practice, humanitarian crisis, ecology, and pedagogy. Though Awan, Schneider, and Till acknowledge there have been a number of movements within architecture over the past decade that have attempted to alter these practices, their effect in spatial agency demands an overhaul of the whole system towards one that recognizes the impact that centring the needs of communities can have a great and lasting impact in the field of architecture and on the built environment on a global scale. They call for new approaches “in the spirit of mutual knowledge...not ones of a prescriptive imposition of knowledge, but of drawing out the vernacular intelligence that the communities already possess.”<sup>26</sup> Furthering their agenda and seeing a spark of it in practice, Laurene Vaughan, in conversation with designer Mick Douglas, explores this potential shift in design through care, stating that “[a] lot of design practice has become more about a practice of being with others.

We could say people are becoming the material that we are designing with, whether it is in organizations, communities, or social groupings. Here, the materials are the relationships and the people, and design is a way of manifesting or creating conditions for something to happen.”<sup>27</sup>

## **FUTURE DIRECTIONS**

It has become increasingly challenging to plan and build in complex urban environments. Firstly, there are rigid building codes with an overwhelming force of laws and regulations. Secondly, there are the various groups involved in the building process who are often at the mercy of a complex market. The architect operates between these two demanding voices with the ultimate aim to balance serving both voices while ensuring livability (architectural quality). While not every architect shares the ambition of such balance and quality, it is definitely something AIRstudio takes to heart. The question still remains: How does one achieve such quality? To answer this question, we venture into a journey to become leaders in Citizen Developer Culture. AIRstudio aims to play a key role in facilitating home ownership and creating new rental units, through a variety of approaches to design processes and advocacy. We believe that by doing so, we can achieve a more diverse and equitable housing culture. With this in mind, our efforts through this collaboration—and the recalibration of practices within housing design—are to reclaim design as “a field of practice where people are the focus, where different perspectives can come together and shape the world.”<sup>28</sup> What we do with it from here will be determined either by the decision to return to how things were or to go forward with care for the future, for each other, and for how we position ourselves as architects designing for a better world. Like Subrahmanian, Reich, and Krishnan, “we reimagine designing in a way that people are not reduced to being mere users but become a part of the process—active participants in the designing and creation of an artifact.”<sup>29</sup> And we believe that this transformation has the potential to take root where the architecture of housing first manifests, in the design process.

## NOTES

- <sup>1</sup> María-Elia Gutiérrez-Mozo, José Parra-Martínez, and Ana Gilsanz-Díaz. "Extending the Architecture of Collective Housing: Towards Common Worlds of Care." *Buildings* 2021, 11, 166. <https://doi.org/10.3390/buildings11040166> (2021).
- <sup>2</sup> Kristin Feireiss and Ulla Giesler. "Foreword" in *Eduard Kögel (Ed.) Urbane Akupunktur: Inge Roecker/ASIR Architekten, Stuttgart, ASIR Studio, Vancouver, (Berlin: Aedes Publication, 2006)*, 3.
- <sup>3</sup> Steffen Lehmann, "Introduction: The Complex Process of City Regeneration, Presenting a Ten-Point Strategy for Urban Regeneration of UK Cities." *Urban Regeneration*, [https://doi.org/10.1007/978-3-030-04711-5\\_1](https://doi.org/10.1007/978-3-030-04711-5_1), (2019), 1.
- <sup>4</sup> Inge Roecker in conversation with Andrea Hoff for the purpose of this writing. The goal of the conversation was to put into words the reasons behind restructuring AIRstudio to better reflect the apparent gaps in housing design, to understand who was being left out, and how those gaps could be addressed through research-to-action as well as the practicalities of an architecture office focused on new ways of considering the design process with multiple stakeholders and the expertise of lived experience. (2023).
- <sup>5</sup> Eswaran Subrahmanian, Yoram Reich, and Sruthi Krishnan. *We are Not Users*, (Cambridge: The MIT Press, 2020), 7.
- <sup>6</sup> Inge Roecker and Andrea Hoff, "Mismatch: Inclusive Design Strategies through Pedagogy and Practice", In *Conference Proceedings, AMPS Transformative Teaching*, (Routledge, 2023, forthcoming).
- <sup>7</sup> Nick Sousanis, comics scholar and comics creator has written extensively on the power of the comics form to convey meaning and narrative through conventions specific to its medium. Here, he is citing the writing of Scott McCloud (1993), who is referencing Will Eisner (1985). This citation (and reference) appeared in "Grids and Gestures: A Comics Making Exercise," *SANE journal: Sequential Art Narrative in Education*: Vol. 2: Iss. 1, Article 8 (2015), 1.
- <sup>8</sup> Nick Sousanis, "Grids and Gestures: A Comics Making Exercise," *SANE journal: Sequential Art Narrative in Education*: Vol. 2: Issue 1, Article 8 (2015), 1. Here Nick Sousanis also references the writing of Alaniz, J. (2003). Into her dead body: Moore & Campbell's 'From Hell.' In G.S. Millidge (Ed.), *Alan Moore: Portrait of an extraordinary gentleman* (p. 146). Leigh-On-Sea, England: Abiogenesis Press.
- <sup>9</sup> Nick Sousanis, "Grids and Gestures: A Comics Making Exercise," *SANE journal: Sequential Art Narrative in Education*: Vol. 2: Issue 1, Article 8 (2015), 1.
- <sup>10</sup> Robyn Creagh. "Visual Spatial Enquiry: Diagrams and Metaphors for Architects and Spatial Thinkers", Edited by Robyn Creagh and Sarah McGann, (Routledge, 2019).
- <sup>11</sup> Steffen Lehmann. "Urban Regeneration", *A Manifesto for transforming UK Cities in the Age of Climate Change*, (Palgrave MacMillan, 2019), 46.
- <sup>12</sup> Steffen Lehmann. "Urban Regeneration", *A Manifesto for transforming UK Cities in the Age of Climate Change*, (Palgrave MacMillan, 2019), 47.
- <sup>13</sup> S. Denicke-Polcher. "Reactivating Underpopulated Areas through Participatory Architecture in Southern Italy by Creating a Home for Newcomers". *Architecture MPS* 21, 1 (2022).
- <sup>14</sup> Adam Sharr. In "Forward" to *Practisopolis* by Yasser Megahed. (Routledge, 2021). Forward.
- <sup>15</sup> Adam Sharr. In "Forward" to *Practisopolis* by Yasser Megahed. (Routledge, 2021). Forward.
- <sup>16</sup> George Ferguson in Steffen Lehmann. "Urban Regeneration", *A Manifesto for transforming UK Cities in the Age of Climate Change*, (Palgrave MacMillan, 2019), 46. A description of Ferguson as provided in the opening pages of *Urban Regeneration* as follows, "George Ferguson CBE is a British politician, entrepreneur and former architect. He is Past President of the RIBA (2003–2005) and was the first directly elected Mayor of the City of Bristol, UK (2012–2016). He secured Bristol's status as European Green Capital 2015, as a founder member of Rockefeller 100 Resilient Cities and as a UNESCO Learning City. He has recently been appointed Bristol's first International Ambassador. He was a founder of the Academy of Urbanism during his presidency of the Royal Institute of British Architects. See also: [www. peopleandcities.com](http://www.peopleandcities.com)". "Urban Regeneration", *A Manifesto for transforming UK Cities in the Age of Climate Change*, (Palgrave MacMillan, 2019),
- <sup>17</sup> Adam Sharr. In "Forward" to *Practisopolis* by Yasser Megahed. (Routledge, 2021). Forward.
- <sup>18</sup> Here Steffen Lehmann cites the work of Hill, J. . *Centuries of Design Research*. In J. Dehn et al. (Eds.), *When Architects and Designers Write/Draw/Build* (2013) (p. 17). Aarhus, Denmark: Arkitektur Forlag; Adding to the definition, Steffen Lehmann also cites the work of Hensel, M., & Nilsson, F. (Eds.). *The Changing Shape of Practice*. (London and New York: Routledge 2016); Steffen Lehmann. "Urban Regeneration", *A Manifesto for transforming UK Cities in the Age of Climate Change*, (Palgrave MacMillan, 2019), 46.

- <sup>19</sup> Nick Sousanis. "Grids and Gestures: A Comics Making Exercise," *SANE journal: Sequential Art Narrative in Education*: Vol. 2: Issue 1, Article 8. (2015), 2.
- <sup>20</sup> Steffen Lehmann. "Urban Regeneration", A Manifesto for transforming UK Cities in the Age of Climate Change, (Palgrave Macmillan, 2019), 47.
- <sup>21</sup> María-Elia Gutiérrez-Mozo, José Parra-Martínez, and Ana Gilsanz-Díaz. "Extending the Architecture of Collective Housing: Towards Common Worlds of Care." *Buildings (Basel)* 11, no. 4 (2021), 166.
- <sup>22</sup> Inge Roecker and Andrea Hoff wrote about the Ethics of Care in relationship to a call to change focus in the pedagogy of architecture education. This writing appeared in "Mismatch: Inclusive Design Strategies through Pedagogy and Practice", In Conference Proceedings, AMPS Transformative Teaching, (Routledge, 2023, forthcoming). As much as the education of architects needs to recentre towards lived experiences of inhabitants (present and future) so too do the practices of housing design, the inclusion of community from the very onset of the design process, and explorations of new cross- and inter-disciplinary methods of design and design research.
- <sup>23</sup> Inge Roecker and Andrea Hoff wrote about the multiple levels of interaction needed in the design process in relationship to a call to change focus in the pedagogy of architecture education. This writing appeared in "Mismatch: Inclusive Design Strategies through Pedagogy and Practice", In Conference Proceedings, AMPS Transformative Teaching, (Routledge, 2023, forthcoming).
- <sup>24</sup> Joan C. Tronto. "Beyond Gender Difference to a Theory of Care." *Signs* 12, no. 4 (1987), 644–63.  
<http://www.jstor.org/stable/3174207>.
- <sup>25</sup> Nishat Awan, Tatjana Schneider, and Jeremy Till. *Spatial Agency: Other Ways of Doing Architecture*. Abingdon, Oxon [England]; New York, NY:: Routledge, 2011;2013.
- <sup>26</sup> Nishat Awan et al., *Spatial Agency*, 48.
- <sup>27</sup> Mick Douglas and Laurene Vaughan. "Performing a Practice of Care: A Dialogue." In *Designing Cultures of Care*, edited by Laurene Vaughan, (London: Bloomsbury Academic, 2019), 222.
- <sup>28</sup> Mick Douglas et al. "Performing a Practice of Care: A Dialogue", 7.
- <sup>29</sup> Mick Douglas et al. "Performing a Practice of Care: A Dialogue", 6.

## BIBLIOGRAPHY

- Alaniz, José. "Into Her Dead Body: Moore & Campbell's From Hell." Alan Moore: Portrait of an Extraordinary Gentleman. Eds. smoky man and Gary Spencer Millidge. Leigh-On-Sea, England: Abiogenesis (2003): 145-49.
- Anthony, Kathryn H. *Designing for diversity: Gender, race, and ethnicity in the architectural profession*. University of Illinois press, 2001.
- Anthony, Kathryn H. "Designing for diversity: Implications for architectural education in the twenty-first century." *Journal of Architectural Education* 55, no. 4 (2002): 257-267. <https://doi.org/10.1162/104648802753657969>.
- Anthony, Kathryn H. 2018. "Built-in Bias." *The Architectural Review* 243 no. 1449 (2018): 29.
- Awan, Nishat. *Diasporic Agencies: Mapping the City Otherwise*. 1st ed. Book, Whole. Farnham Surrey, England; Burlington, VT; Ashgate Publishing Company, 2016.. <https://doi.org/10.4324/9781315577029>.
- Awan, Nishat, Tatjana Schneider, and Jeremy Till. *Spatial Agency: Other Ways of Doing Architecture*. Book, Whole. Abingdon, Oxon [England]; New York, NY; Routledge, 2011. <https://doi.org/10.4324/9781315881249>.
- Clement, Grace. *Care, Autonomy, and Justice: Feminism and the Ethic of Care*. Book, Whole. Routledge, 2018. <https://doi.org/10.4324/9780429501838>.
- Creagh, Robyn. "Diagrams and Metaphors for Seeing, Doing and Making Space" In *Visual Spatial Enquiry: Diagrams and Metaphors for Architects and Spatial Thinkers*, (Eds) Robyn Creagh and Sarah McGann, London: Routledge, 2019.
- Denicke-Polcher, S. "Reactivating Underpopulated Areas Through Participatory Architecture in Southern Italy by Creating a Home for Newcomers". *Architecture MPS* 21, (2022) 1: 3.  
<https://doi.org/10.14324/111.444.amps.2022v21i1.003>.
- Douglas, Mick, and Laurene Vaughan. "Performing a Practice of Care: A Dialogue." In *Designing Cultures of Care*, edited by Laurene Vaughan, 1st ed., (2019): 221–28. London: Bloomsbury Academic.
- Feireiss, Kristin and Ulla Giesler. "Foreword" in *Urbane Akupunktur*: Inge Roecker/ASIR Architekten, Stuttgart, ASIR Studio, Vancouver (Ed.) Eduard Kögel (Berlin: Aedes Publication, 2006), 3.
- Giudici, Maria S. "Counter-Planning from the Kitchen: For a Feminist Critique of Type." *Journal of Architecture (London, England)* 23 no. (7–8) (2018): 1203–29. <https://doi.org/10.1080/13602365.2018.1513417>.

- Gürel, Meltem Ö., and Kathryn H. Anthony. "The Canon and the Void: Gender, Race, and Architectural History Texts." *Journal of Architectural Education* (1984) 59 no. 3 (2006): 66–76.
- Gutiérrez-Mozo, María-Elia, José Parra-Martínez, and Ana Gilsanz-Díaz. "Extending the Architecture of Collective Housing: Towards Common Worlds of Care." *Buildings (Basel)* 11 no. 4 (2021): 166. <https://doi.org/10.3390/buildings11040166>.
- Harriss, Harriet, and Lynnette Widder. *Architecture Live Projects: Pedagogy into Practice*. Book, Whole. Taylor and Francis, 2014. <https://doi.org/10.4324/9781315780764>.
- Hensel, M., & Nilsson, F. (Eds.). *The Changing Shape of Practice*. (London and New York: Routledge, 2016).
- Hill, J. "Centuries of Design Research." In J. Dehn et al. (Eds.), *When Architects and Designers Write/Draw/Build* (p. 17). (Aarhus, Denmark: Arkitektur Forlag, 2013).
- Jackson Bell, Carla. *Space Unveiled: Invisible Cultures in the Design Studio*. Book, Whole. London: Routledge, 2015. <https://doi.org/10.4324/9781315765990>.
- Jeffery, S. *Towards a Theory of Reader-Text Assemblages, The Posthuman Body in Superhero Comics*, 2016. DOI 10.1057/978-1-137-54950-1\_10.
- Kögel, Eduard. *Urbane Akupunktur: Inge Roecker/ASIR Architekten, Stuttgart, ASIR Studio, Vancouver*. Berlin: Aedes Publication, 2006
- Lehmann, Steffen. "Introduction: The Complex Process of City Regeneration, Presenting a Ten-Point Strategy for Urban Regeneration of UK Cities". In (Ed) S. Lehmann. *Urban Regeneration*. Palgrave Macmillan, 2019. [https://doi.org/10.1007/978-3-030-04711-5\\_1](https://doi.org/10.1007/978-3-030-04711-5_1)
- Lehmann, Steffen. *Urban Regeneration, A Manifesto for Transforming UK Cities in the Age of Climate Change*, Palgrave Macmillan, 2019.
- Megahed, Yasser. *Practisopolis*. London: Routledge, 2021.
- Molinsky, Jennifer, and Ann Forsyth. "Housing, the Built Environment, and the Good Life." *The Hastings Center Report* 48 (S3): (2018): S50–56. <https://doi.org/10.1002/hast.914>.
- Mossayeb, Sina. "Foreword: Closing the Gap between the Designer and the Recipients of Design," in Tauke, Beth, Korydon Smith, and Charles Davis. 2016. *Diversity and Design: Understanding Hidden Consequences*. Book, Whole. London: Routledge, 2016. <https://doi.org/10.4324/9781315775791>. xvii-xix.
- Sousanis, Nick. "Grids and Gestures: A Comics Making Exercise," *SANE journal: Sequential Art Narrative in Education*: (2018) Vol. 2: Iss.1, Article 8.
- Subrahmanian, Eswaran, Yoram Reich, and Sruthi Krishnan. *We Are Not Users*. Book, Whole. Cambridge: The MIT Press, 2020. <https://doi.org/10.7551/mitpress/11931.001.0001>.
- Sutton, Damian, Susan Brind, and Ray McKenzie. *The State of the Real: Aesthetics in the Digital Age*. Book, Whole. London;New York; I.B. Tauris, 2007. <https://go.exlibris.link/hwt6xqS1>.
- Sutton, Sharon E., Susan P. Kemp, and Palgrave Social Sciences Collection.. *The Paradox of Urban Space: Inequality and Transformation in Marginalized Communities*. 1st ed. Book, Whole. New York: Palgrave Macmillan, 2011. <https://doi.org/10.1057/9780230117204>.
- Tauke, Beth, Korydon Smith, and Charles Davis. *Diversity and Design: Understanding Hidden Consequences*. Book, Whole. London: Routledge, 2016. <https://doi.org/10.4324/9781315775791>.
- Tironi, Martín. "Ethics of care of urban resources: maintenance and repair on a public bicycle system." *ARQ (Santiago, Chile)*, no. 89: (2007): 76–89. <https://doi.org/10.4067/S0717-69962015000100011>.
- Tronto, Joan C. "Beyond Gender Difference to a Theory of Care." *Signs* 12 no. 4 (1987): 644–63.
- Vaughan, Laurene and Bloomsbury Collections: All Titles. *Designing Cultures of Care*. First;1; Book, Whole. London, England: Bloomsbury Publishing, 2018. <https://doi.org/10.5040/9781350055391>.

# FROM FILLING TO FEELING: RE-READING THE ANTILLEAN CITY

Authors:

**DORIS DUHENNOIS**

Affiliation:

THE UNIVERSITY OF WINCHESTER, UK

---

## INTRODUCTION

In the wake of Black Lives Matter, the dismantlement of statues celebrating white supremacists has become a widespread topic of conversation. In the Caribbean, a region marked by settler colonialism, human slavery and the exploitation of natural resources, this conversation is of particular importance, as reassessing the material legacy of settlers is a necessary step towards understanding the past. However, statues do not stand alone but are part of architectural ensembles designed by Europeans to transform their colonies into spaces they could rule. Although Caribbean nations have very different histories, striking similarities can be observed in how cities were established.<sup>1</sup> First, most cities developed around the port, a critical place for the commercial activities essential to the plantation economy, such as trading humans and exporting goods.<sup>2</sup> For settlers, the port was both a source of wealth and a connecting zone with the mother nation. Forming the city around it was thus a way to ensure the continuity of colonial control from the metropole to the heart of the plantation. Second, construction in the urban space was strictly regulated, and the imposition of European architectural standards helped assert authority over the islands.<sup>3</sup> The ambition of the settlers produced grandiose architecture, monuments, statues, and fountains intended to import civilisation and transform foreign lands into familiar spaces. Studying the history of statues built in the Caribbean is a way to retrace the emergence of colonial cities, understand the intentions of early colonial town planners, and better apprehend the dismantlement of statues.

This article examines the trajectory of two statues built in the Lesser Antilles in the early nineteenth-century. The first one represents Lord Horatio Nelson in Bridgetown, Barbados. Horatio Nelson (1758-1805) was a British officer in the Royal Navy who distinguished himself as a naval strategist and was admired throughout the British empire. However, he is also remembered as a fervent defender of colonialism. He has therefore become a controversial figure to celebrate in a post-colonial world. The second statue represents Josephine de Beauharnais (1763-1814) in Fort-de-France, Martinique. Born and raised in Martinique in a family of enslavers, she became a national figure after marrying Napoleon Bonaparte and becoming empress of France. She was praised for her beauty and elegance and was a source of pride for *béké* (white settlers) in Martinique. For them, she embodied many qualities of the creole woman and demonstrated that their island had a place in French history. However, she is also part of the history of white planters of Martinique and is often associated with the re-establishment of slavery by Napoleon in 1802. Hence, the Empress and Nelson are both controversial monuments. As the first statues built in Martinique and Barbados, their history offers valuable testimony to urban development in the Lesser Antilles.

## INVENTING THE CITY

### From the Green to Trafalgar Square

Upon learning about the death of Horatio Nelson in 1805, the inhabitants of Barbados opened a subscription to erect a monument to his memory. Barbadians were grateful to the commander whose victory in Trafalgar guaranteed the safety of their island. It was decided to build the memorial on The Green, an esplanade known for its gigantic tree. It is difficult to know what the social function of The Green was. It is even more challenging to retrieve the emotional or spiritual value the tree might have had for the local population. These silent narratives disappeared when the colonial administration bought the place and renamed it Trafalgar Square. Many Barbadians perceived this change positively, the Nelson statue adding value to the “many improvements that have lately been made in our Metropolis”, as a Barbadian wrote in a local newspaper in 1811.<sup>4</sup> It is thus, “under the cheers of the assembled multitude” that Nelson was unveiled on March 22, 1813.<sup>5</sup> The colossal statue was made of bronze, surrounded by a railing, and showed the admiral standing in his full uniform, as can be seen in figure 1.

In the years following the inauguration, the square was reconfigured and enlarged to give prominence to Nelson’s statue. Accordingly, when in 1826 it was deemed that some “unsightly houses obstructed the square”<sup>6</sup>, the legislature immediately allocated a fund to remove them.<sup>7</sup> Again, the records do not indicate who lived in these houses and what impact this removal had on their lives. Instead, priority was given to improving the appearance of the square. As a result of this expansion, the square gained popularity and traffic.



Figure 1. Lord Nelson's Statue, Trafalgar Square, Bridgetown, Barbados. Credit: Charles W. Blackburne<sup>8</sup>

When in the 1850s, work was undertaken to bring fresh water to Bridgetown, Trafalgar Square was naturally chosen to cheer this improvement. In a symbolic gesture, the administration set Bridgetown's first and only tap on the pedestal of the Nelson statue.<sup>9</sup> Shortly afterwards, the result of subsequent works allowed wider access to water. To commemorate this event and make water accessible to the population, a public fountain was inaugurated only a few meters from Nelson (figure 2). Fresh water was essential for limiting the spread of disease, especially after the 1854 cholera epidemic in Barbados. Hence, the Dolphin Fountain was both a decorative monument and public health

infrastructure. Its presence demonstrated that the colony was modern and added to the symbolic importance of Trafalgar Square.



*Figure 2. The statue of Nelson and the Dolphin Fountain.<sup>10</sup>*

The status of the square was further enhanced when, in 1874, the Public Buildings (or Parliament Buildings) were constructed opposite Nelson. These buildings were erected to house the colonial administration and its courts. Logically, its architects gave it a size, design and structure worthy of colonial ambition (figure 3). The completion of the Public Buildings transformed Trafalgar Square into the official centre of the capital. This new function was confirmed when the statue of Nelson was raised to a much higher pedestal in 1891 and picked as Barbados' mile zero, the point from which all other distances on the island were to be measured. Hence, in less than a century, politicians and urbanists transformed The Green into a British-style square and Bridgetown into a vibrant colonial city. From Trafalgar Square, people were forced to admire the combined symbols of imperial authority: on one side, the government; on the other, the national hero. And opposite, the harbour and the sea, eternal links with the mother country.



*Figure 3 : The Public Buildings, Bridgetown, Barbados. 1879-80. Credit: Royal Collection Trust / © His Majesty King Charles III 2023<sup>11</sup>*

### **La Savane and Fontaine Gueydon**

In the year of Napoleon III's coronation, the people of Martinique saw fit to commemorate Josephine de Beauharnais, his grandmother. Thus, in 1852, several municipal councils in Martinique voted on a budget to build a monument to the creole empress. There was general enthusiasm for the statue, but it

was not easy to decide where to erect it. The Place d'Arme was first proposed but quickly discarded because the square was too large and would make the statue look too small. The committee then argued for the Hôtel du Gouvernement, a landmark and gathering site for the local elite. This time, however, the plot was deemed too small and, in fact, inadequate, for the statue would have to be erected in such a way that the empress's back was to the hotel or the viewers.<sup>12</sup> In the end, the committee chose to host the empress at the parc La Savane.

Built on a field of mangroves, the land was first used as a military training ground in the eighteenth-century. In the middle of the nineteenth-century, it was renamed Jardin du Roi and paths were laid out. It became an area for the settlers to wander, gather and meet under the cool trees.<sup>13</sup> Placing the empress in this famous garden seemed appropriate, especially as the statue could be built to face the sea and welcome foreigners landing on the island.<sup>14</sup> Nevertheless, the committee complained that if erected in the exact centre of the park, the statue would not be visible from the streets of Sainte-Catherine and Villaret - two busy thoroughfares in the city. To avoid this undignified location, the park was completely redesigned. The alleys were redrawn and replanted to create a new centre where the empress could be enthroned, surrounded by a circle of palm trees.<sup>15</sup> The monument, around five meters high, showed Josephine de Beauharnais standing, the right hand on her heart and the left hand on a locket of Napoleon Bonaparte (figure 4). The dramatic posture given to the statue, as well as the efforts made to place it in a prominent position, indicate the extent to which the colonists were anxious to display their affiliation with France.



*Figure 4 : Statue of Josephine de Beauharnais before 1902. Credit : Paul Drilhon.<sup>16</sup>*

The statue's unveiling triggered a series of celebratory events, such as dinners, gatherings and even an agricultural fair aimed at attracting personalities from neighbouring islands. Of particular interest among these events was the inauguration of the Fontaine Gueydon (figure 5), which took place on the same day as the laying of the first stone of the empress's statue on July 12, 1856. The idea to build an aqueduct to bring clean water to Fort-de-France had been formed for more than a century, but it was

not until the arrival of Governor Gueydon that the project became a reality. Taking office five years after the abolition of slavery, Gueydon, strongly opposed to it, wanted to force the freed population back to work by any means necessary. To this end, he set up a system based on punitive laws limiting freedom of movement, regulating housing strategies and imposing heavy taxation. Any disobedience of these rules resulted in fines, converted into workdays employed in public works. Gueydon was known for his determination to modernise the island but also for the repressive policies that followed.<sup>17</sup> The work required to build the aqueduct was pharaonic (diverting a river and tunnelling under a mountain), yet it was completed in only twenty-two months and at a meagre cost.<sup>18</sup> To make this exploit possible, Gueydon used the strength of the convicts - men and women guilty only of their newfound freedom. Thus, forced labourers built the great aqueduct symbol of progress in the colony. While the festivities organised for the inauguration of the fountain and the statue helped to obscure this dark history, the monuments themselves bear witness to the true cost of modernising the city.



Figure 5 : *The Fontaine Gueydon, Fort-de-France*<sup>19</sup>

## RECLAIMING THE SPACE

### From Trafalgar Square to National Heroes Square

To conform to the aesthetic standards of his time and to give dignity to his work, Nelson's sculptor painted the statue green. According to some onlookers, it looked “very much as if the marine hero had just tumbled overboard, and been fished up dripping wet”.<sup>20</sup> Because of this colour, rather than commanding respect, the sculpture was an object of derision for the island's black population, who dubbed Nelson “the green man of Trafalgar Square”.<sup>21</sup> By calling the settlers' hero by a humorously derogatory name, Barbadians powerfully resisted supposed British superiority. Although the archives do not record similar attempts, the recovery of this nickname allows us to imagine the many ways in which the Black Bajans transformed the symbols of the city to make it their own. It allows us to consider a history of cultural and anti-colonial resistance that began long before independence.

Despite a lively debate about the significance of Trafalgar Square after the country's independence in 1966, it was not until 1999 that it was renamed National Heroes Square. This change reignited the debate about whether Nelson should be removed, but this colonial vestige proved difficult to uproot. However, the fight against the monument continued, and almost twenty years later, in 2017, the statue was splashed with yellow paint, one of the colours of the Barbadian flag (figure 6). A sign was positioned at its feet, which read: “Nelson will Fall/ This RACIST; white supremacist [*sic*] who would rather die than see black people free stands proudly in our nation's capital NELSON MUST GO!! Fear not Barbados the people have spoken. Politicians have failed us! HAPPY INDEPENDENCE [*sic*].”



*Figure 6 : Nelson's statue splashed with paint. Credit: Natasha Beckles<sup>22</sup>*

The reclamation of National Heroes Square was completed on November 16, 2020, when the memorial was officially removed, and Nelson was redefined as an outdated British symbol. A year later, in 2021, the country severed ties with the British Queen and transitioned to a Republic. Coincidentally, around that time, the Bajan Parliament stopped meeting in the Public Buildings - and although this change was supposed to be temporary, it has still not returned three years later. Finally, the Dolphin Fountain, once a symbol of the colony's success, is now often inactive, the water flowing only sporadically.<sup>23</sup> Thus, the square is now devoid of its symbols of power: Nelson's pedestal remains empty, the Parliament Buildings are deserted, and the Dolphin Fountain has no water left.

### **Destruction and decay of Fort-de-France's colonial symbols**

To end this article, let us return to the fate of the statue of Josephine and the Fontaine Gueydon in Martinique. In a discourse pronounced at the dinner following the inauguration of the fountain, a guest professed:

“One day, our little nephews and our descendants, gathered as we were just now, around the monument of Josephine and casting their eyes at the same time towards these living and foaming waters (...) will remember you, Comte de Gueydon; your name given to this great and beautiful work worthy of Roman times, your memory attached to the monument of Josephine, will be transmitted among them from generation to generation (...).”<sup>24</sup>

Perhaps comparing this prophecy and the current state of the fountain is the best way to illustrate how colonial symbols have been overturned. Indeed, the water has long ceased to pour from the fountain,

and the continued lack of maintenance has acted as a passive challenge to the majestic monument, as figure 7 shows. Although the fountain was listed as a historical monument in 2009 and should have been restored, the work has still not been undertaken. Today, the land is used as a car park, and the houses at the foot of the fountain are said to serve as urban shelters for homeless people and drug users.<sup>25</sup> It is an ironic, if tragic, recuperation of a space built with the work of those whom the colonial administration thought to control and exclude from the city.



*Figure 7 : The Fontaine Gueydon in 2020. Credit: Bondamanjak<sup>26</sup>*

As for the statue of the empress, its fate is equally extraordinary. Although so much effort was made to place the statue in the centre of the park, the then Mayor of Fort-de-France, Aimé Césaire, moved it to a peripheral area in 1974 – symbolically marginalising French narratives. It was there that, in 1991, the sculpture was beheaded during the night (figure 8). Despite its lack of a head, in 1992, the statue was listed as a historical monument and placed back in the centre of the park. A new head was made, but the empress was never restored, probably for fear of another beheading. In the following years, the monument was repeatedly graffitied, becoming a practical site of resistance for the Martiniquais, with many of them demanding its complete removal. However, local and national authorities ignored these protests, and on July 26, 2020, a group of activists organised the monument's destruction (figure 8). Fortunately, the overthrow of the memorial did not exhaust the creativity of the Martiniquais. The empty pedestal was transformed into a vegetable garden where everyone could help themselves, perhaps as a protest against the colonial system that privileged the few at the expense of the many.



Figure 8 : Beheading and destruction of the statue of the empress<sup>27</sup>. Credit: Right: Patrice78500 Left: François Marlin

## CONCLUSION

In this article, I have shown how the Nelson statue in Bridgetown and the statue of the empress in Fort-de-France allowed the colonists to transform foreign lands into European cities. By retracing the origins of these statues, I showed how their history is linked to the birth of Bridgetown and Fort-de-France as colonial capitals. It became apparent that monuments served to exhibit the culture and values of the occupiers. However, as the story of the Fontaine Gueydon shows, the urban transformation was only made possible by upholding racist ideologies and practices. Hence, the demonstration of colonial superiority was made by and for the subjugation of black people. Each stone of the aqueduct bears witness to the legacy of white supremacy, and in an island like Martinique, still under French rule, the importance of such narratives cannot be overlooked. In addition, the statues helped assert that the Caribbean belonged to Europe. Barbados and Martinique, islands separated by only 227 kilometres, became French and British lands despite their geographical distance from these countries. Finally, the construction of monuments was part of a process of erasure of the relationship of indigenous peoples with the land, preventing present and future generations from accessing the knowledge and cultures of the past.

Nevertheless, if the colonists succeeded in creating cities in their image, the current state of the monuments testifies to the long history of Antillean resilience. These statues have been mocked, moved, tagged and defaced throughout the last two centuries. While some of these acts of protest have been forgotten or dismissed, it is crucial today to include them in the narrative and give them the importance they deserve. This allows us to apprehend the recent dismantling of statues differently. In this light, it appears that the destruction of monuments is not the result of a sudden fit of rage or a senseless desire to destroy. Destruction is not a thoughtless act on the part of generations eager to erase the past.

On the contrary, the examples discussed in this article show that these acts are part of a long tradition of resistance. The broken empress, the boxed Nelson, the decaying fountains, and the renamed squares testify to the slow reappropriation of a space designed by and for the colonisers. Through these acts, the Antilleans have effectively reclaimed their cities.

## NOTES

- <sup>1</sup> Rivke Jaffe, Ad de Bruijne and Aart Schalkwijk, "The Caribbean city: An introduction," in *The Caribbean City*, ed Rivke Jaffe. (Kingston/Leiden: Ian Randle Publishers/KITLV Press, 2008), 3.
- <sup>2</sup> Dehoorne Olivier, Huhua Cao, and Dorina Ilies. "Study the Caribbean City." *Études Caribéennes* 39-40 (2018): 2.
- <sup>3</sup> Rivke Jaffe, Ad de Bruijne and Aart Schalkwijk, "The Caribbean city: An introduction," 8.
- <sup>4</sup> The Barbados Mercury and Bridgetown Gazette, 25 May 1811, EAP1086/1/10/5/7, Endangered Archives Programme, The British Library, accessed on February 10, 2023, <https://eap.bl.uk/archive-file/EAP1086-1-10-5-7>.
- <sup>5</sup> Robert Hermann Schomburgk, *History of Barbados* (F.Cass, 1971), 247.
- <sup>6</sup> Schomburgk, 247.
- <sup>7</sup> Warren Alleyne, *Historic Bridgetown* (Barbados National Trust, 1978), 98.
- <sup>8</sup> Charles W. Blackburne, Lord Nelson's Statue, Trafalgar Square, Bridgetown, Barbados.
- <sup>9</sup> Warren Alleyne, *Historic Bridgetown*, 86.
- <sup>10</sup> BARBADOS 1. Public buildings in Bridgetown and surrounding areas, 1872, CO 1069/243, The National Archives, Kew, Richmond.
- <sup>11</sup> Public buildings, Bridgetown, Barbados 1879- 80, RCIN 2580381, The Royal Collection Trust, UK. <https://www.rct.uk/collection/2580381/public-buildings-bridgetown-barbados>.
- <sup>12</sup> Extrait d'une dépêche ministérielle à M le gouverneur de la Martinique, 9 November 1854, MAR 30/94, Ministère des Colonies. Martinique, Monuments et œuvres commémoratives, Monument à l'impératrice Joséphine érigé à Fort-de-France, Archives nationales d'outre-mer, Aix-en-Provence. (hereafter cited as MAR 30/94, ANOM)
- <sup>13</sup> "La place de la Savane - Fort-de-France – Martinique," Zananas Martinique, accessed February 10, 2023, <https://www.zananas-martinique.com/patrimoine/la-place-de-la-savane.html>.
- <sup>14</sup> Rapport, January 6, 1855, MAR 30/94, ANOM.
- <sup>15</sup> Gueydon to Tascher de la Pagerie, 12 March 1856, MAR 30/94, ANOM.
- <sup>16</sup> Paul Drilhon, Statue de Joséphine de Beauharnais, before 1902, FR ANOM 8Fi395/20, ANOM.
- <sup>17</sup> "Patrimoine : de la fontaine Gueydon à la politique du Gouverneur," Le Blog Manioc, accessed February 10, 2023, <http://blog.manioc.org/2020/09/patrimoine-de-la-fontaine-gueydon-la.html>.
- <sup>18</sup> "Patrimoine : de la fontaine Gueydon à la politique du Gouverneur," September, 25, 2020, Le Blog Manioc.
- <sup>19</sup> Fontaine Gueydon, à Fort-de-France, SCH132620097i1, MANIOC online, <http://www.manioc.org/images/SCH132620097i1>.
- <sup>20</sup> Charles Day, *Five Years Residence in the West Indies* (London : Colburn & Co, 1852), 17.
- <sup>21</sup> Joseph H. S. Moxly, *An account of a West Indian Sanatorium and a guide to Barbados* (London : Sampson Low & Co, 1886), 3.
- <sup>22</sup> Natasha Beckles, "Statue of Lord Nelson defaced", November 29, 2017, Nation News, <https://www.nationnews.com/2017/11/29/statue-of-lord-nelson-defaced/>.
- <sup>23</sup> "About Barbados: Barbados Dolphin Fountain," Barbados.org, accessed February 10, 2023, [https://barbados.org/barbados-dolphin-fountain.htm#.Y-ZF4RN\\_rF9](https://barbados.org/barbados-dolphin-fountain.htm#.Y-ZF4RN_rF9).
- <sup>24</sup> La France d'outre-mer, Discours d'inauguration de Sydney Daney, 13 July 1856, MAR 30/94, ANOM. Original version: "Un jour, nos petits neveux et nos descendants, réunis comme nous l'étions tout à l'heure, autour du monument de Joséphine et jetant en même temps les regards vers ces eaux vives et spumeuses qui descendront de la montagne, vers ces eaux que leurs pères avaient si longtemps attendues, vers ces eaux qui apporteront à leur cité capitale abondance et la salubrité, nos petits-neveux et descendants se souviendront de vous, M le comte de Gueydon; votre nom donné à ce grand et beau travail digne des temps romains, votre souvenir attaché au monument de Joséphine, se transmettront parmi eux de génération en génération, alors cette belle et noble récompense qu'envient tous les grands cœurs, celle de vivre et de vivre heureusement dans la mémoire de la postérité reconnaissante, vous sera irrévocablement acquise."
- <sup>25</sup> Peggy Pinel-Fereol, "La fontaine Gueydon devient un haut lieu de la délinquance à Fort-de-France", La 1ère, September 19, 2018, <https://la1ere.francetvinfo.fr/martinique/fort-de-france/fontaine-gueydon-devient-haut-lieu-delinquance-fort-france-629160.html>.
- <sup>26</sup> "Martinique...ce que la ville de Fort-de-France fait avec : la FONTAINE GUEYDON," December 16, 2020, Bondamanjak, accessed February 10, 2023, <https://www.bondamanjak.com/martiniquece-que-la-ville-de-fort-de-france-fait-avec-la-fontaine-gueydon/>.
- <sup>27</sup> Left : "Statue de l'impératrice Joséphine en 1998", by Patrice78500. Right : "La statue de Joséphine déjà amputée de sa tête, il y a plus de 30 ans, a été détruite par les activistes, dimanche 26 juillet 2020 à Fort-de-

France”, by François Marlin, <https://la1ere.francetvinfo.fr/martinique/fort-france/statues-josephine-pierre-belain-esnambuc-renversees-activistes-martinique-856692.html>.

## BIBLIOGRAPHY

- Alleyne, Warren. *Historic Bridgetown*. Barbados National Trust, 1978.
- Archives nationales d’outre-mer, Aix-en-Provence.
- Barbados.org. “About Barbados: Barbados Dolphin Fountain.” Accessed February 10, 2023. [https://barbados.org/barbados-dolphin-fountain.htm#.Y-ZF4RN\\_rF9](https://barbados.org/barbados-dolphin-fountain.htm#.Y-ZF4RN_rF9).
- Bondamanjak. “Martinique...ce que la ville de Fort-de-France fait avec : la FONTAINE GUEYDON.” December 16, 2020. Accessed February 10, 2023. <https://www.bondamanjak.com/martiniquece-que-la-ville-de-fort-de-france-fait-avec-la-fontaine-gueydon/>.
- Day, Charles. *Five Years Residence in the West Indies*. London : Colburn & Co, 1852.
- Dehoorne, Olivier, Huhua Cao, and Dorina Ilies. “Study the Caribbean City.” *Études Caribéennes* 39–40 (2018).
- Le Blog Manioc. “Patrimoine : de la fontaine Gueydon à la politique du Gouverneur.” Accessed February 10, 2023. <http://blog.manioc.org/2020/09/patrimoine-de-la-fontaine-gueydon-la.html>.
- MANIOC Bibliothèque numérique Caraïbe Amazonie Plateau des Guyanes.
- Moxly, Joseph H. S. *An account of a West Indian Sanatorium and a guide to Barbados*. London : Sampson Low & Co, 1886.
- Pinel-Fereol, Peggy. “La fontaine Gueydon devient un haut lieu de la délinquance à Fort-de-France”. La 1<sup>ère</sup>, September 19, 2018. <https://la1ere.francetvinfo.fr/martinique/fort-de-france/fontaine-gueydon-devient-haut-lieu-delinquance-fort-france-629160.html>.
- Rivke Jaffe, Ad de Bruijne and Aart Schalkwijk. “The Caribbean city: An introduction.” in *The Caribbean City*, edited by Rivke Jaffe, 1–23. Kingston/Leiden: Ian Randle Publishers/KITLV Press, 2008.
- Schomburgk, Robert Hermann. *History of Barbados*. F.Cass, 1971.
- The British Library, Endangered Archives Programme. The Barbados Mercury and Bridgetown Gazette Newspaper, 25 May 1811. Accessed on February 10, 2023. <https://eap.bl.uk/archive-file/EAP1086-1-10-5-7>.
- The National Archives, Kew, Richmond.
- The Royal Collection Trust, UK.
- Zananas Martinique. “La place de la Savane - Fort-de-France – Martinique.” Accessed February 10, 2023. <https://www.zananas-martinique.com/patrimoine/la-place-de-la-savane.html>.

# PHYGITAL MUSEUM EXPERIENCES: THE SITUATED AND INVISIBLE DIMENSION OF TECHNOLOGY AS A SENSITIVE ACTIVATION OF CULTURAL HERITAGE

Authors:

**ALESSANDRA MIANO**

Affiliation:

UNIVERSITY OF CAMPANIA LUIGI VANVITELLI, ITALY

---

## INTRODUCTION

In recent years, disrupted by the pandemic crisis and the pressing presence of the digital, the systematization of the link between communication, enhancement and fruition of cultural heritage and digital technologies opens a reflection on the potential of integrating digital media within physical museum spaces, as a vehicle for storytelling and amplification of the space and artworks on display, capable of activating a re-reading of the space, bodily involving visitors. In this sense, the design of phygital spaces, physical but mediated by the use of technological devices within ICT, stands as a situated layer, which, in the absence of visible technological prostheses, encourages a familiar and natural relationship with digital technology and the spatial context, in an increasingly looming need for “digital detox”, as overcoming a state of technological saturation, linked to intrusive digital technologies.<sup>1</sup>

This system pushes to a change of the traditional relationships between the agents in the field, “bodies, space, physical objects and digital media”,<sup>2</sup> moving in a double direction: on the one hand, the technological hybridization of museum spaces represents a re-mediation of space, as a “complex script”<sup>3</sup> acting through a hypertextual narrative layer of tangible and intangible cultural heritage; on the other hand, the triggering of the narrative space, built through digital technologies, requires a modification of conventional space-time coordinates of fruition, through a renewed museum proxemics, based on the centrality of gesture, which conceives museum space as an increasingly performative space.

Referring to phygital museum experiences implies first of all asking how the consideration of cultural heritage has changed, from an unchanging substance to a process open to innovation and transformation,<sup>4</sup> as “a stratified, composite subject, consisting of changing environmental, cultural, social, architectural and anthropological elements, as well as active”.<sup>5</sup> This openness affects the representation of cultural heritage within museum spaces, moving in the direction of evocation,<sup>6</sup> as a participatory interpretive possibility of cultural heritage. In this direction, the museum experience is built not only by the fruition of the physical collection, but shifting the attention to the connected stories behind and beyond the physical artworks on display,<sup>7</sup> considering the museum as narrative, “a workshop of change, laboratory of the singular and plural identity”,<sup>8</sup> in which to give space to different points of view. The updating of the definition of the museum, as deliberated during the ICOM extraordinary assembly,<sup>9</sup> emphasizes on the one hand the topic of inclusivity and accessibility,

and on the other hand requires museums not to avoid displaying varied experiences through the participation of communities. In this sense, the intrinsic neutrality of the museum needs to be reconciled with the polyphony of the narratives connected to the artworks, making visible and explicit the collective knowledge often invisible behind what is on display.

Technological sensitization of museums, therefore, is contextualized as a system capable of superimposing different reinterpretations, re-activated through the bodily involvement of visitors, considering the body as a cognitive system and meaning-making of space,<sup>10</sup> from a contemplative to performative dimension of fruition, from a passive dimension to a bodily action.

How does museum space, in the phygital dimension, usher in new rituals, gestures, practices, toward a performative museology? The topic is related to the inextricable relationship between the visitor, digital technology, as mediated within the “exhibition score”,<sup>11</sup> and the space: technology as a means of immersive and sensitive amplification of the emotional and material value of the objects on display follows the narrative plot, coordinated by the exhibition score, in a dimension of transformation of the material into a recognizable communicative system,<sup>12</sup> from medium to message generator. This process makes it possible to consider the involvement of the visitor not only as an activator of installations, but as a work of art itself,<sup>13</sup> capable of creating new relational aesthetics, a place linked to the visitor's body moving in a collective dimension.

### **PHYGITAL PERSPECTIVES: THE TECHNOLOGICAL HYBRIDIZATION OF MUSEUMS**

The design of phygital museum spaces starts from a central methodological premise: digital technology, integrated into the space, is to be understood as being closely dependent on storytelling, concealed behind the materiality of the artworks on display, “it is not the technology that must provide the surprise effect, but what the artwork can tell, involving the visitors”.<sup>14</sup> This approach characterizes the choice and functionalization of technological systems, such as to usher in the possibility of multimodal narratives of the artwork.

The in-depth study of the topic of phygital spaces moves from the origin of the term phygital, coined not in the field of cultural heritage, but in the marketing sector. The neologism phygital was first used in 2007 by Chris Weil, president and CEO of the Australian agency Momentum Worldwide as a crash of the words physical and digital, and contextualized in reference to the convergence of physical business services and digital platforms. The term phygital is declined as main application in the concept of the Internet of things, “which refers to connected objects that trigger a physical reaction from a digital action or a physical sensor that when triggered, results in a digital output”.<sup>15</sup> The characteristic is to represent an indissoluble link between real and virtual, which do not simply complement but reinforce each other, “such that concerns the overall connectivity phenomenon in which everyday objects are interlinked and connected to the environment, collecting information from it and adapting their performance”.<sup>16</sup>

The recontextualization of the terminology within the field of cultural heritage fruition is translated into the concept of “phygital heritage”<sup>17</sup> as the possibility of transmission of the information through simultaneous overlapping of digital and physical tools, such as to combine the immersive and amplification capabilities of digital technologies and the material value of objects and space, in a dimension where digital technology and cultural heritage complement each other, as “assemblies”,<sup>18</sup> part of a contextual and integrated project system.

Phygital spaces are designed mainly through the use of mixed reality tools, which can be defined through the “virtual continuum diagram”,<sup>19</sup> as a continuum from the real environment to the virtual environment, considering as median experiences, the augmented reality, in which the real environment is increased by overlapping digital information, and the augmented virtuality, through which the virtual environment is increased by overlapping direct representation of reality. The

adjective mixed emphasizes the co-presence and overlapping of characteristics related to reality, such as affordance, the ability to stimulate actions in the visitor, and situativity, the link and dependence on the spatial context of reference, and on the other hand, the possibilities offered by digital devices, such as multisensoriality, personalization and multimodality, transmitting information through different technological devices, able to meet target audiences and multiply views of the same artwork. Thus, starting from the relationship between technology, space, and visitors as the main components of the exhibition stage, the phygital heritage model allows to scan the dynamics of the interactions in the space, based on two parameters: how much digital technology is integrated into the space and how much it can act as a gestural stimulus. In this model, phygital spaces move from an augmented dimension, as visible technological layer, overlapping the space, activated through wearable technological devices, to an integrated dimension, in which technology is integrated into the space-object, as an invisible layer, activated only through the bodily involvement of visitors (as in projection mapping or the use of TUI), to an actuated dimension, where visitor can directly modify the digital interface.<sup>20</sup>

The concept of integrated technology is developed mainly through the use of tangible interactions, understood tangibility not in the strict sense, but as a synaesthetic bodily experience, in which touch represents the bodily extension of the cognitive dimension, “this interpretation considers as tangible all those experiences that require a strong involvement of the body when interacting with a digital system”.<sup>21</sup> This could be declined in a double binary, “Indeed, in tangible interaction systems the visitors interact by manipulating tangible objects or by making actions through gestures or the whole body”.<sup>22</sup> In this sense, the focus is in the first case on the smart objects, in which the technology is embedded, and in the second on the gesture, as an activator of the sensitive environment.

The centrality of gesture, driven by the intimate relationship established by tactility, also opens reflection on the concept of interactions as natural interactions, “Interactive and responsive devices that rely on simple, traditional, human modes of communication. They invite us to touch or swipe, respond to the sound of a voice, react to a gesture, move with our body, hide in everyday object use simple human communication methods, such as touch, gesture, voice, common objects”.<sup>23</sup> The more natural the action, the more we understand technology.

Phygital museum experiences push toward a cultural ecosystem, in which technology on the one hand brings to light narratives related to the intangibility of cultural heritage, through an integrated layer in space, on the other hand, it focuses attention on the museum as a familiar place, in which to experience gestures and rites from the past.

## **CASE STUDIES**

The following case studies allow to frame the phenomenon by considering how, starting from the centrality of storytelling, different relationships between space and digital technology can be configured, and how on the basis of this link, a different level of bodily involvement, from contemplative to performative, can be pushed: from immersive environments through the use of projection mapping; to the intimacy of the link with smart objects; to the centrality of the body as an activator of sensitive environments, in individual and collective gaze.

### **Raphael in the Domus Aurea. The role of the immersive storytelling**

Inside the Colosseum Archaeological Park and in particular inside Domus Aurea of Nero, the exhibition project, designed by Dotdotdot, tells the interweaving of stories, related to the discovery of ancient painting buried in the grotesques of the Domus Aurea. It is the space itself that speaks, making visible and communicating the stories, bringing to light how Raphael, Pintoricchio and other contemporaries had frescoed the rooms within the building's grottoes.

The digital storytelling is an integral part of the space: from the Octagonal hall, through immersive videomapping, the visitor is brought into a space that, in the very exaltation of its materiality, comes out of itself, recontextualizing the ancient functions and actions that took place within it (Figure 1, left).

The storytelling is declined in a multimedia and interactive structure: through the integration of digital projections to enhance at full height the ancient walls or the details of the artworks, it shows the indissoluble link between physical artwork and immersive and analytical digital layer (Figure 1, right). In this context, the role of sound and light is crucial, bringing the visitor back to ancient Rome and linking to his movement the activation of the environment, until he becomes part of the artwork itself, illuminating with the own body part of the projection, entering the painting.



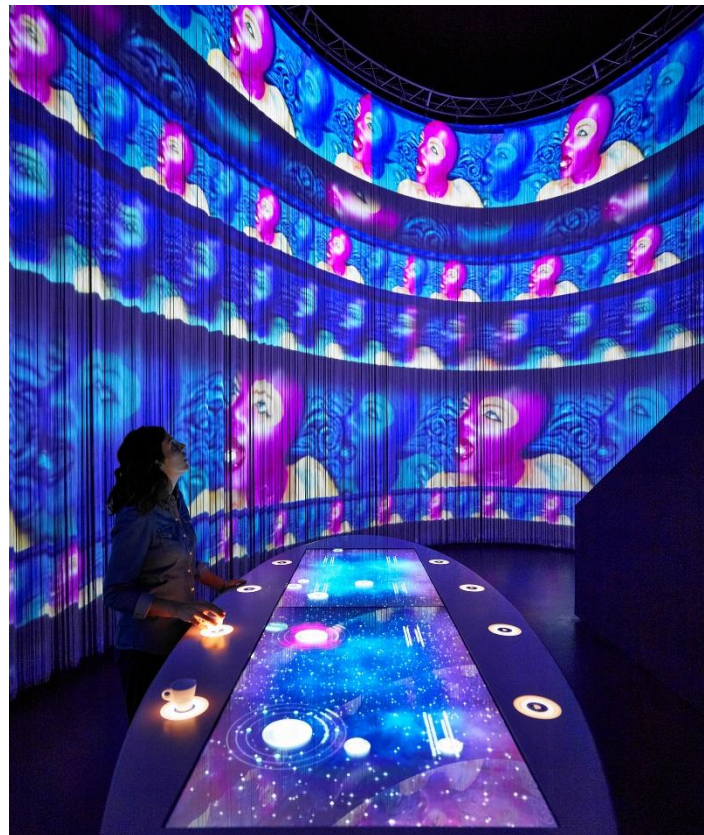
Figure1. (Left) Octagonal Hall, Domus Aurea, Rome. (Right) Digital projection details. Exhibition and interaction Design by Dotdotdot Ph. by Andrea Martiradonna All rights reserved Dotdotdot

The exhibition moves from a contemplative immersive dimension, through videomapping and digital projections, animating the story of space, up to a performative dimension, inviting visitors to be part of the story, through the design of a sensitive environment, reacting to the stimuli and movements of the visitor.

### **Lavazza Museum: smart cup as activator of intimate relationship**

The museum Lavazza, designed by the Ralph Appelbaum Associates with creative multimedial project by NEO and Tamschick, is developed through a journey into the world of Lavazza, where to accompany the visitor as a personal guide is the most iconic object of the coffee ritual: the cup. The visitor receives the smart cup at the beginning of the path, and it is the only tool to activate the installations, through the use of RFID sensors technology. The cup is not only connected to the visit experience, but allows to save information and take with after the visit, as to mark an intimate and personalized path and a selection of moments to remember. The topic of the smart cup, in the context of tangible interactions through the use of smart objects, stands as a reference of the possibility of an intimate connection between the object, symbolizing the content and narrative of the exhibition, and the visitor, who through the act of holding in the hands, activates the installations (Figure 2). The

dimension of the space becomes familiar, thanks to a device that conceals its technological dimension, evoking instead the emotional and material dimension of the object.



*Figure 2. The relationship between visitor and the cup. Ralph Appelbaum Associates, Lavazza Museum, Turin, 2018. © Andrew Lee*

### **Markiezenhof: the process of identification in the storytelling**

Inside the Markiezenhof palace, the oldest city palace of the Netherlands, built in the 14th century as the residence of lords and marquesses, located in the historical heart of Bergen op Zoom, the display of the four period rooms moves from the need to balance the preservation of space and objects, keeping the original arrangement unchanged, and the aim of telling the court stories, engaging visitors. The narrative layer comes from the reinterpretation of space, as stage for the storytelling of the marquise Marie Anne Van Arenberg, filter of the narrative of the palace rooms. The marquise is in fact the protagonist of a love story, later revealed to be tragic: after a marriage of interest, from which a daughter was born, the marquise, left a widow, fell in love with a court servant. The cardinal married them, despite the possible scandal, but soon after made her the victim of blackmail: he asked her to choose between maintaining her daughter's power and her love for the servant. How did the story turn out?

The point is central: the aim of telling a story that has been heard but not told, that has remained invisible in the rooms of the building, and that it is now up to the visitor to bring to light requires the design of technology integrated into the space and digital reproductions, as a double layer of tangible interactions both in the form of the smart object and the sensitive environment.

Through twelve points of interest, articulated in four rooms, as the entrance space within the ballroom, the bedroom, the dining room and epilogue, the visitor is invited to take part in this story,

requiring bodily involvement as a necessary activation of the narrative installations that follow. In the entrance room, the visitor is greeted by the butler, then introduced into the story by the protagonists themselves. Each story invites to action. Each story requires the activation gesture of the visitor, as if to establish a personal and intimate connection. Through an ascending climax, the visitor becomes more and more involved in the story, such as entering in the intimacy of the bedroom, where, by touching the lamp, the lights are turned off and a screen recounts the marquise's amorous and then tragic affairs (Figure 3, left). Soon after, however, the visitor is called by the cardinal himself, through a reproduction in a portrait, to approach to listen to his version. In the dining room, a family quarrel is staged: the visitor is invited to sit and ring the bell, activating the voices of the participants. The quarrel becomes stronger, the voices rise, the objects move. The visitor is part of that moment, empathizing with the different positions (Figure 3, right). For this reason, in the next installation, the visitor has to sign to decide what will be the conclusion of the story, displaying on the screen the consequences of his decision. In the last room, the visitor discovers how the story really went and what happened to the marquise.



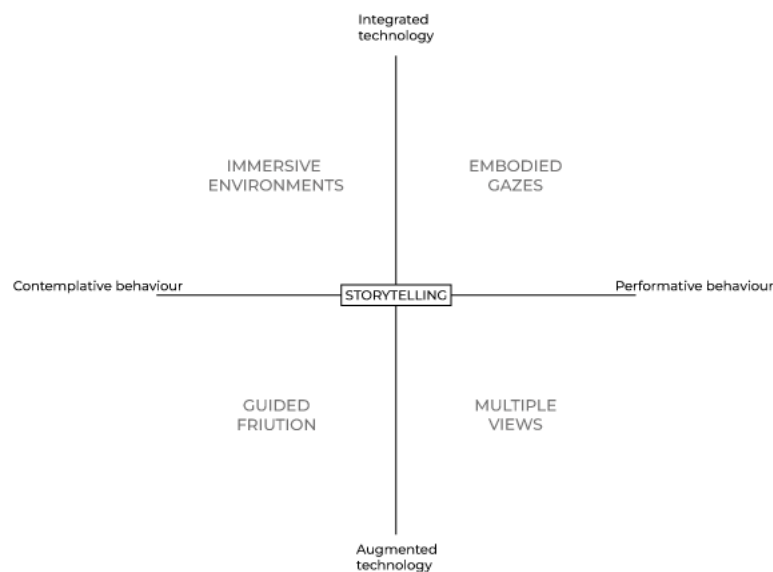
*Figure 3. (Left) View of the installation within the bedroom. (Right) View of the family reunion within the dining room*

In this way, the story moves on a double track: the factual story, on which the storytelling is grafted as the emotional story in which the visitor assumes an internal role as a possible protagonist, identifying with the characters at the point of being able to change the fate.

The invisible technology leads the visitor to interact individually but also to discover the story, through a collective ritual, crossing the interactions of visitors, within a space can be activated only by body gestures.

## CONCLUSION

Phygital cultural experiences, displayed through situated technologies, allow sensory activation of spaces, bringing to light new narratives, thanks to the bodily involvement of visitors, as lived and personal stories. In this scenario, different development perspectives can be imagined, considering phygital spaces as narrative amplifiers of the tangible and intangible dimensions of cultural heritage. In the diagram, if the storytelling is at the center, the analysis is based on two parameters: the level of integration of the technology within the physical space, depending on the physicality of the device from visible to invisible, and the inhabiting behaviour of the visitors, from a contemplative to a performative dimension. The model shows possible scenarios in the interweaving of the criteria: using wearable technological devices, in augmented technology systems, the narrative moves from guided fruition, as an overlap of factual stories in the space, to multiple views, exploiting the amplifying capabilities of technology to narrate varied stories and engage the visitor, opening up different points of view. The use of digital technology, integrated into space and objects, devoid of a visible formal component, moves from the design of immersive environments, exploiting the potential of multimedia in a dimension that from the contemplative pushes toward the performative gesture, as embodied gazes, through renewed proxemics. The narrative becomes a reification of the intangible hidden in the material dimension of space and exhibits.



*Figure 4. Digital technology and proxemics*

The perspective of designing phygital spaces is then to untie digital technology from its formal component, linking instead to the material dimension of space and objects, letting the space speak and tell what is not visible, in a dimension in which to connect polyphonic storytelling, digital technology, and the bodily involvement of visitors.

## NOTES

- <sup>1</sup> Gianluca Carella et al., "Phygital experiences design," *diid disegno industrial industrial design*, no. 67 (2019): 133.
- <sup>2</sup> Raffaella Trocchianesi, *Design e narrazioni per il patrimonio culturale* (Maggiori editore, Sant'Arcangelo di Romagna, 2014), 59. [...corpi, spazio, oggetti fisici e media digitali].
- <sup>3</sup> Letizia Bollini, and Marco Borsotti, "Strategies of Commutation in Exhibition Design," *The International Journal of Architectural, Spatial and Environmental Design*, no. 10 (2019): 15.
- <sup>4</sup> The topic is deepened from different perspectives: Ilaria Bollati, *Digital culture and society. Filters and recommended doses*. (Corraini, 2019) defines the cultural process as dynamic, subjective and personal, even in a dynamic in which subjectivity is influenced by identity, linked to shared values in the context of origin; Giulia Grechi, *Deconolizzare il museo. Mostrazioni, pratiche, sguardi incarnati* (Mimesis Edizioni, 2021) opens the reflection on the need for a re-narration of cultural heritage, as a possible deconstruction, such as to establish a connection between the culture that hosts the cultural heritage and the culture of origin; Eleonora Lupo, "Design e Cultural Driven Innovation," *i+Disegno*, no.14 (2019): 121; Silvia Mascheroni, Per un museo partecipativo e polifonico (presented during Musei e decolonialità. Pratiche per un dialogo critico e polifonico sul passato e futuro, December 15, 2022) points out that the transition from substance to process has a direct influence on the transformation of the physical museum space.
- <sup>5</sup> Serena Del Puglia, *Exhibition Design Stories. Metodi e pratiche di fruizione della cultura*. (LetteraVentidue Edizioni, 2022), 9 [...soggetto stratificato, composito, costituito da mutevoli elementi ambientali, culturali, sociali, architettonici, antropologici, nonché attivo].
- <sup>6</sup> Grechi, *Deconolizzare il museo*, 180.
- <sup>7</sup> Annika Waern and Ander Sunders Løvlie, *Hybrid Museum Experiences. Theory and Design*, (Amsterdam University Press, 2022), 20. <https://library.oapen.org/viewer/53260/9789048552849.pdf>
- <sup>8</sup> Alessandro Balzola, and Paolo Rosa, *L' arte fuori di sé. Un manifesto per l'età post-tecnologica*, (Feltrinelli, 2011), 129. [... officina del cambiamento, laboratorio dell'identità singolare e plurale].
- <sup>9</sup> ICOM Extraordinary General Assembly. Available at: <https://icom.museum/MuseumDefinition.pdf> Accessed on: September 5, 2022 "A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing." Interesting is the reference to research, as a fundamental engine of change and progress, as well as the mention of "varied experiences", thanks to the participation of communities, as awareness that the vision of cultural heritage is not unilateral.
- <sup>10</sup> The topic of the body as knowing system is underlined by Maurice Merleau Ponty, *Phenomenology of Perception*, trans. Colin Smith (Routledge, 2002) considering the body as a general instrument of understanding the world, in a synesthetic dimension, in an inseparable dimension of senses. Juhani Pallasmaa, *The eyes of the skin. Architecture and the senses*, (John Wiley & Sons Ltd, 2012) defined touch, as the unconscious of the vision, as the embodied extension of the perception, capable of representing the most complete experience of the world.
- <sup>11</sup> Trocchianesi, 90
- <sup>12</sup> Marco Borsotti, *Tutto si può narrare. Riflessioni critiche sul progetto di allestimento* (Mimesis Edizioni, 2017).
- <sup>13</sup> Raffaella Trocchianesi, "Nuove prossemiche museali e culturali. Corpi, gesti, relazioni, comportamenti" in *Il design del patrimonio culturale tra storia, memoria e conoscenza. L'Immateriale, il Virtuale, l'Interattivo come materia di progetto nel tempo della crisi*, ed. Fulvio Irace (Milano: Electa, 2013), 65.
- <sup>14</sup> Nicole Mandarano, *Musei e media digitali* (Carocci editore, Roma. 2021), 114 [...Non sono le tecnologie a dover fornire l'effetto sorpresa, ma quello che l'opera riesce a raccontare coinvolgendo il visitatore].
- <sup>15</sup> Vincent Teo, "The Internet of Things: Let's Get Phygital,," April 3, 2013, <https://www.clickz.com/the-internet-of-things-lets-get-phygital/39692/>
- <sup>16</sup> Carella et al., Phygital experience design, 132
- <sup>17</sup> Eslam Nofal et al., "Phygital heritage - An approach for heritage communication,," *The 3rd Annual International Conference of the Immersive Learning Research Network (iLR1V2017)*, Coimbra, Portugal, (June 26-29, 2017), 221, doi.org/10.3217/978-3-85125-530-0- 36]
- <sup>18</sup> Eva Hornecker and Luigina Ciolfi, "Human-computer interactions in museums," *Synthesis Lectures on Human-Centered Informatics*, 12(2), (2019): 29.
- <sup>19</sup> Paul Milgram and Fumio Kishino, "A Taxonomy of Mixed Reality Visual Displays", *IEICE Trans. Information Systems*, vol. E77-D, no. 12, (1994): 1321-1329

<sup>20</sup> Eslam Nofal et al., *Phygital heritage*, 225

<sup>21</sup> Daniele Duranti, Davide Spallazzo and Raffaella Trocchianesi, "Tangible Interaction in Museums and Temporary Exhibitions: Embedding and Embodying the Intangible Values of Cultural Heritage," *Proceedings of the 6th International Forum of Design as a Process*, Valencia: Editorial Universitat Politècnica València, (2019): 160.

<sup>22</sup> Daniele Duranti, Davide Spallazzo and Raffaella Trocchianesi, 161.

<sup>23</sup> Bollati, *Digital culture and society*, 89.

## BIBLIOGRAPHY

- Balzola, Alessandro and Rosa, Paolo. *L' arte fuori di sé. Un manifesto per l'età post-tecnologica*. Feltrinelli, 2011.
- Bollati, Ilaria. *Digital culture and society. Filters and recommended doses*. Corraini, 2019.
- Bollini, Letizia and Borsotti, Marco, "Strategies of Commutation in Exhibition Design." *The International Journal of Architectural, Spatial and Environmental Design*, no. 10 (2019): 13-21.
- Borsotti, Marco. *Tutto si può narrare. Riflessioni critiche sul progetto di allestimento*. Mimesis Edizioni, 2017.
- Carella, Gianluca, Arquilla, Vincenzo, Zurlo, Francesco and Tamburello, Maria Cristina, "Phygital experiences design." *Diid disegno industriale industrial design*, no. 67 (2019): 129-135
- Del Puglia, Serena. *Exhibition Design Stories. Metodi e pratiche di fruizione della cultura*. LetteraVentidue Edizioni, 2022.
- Duranti, Daniele, Davide Spallazzo Davide and Trocchianesi, Raffaella. "Tangible Interaction in Museums and Temporary Exhibitions: Embedding and Embodying the Intangible Values of Cultural Heritage." *Proceedings of the 6th International Forum of Design as a Process*. Valencia: Editorial Universitat Politècnica València, (2019).
- Grechi, Giulia. *Deconolizzare il museo. Mostrazioni, pratiche, sguardi incarnati*. Mimesis Edizioni, 2021.
- Hornecker, Eva and Ciolfi, Luigina. "Human-computer interactions in museums." *Synthesis Lectures on Human-Centered Informatics*, 12(2), (2019).
- ICOM Extraordinary General Assembly. Available at: <https://icom.museum/MuseumDefinition.pdf> Accessed on: September 5, 2022
- Lupo, Eleonora. "Design e Cultural Driven Innovation." *i+Disegno*, n.14 (2019): 120-132.
- Mandarano, Nicole. *Musei e media digitali*. Carocci editore, Roma, 2021.
- Mascheroni, Silvia. Per un museo partecipativo e polifonico. (presented during Musei e decolonialità. Pratiche per un dialogo critico e polifonico sul passato e futuro, December 15, 2022)
- Merlau Ponty, Maurice. *Phenomenology of Perception*. trans. Colin Smith, Routledge, 2002.
- Milgram, Paul and Kishino, Fumio. "A Taxonomy of Mixed Reality Visual Displays." *IEICE Trans. Information Systems*, vol. E77-D, no. 12, (1994) ,1321-1329.
- Nofal Eslam, Reffat, Rabee M. and Vande Moere, Andrew. "Phygital heritage - An approach for heritage communication." *The 3rd Annual International Conference of the Immersive Learning Research Network (ILIRV2017)*, Coimbra, Portugal, (June 26-29, 2017), , doi.org/10.3217/978-3-85125-530-0- 36]
- Pallasmaa, Juhani. *The eyes of the skin. Architecture and the senses*. John Wiley & Sons Ltd, 2012.
- Teo, Vincent. "The Internet of Things: Let's Get Phygital", April 3, 2013, <https://www.clickz.com/the-internet-of-things-lets-get-phygital/39692/>
- Trocchianesi, Raffaella. *Design e narrazioni per il patrimonio culturale*. Maggiori editore, Sant'Arcangelo di Romagna, 2014.
- Trocchianesi, Raffaella. "Nuove prossemiche museali e culturali. Corpi, gesti, relazioni, comportamenti". In *Il design del patrimonio culturale tra storia, memoria e conoscenza. L'Immateriale, il Virtuale, l'Interattivo come materia di progetto nel tempo della crisi*, ed. Fulvio Irace. Milano: Electa, 2013.
- Waern, Annika and Ander Sunders Løvlie, Ander Sunders. *Hybrid Museum Experiences. Theory and Design*, Amsterdam University Press, 2022. <https://library.oapen.org/viewer/53260/9789048552849.pdf>

## IMAGES ON 1975

Authors:

**ADRIA GUARDIOLA-RIUS**

Affiliation:

POMPEU FABRA UNIVERSITY, SPAIN

---

### INTRODUCTION

This text follows the video essay *Images on 1975*,<sup>1</sup> which I created as part of the *Make Film History* program in collaboration with Kingston University School of Art and the BBC's centennial. In the shortfilm, I used a portion of the BBC's available film archive as a starting point to create a film that openly dialogued with the archive's presences and absences.

### 1975

In 1975, Margaret Thatcher is elected to lead the British Conservative Party. The first LAN (Local Area Network) is invented the same year, and several computers are connected for the first time within the same virtual space. The Vietnam War is officially over, Queen Elizabeth knights Charles Chaplin Knight of the Order of the British Empire, and another Queen publishes the masterful *Bohemian Rhapsody* in which they ask, like Calderón de la Barca: Is this the real life? Is this just fantasy?

This strange fantasy takes shape with the arrival of Sony's Betamax video recording format, also in 1975. Meanwhile, JVC introduced the VHS technical standard (Video Home System). The number of experiences that could be remembered increased exponentially as a result of mass consumption technology, despite the fact that the film industry at the time was very hesitant to use this type of domestic format, which was of low quality and dubious verisimilitude.<sup>2</sup> While Japan was mass-producing millions of these devices with techno-emotive potential, Angolans and Mozambicans were gaining independence from Portugal. In the same year, the English National Front protests against the UK's European integration, and the Israeli secret service attacks Lebanon with car bombs in the Lebanon War, while India declares a state of emergency. Pasolini, a few months before his assassination on the beach at Ostia, believes that "something" is disappearing in these turbulent times. And, in the February 1975 issue of *Corriere de la Sera*, he attempted to define this disappearing thing with an evocative, poetic image. Pasolini will refer to this vanishing "something" as the disappearance of the fireflies.<sup>3</sup>

In addition, billions of individuals across a changing world go about living their daily lives behind the great historical facts. And despite the fact that VHS assumes a Home in every device it sells, millions of people struggle to move across a world that some argued is best fenced off, not least as a result of the 1973-74 oil crisis, but "policies aiming to control and reduce migration, however, transformed rather than stopped migration".<sup>4</sup> An anonymous global mass labors to fuel a hungry machine of unlimited development as the capitalist utopia play with ambitions of infinite growth amid a persistent monotony. Capitalism requires a mass of anonymous individuals who must satisfy themselves and have no connection to any particular sense of community: "...who is society? There is no such thing!"<sup>5</sup> Thatcher would acclaim some years later.

### WHAT IF...

The nameless person—the "man of the crowd"—whom Poe first noticed a century ago while seeing "passengers in masses, and thinking of them in their aggregate relations"<sup>6</sup>—moves between this dialectical tension of individual-mass, foreigner-national, opportunity-threat, work-leisure. In 1975,

the anonymous condition already constitutes a significant aspect of contemporary sociability and if we approach the film archive, we shall see various ways of giving form to this anonymity through a selection of documentaries.

The documentary *On Camera: A Town of Many Colors*, which details the various populations that have relocated to Bedford, serves as the beginning point within the BBC film archive that is available for this project. From the institutional standpoint of an English television that tries to recognize and categorize, this piece investigates the perception of these new crowds of anonymous people arriving regularly.<sup>7</sup> And following the methodology of parallel editing (summed up in Godard's favourite formula:  $1+1=3$ ), we can make connections with two other European documentaries from the same year. On the one side, there is the recently restored militant 1975 film *Ali au pays des merveilles* by Djouhra Abouda and Alain Bonnamy, which examines the challenging living circumstances of Algerian refugees in France. And a little farther south, in Franco's Galicia, we follow Llorenç Soler and Laura Tubau in the documentary "Gitano sin romancero," which depicts the existence of a gypsy community that has been rehoused in state-subsidized housing after being denied the option of keeping a nomadic lifestyle. Three distinct documentary styles all center on the same event: capturing the 1975 global migrations through the eyes of anonymous people.

The approach was mainly related to what Warburg intended to do in his extensive *Atlas Mnemosyne*.<sup>8</sup> Hundreds of photos from many eras and locations were combined onto enormous panels, where remnants of visual motifs that allowed him to follow the hints of the ambiguous and the signs engraved in a manner that spoke very faintly emerged. On the panels, the black space created by the juxtaposition of images, or the space between images, revealed a polyhedral realm of expression that eluded the unity of the image.



Figure 1. Panel 48 (Fortuna) *Atlas Mnemosyne*

Indeed, in 1975, Godard and Miéville released the movie *Numéro Deux*, in which they previously displayed the multiple screen equipment that was present in the editing room. Two images at once, inscribed in the unity of a single screen. Farocki, in a film like *Serious Games III*, worked in turn tirelessly around this form that he called co-presence: "When you work with two or more image channels, you can work in such a way that one image does not replace the other, nor cancel it out, but enters into a relationship with it".<sup>9</sup> The research methodology was influenced by both his movies and his installations of synchronized and dialectical images.



Figure 2. *Numéro deux*



Figure 3. *Serious Games III*

### CUSTOMS IN COMMON

How do these three movies compare to one another? There are gestures, actions, and images that are repeated. There are numerous common forms even if they all originate from various points. In the case of Christopher Lewis' documentary *A Town Of Many Colours*, the main goal is to catalog the immigrant population of Bedford in order to make it intelligible to an English television audience.<sup>10</sup> The images of the different types of immigration are repeated under the same pattern: the Indians, the Italians, the African-Americans, the Eastern Europeans, are ordered, one after the other, as if they were clear juxtapositions for the average viewer to understand. As a result, there appears to be a strong similarity between all of the sums.

And this is reflected in the way the images are put together and how these communities are staged: all of the chosen characters' workplace scenarios are purposefully interpreted. The sceneries are well-lit, and the employees' actions are sensible, pleasing, and simple to comprehend. Almost all the characters have a marked route, the actions are shown close to the camera. In this way, most of the camera movements are controlled, not chaotic. They persist in a previous staging despite not seeing or smelling. They demonstrate how to place candy in boxes, inspect an assembly line, and stack bricks. Underneath this string of gestures is a good immigrant—one who works. As the voice-over gently leads the viewer from his home, everything is in order.<sup>11</sup>



Figure 4. *A Town of Many Colours*

Despite the fact that some obvious tensions are addressed (migrants do the jobs that English people don't want to do, they have difficulties in learning the language, identity as migrants overrides any other dimension, etc.) a taxonomy of the right immigrant is what *A Town of Many Colours* attempts to demonstrate. At least, institutional power is the viewpoint position. Moreover, it chooses to discuss some conflicts without explicitly displaying them. The words explain the conflicts that need to be resolved, while the images demonstrate how society should be run. This makes practically every image seem idyllic in some manner. They are carefully chosen and restricted. However, there are perceptible gaps. Also, this film's meaning can be increased if it is examined in relation to other current pictures, detached from the documentary's narrative framework.

How, for instance, do Abouda and Bonnamy simultaneously handle Algerian migration in France? Notwithstanding the irony of its title, the aesthetic goal of the documentary *Ali au pays des merveilles* is to draw attention to racial injustice. We move from institution to militancy, and the viewpoint is different. Djouhra Abouda shares an Algerian origin with both the voice-over in the interviews that accompany most of the film and with the majority of the workers who appear in it. However, the majority of the actions are shot from a certain distance. The spontaneity of the observational documentary record reveals the reality of the anonymous French migrants of 1975, even if it is strongly marked by certain avant-garde aesthetics in this case.<sup>12</sup> The images are edited in a rhythm that gives them a sense of urgency, a life of their own that allows them to be accelerated, repeated, assembled through jump cuts, and so on, without pretending to be detached from what is going on.



Figure 5. *Ali aux pays des merveilles*

And, a little further south, in 1975, the dictator Franco died in Spain. One of Europe's longest-living dictators died on his deathbed in the twentieth century. Llorenç Soler, a documentary filmmaker, travels to Galicia in northern Spain to document a community of gypsies who have been re-housed in specially designed social housing. The life of the gypsy communities, nomadic and alien to the logic of wage labour, is redirected towards the consumer channels of a totalising capitalism that, as Pasolini

appreciated, "takes on the values, the souls, the languages, the gestures, the bodies of the people".<sup>13</sup> And *Gitano sin romancero* (with a title inspired by the poet García Lorca's work) appears to enter the realm of this symbolic violence when it captures a group of anonymous lives who have recently undergone a significant change in their way of life.

As a result, *Gitano sin romancero* contains a slightly more observational device than the previous cases.<sup>14</sup> At first glance, the film appears to have an external consistency due to the seemingly neutral pretext of documenting an urban planning project. On the inside, however, it is full of moments that demand our full attention, such as when we see a long sequence of children fighting, or when we see the women who are always in charge of the housework, cleaning, and cooking.



Figure 6. *Gitano sin romancero*

## SIDE BY SIDE

When we compare the two films, we can see that they use a similar methodology, albeit with different goals. In both cases, the cumulative description seeks to validate a particular generalization. Both films attempt to show similar spaces: the inside of the house, the family together, leisure spaces, the difficulty of work, and so on, so that the images appear to repeat themselves. However, whereas the English documentary accumulates a collection of controlled images, the French documentary seeks to immerse itself in a state of chaos. The classic filmic syntax of the Kuleshov effect<sup>15</sup> is used in both cases: we see the slums, then rich people walk over the migrant workers. On the other hand, we see obedient employees at work, followed by a family gathered around an English salon.

The voice-over in *Ali au pays des merveilles*, on the other hand, speaks exclusively of his own experiences (we hear first-person interviews of Algerian migrants), in contrast to the British narrator's voice-over, which more explicitly guides the narration. In the French documentary, it is the other who speaks (although he speaks through the directors' device, not through a device of his own); in *A Town of Many Colours*, it is the English narrator who speaks. In either case, it appears that both are looking for a more or less obvious repetition between what is heard and what is seen. In the case of the United Kingdom, examples of successful British integration in the context of cultural relativism. In the French film, evidences of racist exploitation as a result of a still active French colonial imperialism.

And the approach to the anonymous community in Spain differs from that in the other two films. While the documentary in England attempts to portray a clearly demarcated "other" from a distance, and in France it portrays anonymous workers with whom they share an identity origin, the gesture in Galicia is more of an anthropological proximity, framed within a social urban planning project. The "sociological experiment" of re-housing gypsies in houses specially dedicated to them is an unusual enough case (though it was not completed due to a lack of funds) to merit attention. Even without sharing a clear identity, the Spanish documentary appears to have less urgency than the other two films, as evidenced by the leisurely pace and wide variety of details and moments captured without the rush of the moment. Nonetheless, the same formal devices are used: a narrator's voice-over runs throughout the documentary on space of the home, the family, moments of leisure, women's work, wage labor, and so on.

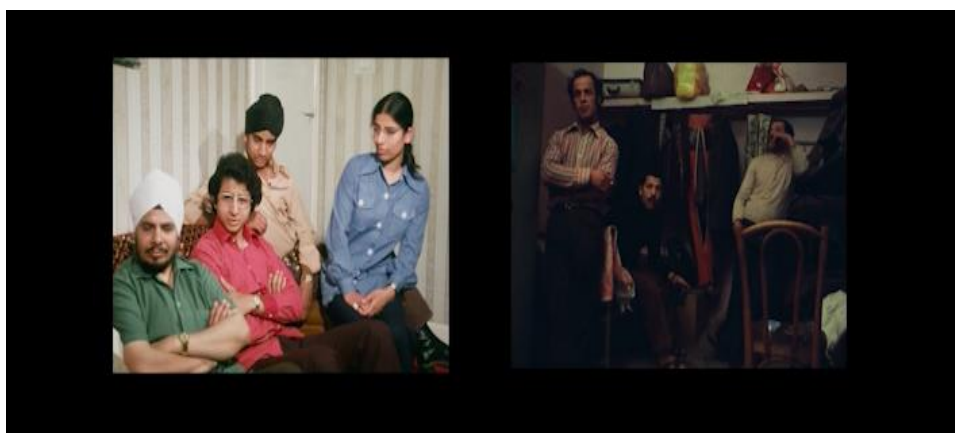


Figure 7. Images on 1975

Following the presentation of the three documentaries, we begin to notice some visual motifs that are recurrently repeated, despite the fact that they document anonymous lives from different countries: individual categorisation is fostered in the male/female/child division; the labor force, almost always repetitive and related to men's physical power; women's roles, anchored primarily at home, in the kitchen, or in brothels; childhood, formalised in an idealisation of the face and play. In the repetitive leisure space, there is a largely male presence, discernible through relaxed and uninhibited bodies. And there is an almost obsessive search for intimate space in the representation of the private space of the home, in a mise-en-scene that obsesses over the form of the family portrait.

However, there is one technical distinction: the Spanish film is shot in black and white. This technical specification does not appear to be more significant until it is viewed in tandem with the other two films. By contrast, the BBC image is clear, stable, and clean. The image begins to fade in *Ali aux Pays des Merveilles*, the movements become more abrupt, and the hand-held camera is frequently used. Although there is a poetic intention in *Gitano sin romancero*, there is also a technical limitation that imprints the image with a tone that contrasts sharply with the two previous cases. The technical differences are aesthetically translated, resulting in formal divergences that appear to distance the three films from the same year.

And by comparing the three documentaries, we can finally see the common thread: the social inequality caused by rapid urbanization in an unjust world. The bricks made by migrants in England are repeated in the paving stones laid by Algerians in Paris, far from public urban planning plans and official political discourse. Gypsy communities in Galicia, like migrant communities in French banlieues, resist institutional isolation and racist violence shapes the daily lives of migrant workers who are destined to literally build the cities of the future. And these are the cities we live in today.

Working creatively with these three documentaries allows us to access a portion of the memory of this anonymous migrant labor force. But on the other hand, their imprint is literally inscribed on the bricks and cobblestones that surround us today. It is a living trace with which we cohabit. Walter Benjamin said that "in the trace, we take possession of the thing" while "in the aura, it takes possession of us".<sup>16</sup> Searching for these traces thus becomes a political gesture that seeks to preserve the history of traces that are still lost.



*Figure 8. Images on 1975*

### WHAT ESCAPES

If anything has changed gradually since 1975, it is the global distribution of wealth. If there is one thing we have maintained, it is that a decreasing number of individuals have increasing power. Most social, economic, and climatic changes since then have reinforced the need for unequal power relations with little room for social justice. And it is in this present in tension that, through a few glimpses, the archive can recount part of this memory, albeit in the faint glow of surviving images that "are but passing glimmers in the midst of darkness".<sup>17</sup> But in a way, it is their very condition of "exception", of intermittent glimmering, that proves that defeat is never absolute: "because they teach us that destruction is never total", Huberman insists, "survivals dispense us, precisely, from believing that a final revelation or a final salvation is necessary for our freedom".<sup>18</sup>

The long history of labor exploitation is, in some ways, the history of the anonymous masses, of those of us who survive in a world where inequality of conditions is becoming increasingly visible. And the use of the film archive participates in this struggle, at least, by offering a possibility of becoming counter-archive,<sup>19</sup> articulating its own discourse against the neoliberal normativity consecrated to the formula of the "happy end". We are still following the logic of work, consume, sleep; work, consume, sleep; work, consume, sleep; work, consume, sleep. And this condition influences image perception insofar as it participates in its production logic: "Cinema is also a factory. A factory where images are manufactured. Just like television".<sup>20</sup> Imagine what it's like to be recorded by a distant camera that looks at you shamelessly but to which you can't respond with your gaze, let alone point a finger. Because it is only through the one who does not refuse to look at the camera that we become aware of our own position as privileged observers.

By delving into the film archive we can immerse ourselves in a creative darkness, similar to that which Pessoa feels when he sees a candle burning in the window of a building: "it is not the common circumstance that both of us [the owner and I] are awake: there is no possible reciprocity in that, for, me being at the window in darkness, he could never see me".<sup>21</sup> Who are we seeing, or, in other words, who is seeing us? Diving into the archive involves exposing oneself to complete darkness in search of fireflies.



Figure 9. Images on 1975

### WHEN THE CANDLE DOES NOT LIGHT

So when we dive into the film archive, we feel like someone who has awoken in the middle of the night and is groping around for something to grab hold of, barely illuminated by a candlestick (or, depending on the era, a smartphone). But isn't it true that things are best seen in the dark? Away from the light, off-center, the obvious fades and the attention is drawn in. The candle suddenly goes out. And it is in that darkness that the archive comes to life. We start searching, tracing, and allowing ourselves to be impressed by what appear to be signs, traces, or marks. "The trace is the appearance of a closeness, however far away that which has left it behind may now be",<sup>22</sup> Benjamin will say again. A closeness impregnated in silver halides in this case. And when these proximities communicate with other proximities, they stop being seen as single images and begin to open up spaces of openness, of present memory. The obvious (ob-, in front of; -via, path) is a concrete moment of initial attention; after that, there is still a path to be travelled. Or dived.

And it is precisely in this mnemosyne<sup>23</sup> inscribed in the footprint that Pessoa finds a point of support when he notices a fragile light in a distant building: "An anonymous candlestick shines deep in the night solitude from behind the window".<sup>24</sup> The candlestick illuminates nothing but the attention of those who see it from the outside, from a distance, in a darkened house, in a city surrounded by darkness (whether physical or temporal). The candle, as a sign of the existence of something non-obvious, never ceases to speak to the remote observer: "an invisible thread links me to the anonymous owner of the candlestick".<sup>25</sup> However, it is a relationship that necessarily involves special consideration. Finally, what do we see when we examine an archive? To begin with, not much. Perhaps we are only seeing a reflection of an existence that, while it remains present and appears to send us threads to connect us, is always veiled. So why not ask the question in reverse? To invert our relationship with the archive in order to destabilize our expectations, which are always linked to the immediate urgency of the present. Perhaps the question is not so much what we see as it is the exact opposite. When we arrive at the film archive, what does it see when it sees us?

Perceiving the darkness we inhabit, the blackness that surrounds us, can facilitate us in comprehending something long forgotten. And trying to understand it requires attention and the possibility of equivocation.<sup>26</sup> In other words, a quiet presence in the midst of darkness. That is the prerequisite for Pasolini's fireflies to re-emerge. In a present saturated with light, perpetually illuminated by the logic of the present, we will never be able to follow the flight of a firefly. If we are unable to inhabit the nocturnal solitude, it will be difficult for us to see an anonymous candlestick behind any window. So how do we approach the archive knowing that it sees us when we see it? Perhaps by realising that "it seems that it is because he is on that the night is so dark. It seems that it is because I am awake, dreaming in the darkness, that he keeps on shining". Let's light up the archive with mindfulness; let's light up the present with a little darkness.



*Figure 10. Images on 1975*

## NOTES

<sup>1</sup> Link to the shortfilm: [https://drive.google.com/drive/folders/1T\\_uai2rLTdaWgnO7E8q-UB4qQLtvvnnp](https://drive.google.com/drive/folders/1T_uai2rLTdaWgnO7E8q-UB4qQLtvvnnp)

<sup>2</sup> As a novelty, in 1975 Jaws was massively advertised on television.

<sup>3</sup> Pier Paolo Pasolini, "Il vuoto del potere," *Corriere della Sera*, October 12, 2022, <https://www.corriere.it/speciali/pasolini/potere.html>

<sup>4</sup> Christof Van Mol, Helga de Valk, "Migration and Immigrants in Europe: A Historical and Demographic Perspective," in *Integration Processes and Policies in Europe: Contexts, Levels and Actors*, ed. Blanca Garcés-Mascareñas et al. (New York: Springer Cham, 2016), 31-55.

<sup>5</sup> "Interview for "Woman's Own" ("No Such Thing as Society"), Margaret Thatcher Foundation, accessed October 15, 2022, <https://www.margarethatcher.org/document/106689>

<sup>6</sup> Edgar Allan Poe, "The Man of the Crowd. Burton's Gentleman's Magazine, vol. VII, no. 6, December 1840, pp.267-270", Edgar Allan Poe Society of Baltimore, October 12, 2022. <https://www.eapoe.org/works/tales/crowda1.htm>

<sup>7</sup> See Elias Canetti, *Crowds and power* (New York: Viking Press, 1962). Canetti succinctly sums up the instinctive behaviour of the BBC when, at the beginning of his indispensable research he notes: "There is nothing that man fears more than the touch of the unknown. He wants to see what is reaching towards him, and to be able to recognize or at least classify it." (15)

<sup>8</sup> Aby Warburg's project is explained in detail at <https://warburg.library.cornell.edu/about>

<sup>9</sup> Harun Farocki, *Desconfiar de las imágenes* (Buenos Aires: Caja Negra, 2013), 284.

<sup>10</sup> The binary opposition is clear in the original text accompanying the film: "Whether it be a Chapati or a plate of genuine Italian spaghetti, you'll find it in Bedford, where in the shadow of the brickworks, a multiracial society has grown up from nearly 50 countries. Should the population be totally integrated or will they benefit from the richness of diversity?"

<sup>11</sup> The Western colonialist scopic drive sharpens towards the end of the film, when a local journalist states: "I think there's probably nothing more beautiful in Bedford on a summer day than an Indian woman in a sari, or in a Sunday morning west Indian families with their children in a colorful clothes."

<sup>12</sup> On the controversy that the film created by combining the two types of register (militant and artistic) in the same work, see Federico Rossin, "CINÉ-CRI", *Another Screen*, October 12, 2022 <https://www.another-screen.com/ali-in-wonderland>

<sup>13</sup> Georges Didi-Huberman, *Supervivencia de las luciérnagas* (Madrid: Abada Editores, 2012), 21.

<sup>14</sup> See Bill Nichols, *Representing Reality: Issues and Concepts in Documentary* (Indianapolis: Indiana University Press, 1991). As he suggests: "The observational mode stresses the nonintervention of the filmmaker. Such films cede "control" over the events that occur in front of the camera more than any other mode." (38)

<sup>15</sup> The Kuleshov effect is an experiment conducted by the filmmaker Lev Kuleshov together with Pudovkin in 1922. By mounting a neutral image of a face, followed by some significant image such as a girl in a coffin or a piece of cake, viewers created a narrative that was not inscribed in the image. In other words, by mounting one image before another, the viewer constructs semantic connections.

<sup>16</sup> Walter Benjamin, *The Arcades Project* (Cambridge: The Belknap Press of Harvard University Press, 2002), 447.

<sup>17</sup> Didi-Huberman, *Supervivencia de las luciérnagas*, 65.

<sup>18</sup> Didi-Huberman, *Supervivencia de las luciérnagas*, 65.

<sup>19</sup> For the relation between archive, film and memory see *Counter-Archive. Film, the Everyday, and Albert Kahn's Archives de la Planète* (New York: Columbia University Press, 2010).

<sup>20</sup> *Numéro deux*, directed by Jean-Luc Godard and Anne-Marie Miéville (Anne-age-Bela, Bela Productions, Société Nouvelle de Cinématographie (SNC), Sonimage, 1975)

<sup>21</sup> Fernando Pessoa, *Libro del desasosiego* (Barcelona: Seix Barral, 1984), 116.

<sup>22</sup> Benjamin, *The Arcades Project*, 450.

<sup>23</sup> Mnemosyne is the Greek goddess of memory to whom Warburg commended himself in his work.

<sup>24</sup> Pessoa, *Libro del desasosiego*, 117.

<sup>25</sup> Pessoa, *Libro del desasosiego*. 117.

<sup>26</sup> See Eduardo Viveiros de Castro, *Cannibal Metaphysics: for a Post-structural Anthropology* (Minneapolis: Univocal Publishing, 2014). I argue equivocation in the sense of possibility given by Viveiros De Castro: "Equivocation is not what prevents the relationship, but what founds and impels it." (89)

## BIBLIOGRAPHY

- Abouda, Djouhra; Bonnamy, Alain. Directors. *Ali au pays des merveilles*. Production Abouda and Bonnamy: France, 1975.
- Amad, Paula. *Counter-Archive. Film, the Everyday, and Albert Kahn's Archives De La Planète*. New York, NY: Columbia University Press, 2010.
- Benjamin, Walter. *The Arcades Project*. Cambridge, MA: Belknap Press, 1999.
- Benedict, Anderson. *Imagined communities: Reflections on the Origin and Spread of Nationalism*, London: Verso, 1991.
- Canetti, Elias. *Crowds and power*. New York: Viking Press, 1962.
- Didi-Huberman, Georges. *Supervivencia de las luciérnagas*. Madrid: Abada, 2012.
- Farocki, Harun. *Desconfiar de las imágenes*. Buenos Aires: Caja Negra, 2015.
- Farocki, Harun. Director. *Serious games III*. Harun Farocki GbR: Germany, 2009.
- Godard, Jean-Luc; Miéville, Anne-Marie. Directors. *Numéro deux*. Anne-age-Bela, Bela Productions, Société Nouvelle de Cinématographie (SNC), Sonimage: France, 1975.
- Lewis, Christopher. Director. *A town of many colours*, BBC: UK, 1975.
- Margaret Thatcher Foundation. "Interview for "Woman's Own" ('No Such Thing as Society')." Accessed October 15, 2022, <https://www.margaretthatcher.org/document/106689>
- Nichols, Bill. *Representing Reality: Issues and Concepts in Documentary*. Indianapolis: Indiana University Press, 1991.
- Pessoa, Fernando. *Libro del desasosiego de Bernardo Soares*. Barcelona: Seix Barral, 1984.
- Pasolini, Pier Paolo. "Il vuoto del potere." *Corriere della Sera*. October 12, 2022. <https://www.corriere.it/speciali/pasolini/potere.html>.
- Poe, Edgar Allan. "The Man of the Crowd. Burton's Gentleman's Magazine, vol. VII, no. 6, December 1840, pp.267-270". Edgar Allan Poe Society of Baltimore. Accessed October 12, 2022. <https://www.eapoe.org/works/tales/crowda1.htm>
- Rossin, Federico. "CINÉ-CRI" Another Screen, October 12, 2022. <https://www.another-screen.com/ali-in-wonderland>
- Soler, Llorenç. Director. *Gitano sin romancero*. Llorenç Soler and Taller d'arquitectura: Spain, 1975.
- Spielberg, Steven. Director. *Jaws*. Zanuck/Brown Company, Universal Pictures: USA, 1975.
- Van Mol, Cristof, and de Valk, Helga "Migration and Immigrants in Europe: A Historical and Demographic Perspective." In *Integration Processes and Policies in Europe. Contexts, Levels and Actors*, edited by Blanca Garcés-Masareñas and Rinus Penninx, 31-55. New York: Springer Cham, 2016.
- Vivieros de Castro, Eduardo. *Cannibal Metaphysics: for a Post-structural Anthropology*. Minneapolis: Univocal Publishing, 2014.

# **SOCIO-TEMPORAL PARADOXES BETWEEN SCREENS AND SPANS: AVERAGE DURATION OF MOVING VISUAL WORKS, TECHNICAL LIMITATIONS, AND SOCIAL DEMANDS FROM THEATRE TO TIKTOK.**

Author:

**VASSILIS GALANOS**

Affiliation:

SCIENCE, TECHNOLOGY AND INNOVATION STUDIES, SCHOOL OF SOCIAL AND  
POLITICAL SCIENCES, UNIVERSITY OF EDINBURGH

---

## **INTRODUCTION AND RELEVANT LITERATURE**

This paper aims at a sociotechnical exploration of a temporal paradox associated with the reverse amount of decreasing average duration of moving visual cultural items (from TV series to TikTok videos) and the increasing duration of consuming such items (informally referred to as binging<sup>1</sup>). I find current attempts at explaining this observation limited on the basis of their disciplinary origins, and therefore will aim at critically synthesise approaches and make a case about an evolutionary taxonomy of such media with decreased average duration as a key feature paired to social demands and technical limitations foregrounding the duration. I specifically wish to emphasise the deep sociotechnicality of this observation in an attempt disengage with mainstream techno-deterministic explanations reducing shortened attentions spans to information influx.

In their 2019 article on *Nature Communications*, Lorenz-Spreen and colleagues report on their longitudinal datasets comparison of multiple domains and decades, finding “increasing gradients and shortened periods in the trajectories of how cultural items receive collective attention” suggesting that “the ever-present competition for recency and the abundance of information leads to the squeezing of more topics in the same time intervals as the result of limitations of the available collective attention.”<sup>2</sup> In their view, “shorter attention cycles are mainly driven by increasing information flows, represented as content production and consumption rates.” While the authors’ findings are useful, their explanation falls short in describing the user experience of attention on the basis of increasingly shorter duration. These findings only confirm the importance of the question, but do not offer sufficient explanation of the following experiential paradox: while indeed, it is more likely<sup>3</sup> that users will invest more attention time on a TikTok experience than in TV series or home cinema experience while, attention spans seem to decrease – one is more focused on being less focused. Here lies a deeper paradox.

Multiple socioeconomic and political theories can be found relevant to enrich this observation. Political-philosophical thinker Paul Virilio speaks of a political space within (chiefly digital) cultural consumption, consisting of “nanochronologies” of “the infinitely short-term cybernetic instantaneity,” or a “hypervelocity” employed by a “turbocapitalism of an overwhelmingly critical instant” that

justifies and normalises its strategy on the basis of assumed objectivity in physics, extending to marketing, trading, and banking speed, employment temporalities, and Formula-1 entertainment.<sup>4</sup> Within this turbocapitalistic context, one may situate Tim Wu's extensive theorisation on attention as a resource, relating to an entire "attention industry" or "attention economy," with its "attention brokers" or "attention merchants" employing behaviouristic marketing and design strategies to attract (chiefly) online users' attention in exchange for monetary rewards by private or governmental companies who aim at targeting audiences.<sup>5</sup> All authors may agree that lower attention spans in front of attention-attracting screens designed to keep viewers engaged for brief amounts of time might lead them to expect such velocities in other areas of their lives and at the same time that the fast-paced lifestyle, involving rapid career shifts and temporary roles at work can also be correlated to the type of cultural consumption. This paper seeks to paint a more complex image taking all these approaches into account, but also putting more emphasis on their interaction as well as the inner experience of duration.

In the following sections, I will offer a media-theoretical and sociotechnical analysis of moving visual works' duration building on an observation by media theorist Friedrich Kittler, applying his approach to contemporary moving visual media consumption. A diagram will assist in depicting this trend, paired to sociotechnical and media-theoretical analytical arguments. Finally, I will attempt an explanation on the basis of the experiential perception of duration with reference to Henri Bergson's theory of duration and suggest the term "continuous content multiplicity" as an explanatory principle to understand the merge between qualitative and quantitative, technical and social elements in the production of attention-oriented moving visual media. This paper contributes to current attempts at bridging media studies with science and technology studies (STS)<sup>6</sup>, highlighting the value of such research for disciplines such as cognitive science, the philosophy of mind and consciousness, and online/attention economics. The great division between media theory and STS can be traced in the nuances between technological determinism, in that media theorists are likely to place more emphasis on adopted techniques' agency in their shaping of society, while STS scholarship would place more emphasis on the social shaping of technology. My engagement with Kittler's work below and the evolution of moving visual works as a case study, aims to bridge STS and media theory on the basis of what Sally Wyatt's employment of technological determinism "as a heuristic for organizing accounts of technological change," and part of a "technical shaping of society" as much as a "social shaping of technology" dialectic.<sup>7</sup> In other words, the admittance that although indeed social demands and desires guide technical designs, the produced technical outcome will enact social roles through its affordances and/or limitations.

## FROM KITTLER'S CANDLES TO TIKTOK HANDLES

For my analysis, I use the following passage by media theorist Friedrich Kittler (ironically, frequently labelled as technological determinist), as it captures the interwoven social and technical factors leading to one of the first decreases in the duration of visual entertainment items. This overlooked passage from his lecture series on a theoretical history of *Optical Media*, will be repurposed as a method to analyse social and technical reasons leading to duration decrease. Emphasised parts are added:

"[T]he technology of illusions *must be limited* in a crucial way that will be important *for the history of film*. [...] For the first time in history [...] a closed theater whose narratives mainly took place in interior spaces and whose performances preferably took place in the evening needed artificial light. [...] Unlike the backdrops, actors, and costumes, however, the hundreds of candles that were used on the stage as well as in the auditorium could not be changed during a performance. The dramatic but *completely forgotten result of this limitation* was the fact that none of the famous dramas by Corneille

or Racine number more than 3,000 alexandrines. Hermeneutic literary studies has actually found the most beautiful and completely textually immanent explanations for this, but they are all worth little, because *this aesthetic restriction follows immediately from a technical restriction*: namely, the burning time of wax candles. In other words, Racine's Phaedra [...] must die not because the flame of her incestuous love for her stepson burns so black, as she complains, but rather because after two hours the smoky candles in the Paris theaters had burned out.”<sup>8</sup>

Kittler's writing style is often criticised for its complexity and condensed, even cryptic, content. In my attempt to extract generalisable principles from this passage that can be applicable to the analysis, I highlight the following five criteria for the shortening of moving visual media duration:

- Social demands lead to novel spatial forms of entertainment (evening entertainment)
- Spatial entertainment innovation is associated to novel technical restrictions (candle expiration time in indoor theatres)
- Such sociotechnical mixes of demand and restriction result in shorter duration of visual entertainment setting up standards for future visual works (shorter theatrical plays)

Kittler does not present this as a model or rule – it is my extrapolation from his observation that suggests a systematisation of its comprising parts, and thus, its complementation by exceptions. For if one is to make a method out of this observation, one should also consider the method's limitations. I suggest that these four elements – social demands and context, technical limitations, sociotechnical outcomes, and exceptions – can be perceived as the guiding principles for a large temporal infrastructural analysis of moving visual works.

The two-hour standard for a recorded film in the history of both cinema and home cinema played a pivotal role in the competition about creating the ideal (most commercially successful) video playing cartridge (the Sony Betamax, VHS, and JVC debate), further involving questions concerning technical limitations restricting the quality of the cartridge in favour of longer duration.<sup>9</sup> Following Kittler, can one assume that the parallel development of videotape competition with proliferation of TV series, increased the marketability of recorded TV series on the basis of their better quality due to every episode's shorter duration? Can that thought be applied to further technical limitations in terms of internet connectivity, information bandwidth, and data storage?

Taking into account a number of scholarly works<sup>10</sup> on the role of increasingly shorter duration of visual media, I trace average durations of popular screen-based platform products: Past the standardisation of the two-hour average from indoor theatre to feature film, the average duration of emerging visual works has reportedly decreased: TV series last between 30 to 60 minutes, YouTube videos between 5 to 10 minutes, Instagram videos and stories last approximately 1 minute, and TikTok video between 15 and 35 seconds. Present space does not allow for an exhaustive mapping of sociotechnical configurations of social demands/contexts, technical limitations, and exceptions or parallel developments, for each and every one of these media. Nevertheless, summarising the social context described in key recent writings<sup>11</sup> about the world of visual consumption and marketing and technical affordances (as a dialectic between restriction and availability), the following can be taken into account. In terms of social demands that allowed the emergence of short video media such as Instagram and TikTok, one may think of a growing demand for entertainment and social interaction/networking in their daily lives with connectivity as a social expectation paired to a desire for platforms that allow users to express themselves following the narrative of bottom-up prosumerist identity of Web 2.0 digital media. To put it otherwise, following another user's TikTok handle can be more addictive than keeping track of a famous actor in pre-social media times, since one's own handle can be followed as well. This, nevertheless, led to the increasing popularity – and power/political dynamics – of influencers who are creating content on YouTube, Instagram, and TikTok, initially as “honest reviewers” but later employed within the platform/attention economic model. In terms of

technical conditions, the availability of reliable mobile networks in several parts of the world that allow access to wireless streaming content at any time enabled and inspired high-end, user-friendly mobile devices that support video streaming and other interactive features, as well as cloud computing infrastructures that allow storage and distribution of video data, and algorithm-driven personalised recommendations, again associated with behaviourist principles and strategies employed in attention-, reward-, and engagement-oriented design encouraging faster consumption rates in greater quantities. This is not to say that exceptions do not exist, or that theatre-goers (and theatre festivals), cinema-goers (and multiplex cinemas), and TV series binge-watchers (and Netflix/Hulu/Amazon Prime Video/Disney+ entire season releases) are extinct. But from a transmedial perspective, one can also argue that commercially successful visual works that employed short duration attention-oriented techniques (such as special effects or controversial/shock value themes) assisted the development of newer media, while in turn, newer media have influenced the development of new feature film and theatrical play designs; indeed, many modern blockbusters rely on visual effects and extended, or interwoven storylines which keep viewers engaged throughout the entire film, as much as user demand expressed through peer-to-peer (illegal) downloading/watching of entire seasons inspired current streaming models. Loosely inspired by Johnson et al's prosumer infrastructure management STS analysis,<sup>12</sup> the table presented at the end of the paper, aims at summarising these observations and analytical recommendations. Moving beyond the diagrammatic (and indeed quantified) presentation of this evolution, I want to devote the last part of this analysis to a qualitative explanation of a movement towards increasingly shorter durations of visual moving works.

## **DISCUSSION: A BERGSONIAN ANALYSIS OF SCREEN/SPAN DURATION**

*"Because they are constantly fluid, emotions cannot be stopped; nor can they be looked at 'under the microscope.' This means that the more closely we observe them, the less we know what it is we feel. Attention is already a change in the emotion."* Ulrich, in Robert Musil's *The Man Without Qualities*.<sup>13</sup>

I very much agree with the following sentence by Krstić: "Duration is important, but not crucial, when it comes to viewership. No one will stay to watch an entire episode if it is not interesting. Any episode that viewer chooses to watch needs to be dynamic and charged with emotions."<sup>14</sup> However, occasioned by this suggested distinction between duration and emotion, I want to use the present paper's observations about duration to explain the paradox about higher consumption rates of items shorter in time using an alternative definition of duration. This derives from philosopher Henri Bergson and his understanding of duration as emotion. This will be done by referring to Bergson's concepts of homogeneous spaces as expressions of qualitative heterogeneity and his distinction between quantitative and qualitative multiplicity as a more experiential approach differing to the reductionist technological determinism of short video platforms and the sociopolitical determinism of attention economy and turbocapitalism impacting attention spans.

First, I suggest we can treat visual moving media as homogeneous spaces – indeed, a cinema, movie, or smartphone screen, as long as attention is being concentrated on it, consists experientially of a singular, homogeneous space, in which heterogeneous quantities of referenced contexts feature on it. Bergson, with brackets including my associating with short duration video consumption: "The more you insist on the difference between the impressions made on our retina by two points of a homogeneous surface [for example, two or more cultural references, captions, colours, faces within a few seconds], the more do you thereby make room for the activity of the mind [attention quickly concentrated expects equally fast processing of complex information], which perceives under the form of extensive homogeneity what is given it as qualitative heterogeneity [too many heterogeneous items to process feature as parts of a single whole]."<sup>15</sup> This passage is extending Bergson's distinction

between quantitative and qualitative multiplicity. For Bergson, quantitative multiplicity consists the mainstream view of multiplicity he aimed at criticising; it has to do with breaking time (and space, and experience) into numerical and countable chunks (numbers, hours, minutes, seconds, or, in recent jargon, likes, follows, views) that are in succession or in a certain way measurable and statistical. His qualitative multiplicity, however, involves “succession without distinction, [...] a mutual penetration, an interconnexion and organization of elements, each one of which represents the whole, and cannot be distinguished or isolated from it except by abstract thought.”<sup>16</sup> For Bergson, then, measurable, quantifiable, time duration does not matter as much as the experience of duration on the basis of intensity of cultural/experiential elements. Something is more durable if it is more intense, even if it does not last for long in time.

Short video platforms, then, are distinctive in offering what I would call continuous content multiplicity, a mixture of attention-oriented design principles encouraging the quantitative consumption of yet another video, while videos themselves are qualitatively more intense. A Bergsonian market strategist asks: how much heterogeneity can you squeeze inside a homogeneous space in order to entertain users? The same strategist responds: intensity of qualitative multiplicity of shorter quantitative pieces of quantified time increases the extensity of quantitative multiplicity of prolonged duration – the more intense the content we consume is, the more users will want to prolong their screen time.

## CONCLUSION AND FUTURE WORK

To sum up, Henri Bergson's theory of qualitative multiplicity suggests that when something transitions from one state to another, the transition is not simply a matter of quantity but involves multiple elements. In this case, the transition from average film duration to TikTok short videos would involve several changes in terms of content, production techniques and audience engagement which involves active (prosumerist) commentary, reactions, and reposts. For example, while traditional films may have focused on complex stories with strong character arcs and narrative structure, TikTok videos often rely more heavily on summarising/aphoristic structures and fast-paced editing or special effects (as much as blockbuster films relied on fast-paced scenario twists and special effects, in contrast to theatrical plays).

This article, by reviewing them in light of STS and media theoretical approaches, suggested that problems associated with different disciplines are part of a complex large infrastructure, and recommend they should be studied as co-evolving, in parallel and longitudinally. Such areas and issues include: behaviourist-infused design (attention economy, interface design), shorter attention span (psychology, cognitive science), the screen addiction and screen fatigue paradox (psychology and ophthalmology), prosumerist narratives and imaginaries (marketing). Duration is an experience associated with all of these domains. It can be historically explained as the combination of a paradoxical human will to escape reality by creating representational alternate versions of it, multiply contents and moderately participate in this creation; a process highly dependent on a dialectic entanglement between technical limitations/innovations and social demands. Thus, this paper suggests a strongly inter/multidisciplinary agenda for better understandings of the psychology and politics of attention and digital platforms.

A technical question is also lurking: what is next? Humans are aware that shorter quantities of time than TikTok's short videos can be reached; in Virilio's suggestion: “the instantaneism of light's limit speed”<sup>17</sup>. But will human brains be able to produce and process information contained in chunks ever shorter than the present ones for entertainment purposes? Or would this high velocity, enable the potential for human attention to escaping screens, and seek in qualitative and transmedial continuity more durable (and sustainable) forms of entertainment? This technical question can also be seen as

social given that fast-paced entertainment (a social activity) is coupled with an increased normalisation of temporary cultures such as employment contracts, gig economies, or university cultures (degrees, publications). To put it otherwise, what this paper suggests, is that perception of precariousness assists in understanding the precariousness of perception.

	Average Duration at Time of Popularisation	Media- technical Limitation	Social Demand/ Expectation/ Context	Sociotechnical Outcome	Exceptions/ Parallel Developments
<b>Indoor Theatre</b>	2-3 hours	Candle burning time	Weather and evening entertainment trend	Alteration of original scripts to fit the time, establishment of duration expectation	Development of short plays, monologues, avant-garde theatre
<b>Feature Film</b>	1.5-2 hours	Scheduling daily replays or multiple screenings	More available techniques enable depiction of scenes not available in theatre; multiplex cinemas availability	Customisation of screening times to fit busy lifestyle, private cinema, videotape market	Short films, documentaries, TV series
<b>TV Series Episode</b>	25-45 minutes	Production limitations hinder participation	Continuous TV entertainment	Seriality of visual material – quantitative content multiplicity	Music video streaming, video- games (early participatory media)
<b>YouTube Video</b>	3-10 minutes	Requirement to offer personal data to upload material (email) and telephone number to upload video longer than 10 minutes	Personalised Web 2.0 participatory prosumer approach, greater control over chosen material watched, demand for videoclip- long videos	Perception of uploaded material as participatory, generating trend of influencer economy, amateur content meshed with advertising content, competing viewing habits	Longer videos or full movies, archival content, occasional copyright issues
<b>Instagram Video</b>	30 seconds to 1 minute	Data storage limitation	Mobile culture demand for more instantaneous communication/reliable mobile networks	Prevalence of video-based communication, stories	Instagram Reels
<b>TikTok Video</b>	17-35 seconds	Screen fatigue	Increasing content flow	"TikTokisation" of YouTube, Facebook, Instagram	Netflix and YouTube autoplay

*Table 1 Evolution of moving visual works, average duration, technical limitations, social demands, sociotechnical outcomes, and exceptions/parallel developments.*

## ACKNOWLEDGEMENTS

This paper has been commissioned for the Discordian-Situationist Foundation.

## NOTES

- <sup>1</sup> Srđan Krstić. "'Binge-Watching': The New Way of Watching TV Series." *AM Časopis za studije umetnosti i medija* 17 (2018): 15-23.
- <sup>2</sup> Philipp Lorenz-Spreen, Bjarke Mørch Mønsted, Philipp Hövel, and Sune Lehmann. "Accelerating dynamics of collective attention." *Nature communications* 10, no. 1 (2019).
- <sup>3</sup> Melany Amarikwa. "Social Media Platforms' Reckoning: The Harmful Impact of TikTok's Algorithm on People of Color." Available at SSRN 4349202 (2023), 9.
- <sup>4</sup> See Paul Virilio. *The Great Accelerator*. Translated by Julie Rose. (Cambridge and Malden: Polity, 2012), 4-5, 14, 72.
- <sup>5</sup> Tim Wu. *Attention Brokers*. Presented at the Innovation Policy Colloquium, NYU. 2016.
- <sup>6</sup> David Moats. 'From media technologies to mediated events: a different settlement between media studies and science and technology studies' *Information, Communication & Society* 22 no 8, 1165-1180. (2017).
- <sup>7</sup> Sally Wyatt. "Technological Determinism Is Dead: Long Live Technological Determinism." In *The Handbook of Science and Technology Studies*, edited by Edward J. Hackett, Olga Amsterdamska, Michael E. Lynch, and Judy Wajcman, 3rd ed., 165–80. (Cambridge, MA: MIT Press. 2008), 176.
- <sup>8</sup> Friedrich Kittler, *Optical Media: Berlin Lectures 1999*. Translated by Anthony Enns. (Cambridge UK: Polity, 2009), 88-89.
- <sup>9</sup> Michael A. Cusumano, Yiorgos Mylonadis, and Richard S. Rosenbloom. "Strategic maneuvering and mass-market dynamics: The triumph of VHS over Beta." *Business history review* 66, no. 1 (1992): 51-94.
- <sup>10</sup> See Cusumano et al, Amarikwa, Lorenz-Spreen et al, and Krstić.
- <sup>11</sup> See Krstić, as well as Mark Paterson. *Consumption and everyday life*. (Routledge, 2017) and David Ardit. *Streaming Culture: Subscription platforms and the unending consumption of culture*. (Emerald Group Publishing, 2021).
- <sup>12</sup> Mikael Johnson, Hajar Mozaffar, Gian Marco Campagnolo, Sampsa Hyysalo, Neil Pollock and Robin Williams (2014) *The managed prosumer: evolving knowledge strategies in the design of information infrastructures*, *Information, Communication & Society* 17, no. 7, (2014), 807.
- <sup>13</sup> Robert Musil. *The Man Without Qualities*. Volume II. Translated by Sophie Wilkins and Burton Pike. (New York: Vintage International. 1995), 1277.
- <sup>14</sup> Krstić, *Binge-Watching*, 18.
- <sup>15</sup> Henri Bergson, *Time and Free Will*, 1888, in Henri Bergson. *Key Writings*. Edited by Keith Ansell-Pearson and John Ó Maoilearca. (London, Oxford, New York, New Delhi, Sydney: Bloomsbury Academic. 2014), 70-71.
- <sup>16</sup> Bergson, *Key Writings*, 73.
- <sup>17</sup> Virilio, *The Great Accelerator*, 25.

## BIBLIOGRAPHY

- Amarikwa, Melany. "Social Media Platforms' Reckoning: The Harmful Impact of TikTok's Algorithm on People of Color." Available at SSRN 4349202 (2023)
- Arditi, David. *Streaming Culture: Subscription platforms and the unending consumption of culture*. Emerald Group Publishing, 2021.
- Bergson, Henri. *Key Writings*. Edited by Keith Ansell-Pearson and John Ó Maoilearca. London, Oxford, New York, New Delhi, Sydney: Bloomsbury Academic. (2014).
- Cusumano, Michael A., Yiorgos Mylonadis, and Richard S. Rosenbloom. "Strategic maneuvering and mass-market dynamics: The triumph of VHS over Beta." *Business history review* 66, no. 1 (1992): 51-94.
- Johnson, Michael, Hajar Mozaffar, Gian Marco Campagnolo, Sampsa Hyysalo, Neil Pollock & Robin Williams. *The managed prosumer: evolving knowledge strategies in the design of information infrastructures*, *Information, Communication & Society*, 17, no 7, (2014) 795-813.
- Kittler, Friedrich. *Optical Media: Berlin Lectures 1999*. Translated by Anthony Enns. Cambridge UK: Polity, 2009.
- Krstić, Srđan. "'Binge-Watching': The New Way of Watching TV Series." *AM Časopis za studije umetnosti i medija* 17 (2018): 15-23.

- Lorenz-Spreen, Philipp, Bjarke Mørch Mønsted, Philipp Hövel, and Sune Lehmann. "Accelerating dynamics of collective attention." *Nature communications* 10, no. 1 (2019): 1759.
- Moats, David. "From media technologies to mediated events: a different settlement between media studies and science and technology studies." *Information, Communication & Society* 22 no 8 (2017): 1165-1180.
- Musil, Robert. *The Man Without Qualities*. Volume II. Translated by Sophie Wilkins and Burton Pike. New York: Vintage International. 1995.
- Paterson, Mark. *Consumption and everyday life*. Routledge, 2017.
- Virilio, Paul. *The Great Accelerator*. Translated by Julie Rose. Cambridge and Malden: Polity, 2012.
- Wu, Tim. *Attention Brokers*. Presented at the Innovation Policy Colloquium, NYU. 2016.
- Wyatt, Sally. "Technological Determinism Is Dead: Long Live Technological Determinism." In *The Handbook of Science and Technology Studies*, edited by Edward J. Hackett, Olga Amsterdamska, Michael E. Lynch, and Judy Wajcman, 3rd ed., 165–80. Cambridge, MA: MIT Press,. 2008.

# TECHNOLOGIES EVOLVE: VISUALIZING MIXED REALITY OVERTIME IN CINEMA PRODUCTION

Authors:

**SAMAH NASSAR**

Affiliation:

OCTOBER UNIVERSITY FOR MODERN SCIENCES AND ARTS, EGYPT

---

## INTRODUCTION

Mixed reality (MR) is an advancement of virtual and augmented reality in the essence that it brings together the real and virtual world elements. MR has made use of the recent generation imaging and sensing technologies to stage-manage both virtual and physical objects and the environment. To understand mixed reality, you need to first understand virtual and augmented reality. Virtual reality and augmented reality are the technologies that have been applied to replace and add the digital basics to visual discernment.<sup>1</sup> Augmented reality centralizes the real world while still enhancing other digital details, introducing a new level of perception, and using it to supplement reality. In Virtual reality, a head-mounted display makes one experience computer-generated images and sounds that cause you to manipulate objects and move with haptic controllers tethered to the computer. If the word "mixed reality" is defined broadly enough, it might essentially refer to everything we encounter. However, this definition is not very useful. The phrase is best understood in terms of a scale on the "virtuality continuum," which was created in 1994 by Fumio Kishino and Paul Milgram.<sup>2</sup> The primary concept of the VR as well as the desire of escaping the present circumstances through the visual means mainly existed long prior the invention of computers.<sup>3</sup> The scale shown in the image above goes from "the entirely actual environment" to "the completely virtual environment." The purpose of this research is to engage in a thorough discussion of what constitutes "totally real" and "completely virtual" reality. The cinema industry has seen changes ranging from noble changes from creative processes, ideas or script writing, and featuring and characterization.<sup>4</sup> The physical environment in which our bodies are located and where sensory input provides a mental experience of what we perceive as reality are understood in this article as the "real environment." As long as we permit ourselves to not know what a purposeful Mixed Reality experience certainly is, we are free to talk about our attempts to make one without feeling obligated to defend the design approaches we've chosen or to contrast our expeditions with other well-known creations and well-known artists.<sup>5</sup>

This research aims at investigating the past, present, and future of mixed reality, at the same time reflecting on the immersive changes in augmented and virtual reality. The paper also reflects on how this innovative technological advancement is used in graphical processing, computer visions, and using AI and blended with computer-generated content. In addition, the history of cinema digitalization, and how that assists humans to be more creative since they can approach reality from a new perspective. Very important to go through the history of mixed reality starting from virtual reality to augmented reality and reaching mixed reality.

## LITERATURE REVIEW

Several studies have reviewed the past and present of virtual, augmented, and mixed reality identifying the benefits, limitations, design guidelines, and the start of the collaborative mixed reality as well as their application in technical settings. According to Ladwig & Geiger, a combination of Reality, Augmented Reality, Augmented Virtuality, and Virtual Reality is referred to as Mixed Reality.<sup>6</sup> The changeover between these reality phases can be facilitated by this ground-breaking technology. By adding artificial visuals to reality, we can more readily do tasks like collaborating with people who are spread out across different locations.<sup>7</sup> Artificial intelligence is a new technology which is developed with the motive to offer a stimulating environment for expanding human intelligence.<sup>8</sup> Even if the contributors do not meet physically collaborative manufacturing, assembly work, or educational assignments can be carried out remotely. Mixed Reality (MR) has recently received more media attention as a result of the development of accessible monitoring and flaunts technologies, which has also sparked the imaginations of many potential users. We will undoubtedly get closer to the ideal technology that will make it difficult to tell the difference between the virtual world and reality gave the advancement of research and improvement of electronics in recent years. Nijholt studies the initial experience of virtual reality and augmented reality and the transition to the present day.<sup>9</sup> In the prediction of the future reality, he predicts that this technology is in the process of entering into a persuasive era of AR and VR. In the past, successful study on vision and image production has been the driving force behind virtual and augmented reality research. We are now entering a time where research on augmented reality and virtual reality is likely to be incorporated into research on ubiquitous computing, which focuses on sensors, CPUs, and actuators that are embedded and networked in smart environments, objects, and gadgets.<sup>10</sup> We must focus more on issues like artificial Intelligence systems for the world and the development of algorithms, (user-centered) design, motion graphics, customer experience, multisensory and cross-modal features of experience and interaction, wearable technologies, presence, and ethical and societal questions. This is especially true as AR and VR technologies grow ingrained in our culture and begin to rule our daily lives.<sup>11</sup> According to Schulz et al., the cinematic industry has experienced constant technological advancement since its inception about 125 years ago.<sup>12</sup> The researchers have resolved that as the cinema adopt VR filmmaking, it would borrow the concepts as well as the implementation methodologies from various other industries.<sup>13</sup> What additional digitization breakthroughs can be anticipated over the ensuing ten years, and what effects will they have on the value chain of the sector? We carried out a global two-stage Delphi research to address this query. The findings pointed to an increase in the adoption of smartphones as cameras, the development of fully digital film sets and star avatars, and improvements in VR-based and participatory movies. The results suggest difficulties for established companies throughout the motion picture value stream.

Production technology advances in both simplicity and complexity, posing the possibility of new competitors. To better enable discussion of how approaches from one medium might be adapted to another, John Mateer investigated the connection between film directing approaches and CVR production.<sup>14</sup> Mateer did this by drawing on transportation theory. It was thought about how existing film grammar and directorial techniques might be used if an established film series were converted to CVR

### The focus of the research

As stated earlier, this research aims at investigating the past, present, and future of mixed reality, at the same time reflecting on the immersive changes in augmented and virtual reality. The paper also reflects on how this innovative technological advancement is used in graphical processing, computer visions, and using AI and blended with computer-generated content. In addition, the history of cinema

digitalization, and how that assists humans to be more creative since they can approach reality from a new perspective. Very important to go through the history of mixed reality starting from virtual reality to augmented reality and reaching mixed reality. Therefore, the focus of the paper will be on predictions of future digitizing timeframe now that real technology is controlling the mode of operation in the cinematic industry. To identify the future projections of mixed reality in cinematic spatial design, the paper will first examine the history of digitizing cinema, the role of mixed reality in digital art – shaping spatial design in digital art, other technologies that have contributed to the growth of mixed reality; the digital revolution of MR in history; how augmented and virtual reality has impacted the cinema.

### **Study purpose**

To investigate the past, present, and future of mixed reality, at the same time reflecting on the immersive changes in augmented and virtual reality.

### **Approach**

This paper applies the qualitative study approach in which information will be collected from different literature materials inclusive of the references highlighted in the literature review, compare findings, arguments, and insights from various documents, and through inductive reasoning develop arguments to support the research hypothesis. This study is conducted to assess the cinematic digitization timeframe with the incorporation of immersive technologies – mixed reality, virtual reality, and augmented reality – and how the mixed reality is shaping and continues to shape the cinema's spatial design.

### **Hypothesis**

This research is built on the hypothesis that mixed reality continually combines spatial clues from the physical world and the computer-simulated area while incorporating immersive elements to a lesser extent. The usefulness of the gathered knowledge regarding the similarities between virtual environments occurring in other sorts of extended reality (XR), and accompanying results, is called into doubt by this blurry boundary.

## **METHODOLOGY**

### **Materials**

Published journals from 2017 to 2022, website articles, and documented reports.

### **Method**

The method used in the study is secondary research. This method entailed extracting information from written texts such as previous journals, websites, and other study articles that capture the entire topic or a segment of it to support the hypothesis.

## **FINDINGS**

According to the information derived from different literature materials, mixed reality originated from virtual and augmented reality. It combines features from AR and VR to add digital elements in the real world while still immersing the user in a virtual world. Some examples of AR include mobile apps such as Snapchat, TikTok, Viskit, and other computer features that enhance the appearance of physical images and objects. VR makes use of headsets like Oculus Rift and Google Cardboard to bring out the experience of the virtual realm. A combination of these features makes up the mixed

reality. Digitization of cinematography has highly been influenced by these technological developments in the field of virtual and mixed reality.<sup>15</sup> First of all, it began with virtual reality whose function gives a wide-viewing angle, making passive viewers more active and allowing them to navigate within the artificial surroundings and the real-life replications. VR technology helped in creating films that occur in virtual realities and can only be viewed through VR headsets. The users have different viewing experiences.

Shared virtual environments (SVEs) depend highly on co-presence to improve their collaborative design routine. MR mediates a collaborative virtual environment that is specified to provide the designers in spatial space with a more effective design and bring a sense of existence. The key findings according to Men et al. are; virtual spaces provide personal space and thereby support collaborative inspiration in SVEs; and most virtual spaces prefer a configuration that can grant an impermanent personal space.<sup>16</sup> Schulz et al. suggest that motion picture production has taken over cinema production technology and outdone the traditional players.<sup>17</sup> Mateer provides highlights on the evolution of digital cinematography in terms of craft and production.<sup>18</sup> Cinematography combines art and craft features and the main elements entail lighting, composing, and creating movement. Motion pictures began in the 1970s with the evolution of televisions calling for more technological advancements to improve on resolution powers of the images. Today, significant advancements in technology – virtual assistants like Alexa – have only been used to enhance the user experience and have not changed the core task of cinematography. Only a few publications address the intersection between mixed reality and spatial presence and this provides hints on the future projections of mixed reality in cinematography.<sup>19</sup> An interdisciplinary collaboration of mixed reality in the virtual space can optimize the design to the intended audience and context.

## DISCUSSION

Computer-generated imagery (CGI) was previously only used in post-production. Some equipment can now be utilized while filming. For instance, James Cameron, the director of the 2009 film "Avatar," employed virtual monitors to track the animated outcomes of the motion captures on a real-time basis.<sup>20</sup> Future previsualization technologies might advance to the point that performers could perform on a digital set while being filmed, eliminating the need for an animated film set's post-production.<sup>21</sup> In the next ten to fifteen years, intricate movie settings will be virtually built so that performers can perform on them in real time, without the need for additional post-production.<sup>22</sup> Animated or robotic figures that resemble humans increasingly but not perfectly are not seen as empathetic, but rather as terrifying and unsettling.<sup>23</sup> The similarity must be refined to the point that it is impossible to tell them apart for robots or animations to elicit the same degree of empathy from the viewers as an actual human being.

High-end smartphones today are capable of scanning their immediate environment, processing it in real-time to produce point cloud data and geometric designs, and spatially referencing the virtual elements with the actual world for MR. Some devices cannot handle the computing needs of MR, nor is it practical to record or broadcast such high-resolution images and motion in each given arrangement, but most of this is made possible only by hardware advancements. The capacity to gather information, visualize and interrogate it, and examine the findings while utilizing a cohesive MR interface is made possible by visualizations, real-time sensing, and modeling.

The art of cinematography will remain what it is. For us, the conversation will continue to center on lighting ratios, managing our contrasted ratios, and our faces, and attempting to capture sufficient detail in both the shadows and the highlights.<sup>24</sup> The practice of cinematography as an art form will continue for us. There will still be our palette. The cinematic look will likely remain even if our colors alter. The fundamentals of cinematography have not changed in 100 years, and they won't change.

Which will change is the artistic process.<sup>25</sup> In addition, based on the questionnaire conducted in a previous paper resulted that Virtual reality technology provides the filmmakers with the functionality of providing the all-around experience of the movies where the viewers would be present in the movie in some form.<sup>26</sup> The perception of virtual haptics is a common unresolved issue in MR, and researchers are working to replace it with the help of limitations such as virtual collisions and snapping. Additionally, more research is needed to determine which specific activities may be successfully solved and managed by MR.<sup>27</sup> We will travel to a Holodeck and possibly beyond thanks to improved tracking technology, quicker networks, improved sensors, and faster computing. With the introduction of new technologies like machine learning for object identification and recognition, new study topics will emerge.<sup>28</sup> Future MR Technology will be able to identify surfaces in the surroundings as well as detect people, tools, and machine parts.

Future MR could aid in bridging the gap between the field and lab environments, enabling situational GIScience that facilitates the cognitive link between data and location. In immersive, located, and mixed reality environments, XR offers the chance to engage with and experience data, perceive and analyze it in many dimensions, and carry out volumetric and topological 3D analysis and simulations with ease.<sup>29</sup> The wearable XR, according to some, will bring about the next technology revolution after the use of smartphones.<sup>30</sup> This might be the case but doing so calls for intentional interdisciplinary collaboration. Changing people's realities is an intriguing feature of extended reality, especially MR. If MR is widely adopted, it could have significant effects on how people live and how they evolve.

## CONCLUSION

Virtual reality technology advancements now have an impact on many businesses. Wide viewing angles are possible with head-mounted displays that have a head-tracking feature. In this approach, inactive viewers get engaged and can move about a simulated area in real time. Although a 360-degree view that allows for both up and down viewing is theoretically conceivable, the plot establishes the intended viewing region that most consumers will adhere to for the majority of the time. The future of cinema, according to director Chris Milk, is in virtual reality. VR will make it possible to tell stories that are specifically adapted to the audience's preferences and take those into account. Compared to conventional 2D movies, VR movies have a considerably higher emotional impact on spectators.<sup>31</sup> Therefore, we can conclude that mixed reality continually combines spatial clues from the physical world and the computer-simulated area while incorporating immersive elements to a lesser extent. The usefulness of the gathered knowledge regarding the similarities between virtual environments occurring in other sorts of extended reality (XR), and accompanying results, is called into doubt by this blurry boundary.

## AVAILABILITY OF DATA

Data that support the findings of the study are available in several data based as listed below:

1. Extended reality in spatial sciences. [Doi.org/10.3390/ijgi9070439](https://doi.org/10.3390/ijgi9070439) reference number 1
2. Directing for Cinematic Virtual Reality. [doi.org/10.1080/14682753.2017.1305838](https://doi.org/10.1080/14682753.2017.1305838). Reference number 4
3. Spatial Presence in Mixed Realities. [Doi.org/10.2289/frvir.2021.694315](https://doi.org/10.2289/frvir.2021.694315). reference number 10

## NOTES

- <sup>1</sup> Carolin Wienrich, "Spatial presence in mixed realities—considerations about the concept, measures, design, and experiments," *Frontiers in Virtual Reality* 2, (2021): 694315.
- <sup>2</sup> Camilla Jaller and Serafin Stefania. "Transitioning into states of immersion: transition design of mixed reality performances and cinematic virtual reality," *Digital Creativity* 31, no. 3 (2020): 213-222.
- <sup>3</sup> Samah Nassar, "Engaging by Design: Utilization of VR Interactive Design Tool in Mise-en-scène Design in Filmmaking," *International Design Journal* 11, no. 6 (2021): 65-71.
- <sup>4</sup> Samah Nassar, "Short Film's Global Role to Survey the Present and Influence the Future SDG's by Tackling the Crucial Complications that Facing Humanity," *Proceedings of the 22nd International RAIS Conference on Social Sciences and Humanities*. Scientia Moralitas Research Institute, (2021).
- <sup>5</sup> Jaller and Serafin, "Transitioning into states of immersion," 213-222.
- <sup>6</sup> Philipp Ladwig, and Christian Geiger, "A literature review on collaboration in mixed reality," *Smart Industry & Smart Education: Proceedings of the 15th International Conference on Remote Engineering and Virtual Instrumentation* 15. Springer International Publishing, (2019).
- <sup>7</sup> Jaller and Serafin, "Transitioning into states of immersion," 213-222.
- <sup>8</sup> Samah Nassar, "The Novel Role of Artificial Intelligence Utilization by Concept Designers in Video Games," *International Design Journal* 12, no. 2 (2022): 267-270.
- <sup>9</sup> Anton Nijholt, "Virtual Worlds: A New Open Access Journal of Virtual Reality, Augmented and Mixed Reality Technologies, and Their Uses," *Virtual Worlds* 1, no. 1, (2022): 18-19.
- <sup>10</sup> Balasaravanan Kumaravel and Bjoern Hartmann, "Interactive Mixed-Dimensional Media for Cross-Dimensional Collaboration in Mixed Reality Environments," *Frontiers in Virtual Reality* 3, (2022): 34
- <sup>11</sup> Nijholt, "Virtual Worlds," 18-19
- <sup>12</sup> Anne Schulz *et al.*, "The digitalization of motion picture production and its value chain implications," *Journalism and Media* 2, no. 3 (2021): 397-416.
- <sup>13</sup> Samah Nassar, "Engaging by Design," 65-71.
- <sup>14</sup> John Mateer, "Directing for Cinematic Virtual Reality: how the traditional film director's craft applies to immersive environments and notions of presence," *Journal of Media Practice* 18, no. 1 (2017): 14-25.
- <sup>15</sup> Arzu Çöltekin *et al.*, "Extended reality in spatial sciences: A review of research challenges and future directions," *ISPRS International Journal of Geo-Information* 9, no. 7 (2020): 439.
- <sup>16</sup> Liang Men *et al.*, "Designing spaces to support collaborative creativity in shared virtual environments," *PeerJ Computer Science* 5 (2019): 229.
- <sup>17</sup> Schulz *et al.*, "Digitalization," 397-416
- <sup>18</sup> John Mateer, "Digital cinematography: evolution of craft or revolution in production," *Journal of Film and Video* 66, no. 2 (2014): 3-14.
- <sup>19</sup> Wienrich, *et al.*, "Spatial presence," 694315.
- <sup>20</sup> Mateer, "Digital cinematography," 3-14.
- <sup>21</sup> Wienrich, *et al.*, "Spatial presence," 694315.
- <sup>22</sup> Jaller and Serafin, "Transitioning into states of immersion," 213-222.
- <sup>23</sup> Çöltekin, *et al.*, "Extended reality," 439.
- <sup>24</sup> Çöltekin, *et al.*, "Extended reality," 439.
- <sup>25</sup> Çöltekin, *et al.*, "Extended reality," 439.
- <sup>26</sup> Nassar, "Engaging by Design," 65-71.
- <sup>27</sup> Mateer, "Digital cinematography," 3-14.
- <sup>28</sup> Çöltekin, *et al.*, "Extended reality," 439.
- <sup>29</sup> Mateer, "Digital cinematography," 3-14.
- <sup>30</sup> Wienrich, *et al.*, "Spatial presence," 694315.
- <sup>31</sup> Çöltekin, *et al.*, "Extended reality," 439.

## BIBLIOGRAPHY

- Çöltekin, Arzu, Ian Lochhead, Marguerite Madden, Sidonie Christophe, Alexandre Devaux, Christopher Pettit, Oliver Lock *et al.* "Extended reality in spatial sciences: A review of research challenges and future directions." *ISPRS International Journal of Geo-Information* 9, no. 7 (2020): 439.

- Jaller, Camilla, and Stefania Serafin. "Transitioning into states of immersion: transition design of mixed reality performances and cinematic virtual reality." *Digital Creativity* 31, no. 3 (2020): 213-222.
- Ladwig, Philipp, and Christian Geiger. "A literature review on collaboration in mixed reality." *Smart Industry & Smart Education: Proceedings of the 15th International Conference on Remote Engineering and Virtual Instrumentation 15*, (2019): 591-600.
- Mateer, John. "Digital cinematography: evolution of craft or revolution in production." *Journal of Film and Video* 66, no. 2 (2014): 3-14.
- Mateer, John. "Directing for Cinematic Virtual Reality: how the traditional film director's craft applies to immersive environments and notions of presence." *Journal of Media Practice* 18, no. 1 (2017): 14-25.
- Men, Liang, Nick Bryan-Kinns, and Louise Bryce. "Designing spaces to support collaborative creativity in shared virtual environments." *PeerJ Computer Science* 5 (2019): 229.
- Nassar, Samah Gaber Mohamed. "Engaging by Design: Utilization of VR Interactive Design Tool in Mise-en-scène Design in Filmmaking." *International Design Journal* 11, (2021): 65-71.
- Nassar, Samah. "Short Film's Global Role to Survey the Present and Influence the Future SDG's by Tackling the Crucial Complications that Facing Humanity." *Proceedings of the 22nd International RAIS Conference on Social Sciences and Humanities*. (2021): 214-217.
- Nassar, Samah Gaber Mohamed. "The Novel Role of Artificial Intelligence Utilization by Concept Designers in Video Games." *International Design Journal* 12, no. 2 (2022): 267-270.
- Nijholt, Anton. "Virtual Worlds: A New Open Access Journal of Virtual Reality, Augmented and Mixed Reality Technologies, and Their Uses." *Virtual Worlds* 1, no. 1 (2022): 18-19.
- Schulz, Anne, Amelie Eder, Victor Tiberius, Samantha Casas Solorio, Manuela Fabro, and Nataliia Brehmer. "The digitalization of motion picture production and its value chain implications." *Journalism and Media* 2, no. 3 (2021): 397-416.
- Kumaravel, Balasaravanan Thoravi, and Bjoern Hartmann. "Interactive Mixed-Dimensional Media for Cross-Dimensional Collaboration in Mixed Reality Environments." *Frontiers in Virtual Reality* 3 (2022): 9.
- Wienrich, Carolin, Philipp Komma, Stephanie Vogt, and Marc E. Latoschik. "Spatial presence in mixed realities—considerations about the concept, measures, design, and experiments." *Frontiers in Virtual Reality* 2 (2021): 694315.

# A DISCOURSE BETWEEN THE FORMER AND THE PROSPECT

Authors:

**SAMAN MALIK, AIMAN RAHMAN**

Affiliation:

BEACONHOUSE NATIONAL UNIVERSITY, PAKISTAN

---

## INTRODUCTION

Lahore is one of the oldest cities in Pakistan, seeped richly in the history of the Mughal, Sikh, and colonial empires in this region. Like many ancient cities, Lahore has a historic fortified center known as the Walled City, within which is a neighborhood known as the Bhatti Gate. The Bhatti Gate was once an affluent area and home to numerous poets, writers, and artists.<sup>1</sup> In modernity, it has been affected by challenges, including urbanization, unsustainable population growth, demographic changes, and technological advancements that have ultimately contributed to constant urban decay.

This research paper seeks to address the pressing urban issues affecting the Bhatti Gate vicinity. We explore primarily intangible elements: the cultural and emotional spirit of the space and the impact of fiction and narrative in shaping its future. We introduce three characters representing different segments of the Bhatti Gate population, namely a visitor, an elder, and a woman. We then propose a design-based solution, incorporating methodologies like drawings, narratives, and interviews with local residents, visitors, and experts. Our ultimate goal is a radical urban intervention that stitches together the diverse and often segregated urban populations of Bhatti Gate, thereby repairing and redirecting the region's future. This project addresses gentrification and cultural preservation by empowering the local population and promoting a sense of ownership for their community. Through this, we highlight the important role of architecture in mediating between the old and the contemporary in shaping our urban future.

## BHATTI GATE, WALLED CITY OF LAHORE

The urban fabric of Bhatti Gate is dominated by Mughal architecture<sup>2</sup> and is sensitive to Lahore's mostly hot and dry climate.<sup>3</sup> It contains numerous historical *Havelis*, traditional multi-story mansions with central courtyards, drawing rooms (*baithaks*), and transitory spaces between the streets and the main house. One architectural feature that stands out is the *Jharokha*, a window that projects from the front facade, serving as a semi-private space overlooking the bustling street below. A *Thara* is another architectural element creating a perforated relationship between the inside and outside.

The area's predominantly vertical expansion resulted in narrow, cool streets blocking the harsh sun. The main streets ran like arteries through the dense fabric, often hosting bazaars, marketplaces, and other commerce-driven activities.<sup>4</sup> These bustling areas attracted surrounding populations, keeping the area's energy vibrant throughout the day. Before partition, the Walled City reflected a harmonious way of living in close quarters with people of different religions and sects.<sup>5</sup> Today, their presence is evidenced only through religious edifices and run-down havelis, while the communities have

segregated phenomenally. Over time, the historical architecture continued to transform, the new began to superimpose the old, and the Walled City became a palimpsest of changing times.

Bhatti Gate was once known as the "Chelsea" of Lahore,<sup>6</sup> a reference to London's Chelsea holding great literary and cultural significance. In our time, one can only experience glimpses of this past. The NAQSH School of Arts in Bhatti Gate continues that rich legacy today, teaching poetry, literature, and traditional crafts like tile painting, pottery, and woodwork.<sup>7</sup> An old Haveli known as Fakir Khana, known for hosting mehfilis for influential writers and artists, has also turned into an intimate museum to carry forward the narratives it once bred.<sup>8</sup> Many films and television shows are shot at *Haveli Fakir Khana*. Unfortunately, during our interviews with the sponsors, we discovered that local rituals and activities once echoing in the streets are now confined within private boundaries and not accessible to the general public. Bhatti Gate, once known for its congregational identity, sense of community, and hospitality, eventually underwent a cultural erosion.

Over time, Bhatti Gate has lost its character to neglect and commercialization. Narrow streets once thronging with pedestrians are now clogged with cars, motorcycles, and rickshaws, making walking difficult and unsafe and resulting in the loss of community as social activities become restricted to fortified spaces. A majority of residents have moved out of the Walled City. Uncontrolled commercialization has also led to the decline of hawkers and, tragically, *Havelis* being converted into warehouses or parking lots. These ill-thought-out changes have marginalized fresher communities as drug addiction, and safety concerns become part of daily life.

We chose Bhatti Gate for our investigation because, as the above data depicts, significant unsustainable change has trickled into the area, negatively impacting its growth and urban cultural fabric. However, the presence of some contemporary buildings continuing the area's legacy proves its potential to reshape and revitalize itself for future generations. The study finds relevance as globally, many cultural sites are threatened by modernization and progressive decline.

Our goal is to propose a radical urban design intervention that equalizes the past and the future, creating a harmonious relationship between architecture and ever-evolving culture. We answer the question: How can architecture and urban design be used to revitalize the contemporary cultural identity of Bhatti Gate in Lahore while preserving its historical and cultural heritage? We use our intervention to reconceptualize information, construct new relationships, and revive the spirit of Bhatti Gate. This research question considers the need to preserve cultural heritage while promoting sustainable and inclusive urban development, a challenge faced by many cities worldwide.

## EXPLORING URBAN LIFE THROUGH THE LENS OF THE BHATTI GATE COMMUNITY

This investigation examines the role of the narrative building in shaping the future of urban development. Over four months, our team spent significant time in the area under research, engaging with residents and observing the community at different times of the day and during various events. To capture the character of the region, the research team produced narratives and drawings through three distinct lenses: that of a visitor, an elder, and a woman.

These lenses reveal the intricacies and complexities of the social and architectural fabric of Bhatti Gate, which can be used to inform urban planning and design decisions. Additionally, by focusing on intangible elements, this study proposes a valuable complementary approach to more traditional solutions focusing solely on empirical data.

### Character 1 - The Visitor

Through the lens of The Visitor, we reproduce the experiences and perspectives of individuals visiting Bhatti Gate for the first time. The visitor's lens examines the area from a foreigner's perspective, irrespective of any preconceptions, highlighting impressions formed upon arrival that shape the

overall perception of the Walled City. By understanding these perspectives, we can respond with urban design solutions to accommodate tourists' needs and expectations.

The visitor, Ali, is a 20-year-old boy. He approaches Bhatti Gate, crosses the deep threshold, and enters the main street leading to the "*Hakiman Bazar*," a historical street bazaar running through the middle of the locality. This street never has a moment of pause. Hundreds of people and vehicles move through as he dances to the rhythm of the traffic. Dodging, twisting, turning, and shifting on his feet, he feels trapped within the paths and overwhelmed by the area (Figure 1A).

Only when he begins to overcome his fears and submit himself to the space does he truly experience it. "The day starts here after the break of dawn. As first rays of light kick-start the functionality of these streets." The bazaar prepares for its chores, and the visitor witnesses the morning drill. He is mesmerized by his environment's energy, dignity, and scale. "*Nashte ki khushboo, koilo ki bhaap* (the fragrance of breakfast, the warmth of coals), and a crescendo of sounds of vehicles, vendors and cheering kids set the stage for the vibrant *Hakiman Bazaar*" (Figure 1C). The shop owners boast to him about their inherited shops, and the residents win him over with their boundless hospitality.

The transformation of space is manifest from dawn to dusk. The sky that guides one around the city during the day now camouflages it. The streets light up to deceive the darkness. After a long tiring day, the inhabitants retire to the *tharas*. When Ali gets weary of the urban fabric repeating itself, it offers him instances of tranquility after a long walk, with *Havelis* standing tall and ruins telling tales of past glory (Figure 1D). Vibrant colors, the warmth of wood, and light shooting out at the end of dark corridors beckon the visitor. These places offer healing amidst movement and energy. Being a guest, he feels honored by the existence of such abodes.

History has dwindled patently over time. This city fragment is layered with new development superimposed on old structures, creating a novel appeal (Figure 1B). It can be seen as a collage of events with permanent transformation. The arrangement is capable of expanding rather than simply containing experience. One can witness the religious and cultural harmony of the original space with *mandirs* (Hindu temples) within houses, *masjid* (mosques) and *imam bargah* (*Shia* shrines) standing tall outside. These religious monuments mark the skyline of Bhatti Gate, unfortunately not a common sight in other areas of Lahore.

Ali observes Bhatti Gate's mix of religious and cultural landmarks and the walled structures that expand and enrich experiences rather than contain them. He is also aware of signs of deterioration and the need for historical conservation.



Figure 1. The Visitor

## Character 2 - The Elder

Through the lens of an old local, this study illuminates the perspectives of long-term residents of Bhatti Gate. The old man's (Akbar) lens examines the area with a long view, encapsulating its transformation over time. It also the historical and cultural contexts of Bhatti Gate through the memories of people who have lived there for centuries. "I aspire to look at the same view. I am attached to this part of the city, it's my fate, identity, and it has made me into the person that I am today, and I take pride in it", Akbar says. His character is like a kite drifting through the fluid fabric of Bhatti Gate with the freedom of flight and no strings attached (Figure 2A).

For Akbar, the place is marked by ruin, neglect, and poverty while its walls proclaim their histories. The blend of age, dirt, and humidity has slowly darkened the city and replaced its colors with this special palette, the unique texture, and the vocals of its past (Figure 2B). Every day he sits on the *tharas* and describes them as open for every passerby to take refuge. This is the most prominent ritual of the Walled City, expressing its soul. These moments along the streets nod to the past, where the same *tharas* host new inhabitants as the ages pass (Figure 2C).

These spaces still hold power to build community, the energy that keeps the city awake, and the grandeur of the past, allowing the older generation to rendezvous with history. Akbar sits on the roof, watching a poetic sunset. He says, "Maybe the roofs are designed to create a boundary, but they act as a gateway for life to flow through. Hidden below it are cosmoses we have begun to forget. Over decades, they have become separate entities floating in the sky" (Figure 2D).

At night, when darkness cloaks Bhatti Gate, Akbar feels safe and at home, unlike newcomers merely acquainted with the space, and he retreats into the dream world of his long-gone riches and legends. His worldview deepens our appreciation of the area's history and cultural significance and informs future interventions.



Figure 2. *The old man*

### Character 3- The Woman

Through the lens of The Woman (Shazia), we spotlight a particular demographic, namely women and other marginalized communities in Lahore, providing insight into their challenges, including issues of gender, poverty, and social banishment. We bring these voices to the forefront to promote greater understanding between Bhatti Gate's different communities. Examining their experiences sheds light on broader social and cultural forces.

Shazia says, "My view of the space is transitional, exploring the area with a medium between inside and outside" (Figure 3C). The city containing much hustle and bustle, also stands in solitary. The spaces feel lonely and abandoned because no one seems to care for them. Shazia is able to relate with such spaces. Walking down a street unaccompanied, she feels like one of those elements, with a hundred men's gaze fixed on her like an object of desire, making her uncomfortable. Feeling vulnerable in the crowds, she wants to break free from the threads entangling her being and take flight. The windows breathe darkness when she walks past them. The streets feel dark, narrow, and congested as she walks through (Figure 3A).

There are two perspectives to her life, she says, "One may seem like a cage, that I am entangled in a fixed boundary, but then there is another too where I feel like a queen on my throne observing this town from a distance, with the ability to see through the mortal shell and gaze within the very soul of it." Observing the city through a window, she states, "The fabric of Bhatti Gate is being molded according to dwellers' shapes and preferences. The spaces become incredibly vocal about their past and present, but some historical spaces like *Havelis* have been lost in time, representing the past. These spaces present themselves in glimpses, often concealed, and only present themselves on rare occasions." The static image amidst a busy town has become a threshold and a canvas for Shazia's imagination, an ally to her in difficult times (Figure 3B).

Examining the experiences of women and other marginalized groups creates urgency for improving social and cultural equity and supports ongoing efforts to revitalize the Bhatti Gate community with sensitivity and sustained dialogue.



Figure 3. The Woman

### ACCEPTING THE EPHEMERAL AND LOST ASPECT OF THE SOCIETY

The following design interventions for the Bhatti Gate vicinity are based on findings from the above analytical lenses. The stated goals of these interventions are to revive the region's cultural richness and to increase the sense of ownership among its marginalized communities.

#### Rerouting the traffic, Parking Reallocation

Our first proposed intervention is to reroute the traffic to roads along the boundary of the Walled City, currently underutilized and lodged by drug addicts, so that the historic *Hakiman Bazar* may be used primarily by pedestrians only. Rerouting vehicular traffic helps the pedestrian traffic of boundary streets by reducing hidden corners for addicts to take refuge in, making the road more comfortable for women to travel.

We propose parking spaces to be designated just outside the Bhatti Gate, so that public courtyards within serving as parking-lots can be restored. The only available vehicular transport through the narrow streets should be *rickshaws*, to take visitors to their desired destinations. Since Bhatti Gate encompasses a small area, traveling on foot takes little time and is incentivized by the naturally shaded streets cutting through the urban fabric.<sup>9</sup> These changes make the area more accessible and relaxing for pedestrians, particularly women.

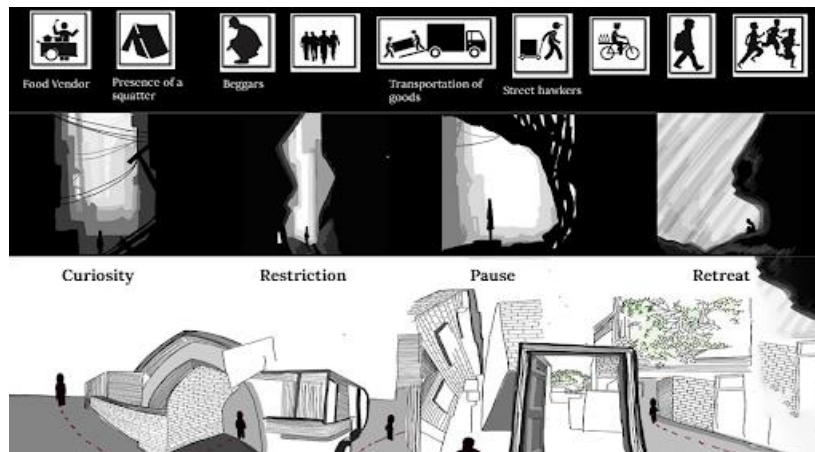


Figure 4. Street Experience

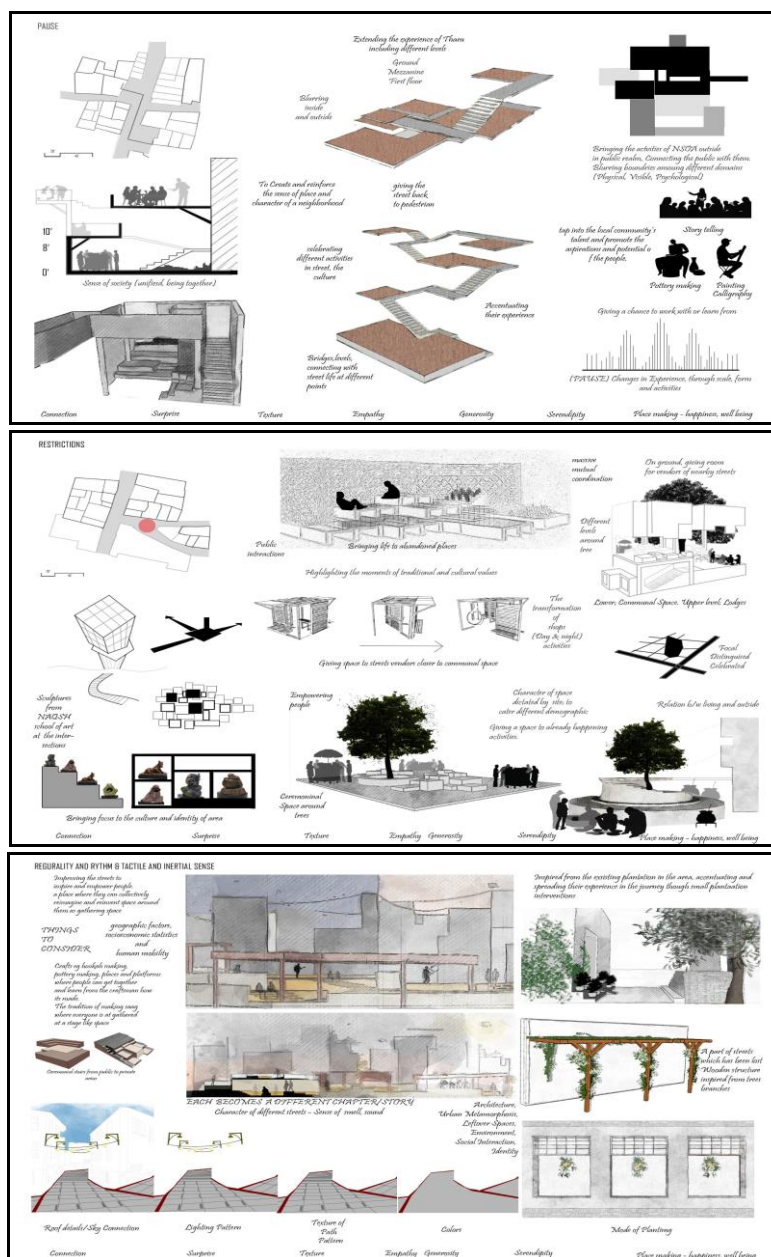


Figure 5. Character of streets

Rerouting vehicular traffic also helps revitalize the street character. Sculptures and wall hangings adorn the route at nodes and intersections, created using the same crafts and techniques practiced here for generations. Local schools would contribute artwork and craft models unique to the area. Not only does this provide points of orientation for pedestrians, but it also revives the culture and soul of Bhatti Gate. There is ample space for street performers, vendors, and food carts at key junctions, creating multiple interaction spaces. Integrating bridges in the design adds further connectivity between social spaces, weaving the area together like a spider's web (Figure 5).

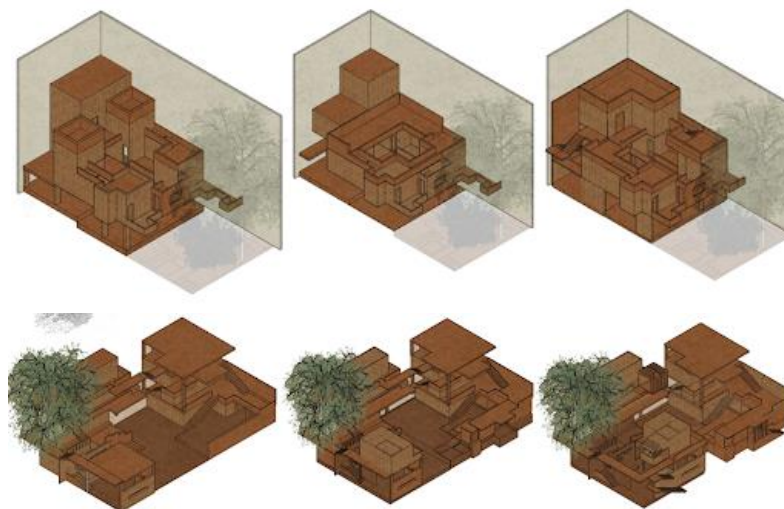
### Radical Urban Design Interventions

For our proposed urban design interventions, we have shortlisted two sites, both under-utilized sites that have become garbage dumps over the years.



*Figure 6. Site Images*

Here, we propose two lodging structures for students of NAQSH School of Art, who come to Bhatti Gate from all over Lahore. The ground floor of these structures is dedicated to public uses such as exhibitions, traditional artisan practices, and commerce, while the rooftops are reserved for more general use, promoting the local rooftop culture of the Walled City (Figure 7).



*Figure 7. Process Volumetric Studies*

The design aims to acknowledge and capture the ephemeral aspects of life in Bhatti Gate, and to take steps to mitigate its ongoing gentrification. By giving equal representation to vendors, craftsmen, artists, and literary pursuits, the project hopes to revitalize local traditional arts, crafts, and cultural practices, particularly through interaction spaces that braid the area together, bringing different

communities into direct conversation while also connecting visitors through Bhatti Gate's historically significant areas.

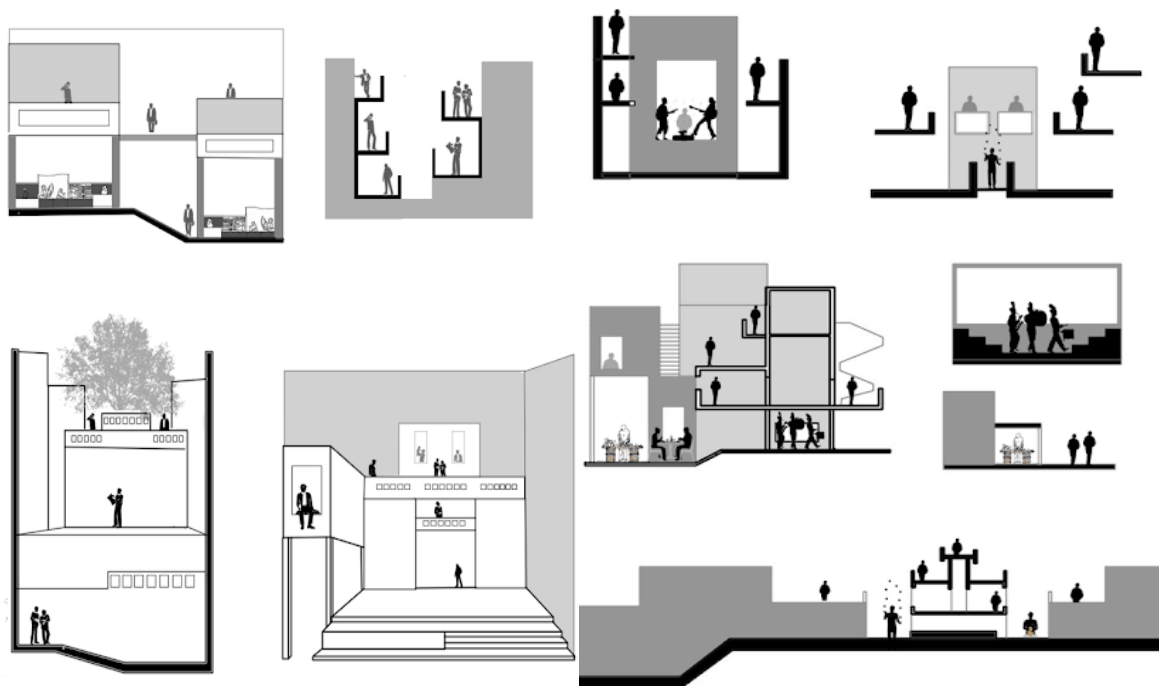


Figure 8

## Architectural Language

While our design for these sites borrows from the experience of historical architecture, it translates to a contemporary architectural language. The construction material proposed originates in the locality. Further, the garbage present on the sites should be converted to non-load-bearing bricks to be used as interior shelves, cladding material, etc.<sup>10</sup>

## Interactive Spaces

We based the experiential design of our interventions on the existing urban fabric of Bhatti Gate. We have included interactive spaces and semi-private spaces to allow social exchange at different levels, decreasing the gap between inside and outside, and bringing the streets to interior spaces. The windows on the top floors are inhabited, inspired by the *jharokha* and frame that retains its context. These design strategies imagine a future for Bhatti Gate that is borne out of its rich cultural past.

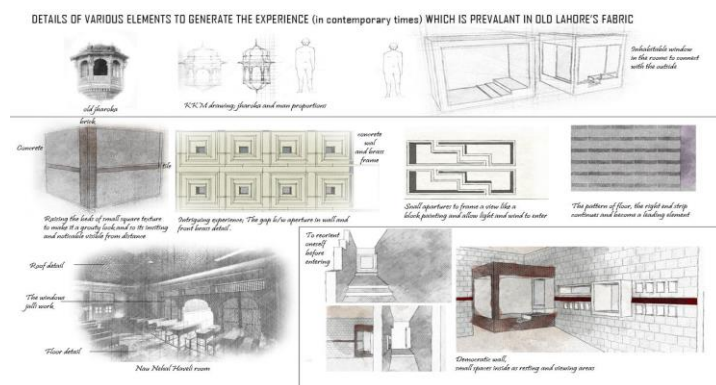
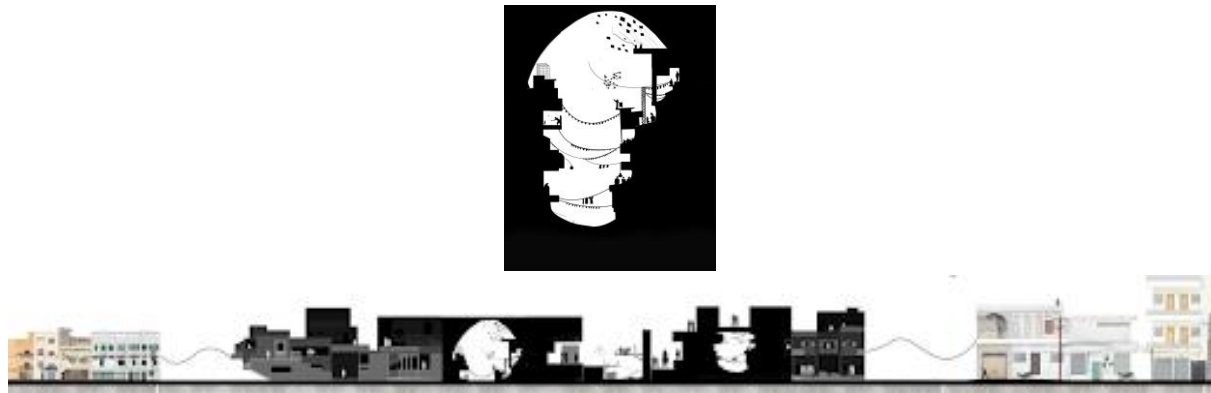


Figure 9

### Community Engagement

The food mess for the lodging residents is run by locals and nearby residents, creating more space for visitors and locals to communicate and interact with each other.



*Figure 10*

### Increased Sense of Ownership

These design interventions would work together to improve local sense of ownership. The lodgings would also offer convenience to students from different parts of Lahore, as well a place for tourists, artists or other individuals to stay and learn about the culture of Bhatti Gate.

Our proposals focus on resolving issues of underutilized spaces, drug addiction, and gentrification, and are designed to revive the spirit of “Chelsea of Lahore”. By giving equal representation to traditional arts, crafts, and cultural practices, the design counteracts gentrification and increases the sense of ownership for all communities. Our findings emphasize the necessity of considering cultural and historical contexts in urban design and planning and the potential to influence a region’s future.

### CONCLUSION

This paper introduces some deep-rooted historical narratives of Bhatti Gate and how they have morphed as decades progress. It then presents the experiences of three personas of Bhatti Gate, comparing the differences and similarities of perspective towards the same locality. The characters in this paper become the focal point through which we understand the existing polarity in intangible experiences, which otherwise gets lost in the monumentality and layers of Mughal, Sikh and colonial history. Our goal was to provide the reader with a holistic understanding of these urban characteristics within the context of Bhatti Gate’s rich cultural heritage. The proposed design interventions are targeted towards revival of local culture while addressing the challenges facing the modern community, including marginalized groups, and can be adapted to address similar decay in historical urban centres worldwide. This methodology supports innovative solutions for preserving cultural heritage while meeting our rapidly changing urban demands.

## NOTES

<sup>1</sup> Usman Farooq, "Bhatti Gate," Scribd (Scribd, May 31, 2021), <https://www.scribd.com/document/509994236/Bhatti-Gate#>.

<sup>2</sup> Tania Qureshi, "Inside Lahore's Culturally Rich Bhatti Gate," Daily Times, March 20, 2018, <https://dailytimes.com.pk/217376/inside-lahores-culturally-rich-bhatti-gate/>.

The Mughal architecture is characterized by a consistent design, featuring bulbous domes, slender corner minarets, spacious halls, grand vaulted gateways, and intricate ornamentation. In Bhatti Gate, one can find examples of this architectural style, such as the Oonchi Masjid which was constructed during the rule of Mughal Emperor Akbar. Additionally, inside the Bhatti Gate, there are other notable structures like Madrassa Nomanai and a mosque built during the reign of Shah Jahan.

<sup>3</sup> "Weatherspark.com," Lahore Climate, Weather By Month, Average Temperature (Pakistan) - Weather Spark, accessed February 18, 2023, <https://weatherspark.com/y/108021/Average-Weather-in-Lahore-Pakistan-Year-Round>. Lahore has a hot semi-arid climate, characterized by hot summers and mild winters. Summer season in Lahore usually lasts from May to September, during which temperatures can reach up to 40 °C (104 °F) in the daytime.

<sup>4</sup> *Bhatti Gate Lahore Documentary in English by Androon\_Lahore*, YouTube (YouTube, 2021), <https://www.youtube.com/watch?v=4cO2NkwcwvU>.

<sup>5</sup> Usman Farooq, "Bhatti Gate," Scribd (Scribd, May 31, 2021), <https://www.scribd.com/document/509994236/Bhatti-Gate#>.

<sup>6</sup> Rai M. Azlan, "Chelsea of Lahore – Bhatti Gate," Lahore Nama, August 21, 2011, <https://lahorenama.wordpress.com/2011/08/21/chelsea-of-lahore-bhatti-gate/>.

<sup>7</sup> Billal Hassan, "Naqsh School of Arts," Locally Lahore, August 31, 2017, <https://www.locallylahore.com/naqsh-school-of-arts/>.

<sup>8</sup> Farwa Bokhari, "Fakir Khana Museum - Google Arts & Culture," Google (Google), accessed February 18, 2023, <https://artsandculture.google.com/story/fakir-khana-museum-fakir-khana-museum/DQWRATNd9hEA8A?hl=en>.

<sup>9</sup> Author: Sydney Franklin, "MVRDV Takes on the Entire City of Glasgow - Architizer Journal," Journal, May 31, 2022, <https://architizer.com/blog/inspiration/industry/mvrdv-and-austin-smithlord-glasgow/>. This project served as a case study to examine the entire process involved in redirecting traffic to revitalize a particular area. Initially, we identified all the lively, culturally significant, and historically important areas within the vicinity, which were often congested with vehicular traffic. Our primary approach involved creating pedestrian-only zones within these areas, while also introducing new channels and streets around the periphery to facilitate traffic flow. To enable travel within the area, we developed a specialized automobile. However, the primary objective was to minimize vehicular traffic to create a more pedestrian-friendly and inviting space. Taking things a step further, we then redesigned the urban fabric based on our findings and the feedback we received from the local community. The area's distinct characteristics, local crafts, and people's needs were all taken into account during the design process, resulting in a tailored urban fabric that truly reflected the community's voice.

<sup>10</sup> Pierre-Louis Soulié, "Fabbrick: Construction Materials from Recycled Textile," DesignWanted, December 19, 2022, <https://designwanted.com/fabbrick-construction-materials-recycled-textile/>.

## BIBLIOGRAPHY

Arif, Fatima. "Bhatti Gate-The Walled City." Medium. From Where I Stand, February 6, 2019. <https://medium.com/from-where-i-stand/bhatti-gate-the-walled-city-3d045b9fac5e>.

Azlan, Rai M. "Chelsea of Lahore – Bhatti Gate." Lahore Nama, August 21, 2011. <https://lahorenama.wordpress.com/2011/08/21/chelsea-of-lahore-bhatti-gate/>.

*Bhatti Gate Lahore Documentary in English by Androon\_Lahore*. YouTube. YouTube, 2021. <https://www.youtube.com/watch?v=4cO2NkwcwvU>.

Bokhari, Farwa. "Fakir Khana Museum - Google Arts & Culture." Google. Google. Accessed February 18, 2023. <https://artsandculture.google.com/story/fakir-khana-museum-fakir-khana-museum/DQWRATNd9hEA8A?hl=en>.

Farooq, Usman. "Bhatti Gate." Scribd. Scribd, May 31, 2021. <https://www.scribd.com/document/509994236/Bhatti-Gate#>.

Franklin, Author: Sydney. "MVRDV Takes on the Entire City of Glasgow - Architizer Journal." Journal, May 31, 2022. <https://architizer.com/blog/inspiration/industry/mvrdv-and-austin-smithlord-glasgow/>.

Hassan, Billal. "Naqsh School of Arts." Locally Lahore, August 31, 2017. <https://www.locallylahore.com/naqsh-school-of-arts/>.

Qureshi, Tania. "Inside Lahore's Culturally Rich Bhatti Gate." Daily Times, March 20, 2018. <https://dailytimes.com.pk/217376/inside-lahores-culturally-rich-bhatti-gate/>.

Soulié, Pierre-Louis. "Fabbrick: Construction Materials from Recycled Textile." DesignWanted, December 19, 2022. <https://designwanted.com/fabbrick-construction-materials-recycled-textile/>.

"Weatherspark.com." Lahore Climate, Weather By Month, Average Temperature (Pakistan) - Weather Spark. Accessed February 18, 2023. <https://weatherspark.com/y/108021/Average-Weather-in-Lahore-Pakistan-Year-Round>.

# BILINGUALISM IN SPATIAL DESIGN; RESTRUCTURING THE ARCHIVE FOR THE ELUSIVE OBJECT

Authors:

**IFIGENIA MARI, GEORGE PARMENIDIS**

Affiliation:

ARCHITECTURE SCHOOL, NATIONAL TECHNICAL UNIVERSITY OF ATHENS, GREECE

---

## INTRODUCTION

The designed object in architectural space is weighed down by an excessive semantic load of properties derived from the past. The object is in a state of postproduction,<sup>1</sup> perpetually elusive, as the framework of its properties constantly transforms according to the desires of the present, displacing any attempt to stabilize its description.

In architectural spatial design, the dynamic field of space is produced by the interactive transformation of the properties of subjects and objects.<sup>2</sup> The semantic determination of the properties of designed object, resulting from the interaction of subject-object properties, is attempted to be described by a subject-object bilingualism: The language of subject and the language of object are two languages in different cognitive fields, with their own histories and data,<sup>3</sup> interwoven regarding the sentient with the sensible and vice versa.<sup>4</sup>

Translating into the two languages an archive of designed objects in modernism, '19th-21st century seats',<sup>5</sup> a corresponding archive of different properties is proposed, aware of conventionality in property assignments.

If we could rearrange the property archive of the designed object with relations delineated by subject-object bilingualism, then we should suggest a cognitive topology in design, referring to subject-object interaction: a preparation for a post-definition of the elusive object properties in the dynamic field of the present space.<sup>6</sup>

## DIFFERENCIES IN SUBJECT-OBJECT BILINGUALISM

In the proposal of subject-object bilingualism, differences can be distinguished in the semantic associations of the object properties, according to the different cognitive fields of the two languages. The subject language concerns the epistemological causality of object definition (referring to the question "why is it"), and it is described according to subject's schemata for perception, ideology, social value.<sup>7</sup> The object language concerns the ontological consistency of object (referring to the question "what is it"),<sup>8</sup> and it is described according to object's semantic relations in category, function, procedure.<sup>9</sup>

### **Property relational differences, in reference to the cognitive fields of bilingualism.**

In the two languages, the stability status of the object's property relations differs.

In the subject language, the concern is the constitution of the object's properties in the truth of the subject. The subject is identified by confronting semantically unstable object properties. Then the

subject declares faith in a truth, to acquire the cognition to assign properties to the object. Each subject is a self-referential description language that attributes epistemological causality to the object’s properties.<sup>10</sup>



								
								
								
Historicism	Revivalism	Eclecticism	New Objectivism	Rationalism	Neorealism	Proceduralism	Deconstructivism	Conceptualism

Table 1. An archive of designed objects in modernism, '19th-21st century seats'

For example, in the subject language in modernism, epistemological causalities were developed in the assignment of properties to the object, corresponding to three cognitive fields:<sup>11</sup>

- 1.The causality of perceptual properties was developed in the history of style, described in terms of an aesthetic view of material delineation.
- 2.The causality of ideology properties was developed in the history of the type, described in terms of a teleological view of the intentions of social groups for subject-object interaction.
- 3.The causality of value properties was developed in the history of the social symbol, described in terms of a social view of values related to culture.

In the object language, the concern is the constitution of the object’s properties in the truth of the already given encyclopaedia of them.<sup>12</sup> In a semantically stable state of the object’s properties, referring to an already conventionally established relationship between them, the properties could be reassigned within the potentialities of the given encyclopaedia. Each object is an inter-referential description language conferring an ontological consistency to its properties.

For example, in the object language in modernism, ontological consistencies were recognized in the assignment of properties to the object, corresponding to three cognitive fields:<sup>13</sup>

1. The consistency of category properties was regarding in the history of representation, described in terms of assigning properties in comparison to other similar-dissimilar objects.
2. The consistency of function properties was regarding in the history of structure’s checks and balances, described in terms of assembly rules.
3. The consistency of procedure properties was regarding in the history of interaction, described in terms of conventions in subject-object interactivity.

Properties of different causalities in the subject language, and of different consistencies in the object language were assigned at different cognitive fields, each with its own history, terminology, facts, and references.<sup>14</sup> In each different cognitive field, different cognitive expertise was required. In the subject language expertise was required on perception in style, ideology in type, social value in symbol, and in the object language expertise was required on category in representation, function in structure, procedure in interaction.

## **Property dominance and genre differences, in reference to the reality descriptions in bilingualism.**

In cognitive field, transformations can be performed with respect to transformations of the reality paradigm. The data of cognitive field augments because of new descriptions of the real. New inductive data are introduced, and whenever they cannot be considered with the existing conceptual tools, new deductions are suggested.<sup>15</sup> With this cognitive procedure, the reality paradigm is transformed into gradual phases of property manipulation, from the naming of the new ones to the formulation of rules for their systematization, and to the operation of their various systems. Depending on the phases of transformation different epistemological causalities and ontological consistencies prevail in subject-object bilingualism.

### **Property dominance differences**

During the transformation phases of reality paradigm, and according to the succession of relevant cognitive phases, in subject-object bilingualism the assignment of properties follows a corresponding dominance succession.<sup>16</sup>

For example, three transformations of the reality paradigm of modernism should be considered in relation to the bourgeois revolution and the establishment of class society (1780s-1870s), the labore revolution and the establishment of mass society (1870s–1950s), the racial revolution and the establishment of world society (1950s-21<sup>st</sup> c.).

In the first transformation phase of the three reality paradigms, naming the properties and relations of the new inductive data, as in Historicism, New Objectivism, and Proceduralism, the assignment of properties was dominated by:

- perception properties within styles, in the subject language, and
- category properties within representations, in the object language.

In the second phase of the three reality paradigms, forming rules of abstraction and generalization for the systematization of properties, as in Revivalism, Rationalism, and Deconstructivism, the assignment of properties was dominated by:

- ideology properties within types, in the subject language, and
- function properties within structures, in the object language.

In the third phase of the three reality paradigms, operating property systems, as in Eclecticism, Neorealism, and Conceptualism, the assignment of properties was dominated by:

- social value properties within symbols, in the subject language, and
- procedure properties within interactions, in the object language.

### **Property genre differences**

In the transformation phases of the reality paradigm, the referential semantic systems to society and cosmos<sup>17</sup> were transformed, and different genre of properties were assigned to objects.<sup>18</sup>

For example, in the first phase of transformation of the three reality paradigms, in the eras of Historicism, New Objectivism, and Proceduralism, semantic shifts can be considered the differentiations of the genre of

- perception properties between “meaning-ness”, “convention-ness”, “interactive-ness”, in the subject language, and
- category properties between ‘finite-ness’, ‘distinct-ness’, ‘interpretive-ness’, in the object language.

In the second transformation phase of the three reality paradigms, in the eras of Revivalism, Rationalism, and Deconstructivism, semantic shifts can be considered the differentiations of the genre of

- ideology properties, between “utopia-ness”, “causal-ness”, “frame-ness”, in the subject language, and
- function properties between “effective-ness”, “articulate-ness”, “relational-ness”, in the object language.

In the third transformation phase of the three reality paradigms, in the eras of Eclecticism, Neorealism, and Conceptualism, semantic shifts can be considered the differentiations of the genre of

- social value properties between “mediate-ness”, “reference-ness”, “analogic-ness”, in the subject language, and
- procedure properties between “intimate-ness”, “sense-ness”, “communicative-ness” in the object language.




























the bourgeois revolution the establishment of class society 1780s-1870s			the labore revolution the establishment of mass society 1870s-1950s			the racial revolution the establishment of world society 1950s-21 <sup>st</sup> c.		
three evolution phases in paradigm			three evolution phases in paradigm			three evolution phases in paradigm		
naming properties of new data	forming rules for system of properties	operating systems of properties	naming properties of new data	forming rules for system of properties	operating systems of properties	naming properties of new data	forming rules for system of properties	operating systems of properties
properties in the subject language			properties in the subject language			properties in the subject language		
perceptual properties causality	ideology properties causality	value properties causality	perceptual properties causality	ideology properties causality	value properties causality	perceptual properties causality	ideology properties causality	value properties causality
subject			subject			subject		
meaning-ness	utopia-ness	mediate-ness	convention-ness	causal-ness	reference-ness	interactive-ness	frame-ness	analogic-ness
								
								
								
finite-ness	effective-ness	intimate-ness	distinct-ness	articulate-ness	sense-ness	interpretive-ness	relational-ness	communicative-ness
object			object			object		
properties in the object language			properties in the object language			properties in the object language		
category properties consistency	function properties consistency	procedure properties consistency	category properties consistency	function properties consistency	procedure properties consistency	category properties consistency	function properties consistency	procedure properties consistency
Historicism	Revivalism	Eclecticism	New Objectivism	Rationalism	Neorealism	Proceduralism	Deconstructivism	Conceptualism

Table 2. An archive of properties

## Properties in a cloud of differences

With the semantic shifts of properties in the subject-object bilingualism, during the transformation phases of the three reality paradigms in modernism, different genres of properties have emerged. They have accumulated as inherited characteristics and relations of the object, forming a property cloud in modernism: The etymological tradition of properties in the present.

For example, the newly appeared properties can be described for their “meaning-ness”, “convention-ness”, “interactive-ness”, and also for their “finite-ness”, “distinct-ness”, “interpretive-ness”. Property generalization rules can be described for their “utopia-ness”, “cause-ness”, “frame-ness”, and also for their “effective-ness”, “articulate-ness”, “relational-ness”. Criteria for operating property systems can be described for their “mediate-ness”, “reference-ness”, “analogic-ness”, and also for their “intimate-ness”, “sense-ness”, “communicative-ness”.

The consideration of the object properties in a cloud of differences is confronted in each present. The assigned properties in the frames of distinct languages, cognitive fields and reality paradigms loosen their semantic relations in the face of the opportunism of stating the problem of the present. Properties in a loose cloud state,<sup>19</sup> slightly implying their semantic relations and generative rules, provide the means either to confirm the stereotypes of the present reality paradigm, or to go beyond them.

meaning-ness	utopia-ness	mediate-ness	convention-ness	causal-ness	reference-ness	interactive-ness	frame-ness	analogic-ness
finite-ness	effective-ness	intimate-ness	distinct-ness	articulate-ness	sense-ness	interpretive-ness	relational-ness	communicative-ness

Table 3. Properties in a cloud of differences

METALANGUAGES IN SUBJECT-OBJECT BILINGUALISM

Metalanguages have structured hierarchical stereotypes among the loose relations in the property cloud, offering interpretive schemata of what has been done, with the intention of confirming truths. Stereotypical property schemata were recognized as ready-made representational relations between properties of different cognitive fields in the subject-object bilingualism. In the semantically multidimensional object morphemes, properties assigned in different cognitive fields coincided in the spatial domain of the object. Based on such spatial semantic coincidences, properties were associated in metalanguages, as if they were representatives of each other. Generalizations were constituted between properties, differentiating the hierarchy into properties that are considered either presentations of reality, or their representatives.<sup>20</sup>

Property genre and hierarchy differences, in reference to reality representation.

Metalanguages have structured stereotypes among properties in the cloud, as representational schemata that constitute the symbolic form of different realities into modernism. They have enhanced either the creative power of modernism to develop social conditions, or the degree of integration into modernism to distinguish social hierarchies. In this difference in modernism's view of reality, and during the transformation phases of reality, different genres and hierarchies developed between stereotyped property relations. In the property cloud, metalanguages have structured generic clusters of properties<sup>21</sup> with an internal hierarchical relationship.<sup>22</sup>

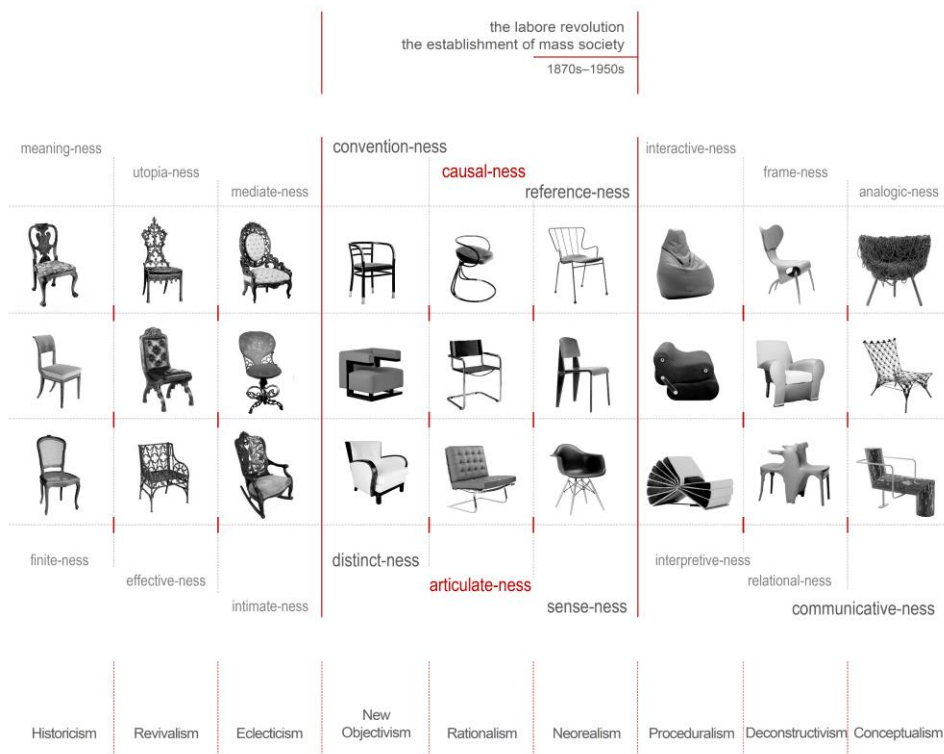


Table 4. A metalanguage hierarchy of properties

Property representational genre differences

Metalanguages have delineated hierarchical relationships between properties of different cognitive fields, as if they were genre, species, and hybrids, according to the reality symbol values they were intended to enhance.

For example, stereotypes which have reinforced the symbolic form of modernism's creative power to develop social conditions, have delineated the properties of the avant-garde as the properties of the creativity of the era. In the reality paradigm of the mass society establishment (1870s-1950s), in the subject language, the ideology properties of causal-ness were considered as the genre properties of creative originality, in which social value and perception properties were included as species properties. In the object language, the function properties of articulate-ness were considered as the genre properties of creative originality, in which procedure and category properties were included as species properties.<sup>23</sup>

Simultaneously, stereotypes, which have reinforced the symbolic form of integration into modernism to distinguish social hierarchies, have delineated the property genre according to hierarchies in religion, nationality, global or local traditional society. The selection of objects was filtered by different social strata to present their socially desirable position, and the properties that were presenting the socially desirable position were considered as the presentations of reality. For example, in the 1930s Rationalism, the avant-garde modern object properties of causal-ness and articulate-ness, considered as the genre properties presenting upper-class lifestyle. In the same era, there were hybrid "modernistic" properties in conventional middle-class objects, with very limited "modern" features, so much so that they could symbolize the integration in modernism as lifestyle.<sup>24</sup>

### Property representational hierarchy differences

In metalanguage, the property relations differ according to a representational hierarchy delimited in reference to the presentation of reality.

For example, in the subject language, in the reality paradigm of the establishment of class society (1780s-1870s) and especially in the rule forming phase, perception properties and social value properties of “meaning-ness” and “mediate-ness” were in a low hierarchical rank. They were representatives of ideology properties of “utopia-ness”, that were considered as the presentations of reality. On the contrary, in the reality paradigm of the establishment of world society (1950s-21<sup>st</sup> c.) and especially in the phase of naming properties of new data, perception properties of “interactive-ness” were in a high hierarchical rank, as the presentations of a new reality.

In the object language, in the reality paradigm of the establishment of class society (1780s-1870s) and especially in the phase of naming properties of new data, category properties of “finite-ness” were in a high hierarchical rank, as the presentations of reality. Function and procedure properties of “effective-ness” and “intimate-ness” were considered as representatives of the category properties. On the contrary, in the reality paradigm of the establishment of world society (1950s-21<sup>st</sup> c.) and especially in the phase of operating systems of properties, category properties were in a low hierarchical rank. They were representatives of procedural properties of “communicative-ness”, that were considered as presentations of reality.

### SIMULATIONS IN SUBJECT-OBJECT BILINGUALISM

Relationships in the property cloud could be reconstructed and deconstructed, by simulation makers, as metaphor, synecdoche, metonymy.<sup>25</sup> As the object could be simulated in various ways by the simulation makers, its properties could acquire a new semantic relationship, which is handled by the diagram, the conceptual tool for describing relationships.<sup>26</sup> In contrast to truth-enhancing metalanguage stereotypes that interpret property relations, the diagrammatic descriptions are procedural tools “at hand” to design the construction-deconstruction of property relations, re-designing the subject-object relationship.

### Property genre differences, in reference to object multiple simulations

In the simulating procedures the genre of object properties is defined by metaphor. By synecdoche the properties of the species of the genre are constituted, and by metonymy these properties are transformed.<sup>27</sup>

In metaphor, the frame of the object’s properties is translated into a new frame, as a redefined reality for the object. The diagram describes the self-similarity relationship of the object’s properties with the properties of its new frame, and the object acquires the semantic background for the assignment of its properties.

In synecdoche, the internal coherence of object properties is built, in reference to properties of a similar other in the frame. The diagram describes the state of literal and connotative simulation of the object’s properties with an other’s, specifying the obvious semantic properties of the object.































the bourgeois revolution the establishment of class society 1780s-1870s			the labore revolution the establishment of mass society 1870s-1950s			the racial revolution the establishment of world society 1950s-21 <sup>st</sup> c.		
metaphors in reference to nature			metaphors in reference to machine			metaphors in reference to city		
meaning-ness	utopia-ness	mediate-ness	convention-ness	causal-ness	reference-ness	interactive-ness	frame-ness	analogic-ness
								
								
								
finite-ness	effective-ness	intimate-ness	distinct-ness	articulate-ness	sense-ness	interpretive-ness	relational-ness	communicative-ness
convention-ness meaning-ness utopia-ness reference-ness mediate-ness			convention-ness causal-ness reference-ness			meaning-ness reference-ness mediate-ness interactive-ness frame-ness analogic-ness		
								
distinct-ness	effective-ness	intimate-ness	distinct-ness	articulate-ness	sense-ness	interpretive-ness	relational-ness	communicative-ness
finite-ness sense-ness			finite-ness effective-ness			intimate-ness communicative-ness sense-ness		

Table 5. Property frames of metaphoric simulations

In metonymy, the allegory of similarity designates multiple properties of the object by the adjacency to the properties of others in the frame. The diagram describes the condition of double similarity of the object's properties to the properties of others, revealing the diversity of the object's properties. For example, in the three reality paradigms, the respective dominant metaphors in each delineating the property frames were in reference to “nature”, “machine”, and “city”.<sup>28</sup> In these frames, objects acquired synecdochic properties, by which they could engage in metonymic, allegorical relations with others, retaining, transforming, or erasing their properties.

CONCLUSION

Recognizing the bilingualism in the design of the object in architectural space, an attempt was made to describe its properties by intertwining the languages of subjects and objects, with their own differences in cognitive fields, histories, and data. In the subject-object bilingualism during the period of modernism and according to the transformation phases of the reality paradigm, specific properties were differentiated in reference to their relational stability, dominance, and genre. However, the

assigned properties in the frames of distinct languages, cognitive fields and reality paradigms loosen their semantic relations facing the opportunism of the problem statement in the present. Properties are encountered in a cloud form, as an etymology field of properties in each present. Implying their semantic relations and generative rules, they provide the means either to a metalanguage confirmation of the stereotypes of the present reality paradigm, or to go beyond them. Loose semantic relations allow metalanguage interpretive schemata to bind differences in the hierarchy and genre of properties, delineating certain properties as presentations of reality, and others as their representatives. Also, the looseness of the cloud allows diagrammatic simulations to distinguish genre differences in a succession of multiple similarities with metaphor, synecdoche, and metonymy. Diagrammatic simulations by metaphor allow changing the genre of properties, and thus the frame of property assignments, offering the ability to re-assign properties beyond the given relationship, to re-design the subject-object relationship.

The archive of properties of our era can be organized into four areas, delineating a cognitive topology:

- In the area of transformations of the reality paradigm, where the periodic alternation of dominance between cognitive fields corresponds to the periodic alternation of dominance between properties in subject-object bilingualism.
- In the area of transformations of semantic systems characterizing the reality paradigms, where different frames of reference correspond to different genre properties in subject-object bilingualism.
- In the area of property stereotypes, where hierarchical classifications of properties correspond to metalanguage truth-enhancing interpretations with properties derived from subject-object bilingualism.
- In the area of diagrammatic simulations of the design object, where genre of properties can arise in relation to synecdoche and metonymy assignments of properties in metaphorical frames of subject-object bilingualism.

In the first two areas, the data of the properties of the object constitute the tradition of thought that emerges from each era. In the present, properties are encountered as a cloud, within which in the third area the transcendence of data is accepted, and metalanguages classify data properties according to their fidelity to truths. In the fourth area, data relations are reconstructed by shifting property genres according to different diagrammatic simulations of objects. The difference between metalanguage hierarchical representations and the diagrammatic simulations lies in the difference in awareness of conventionality in property assignment relations.

The conventionality of given property assignments is revealed through the ability of multiple simulations, allowing the metonymic allegorical object's double simulation. The elusiveness of the object is perceived, as the conventionality of given hierarchies and similitudes is revealed by the allegorical possibility of the object's simultaneous double simulation. The proposed subject-object bilingualism for the organization of the object property archive inherently carries the allegory, the double simulation of the object, which posits the relativity of the property assignment as the core property of the archive.

## NOTES

<sup>1</sup> Nicolas Bourriaud, *Postproduction: Culture as Screenplay: How Art Reprograms the World* (New York: Lukas & Sternberg, 2002).

<sup>2</sup> Gilles Deleuze, "Bergson's Conception of Difference", in *Desert Islands and Other Texts 1953-1974*, ed. David Lapoujade (Paris: Semiotext(e) Foreign Agents Series, 2004).

Henri Bergson, *Matter and Memory*, 1896 (New York: Zone Books, 1991), 209-211, 231.

Jeanne Lafont, *The Ordinary Topology of Jacques Lacan*, trans. Jack W. Stone (Paris: Point Hors Ligne, 1986), chapter 1: "Space, Structure", 3-5.

<sup>3</sup> Peter Coad, Edward Yourdon, *Object-Oriented Design* (New Jersey: Prentice Hall, 1991), chapter 1: "Improving Design", 4-9, chapter 2: "Developing the Multilayer, Multicomponent Model", 18-35.

Graham Harman, *Object Oriented Ontology* (Middelsex: Pelican Books, 2017), chapter "Why Science Cannot Provide a Theory of Everything", 25-38.

<sup>4</sup> Maurice Merleau-Ponty, *The Visible and the Invisible*, 1964 (Evanston: Northwestern University Press, 1968) chapter 4: "The Intertwining—The Chiasm", 130-155.

<sup>5</sup> George Parmenidis, *Ideology, Technique and Business Fluctuations in the Production of Industrially Designed Objects: Chairs in the Twenties* (Athens: Paratiritis, 1982).

The compilation of an archive of designed objects based on conceptual typology of properties is the main topic in the postgraduate course taught by George Parmenidis and Ifigenia Mari, "Architecture as an object of research: On the conceptual background of research" (Athens: School of Architecture NTUA, Postgraduate Studies, 2022).

<sup>6</sup> The concept of the difference between a syntax-language and an object-language, as the ordinary language about objects in the world, has been developing since the early 20th century. See Rudolf Carnap, *Logical Syntax of Language*, 1937 (London: Routledge, 2000). Also, in the same era, the concept of heteroglossia was developed by Mikhail Bakhtin, "Discourse in the Novel", 1934, in *The Dialogic Imagination: Four Essays by M. M. Bakhtin*, ed. Michael Holquist (Austin: University of Texas Press, 1981). Since then, this concept has been elaborated in the field of design methods to explain a different way of thinking between Humanities and Design. See Nigel Cross, "Designerly way of Knowing", *Design studies*, Vol. 3 No. 4, 1982. Also, on contemporary interest in the idea, see Jean Henrique de Oliveira Menezes, "From Tinkering Methods to Design Thinking: Primordial Thoughts in Design Research", in *Proceedings of the 22nd International Conference on Engineering Design* (ICED19), Delft, 5- August 8, 2019.

<sup>7</sup> Erwin Panofsky, *Studies in Iconology*, 1939 (New York: Icon Editions, 1972), 3-17.

<sup>8</sup> See Birger Hjørland and Jenna Hartel, "Afterword: Ontological, Epistemological and Sociological Dimensions of Domains", *Knowledge Organization*, 30(3/4), 2003.

<sup>9</sup> Michel Foucault, *The Order of Things; An Archaeology of the Human Sciences*, 1966 (New York: Vintage Books, 1973), chapter 10: "The Human Sciences: The Three Faces of Knowledge, The Three Models", 346-347, 356-357.

<sup>10</sup> Alain Badiou, *Being and Event*, 1988 (London: Continuum, 2007), 392.

Alain Badiou, *Logics of Worlds* (London: Continuum, 2009), 222, 381, 397, 400.

<sup>11</sup> Panofsky, *Studies in Iconology*, 3-17.

Nicolas Bourriaud, *Relational Aesthetics*, 1998 (Dijon: Les Presses du Réel, 2002), 46.

<sup>12</sup> Alain Badiou, *Being and Event*, 328-329.

<sup>13</sup> Foucault, *The Order of Things*, 356-357. The category object has been described in terms of assigning properties in comparison to other similar-dissimilar objects, analogous to the linguistic cognitive category in the humanities. The function object has been described in terms of the assemblage rules of elements and subsets, analogous to the biological cognitive category in the humanities. The procedure object has been described in terms of conventions in subject-object interactivity, analogous to the economic cognitive category in the humanities.

Sebastian Rudolph, *Foundations of Description Logics* (Karlsruhe: Karlsruhe Institute of Technology, 2011), 5, 8-10.

<sup>14</sup> Tim Brown, "Design Thinking", *Harvard Business Review*, June 2008.

<sup>15</sup> Thomas Kuhn, *The Structure of Scientific Revolutions*, 1962 (Chicago: University of Chicago Press, 1969), Postscript-1969, 174-210.

<sup>16</sup> See *Architectural Theory: Volume II - An Anthology from 1871 to 2005*, ed. Harry Francis Mallgrave and Christina Contandriopoulos (New York: Wiley, 2008).

See *Theorizing a New Agenda for Architecture; An Anthology of Architectural Theory 1965-1995*, ed. Kate Nesbitt (New York: Princeton Architectural Press, 1996).

- <sup>17</sup> See Linda Henderson, *The Fourth Dimension and Non-Euclidean Geometry in Modern Art*, 1975 (Princeton: Princeton University Press, 1983).  
See Linda Henderson, "The Forgotten Meta-Realities of Modernism: Die Übersinnlich Welt and the International Cultures of Science and Occultism", *Glass-Bead*, 2016.
- <sup>18</sup> See Ian Dunlop, *The Shock of the New; Seven Historic Exhibitions of Modern Art* (New York: American Heritage Press).
- See Robert Hughes, *The Shock of the New; The Hundred Year History of Modern Art* (New York: Alfred Knopf, 1982).
- <sup>19</sup> Richard Boyd, "Homeostasis, Species, and Higher Taxa", in *Species: New interdisciplinary essays*, ed. R. A. Wilson (Cambridge: MIT Press, 1999), 526.
- <sup>20</sup> See Okwui Enwezor, "Modernity and Postcolonial Ambivalence", in *Altermodern*, ed. Nicolas Bourriaud (London: Tate Publishing, 2009), chapter "Forms of Transformation: Modernity as Meta-Language". As an example of a metalanguage framework that constitutes hierarchies of concepts based on representational relations, see Henri Lefebvre, *The Production of Space*, 1974 (Oxford: Blackwell Publishing, 2007), 31-33.
- <sup>21</sup> Richard Boyd, 484-485.
- <sup>22</sup> Within the generic clusters new properties could arise, exhibiting a variety commensurate with the multitude of subjective idiomatic interpretations, confined to the transcendental framework of the metalanguage.
- <sup>23</sup> Brent Brolin, *The Failure of Modern Architecture* (New York: Studio Vista, 1976), chapter 2: "The Cultural Roots of Modern Architecture", 14-54.
- <sup>24</sup> David Joel, *Furniture Design Set Free* (London: J.M. Dent, 1969), 38.
- <sup>25</sup> Paul Ricoeur, *The Rule of Metaphor, The Creation of Meaning in Language*, 1975 (London: Routledge, 2004), chapter "Metonymy, synecdoche, metaphor", 63-68.
- <sup>26</sup> Charles Sanders Peirce, "Diagram" (1906-7), in *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*, ed. Mats Bergman and Sami Paavola (2014), retrieved from <http://www.commens.org/dictionary/term/diagram>, 06.02.2023, MS [R] 339:286r. The purpose of a Diagram is to represent certain relations in such a form that it can be transformed into another form representing other relations involved in those first represented and this transformed icon can be interpreted in a symbolic statement.  
See Stan Allen, "Diagrams Matter", *ANY: Architecture New York*, 1998, 16.  
See John Peponis, Iris Lycouriotti, Ifigenia Mari, "Spatial models, design reasons and the construction of spatial meaning", *Philosophica: Diagrams and the anthropology of space*, vol. 70, 2002.
- <sup>27</sup> Ifigenia Mari, *Taxonomy and regulation diagrams in spatial design; the real and imaginary space and time in Homer's Nekyia, the conceptual space and time in Marcel Duchamp's work* (Athens: PhD National Technical University of Athens, 2021).
- <sup>28</sup> Anthony Vidler, "The third typology", 1976, in *Oppositions Reader*, ed. Michael Hays (New York: Princeton Architectural Press, 1998).

## BIBLIOGRAPHY

- Allen, Stan. "Diagrams Matter". *ANY: Architecture New York* (1998): 16-19.
- Badiou, Alain. *Being and Event* (1988). London: Continuum, 2007.
- Badiou, Alain. *Logics of Worlds*. London: Continuum, 2009.
- Bakhtin, Mikhail. "Discourse in the Novel" (1934). In *The Dialogic Imagination: Four Essays by M. M. Bakhtin*, ed. Michael Holquist. Austin: University of Texas Press, 1981.
- Bergson, Henri. *Matter and Memory* (1896). New York: Zone Books, 1991.
- Bourriaud, Nicolas. *Relational Aesthetics* (1998). Dijon: Les Presses du Réel, 2002.
- Bourriaud, Nicolas. *Postproduction: Culture as Screenplay: How Art Reprograms the World*. New York: Lukas & Sternberg, 2002.
- Boyd, Richard. "Homeostasis, Species, and Higher Taxa". In *Species: New interdisciplinary essays*, edited by R. A. Wilson. Cambridge: MIT Press, 1999.
- Brolin, Brent. *The Failure of Modern Architecture*. New York: Studio Vista, 1976.
- Brown, Tim. "Design Thinking". *Harvard Business Review* (2008): 1-9.
- Carnap, Rudolf. *Logical Syntax of Language* (1937). London: Routledge, 2000.
- Coad, Peter and Yourdon, Edward. *Object-Oriented Design*. New Jersey: Prentice Hall, 1991.
- Cross, Nigel. "Designerly way of Knowing". *Design studies*, Vol. 3 No. 4 (1982): 221-227.

- Deleuze, Gilles. "Bergson's Conception of Difference". In *Desert Islands and Other Texts 1953-1974*, edited by David Lapoujade. Paris: Semiotext(e) Foreign Agents Series, 2004.
- Dunlop, Ian. *The Shock of the New; Seven Historic Exhibitions of Modern Art*. New York: American Heritage Press.
- Enwezor, Okwui. "Modernity and Postcolonial Ambivalence". In *Altermodern*, edited by Nicolas Bourriaud. London: Tate Publishing, 2009.
- Foucault, Michel. *The Order of Things; An Archaeology of the Human Sciences* (1966). New York: Vintage Books, 1973.
- Harman, Graham. *Object Oriented Ontology*. Middlesex: Pelican Books, 2017.
- Henderson, Linda. *The Fourth Dimension and Non-Euclidean Geometry in Modern Art* (1975). Princeton: Princeton University Press, 1983.
- Henderson, Linda. "The Forgotten Meta-Realities of Modernism: Die Übersinnlich Welt and the International Cultures of Science and Occultism". *Glass-Bead* (2016): 1-18.
- Hjørland, Birger and Hartel, Jenna. "Afterword: Ontological, Epistemological and Sociological Dimensions of Domains", *Knowledge Organization*, 30(3/4), (2003): 239-245.
- Hughes, Robert. *The Shock of the New; The Hundred Year History of Modern Art*. New York: Alfred Knopf, 1982.
- Joel, David. *Furniture Design Set Free*. London: J.M. Dent, 1969.
- Kuhn, Thomas. *The Structure of Scientific Revolutions* (1962). Chicago: University of Chicago Press, 1969.
- Lafont, Jeanne. *The Ordinary Topology of Jacques Lacan*. Translated by Jack W. Stone. Paris: Point Hors Ligne, 1986.
- Lefebvre, Henri. *The Production of Space* (1974). Oxford: Blackwell Publishing, 2007.
- Mallgrave, Harry Francis and Contandriopoulos, Christina, eds. *Architectural Theory: Volume II - An Anthology from 1871 to 2005*. New York: Wiley, 2008.
- Mari, Ifigenia. *Taxonomy and regulation diagrams in spatial design; the real and imaginary space and time in Homer's Nekyia, the conceptual space and time in Marcel Duchamp's work*. Athens: PhD National Technical University of Athens, 2021.
- Menezes, Jean Henrique de Oliveira. "From Tinkering Methods to Design Thinking: Primordial Thoughts in Design Research". In *Proceedings of the 22nd International Conference on Engineering Design (ICED19)*, Delft, 5- August 8, 2019.
- Merleau-Ponty, Maurice. *The Visible and the Invisible* (1964). Evanston: Northwestern University Press, 1968.
- Nesbitt, Kate, ed. *Theorizing a New Agenda for Architecture; An Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press, 1996.
- Panofsky, Erwin. *Studies in Iconology* (1939). New York: Icon Editions, 1972.
- Parmenidis, George. *Ideology, Technique and Business Fluctuations in the Production of Industrially Designed Objects: Chairs in the Twenties*. Athens: Paratiritis, 1982.
- Parmenidis, George and Mari, Ifigenia. "Architecture as Object of Research: On the conceptual background of research", Postgraduate Course. Athens: School of Architecture NTUA, Postgraduate Studies, 2022.
- Peirce, Charles Sanders. "Diagram" (1906-7). In *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*, edited by Mats Bergman and Sami Paavola. (2014): Retrieved from <http://www.commens.org/dictionary/term/diagram>, 06.02.2023).
- Peponis, John and Lycourioti, Iris and Mari, Ifigenia. "Spatial models, design reasons and the construction of spatial meaning". *Philosophica: Diagrams and the anthropology of space* (2002): 59-90.
- Ricoeur, Paul. *The Rule of Metaphor, The Creation of Meaning in Language* (1975). London: Routledge, 2004.
- Rudolph, Sebastian. *Foundations of Description Logics*. Karlsruhe: Karlsruhe Institute of Technology, 2011.
- Vidler, Anthony. "The third typology" (1976). In *Oppositions Reader*, edited by Michael Hays. New York: Princeton Architectural Press, 1998.

# ENCODING MATERIAL EMPATHY: A REVIEW OF PHYSICAL MATERIALS AND *DIGITAL GEOMETRIES*

Author:

**TAY YU JIE**

Affiliation:

NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE

---

## INTRODUCTION

“It’s not my duty as an architect to look at it. I cannot do anything about it because I have no power to do anything about it. I think it’s a problem anywhere in the world.”

This was Zaha Hadid’s response in a 2014 interview with The Guardian, regarding the death of 500 Indians and 382 Nepalese migrant workers who died in preparation of the 2022 World Cup in Qatar.<sup>1</sup> While it has been clarified that none of the deaths occurred in the late architect’s construction site, her declaration for architects to be unassociated with exploitative labour questions the extents of power and ethical considerations adopted by the architect in the construction industry.

Extravagant forms conceived through digital environments are only realised through the support of construction labour. While the digital environment is becoming increasingly sophisticated, the construction industry remains one of the most manual industries, second only to agriculture. Considering the opposing states of digital environment and construction, the research seeks to understand this disparity through questioning the affinity between physical materials and *digital geometries*. Physical materials refer to the media that craftspersons work with in the fabrication stages, while *digital geometries* refer to the media that the architects work with in the formulation stages. While the digital environment offers the possibility to encode *digital geometries* as desired, this is not the case with physical materials. Physical materials embody their own material complexity and are embedded within larger networks of supply chains and requirements of labour skills. This unaccommodating perception of material behaviour results in highly resource-intensive construction practices.

The research hopes to explore the possibility of recentring a more empathetic perception of materials during the formulation stages, through the creation of new encoded materials. Encoded materials leverage on the syntax of *digital geometries* to create a hybrid intersection between physical materials and *digital geometries*. Through encoding haptic interactions derived from physical materials onto *digital geometries*, encoded materials restructure an understanding of materials to traverse both digital and physical domains. This open framework of encoded materials generates interdependency between *digital geometries* and physical materials and engages a shared understanding of materials throughout the formulation and fabrication stages while allowing for collaborative innovation to occur.

## TRAJECTORIES OF PHYSICAL MATERIALS AND *DIGITAL GEOMETRIES*

### Split Between Architect-Craftsperson

To understand the trajectory of the digital environment and its contrasting development against construction processes, we must trace past its history within the scope of the architect and identify the

point at which architecture first branched away from the scope of the Master Builder.<sup>2</sup> This division was set forth by the revolutionary shift in worldview from a foundation of divine supremacy to an anthropocentric reality in the sixteenth century.<sup>3</sup> The Master Builder of the past has split into two separate professions today – the architect (using cognitive abilities to formulate ideas, remote from physical materials) and the craftsman<sup>4</sup> (using senses and working with physical materials to formulate resultant artefacts).

Consequently, hierarchy was granted to intellectual work processes while manual labour was less regarded. The architect's cognitive formulations were '*conceived as a process of genesis*',<sup>5</sup> without the limitations of material reality to pursue extents of creativity. Meanwhile, the maker worked with materials in a dynamic relationship, teasing and collaborating with it such that the resultant artefact encompasses material as both the subject and object through the dynamic process.<sup>6</sup> Regardless, it did not matter how the maker perceived materials, as the anthropocentric domination of the architect's perception of materials ultimately superseded them and defined the subsequent trajectories of digital environment and material understandings.

## Domestication of Physical Materials

As architects were granted exclusive authorship of the creative process, the following trajectories of physical materials were aimed to fulfil a supportive role, manipulating materials to morph according to the architect's assumption. British metallurgist and historian of science, Cyril Stanley Smith, identifies the study of material behaviour has always been the concern of empirically oriented professions, such as craftsmen and engineers, rather than philosophers or scientists.<sup>7</sup>

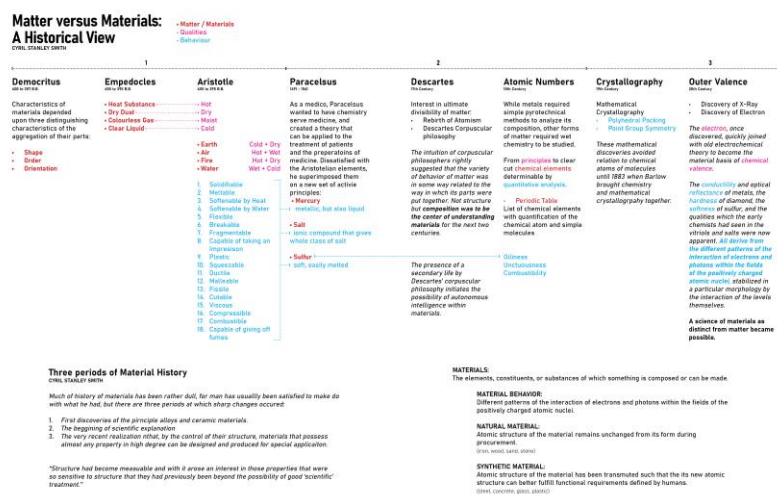


Figure 1. Material history as narrated by Cyril Stanley Smith

It can be observed that the three periods of material history demarcated by Smith pursued an understanding of material behaviour to domesticate the complexity of material behaviour and diminish its vitality. The perception of material as an imperative subject was displaced through empirical research that quantified complex behaviour into domesticated avenues of control.

## Increasing Animacy of *Digital geometries*

In pursuit of unbounded creativity, the development of cognitive formulation was complemented by the establishment of digital environments. Andrew Witt (2021) regards the digital environment as a dimensioned virtualized space; yet it offered a habitable domain that could facilitate cognitive

imagination without dependency on physical reality.<sup>8</sup> Following Mario Carpos's *The Second Digital Turn* (2017), trajectories of development in *digital geometries* can be charted by seminal works over each decade.<sup>9</sup>

Ivan Sutherland's Sketchpad thesis in the 1960s enabled the first direct interface between humans and machines, taking in cognitive input and publishing it as a geometry into the digital realm that could be scaled and manipulated as desired using its encoded values. Instinctive forms of splines could be more accurately expressed through these new avenues of value controls offered by *digital geometries*. This was followed by Charles M Eastman's Building Descriptions System (BDS) in the 1970s that extended the list of encodable information within *digital geometries*, converging fragments of reality into the digital environment. In the 1980s, Stephen Wolfram gave new life to *digital geometries* by defining the potential of Cellular Automata. Through encoding particle genes facilitated by computational processes, *digital geometries* could now calculate predictions more accurately than human inference ever could. It is in this strand of technological development that *digital geometries* evolved into autonomous *digital geometries*, encompassing its own intelligence unreplacable by humans.

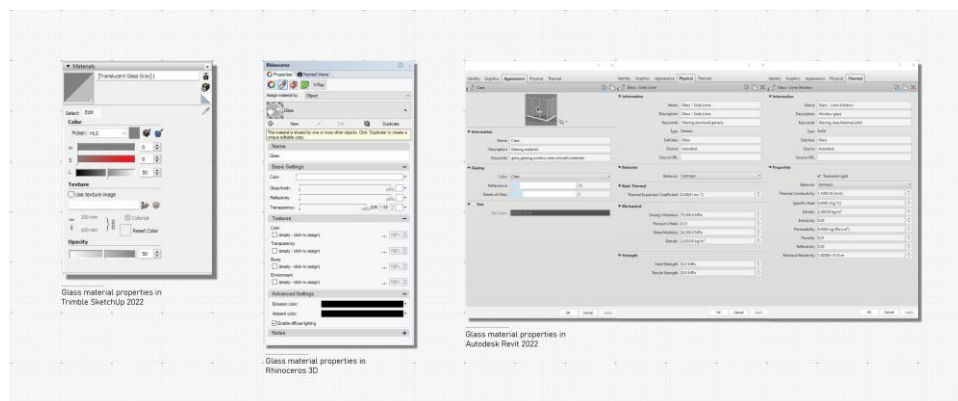


Figure 2. Glass properties across different digital environments

While physical materials were increasingly domesticated with the discovery that material properties can be defined by altering the outer valence of an atom,<sup>10</sup> *digital geometries* became increasingly autonomous through attributing more encoded information upon its creation. This trajectory of *digital geometries* disrupted the human-centric reality it was founded upon and supported the rise of autonomous *digital geometries*, further straining the relationship of formulation against fabrication that is bounded to reality.

### Technology is Never Neutral

In Feenberg's critique of the *Dialectic of Enlightenment* (1947), he notes that the leading members of the Frankfurt School (1881 - 2004) argued that instrumentality is a form of domination, that controlling objects violates their integrity and hence, the incorporation of technology is never neutral. Technology has been able to thrive within the capitalist context due to its objective nature that allows for rationalised development.<sup>11</sup> The contradictory development of physical materials and *digital geometries* showcases the social prejudice incurred by the incorporation of technology despite it behaving seemingly objectively at a microscale. It therefore invites an evaluation of technology through its relationship with materials to explore the social domains that it influences.

## ARCHITECT'S UNDERSTANDING OF THE 'SKILLS OF A CRAFTSMAN'

In every built project, opposing trajectories of physical materials and *digital geometries* must somehow converge through compromise of form or intensification of construction processes. By comparing the intended architectural experience and the chosen method of construction, the material outcome becomes representative of the relationship between the architect and the constructor. In architecture, glass is used to pursue its linguistic narratives, such as its illusive force in Rowe and Slutzky's seminal essay, *Transparency: Literal and Phenomenal* (1963). In engineering, glass is deployed for its structural ideals, able to be quickly fabricated and constructed as observed in The Crystal Palace (1936), and able to manage dynamic loads through its flexibility as demonstrated in the glass facade of Les Serres et Toiture Accueil (1982). The multiple ontological understanding of glass reinvestigates the shortcomings of *digital geometries*, and the consequences of employing monologic accounts of material in the digital environment. The convergence of opposing trajectories and the incumbent relationship between architects and constructors can be observed in the development of the glass sails in Frank Gehry's Fondation Louis Vuitton (FLV).

### Bypassing the Euclidean Syntax



Figure 3. Sailing Yacht Suzanne, 1910

Taking inspiration from the sails of the 1911 J Class yacht Susanne, the expressive glass sails of the FLV adds to the archival of bizarre forms designed by Frank Gehry.<sup>12</sup> The firm was interestingly positioned in contemporary architecture practice. On one hand, Gehry himself is famously known for conceiving extravagant forms using traditional model making. Yet, Gehry & Partners is recognized for being at the forefront of the Architecture, Engineering & Construction (AEC) industry, with their own BIM software, Digital Project, created under their research and computation subsidiary, Gehry Technologies.

This unexpected synthesis between highly dexterous and computational processes were intentionally engaged to enable Gehry's formulative designs to bypass the Euclidean domination that systemized formulation and fabrication production.<sup>13</sup> But the Euclidean syntax aligns much of the fabrication industry, and to veer away from it will demand unconventional or manually laborious building techniques. This framework clearly prioritises imaginative formulations and disregards the reality of resource intensity, using *digital geometries* to justify such bizarre forms to be achievable.



Figure 4. Frank Gehry's physical models of Fondation Louis Vuitton

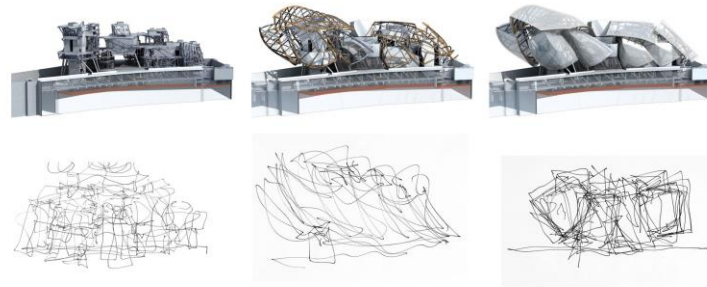


Figure 5. Fondation Louis Vuitton model in Digital Project and Frank Gehry's sketches

### Digital geometries as Decoys

The resultant construction implication of non-Euclidean geometry in Gehry's architecture is discussed in Dennis R. Sheldon's Doctoral dissertation, *Digital Surface Representation, and the Constructability of Gehry's Architecture* (2002). The co-founder of Gehry Technologies rationalises that the physical modelling process was not solely a visual representation but was imperative in the formulation process to "*stand in for those (construction considerations) of craftsmen and fabricators on the resulting building construction.*"<sup>14</sup> The overstatement of modelling material which were directly converted to *digital geometries*, were thoughtlessly equated with physical materials, one to be representative of another, believed to encapsulate consistent meaning across each stage of development. The architects did not acknowledge the *digital geometries* employed are fundamentally decoys that transfers liability from the architects to the manufacturers and contractors. It oversimplifies material behaviour and undermines the laborious aspect of craftsmanship.

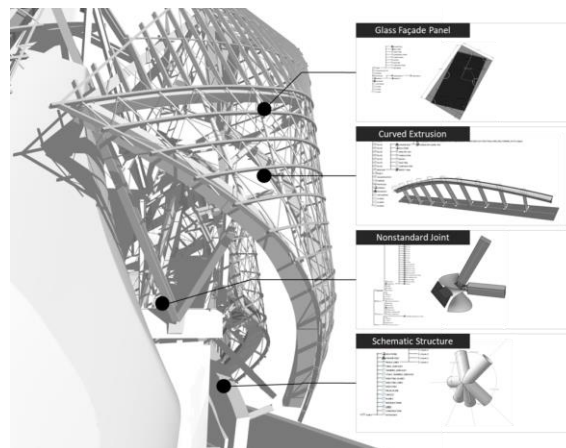


Figure 6. Fondation Louis Vuitton model in Digital Project

### Ambushing the Construction Site

Following the formulation of these *digital geometries*, the chosen fabrication method is dependent on cost. Here, there are three options that the firm could take to manage costs. First is the rationalisation of building form into geometric regularities to streamline production through accessible fabrication machines that operate Euclidean denomination. Second is to generate each component to be fabricated as discrete elements. This of course incurs higher cost with state-of-the-art CNC fabrication machines that can handle free-form geometries effortlessly. The last option depends on the "*craftsman working on the component to figure out aspects of the component's configuration.*"<sup>15</sup> This would enable most

cost savings but would also require an increase in material usage to allow for structural buffers that these “craftsmen” could work with.

The project team must balance between the three methods to keep within considerations of financial cost and, at the same time, achieve as closely as possible the desired form of the project. Across the three options, it should be noted that component assembly is still dependent on manual labour, even if discrete elements could be fabricated using CNC machines (except for additive fabrication). Understanding the realities of manual assembly, the extensive volume of 3,500 custom curved glass panels, 19,000 CNC-cut custom ductal moulds and its respective customised hanging hardware in the construction of FLV could possibly explain the cost of the project exceeding its original budget by nearly eight times.<sup>16</sup> Equating physical model-making materials (converted to digital geometry) with physical construction material becomes problematic as the project was conceived with a lack of prior understanding regarding material behaviour. Without fundamental material understandings, what does the ‘skills of a craftsman’ mean? It becomes a loose term exploited to hide the relegation of complex fabrication procedures to extensive manual labour, as these subjective values are difficult to account for within *digital geometries*.

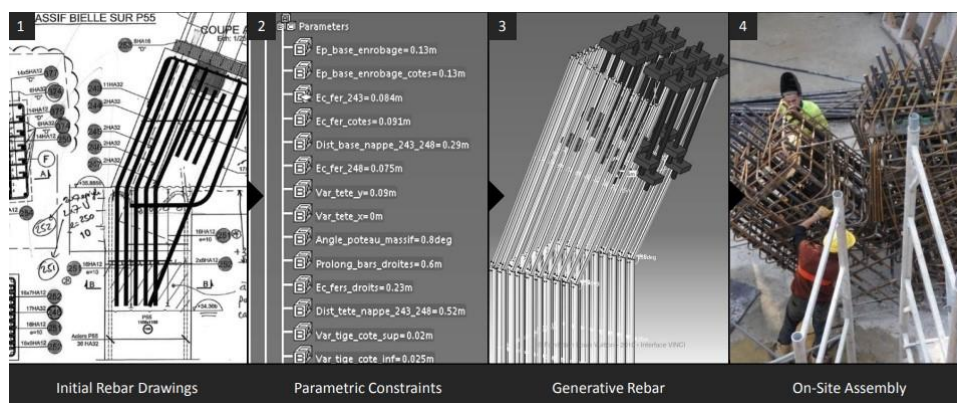


Figure 7. Fondation Louis Vuitton rebars from drawings to construction

### Induced Innovation

Nonetheless, the domination by the trajectory of *digital geometries* within the materialisation of the project expanded the material qualities of the original physical material. Its disregard for feasibility challenges the conventional standards associated with glass within the fabrication industry. The project contended with the use of curved glass used in automobiles, and recognised glass to be dynamic, malleable and invigorated, able to mimic the visual motif of moving sails. The convergence of physical materials with *digital geometries* in this context leaned onto the trajectory of *digital geometries*, successfully conceiving its intended form at a high price of resource intensity. Such endeavour was made possible by access to the patronage of FLV, who were eager to realise an iconic building for the French luxury fashion house. Granted with adequate authority, the unbounded nature of *digital geometries*—able to be encoded as desired, enables it to disrupt the dormant course of physical materials within the fabrication industry and induce points of innovation in its operation.

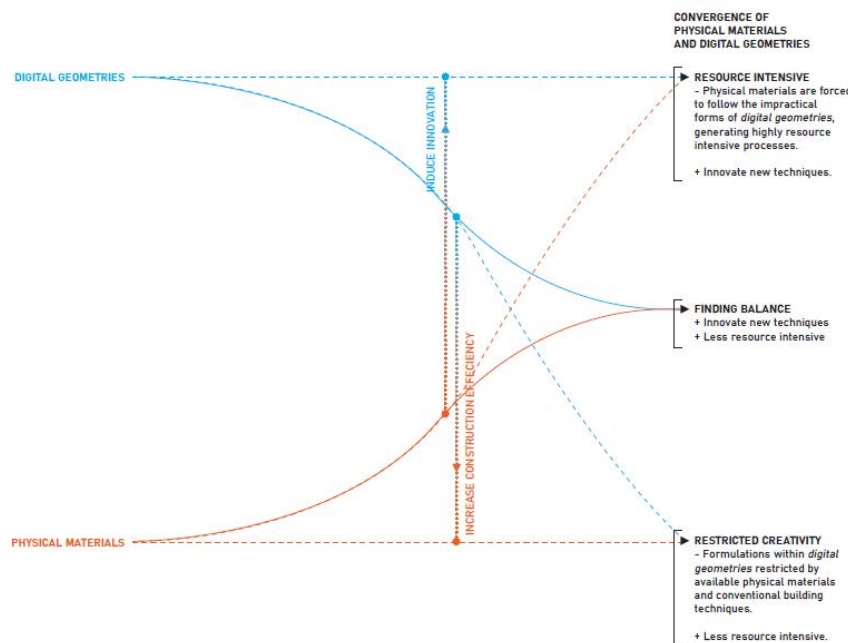


Figure 8. Converging trajectories of physical materials and digital geometries

## RUPTURES IN THE KNOWLEDGE SYSTEM

### Epistemology of Tools

To understand the extent of materiality associated with physical material and *digital geometries* of glass, we need to investigate the trail of tools adopted by each profession across the construction line. Tools systematised the process of humans working with materials and the design of a tool suggests the material behaviour that it was intended to deal with. Comparing the tools used in formulation and fabrication processes identifies the differences between physical materials and *digital geometries*.

As noted by Andrew Witt in *A Machine Epistemology* (2010), tools encapsulate instrumental knowledge within its mechanical or procedural operations.<sup>17</sup> The execution of tools reduces the necessary knowledge to replicate the processes of these tools manually. Reliance on tools, coupled with an incomplete understanding of its processes creates ruptures in the knowledge system of material production. We do not know how it works but we trust that it works. This truncated understanding of material behaviour does not allow for knowledge gained to be conveyed across the production workflow. Without a shared understanding of material behaviour, the conflation of physical materials and *digital geometries* therefore results in either an over-assumption of material capabilities or an undermining of material behaviour. Fundamental knowledge regarding material behaviour will be necessary to push the boundaries of the material feasibly without resorting to conventional building methods or ignorantly fantasising resource-intensive formulations.



E 1 2 4 1 1 1 1 1 1 1

Though the online and free form surveys can be applied across industries it was originally

### Finding Balance between Resource Efficiency and Innovation

Considering the above, there are two perceptions of materials that alter the synergistic conditions of the construction industry. Working with *digital geometries* and being able to encode information in them successfully detaches material from conventional notions and enables designers to generate new forms. The potential risk that such workflow creates is further conflation and detachment of the architect from the realities of construction, blindly generating intensive resource allocation in construction procedures that further burdens the construction industry. However, deliberately restricting designers to work from a palette of available physical materials and building techniques, as seen in Gilles Retsin and Mollie Claypool's *Discrete Architecture* (2019), would create a limitation to form expression that impedes the creativity of the designer. How do we provide a balanced framework for the construction industry, such that it progresses across stages optimally, without becoming sterile or un-empathizing?

### Return to the Digital Master Builder

Unlike tools assigned to individual processes, materials are malleable and proliferate throughout manufacturing and construction processes. A plausible hybridization of physical materials and digital geometry could mitigate existing ruptures in the knowledge system by employing the agency of materials. *Digital geometries* must be encoded with tactile experiences of physical materials — its tolerance and affordances, that can be accessed through an external haptic device to increase accountability. Physical materials must be reimagined to embody new material behaviours to induce new forms of construction through *digital geometries*. Cross-pollination between physical material and *digital geometries* provides a form of system without resorting to standardisation, enabling the industry to mutually progress.

By synchronising material behaviour into the digital environment, *digital geometries* can no longer be perceived as dull matter, but one that embodies its own behaviours and affordances, responsive to the splicing and stretching by the architect. The interdependency generated between *digital geometries* and physical materials no longer allows for further disengagement between stages. *Digital geometries* encoded with existing material properties will recentre a more empathetic perception of material behaviour and reduce resource intensity in construction practices. Anonymous materials encoded with non-existent material properties will clearly identify areas that require innovation intervention from material and structural engineers, without relegating the liability of unrealistic designs to manufacturers and contractors. Through this synthesis, the more fluid process allows for a return of the Digital Master Builder who designs and builds with encoded materials.

## NOTES

- <sup>1</sup> James Riach, 'Zaha Hadid Defends Qatar World Cup Role Following Migrant Worker Deaths', The Guardian, February 25, 2014, <https://www.theguardian.com/world/2014/feb/25/zaha-hadid-qatar-world-cup-migrant-worker-deaths>.
- <sup>2</sup> Master Builder is used to describe the head of a construction project in the Middle Ages or Gothic period, and is someone who possesses design and construction knowledge gathered from years of apprenticeship.
- <sup>3</sup> Maria Voyatzaki, ed., *Architectural Materialisms: Nonhuman Creativity*, New Materialisms (Edinburgh: Edinburgh University Press, 2018), 7.
- <sup>4</sup> While Voyatzaki used the term 'constructor', we have adopted the term 'craftsperson' as it clearly entails an individual who works directly with materials, while constructor could refer to a person or company.
- <sup>5</sup> Voyatzaki, *Architectural Materialisms: Nonhuman Creativity*, 8.
- <sup>6</sup> Voyatzaki, *Architectural Materialisms: Nonhuman Creativity*, 9.
- <sup>7</sup> Melvin Kranzberg and Cyril Stanley Smith, "Materials in History and Society" in *The Materials Revolution*, ed Tom Forrester, (Cambridge, Massachusetts: The MIT Press, 1988), 93.
- <sup>8</sup> Andrew Witt, *Formulations: Architecture, Mathematics, Culture*, Writing Architecture Series (Cambridge, Massachusetts: The MIT Press, 2021), 148.
- <sup>9</sup> Mario Carpo, *The Second Digital Turn: Design beyond Intelligence*, Writing Architecture (Cambridge, Massachusetts: The MIT Press, 2017).
- <sup>10</sup> Cyril Stanley Smith, 'Matter versus Materials: A Historical View', *Science* 162, no. 3854 (8 November 1968): 641, <https://doi.org/10.1126/science.162.3854.637>.
- <sup>11</sup> Andrew Feenberg, *Marcuse or Habermas: Two Critiques of Technology*, Inquiry, no. 39 (Stanford, Calif: Stanford University Press, 2002), 45.
- <sup>12</sup> Matt King, Jorge Hidalgo, and Africa Garcia, 'Glass Sails of the Fondation Louis Vuitton: Approach to Robustness' (T/E/S/S Atelier d'ingénierie, September 2018), 2.
- <sup>13</sup> Dennis Shelden, 'Digital Surface Representation, and the Constructability of Gehry's Architecture' (Cambridge, Massachusetts, Massachusetts Institute of Technology, 2002), 26.
- <sup>14</sup> Dennis Shelden, 'Digital Surface Representation, and the Constructability of Gehry's Architecture', 26.
- <sup>15</sup> Dennis Shelden, 'Digital Surface Representation, and the Constructability of Gehry's Architecture', 44.
- <sup>16</sup> AIA Technology in Architectural Practice (TAP) Knowledge Community, 'Building Information Evolved, Fondation Louis Vuitton' (AIA TAP BIM Awards 2012, Washington, DC United States, n.d.).
- <sup>17</sup> Andrew Witt, 'A Machine Epistemology in Architecture. Encapsulated Knowledge and the Instrumentation of Design.', *Transcript Verlag, Bielefeld, on Behalf of Candide*. 3 (December 2010), 41.

## BIBLIOGRAPHY

- AIA Technology in Architectural Practice (TAP) Knowledge Community. '*Building Information Evolved, Fondation Louis Vuitton*'. Presented at the AIA TAP BIM Awards 2012, Washington, DC United States, n.d.
- Carpo, Mario. *The Second Digital Turn: Design beyond Intelligence*. Writing Architecture. Cambridge, Massachusetts: The MIT Press, 2017.
- Feenberg, Andrew. "*Marcuse or Habermas: Two Critiques of Technology*." Inquiry, no. 39 (2002): 45-70.
- King, Matt, Jorge Hidalgo, and Africa Garcia. '*Glass Sails of the Fondation Louis Vuitton: Approach to Robustness*'. T/E/S/S Atelier d'ingénierie, September 2018.
- Kranzberg, Melvin and Cyril Stanley Smith, "Materials in History and Society." In *The Materials Revolution*, edited by Tom Forrester, 1-39. Cambridge, Massachusetts: The MIT Press, 1988.
- Riach, James. '*Zaha Hadid Defends Qatar World Cup Role Following Migrant Worker Deaths*', The Guardian, February 25, 2014, <https://www.theguardian.com/world/2014/feb/25/zaha-hadid-qatar-world-cup-migrant-worker-deaths>.
- Shelden, Dennis. '*Digital Surface Representation, and the Constructability of Gehry's Architecture*'. Massachusetts Institute of Technology, 2002.
- Smith, Cyril Stanley. '*Matter versus Materials: A Historical View*'. Science 162, no. 3854 (8 November 1968): 637-44. <https://doi.org/10.1126/science.162.3854.637>.

Voyatzaki, Maria, ed. *Architectural Materialisms: Nonhuman Creativity*. New Materialisms. Edinburgh: Edinburgh University Press, 2018.

Witt, Andrew. *Formulations: Architecture, Mathematics, Culture*. Writing Architecture Series. Cambridge, Massachusetts: The MIT Press, 2021.

Witt, Andrew. 'A Machine Epistemology in Architecture. Encapsulated Knowledge and the Instrumentation of Design.' Transcript Verlag, Bielefeld, on Behalf of Candide. 3 (December 2010): 37–88.

# DEBRIS AND DATA; USING PHOTOGRAMMETRY FOR MAPPING REMNANTS IN HONG KONG

Authors:

**NIKOLAS ETTTEL**

Affiliation:

FACULTY OF ARCHITECTURE, THE UNIVERSITY OF HONG KONG

---

“It is about seeing these unintended events as if they were intended, (...). And as if they were an ongoing and unfolding series of connected events that are taking place in every city all the time, only just below the threshold of visibility.”<sup>1</sup>

## INTRODUCTION

This paper explores photogrammetry as a documentation tool for urban leftovers. This approach consists of attentive street observations and intermedia techniques for cataloguing particular urban remnants that are “too place-specific to be abstracted, too plainly useless to be commodified, too absurd to be preserved.”<sup>2</sup>

Thereby, the following uses an investigation method developed by The Street Observation Society (Rojō Kansatsu Gakkai, or short: ROJO), a group of Japanese “innovative and charismatic”<sup>3</sup> architectural detectives for the first time applied in Hong Kong’s streets. Furthermore, this tries to test photogrammetry as the most contemporary tool for the recording and digital reproduction of artefacts. Photogrammetry for this case study allows for a more precise and efficient archival processes of found urban objects. Besides the immediate questions on how digital copies can act as an aid in the preservation of cultural artefacts, this paper deals with the question on why to record seemingly useless urban leftovers reveals interesting urban dynamics. All this tries to shift attention from the “carefully planned, officially designated, and often under-used spaces of public use”<sup>4</sup> towards urban incidents. In the ROJO spirit, this paper deals with objects that are left behind, forgotten, overlooked, neglected, and merely relativized as the “background noise”<sup>5</sup> of urban living. After all, this is an approach to use leftovers to develop a “sensitivity about the city.”<sup>6</sup>

## STREETS ARE MADE FOR WALKING

Leftovers can be spotted everywhere. Every city around the world – some more, some less – consist of hidden treasures - seemingly worthless remnants, rubble, stuff, bits and pieces, junk, leftovers ranging from structural ruins to overlooked façade pieces, stairs to curbs – in another word: urban debris. Yet, there is something imperceptible in these remains. Therefore, it seems relevant to first stroll through different areas in Hong Kong and search for them. But rather than the unplanned journeys through cityscapes described in Guy Debord’s “*derive*,”<sup>7</sup> this paper argues for a more strategic approach: attentive walking.

This way of walking through the city as a physical act of observation by movement is to grow awareness on details rather than psychogeography and emotional disorientation. The method of attentive walking was already mentioned in the seventieth by French theorist Roland Barthes. In *The Empire of Signs*, he states that “[a] city can be known only by an activity of an ethnographic kind: you must orient yourself in it not by book, by address, but by walking, by sight, (...).”<sup>8</sup> Similarly, philosopher Michel de Certeau mentions in *The Practice of Everyday Life* that city-walks are “[the] elementary form of experiencing the city.”<sup>9</sup> Subsequently, a growing number of studies have had investigated the potentials of city walks. But only the physical act of walking may not be enough to find leftovers in Hong Kong, so it may be helpful to peek at the theoretical lens of another French thinker: George Perec, and his idea on *infra-ordinary*. The term describes a certain form of overlooked everyday events, which require careful attention to details to be visible again. In *Species of Spaces and other Pieces*, he coined the term *infra-ordinary* to describe the “overlooked, hence ordinary and habitual aspects of everyday life.”<sup>10</sup>

“What we need to question is bricks, concrete, glass, (...). We live, true, we breathe, true; we walk, we open doors, we go downstairs, (...). How? Where? When? Why? Describe your street. Describe another street. Compare.”<sup>11</sup>

According to Caterinel Popa, eventually, “it all depends on the capacity of the viewer to (re)learn to watch, to see that part of reality which is hidden to the naked eye and to the conscious, that part which escapes us especially because it is in plain sight, being overexposed, trivialised and belittled through repetition.”<sup>12</sup> Another well-used, suitable French philosopher and friend of George Perec is Henri Lefebvre, who once “helped the impoverished Perec [to] get a job doing market research.”<sup>13</sup>

Lefebvre is regularly mentioned as the main source of inspiration in several contemporary urban theories preceding this observation. His influence is highlighted in studies such as *Everyday Urbanism* as “identifying a new position in understanding and approaching the city,”<sup>14</sup> or in *Small Tokyo; Measuring the Non-Measurable* as “adding another definition to urban life,”<sup>15</sup> and interestingly, Lefebvre is also mentioned by Japanese architect Yoshiharu Tsukamoto, founding member of Atelier Bow Wow, in an interview for *Made in Shanghai*,<sup>16</sup> a study conducted in 2018 on the urban transformation of Shanghai succeeding their well-known work *Made in Tokyo*<sup>17</sup> from 2001.

## FINDERS KEEPERS

“There is no cynicism (...), just an admiration of the effort (or pointed lack of effort) entailed by the preservation of these objects, a wonder at their survival amid the ruthless, endless erasure and renewal of the city in its pursuit of economic efficiency, and a pure joy taken in all this useless beauty.”<sup>18</sup>

Moreover, the following will have a closer look on Lefebvre’s direct influence in Asia - more precisely in Japan - through his term “*appropriation*.”<sup>19</sup> Lefebvre’s appropriation description seems relevant to this search on urban leftovers, and is understood by Jordan Sand in his chapter *Deviant Properties* as “(...) an act of opposition against the static formulation of ownership implied by the term property.”<sup>20</sup> Appropriation, he writes, implies time or times, rhythm or rhythms, symbols, and a practice. The act of appropriation questions the stability of property, whereas property itself is the product. He continues that “[a]ppropriation - the gesture of claiming something as property - simply draws attention to property’s made-ness, its artificial nature.”<sup>21</sup> In Japan, Lefebvre and particularly his concept of appropriation, was a great influence to The Street Observation Society. Thomas Daniell describes in *The Anatomy of Influence* that Japanese “avant-garde”<sup>22</sup> artist Genpei Akasegawa focused extensively on Thomassons (or Hyperart); “a term invented by [him] to describe abandoned, useless objects that may be appropriated as conceptual artworks, which he began doing in 1972.”<sup>23</sup> Briefly explained, Thomassons are defined by Genpei Akasegawa as “useless objects attractively maintained.”<sup>24</sup> They are “objects too place-specific to be abstracted, too plainly useless to be

commodified, too absurd to be preserved,”<sup>25</sup> while “leaving them for the rest of the world to rediscover or inadvertently destroy.”<sup>26</sup> Akasegawa retrospectively in 1982, ten years after his research began, named these urban findings Thomassons in “ironic homage to major-baseball player Gary Thomasson, who had been brought in the previous year by the Tokyo Giants team on a huge salary, yet rarely managed to hit the ball – the epitome of expensively maintained uselessness.”<sup>27</sup> Architect Terunobu Fujimori, friend and fellow founding member, describes their observations as “(...) not for aesthetic appreciation - that is to say, they are not to be evaluated (...) using precedents to provide illumination and allow judgement. Nor are they to be relished (...). Because an artwork is an embodiment of the intentions of its author, it can be evaluated and relished, but unintentional things that are not filled with thought or spirit, (...).”<sup>28</sup>

Both concepts “arose from a general interest in odd and amusing artefacts, but if the Thomasson is defined by the deliberate effort put into preserving something no longer functional, ROJO objects are more often the result of negligence and in some cases need no human intervention at all.”<sup>29</sup> Despite this humorous ethnographic research approach, it may be helpful to move from a Japanese-centric method towards a global phenomenon; hence introducing the developed term and method: Krimskrams.

Krimskrams is a tautology of *Kram*; describing unspecified, mostly insignificant objects in any given shape, but rather small in size. It derives from the German word *krāmen*.<sup>30</sup> to search for something that contains many “items.”<sup>31</sup> Here, the term’s ambiguity comes into play as Krimskrams is subsequently not only used to describe specific physical objects found in the city, but also a mode of searching for them. Ultimately, the irony is in giving value - in the form of attention - to found objects on the streets, while, in fact, the objects themselves have no “inherent value”<sup>32</sup> as they were made or left behind anonymously and unintentionally. As mentioned by Sand, this tries to establish an activity to be taken up by anyone who wished to learn this method and thereby constitutes “a critical statement on urban property, along with capitalist economy and national policies that manipulated it.”<sup>33</sup> In this example, the urban finding named as Krimskrams could be therefore described as incidents or anomalies of the common “building practices and policies underlay the visible urban form of the present”<sup>34</sup> As the following case study will show, some of these findings are temporary, yet occasionally became permanent, or even turning themselves into something completely new.

## DOCUMENT KRIMSKRAMS

“An accidental time capsule, a curious box of memories and meaninglessness.”<sup>35</sup>

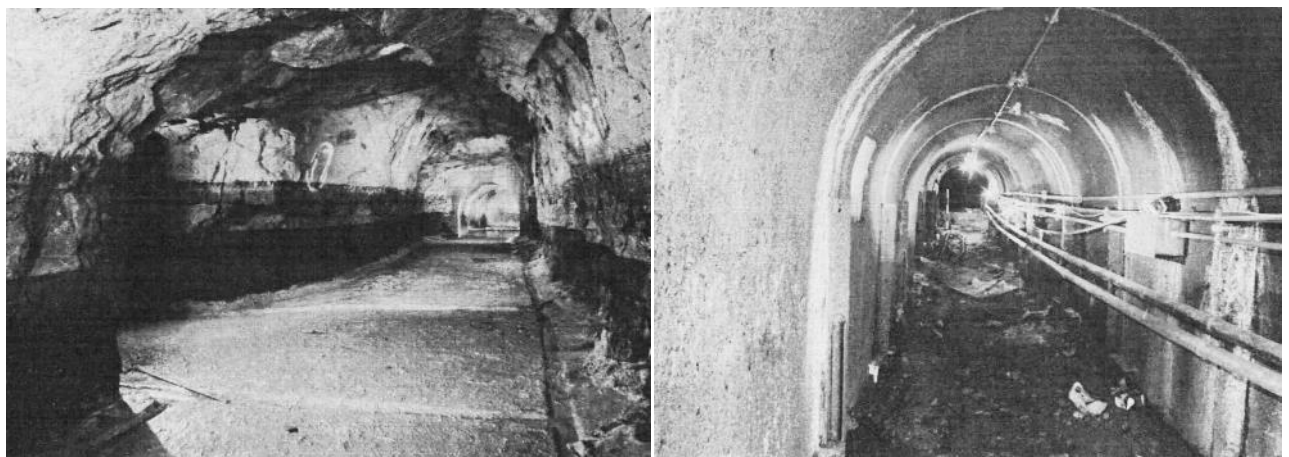
Following the terminology of Krimskrams, the next step is to describe the tool used to enrich the described method. For this research, photogrammetry plays a crucial part in documenting the findings. Briefly described; photogrammetry measures physical objects and environments by analysing photographic data in order to create a digital, in this case a three-dimensional, copy. Accordingly, this method is used in this project due to its efficiency in constructing accurate digital models with precise data of any recorded object in any given form or shape. One striking example for the beneficial use of photogrammetry is a crowdfunded videogame named Vokabulantis. The studio behind this visual compelling game is called Studio Kong Orange, which used animated stop-motion puppetry to achieve a hand-made aesthetic quality. As mentioned by filmmaker and stop-motion animator John Oettinger, the details in this game, such as the tram “was built by hand in two weeks, exterior and interior – it would have taken CG artists at least five weeks to build it in a computer, to that level of detail, with texture. There is a real time to be saved.”<sup>36</sup>

Bringing this back to Krimskrams; some of these abnormalities are occasionally funny, yet questionable in terms of ownership, it seems fruitful to export ROJO’s street observation strategy from Japan to Hong Kong, succeeding their French inspiration for a unique, site-specific application.

It may appear difficult to holistically categorise Krimskrams, but generally, all this is an effort to document temporary incidents that have lost their purpose, function, or meaning over time. This can be in the form of façade pieces that remains due to a party wall conflict. Others can be spotted on the ground, such as leftover street temples,<sup>37</sup> or on costal shores telling about turbulent times of different wars and occupations<sup>38</sup>. Basically, every piece of structure that remains in the urban fabric – maintained or not – yet without an immediate purpose or function should be considered under the banner of Krimskrams. Here, it becomes clear that some findings do hold little to no historical relevance or interesting stories to share and learn from, yet some Krimskrams are richly layered and truly worth sharing. This tries to adapt Marian Brehmer’s argument about lingering items on a bazaar that could “easily could tell more about the culture of this place than any museum”<sup>39</sup> through the following case study.

### CASE STUDY

One of the earliest findings of this research is a walled-up gate. Unremarkable when passing by, it is located underneath the recreational facility *King George V Memorial Park* on Hospital Road in Sai Ying Pun, a hip district of Hong Kong’s main island. Yet, only by closer looks, this specific finding revealed its layers and turned out to be a historical air-raid shelter entrance gate - a military relic that protected inhabitants “against air raid by the Japanese and later the Allied bombing during the World War II.”<sup>40</sup> According to a Government funded investigation of all disused tunnels in Hong Kong, this network is entirely driven entirely into the Hong Kong granite and its shelter comprises of a 770m tunnel network of which 85 m accessible, yet these spaces are occasionally flooded and cracked, very humid – “being above 90% humidity throughout the year, but not foul.”<sup>41</sup> Further 135m of this network are inaccessible due to collapse or have been previously backfilled.



*Figure 1(left). Junction 17 with cast insitu concrete floor<sup>42</sup>*

*Figure 2(right). Tank room of the Hong Kong Jockey Club Clinic towards Junction 1 of Network No.15<sup>43</sup>*

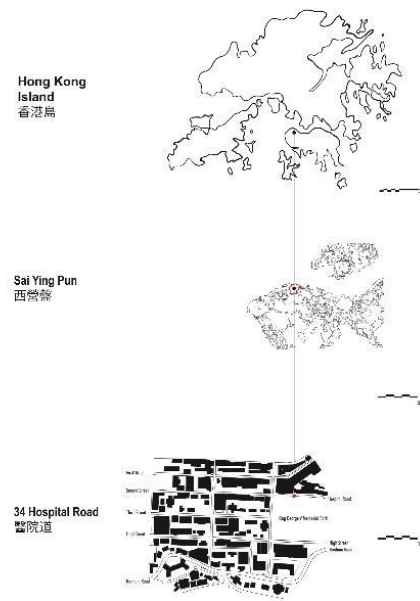


Figure 3. Krimskrams #1: Site plan made by the author

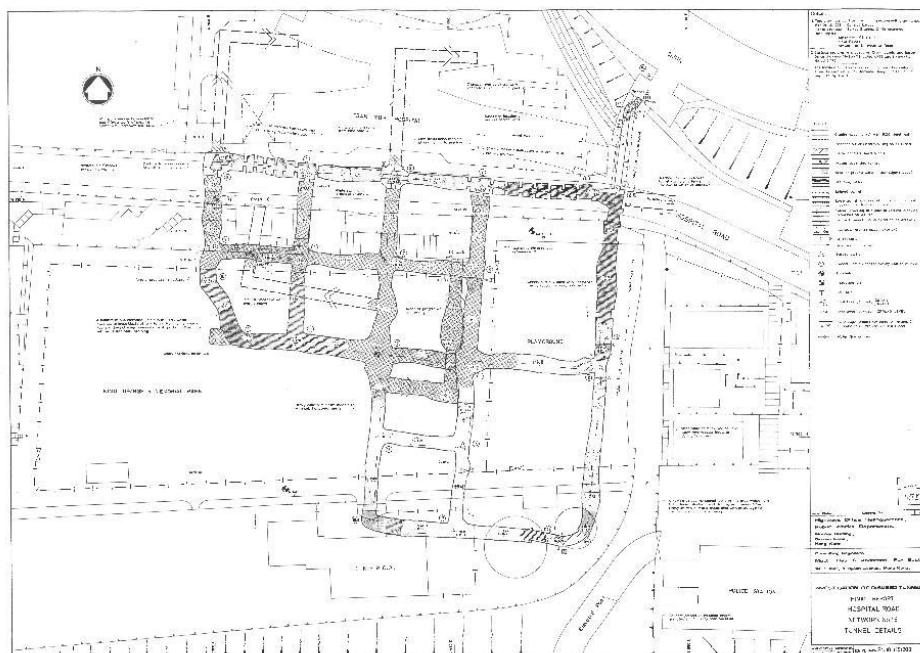


Figure 4. Ground plan of ARP tunnel Network No. 15 by CEDD Hong Kong<sup>44</sup>

Due to a partial collapse of nearby Air Raid Precaution Tunnels (ARPs) in 1977, a wider investigation and repair work has been commissioned and according to this report issued by Civil Engineering and Development Department of Hong Kong, a majority of the tunnels are already backfilled or demolished, and only approximately 90 disused tunnels of an unknown larger network are left. Hence, those in good condition are currently occupied for different purposes by private and public entities, such as the bunker at Shouson Hill on the southside of Hong Kong's main island is leased to a private company as wine cellars for bottled investments. Here, according to an *Al Jazeera* report from 2019,

munition have been replaced by 1,5 million wine bottles with a “total insurance cover of just under 4 billion US dollars;”<sup>45</sup> including one of the most expensive bottles in the world. Another ARP has turned its function and is currently used as part of the Hong Kong Museum of Coastal Defence.



Figure 5. *Krimskrams #1: 3D visualisation of Hospital Road Gate made by the author*

Unfortunately, only limited plan material of the ARP Network No. 15 Hospital Road was found during this research phase, yet, a handful of historical references were made by Cheng Siu-ming’s Master thesis “*King George V Memorial Park mapping the historical changes of a cultural landscapes*.”<sup>46</sup> Siu-Ming concludes that “(...) since no specific use was planned for the tunnels underneath the Park, the entrances were completely sealed off by boulders, leaving the overall design of entrances remain intact and marked the significance of the structures.”<sup>47</sup>

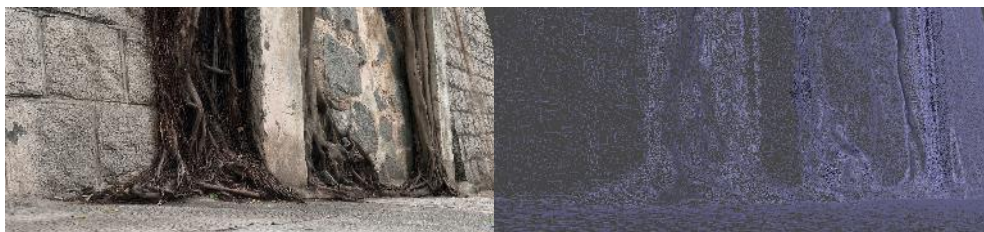


Figure 6+7. *Krimskrams #1: 3D detail of Hospital Road Gate made by the author*

## CONCLUSION

While beyond the scope of this paper, further discussions about the appreciation of the everyday, such as “discovering beauty within the mundane,”<sup>48</sup> according to Thomas Daniell, can be traced back to the fifteenth-century tea master Sen Rikyu, while the shifts of the cultural and critical usage of the term *Everyday* is traced back by John Roberts to the early 1920s after the Russian Revolution.<sup>49</sup> Hence, this attention to urban incidents do reveal, in relation to *Architecture of the Everyday*; “a world of conflicts, tensions, cracks, and fissures - a shifting ground that continually opens to new potentials - and at the same time it presents is historical picture that posits distinctions, hierarchies, and causality in a commitment to political agency and action.”<sup>50</sup> After all, urban debris represents a dynamic temporal phenomenon – “errors in the visual [urban] fabric” that are constantly in a state of uncertainty, as they are “(...) never around for long. They are either painted-over or tagged or removed. It’s like they (...) have to be corrected.”<sup>51</sup> This further requires acceptance of the fact that mentioned debris cannot be conventionally researched – such as through archives, surveys, or printed literature. Subsequently, *Krimskrams* sits between the common understanding of *Everyday Urbanism*

as a concept of “fragmentation and incompleteness”<sup>52</sup> and *Messy Urbanism* as being “hidden, disgraced, [and] under-appreciated.”<sup>53</sup> Here, the rubric Krimskrams describes the things that were left behind; forgotten, overlooked, neglected, relativised - obvious only by careful attention. Soon, an online website will be launched for easy general access to these urban findings which systemically create a three-dimensional, accurate “irreplaceable archive of ephemera made permanent.”<sup>54</sup>

After all, more often than not, Krimskrams represent locality. Perhaps, Krimskrams, as fragmented and unrelated as they may seem become under the right lens then “one of those quirky features of a locality that help to give a place its identity.”<sup>55</sup> A reminder on Georges Cuvier, “a French anatomist and palaeontologist much admired for his ability to reconstruct whole animals from fragmentary fossils.”<sup>56</sup> Here, Krimskrams is digitally preserved to question the conjunction of temporal anomalies in our cities as fragmented documents of property relations and their subsequent incidents. Ultimately, this visualises a paradox: “to capture remains; Or is it even more: to cherish remains, so that something can disappear?”<sup>57</sup>

## ACKNOWLEDGEMENTS

This paper used the investigation report and plans from the archive of The Civil Engineering and Development Building Library Hong Kong, and includes extracts as stated from the Agreement No. CE 11/77 – Investigation of Disused Tunnels, Final Report, Network No. 15 Hospital Road. Matt, Hay & Anderson Far East. Public Works Department, Highways Office Headquarter Hong Kong, Geotechnical Engineering Office Report No. 11865, March 1978.

## NOTES

- <sup>1</sup> David Batchelor, *Found Monochromes* (Ridinghouse, 2010), 299.
- <sup>2</sup> Jordan Sand, "Street Observation Science and the Tokyo Economic Bubble, 1986–1990" in *The Spaces of the Modern City Imaginaries, Politics, and Everyday Life*. ed. Kevin Michael Kruse and Prakash Gyan (Princeton University Press, 2008) 390.
- <sup>3</sup> Thomas Daniell, et al. *An Anatomy of Influence*. Ed. Sarah Handelman (Architectural Association, 2018), 169.
- <sup>4</sup> Crawford Chase, and John Kaliski, John. *Everyday Urbanism* (Monacelli Press, 1999), 13.
- <sup>5</sup> Ben Highmore, *The Everyday Life Reader* (Routledge 2002), 177.
- <sup>6</sup> Jordan Sand, *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects* (Berkeley: University of California, 2013), 91.
- <sup>7</sup> Guy Debord, *Theory of the Dérive* (Les Lèvres Nues #9 (November 1956), reprinted in Internationale Situationniste #2 (December 1958) translated by Ken Knabb, Online (Retrieved on 15 February 2023): <https://www.cddc.vt.edu/sionline/si/theory.html>
- <sup>8</sup> Roland Barthes, *Empire of Signs* (Jonathan Cape, 1983), 36.
- <sup>9</sup> Michel De Certeau, *The Practice of Everyday Life*, trans. Steven Rendall (University of California Press, 1984), 93.
- <sup>10</sup> Georges Perec, *Species of Spaces and Other Pieces*, trans. John Sturrock (Penguin, 1997), 206.
- <sup>11</sup> Georges Perec, *Species of Spaces and Other Pieces*, trans. John Sturrock (Penguin, 1997), 178.
- <sup>12</sup> Catrinel Popa, (2016). *Exploring the Infra-Ordinary (the "Oblique Glance" as Autobiographical Strategy)*, (De Gruyter 2016, Retrieved on 15 February 2023: [https://www.researchgate.net/publication/301571083\\_Exploring\\_the\\_Infra-Ordinary\\_the\\_Oblique\\_Glance\\_as\\_Autobiographical\\_Strategy](https://www.researchgate.net/publication/301571083_Exploring_the_Infra-Ordinary_the_Oblique_Glance_as_Autobiographical_Strategy)), 77.
- <sup>13</sup> Ben Highmore, *The Everyday Life Reader* (Routledge, 2002), 167.
- <sup>14</sup> Crawford Chase, and John Kaliski, John. *Everyday Urbanism* (Monacelli Press, 1999), 13
- <sup>15</sup> Darko Radovic, *Small Tokyo. Measuring the Non-measurable* (Flick Studio, 2012), 10.
- <sup>16</sup> See Li, Xiangning, Danfeng Li, Jiawei Jiang, and Yoshiharu Tsukamoto, *Made in Shanghai* (China: Tongji University Press, 2017).
- <sup>17</sup> See Kajima, Momoyo, Junzō Kuroda, and Yoshiharu Tsukamoto. *Made in Tokyo* (Kajima Institute Pub. Co, 2001).
- <sup>18</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 67.
- <sup>19</sup> Henri Levebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford, UK ; Cambridge, USA: Blackwell, 1991), 165.
- <sup>20</sup> Jordan Sand, *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects* (Berkeley: University of California, 2013), 92.
- <sup>21</sup> Jordan Sand, *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects* (Berkeley: University of California, 2013), 92.
- <sup>22</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 64.
- <sup>23</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 63.
- <sup>24</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 63.
- <sup>25</sup> Jordan Sand, "Street Observation Science and the Tokyo Economic Bubble, 1986–1990" in *The Spaces of the Modern City Imaginaries, Politics, and Everyday Life*. ed. Kevin Michael Kruse and Prakash Gyan (Princeton University Press, 2008) 390.
- <sup>26</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 60.
- <sup>27</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 60-63.
- <sup>28</sup> Thomas Daniell, et al. *An Anatomy of Influence*. Ed. Sarah Handelman (Architectural Association, 2018), 167.
- <sup>29</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 67.
- <sup>30</sup> <https://en.wiktionary.org/wiki/kramen>, Retrieved on 15 February 2023
- <sup>31</sup> Author's translation: <https://www.duden.de/rechtschreibung/kramen>, Retrieved on 15 February 2023

- <sup>32</sup> Jordan Sand, *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects* (Berkeley: University of California, 2013), 92.
- <sup>33</sup> Jordan Sand, *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects* (Berkeley: University of California, 2013), 92.
- <sup>34</sup> Jordan Sand, *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects* (Berkeley: University of California, 2013), 95.
- <sup>35</sup> Kit Yarrow, *What Your Junk Drawer Reveals About You*, Online: <https://www.npr.org/sections/theprotojournalist/2014/08/15/337759135/what-your-junk-drawer-reveals-about-you>, retrieved on 15 February 2023.
- <sup>36</sup> Bryant Frazer, *The Future of Filmmaking: Cinematography in the Age of Photogrammetry*, Online: <https://blog.frame.io/2021/06/14/photogrammetry-future-of-filmmaking/>, retrieved on 15 February 2023
- <sup>37</sup> See Michael Wolf, *Small God, Big City : Earth God Shrines in Urban Hong Kong* = 繁華都市小小神 : 香港市區中的土地神位. Hong Kong : [Berlin]: Hong Kong University Press ; Peperoni Books, 2013.
- <sup>38</sup> See Lawrence W.C. Lai, Y.K. Tan, and Stephen N.G. Davies, Pillboxes on Hong Kong Island in the era of World War II, Special Issue of Surveying & Built Environment, December 2021, Online: [https://www.hkis.org.hk/archive/materials/category/202112\\_SBE\\_Special\\_Issue\\_final.pdf](https://www.hkis.org.hk/archive/materials/category/202112_SBE_Special_Issue_final.pdf), retrieved on 16 February 2023.
- <sup>39</sup> Marian Brehmer, Der Krimskrums, der die iranische Geschichte erzahlt (Neue Zuercher Zeitung, 2019), online: <https://www.nzz.ch/wochenende/reisen/teheran-irans-geschichte-auf-dem-flohmarkt-id.1472980?reduced=true>, retrieved on 15 February 2023.
- <sup>40</sup> Siu-ming Cheng. [鄭兆銘]. King George V Memorial Park : mapping the historical changes of a cultural landscapes. (Thesis). University of Hong Kong, Pokfulam, Hong Kong SAR (2013). Retrieved from [http://dx.doi.org/10.5353/th\\_b5071592](http://dx.doi.org/10.5353/th_b5071592)
- <sup>41</sup> Agreement No. CE 11/77 – Investigation of Disused Tunnels, Final Report, Network No. 15 Hospital Road. Matt, Hay & Anderson Far East. Public Works Department, Highways Office Headquarter Hong Kong, Geotechnical Engineering Office Report No. 11865, March 1978.
- <sup>42</sup> Agreement No. CE 11/77 – Investigation of Disused Tunnels, Final Report, Network No. 15 Hospital Road. Matt, Hay & Anderson Far East. Public Works Department, Highways Office Headquarter Hong Kong, Geotechnical Engineering Office Report No. 11865, March 1978.
- <sup>43</sup> Agreement No. CE 11/77 – Investigation of Disused Tunnels, Final Report, Network No. 15 Hospital Road. Matt, Hay & Anderson Far East. Public Works Department, Highways Office Headquarter Hong Kong, Geotechnical Engineering Office Report No. 11865, March 1978.
- <sup>44</sup> Agreement No. CE 11/77 – Investigation of Disused Tunnels, Final Report, Network No. 15 Hospital Road. Matt, Hay & Anderson Far East. Public Works Department, Highways Office Headquarter Hong Kong, Geotechnical Engineering Office Report No. 11865, March 1978.
- <sup>45</sup> <https://www.youtube.com/watch?v=RjvnuKLUNIU>, retrieved on 15 February 2023
- <sup>46</sup> Cheng. [鄭兆銘]. King George V Memorial Park : mapping the historical changes of a cultural landscapes. (Thesis). University of Hong Kong, Pokfulam, Hong Kong SAR. (2013), Retrieved from [http://dx.doi.org/10.5353/th\\_b5071592](http://dx.doi.org/10.5353/th_b5071592)
- <sup>47</sup> Siu-ming Cheng. [鄭兆銘]. King George V Memorial Park : mapping the historical changes of a cultural landscapes. (Thesis). University of Hong Kong, Pokfulam, Hong Kong SAR (2013). Retrieved from [http://dx.doi.org/10.5353/th\\_b5071592](http://dx.doi.org/10.5353/th_b5071592)
- <sup>48</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 67.
- <sup>49</sup> See John Roberts, *Philosophizing the Everyday Revolutionary Praxis and the Fate of Cultural Theory* (London: Pluto Press, 2006).
- <sup>50</sup> Deborah Berke, and Steven Harris. *Architecture of the Everyday*. New York: Princeton Architectural Press, 1997. 29.
- <sup>51</sup> David Batchelor, *Found Monochromes* (Ridinghouse, 2010), 298.
- <sup>52</sup> Crawford Chase, and John Kaliski, John. *Everyday Urbanism* (Monacelli Press, 1999), 13.
- <sup>53</sup> Manish Chalana, and Jeffrey Hou, *Messy Urbanism : Understanding the "other" Cities of Asia* (Hong Kong University Press, 2016), 4.
- <sup>54</sup> Thomas Daniell, *Just Looking: The Origins of the Street Observation Society*, Source: AA Files, 2012, No. 64, Architectural Association, 2018), 67.
- <sup>55</sup> Christopher Webster, Dean's Roundup. The Life-cycle of a void. July 2021

<sup>56</sup> Honoré de Balzac, *The Wild Ass's Skin*, trans. Helen Constantine and Patrick Coleman (Oxford University Press, 1831, 1954), 234.

<sup>57</sup> Author's adaption: Roger Willemsen, *Der Knacks* (S. Fischer Publisher, 2008), 93. Original: "Warum das Aufschreiben eines Verschwinden? Warum dem Paradoxen Kontur geben: Festhalten, was verschwindet, mehr noch: Festhalten, damit etwas verschwinden kann?"

## BIBLIOGRAPHY

- Akasegawa, Otsuji, 尾辻克彦, Fargo, and Fargo, Matt. *Hyperart : Thomasson*. New York City: Kaya Press Publishers, 2009.
- Barthes, Roland. *Empire of Signs*. Jonathan Cape, 1983.
- Batchelor, David, *Found Monochromes*. Ridinghouse, 2010.
- Berke, Deborah., and Steven Harris. *Architecture of the Everyday*. New York: Princeton Architectural Press, 1997.
- Blomley, Nicholas. "The Boundaries of Property: Complexity, Relationality, and Spatiality." *Law & Society Review* 50, no. 1 (2016): 224-55.
- Certeau, Michel De. *The Practice of Everyday Life*. Berkeley: University of California Press, 1984.
- Chalana, Manish, and Hou, Jeffrey. *Messy Urbanism : Understanding the "other" Cities of Asia*. Hong Kong University Press 2016.
- Chase, Crawford, Kaliski, Chase, John, Crawford, Margaret, and Kaliski, John. *Everyday Urbanism*. New York: Monacelli Press, 2008.
- Code Of Practice For Demolition Of Buildings, 2004.  
[https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/Demolition\\_e2004.pdf](https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/Demolition_e2004.pdf)
- Daniell, Thomas, Sarah Handelman, and Kazuo Shinohara. *An Anatomy of Influence*. AA Publications, 2018.
- Highmore, Ben. *The Everyday Life Reader*. Routledge, 2002.
- Kajima, Kuroda, Tsukamoto, Kuroda, Junzō, and Tsukamoto, Yoshiharu. *Made in Tokyo*. Tokyo : Kajima Institute Pub. Co., 2001.
- Levebvre, Henri. *The Production of Space*. Oxford, UK ; Cambridge, USA: Blackwell, 1991.
- Li, Jiang, Tsukamoto, Li, Danfeng, Jiang, Jiawei, and Tsukamoto, Yoshiharu. *Made in Shanghai*. Luminocity. 2017.
- Perec, Georges. *Species of Spaces and Other Pieces*, translated by John Sturrock. Penguin, 1997.
- Popa, Catrinel. (2016). *Exploring the Infra-Ordinary (the "Oblique Glance" as Autobiographical Strategy)*. Human and Social Studies. 5. 10.1515/hssr-2016-0005.
- Pryor, Mathew. "Everyday urbanism in high density cities" in Yang, Y. and Taufen, A. (Eds.), *Routledge Handbook of Sustainable Cities and Landscapes in the Pacific Rim*, Routledge, 2022.
- Radovic, Darko., Davisi Boontharm, and 慶應義塾大学. International Keio Institute for Architecture Urbanism. *Small Tokyo. Measuring the Non-measurable ; 01*. Tokyo: Flick Studio, 2012.
- Sand, Jordan. *Tokyo Vernacular : Common Spaces, Local Histories, Found Objects*. Berkeley: University of California, 2013.
- Wolf, Michael. *Small God, Big City : Earth God Shrines in Urban Hong Kong = 繁華都市小小神 : 香港市區中的土地神位*. Hong Kong : [Berlin]: Hong Kong University Press ; Peperoni Books, 2013.

# ALGARVE- MEMORY AND IDENTITY REPRESENTATIONS FOR A SUSTAINABLE FUTURE

Authors:

**ANA PEREIRA NETO**

Affiliation:

CHAM, FACULDADE DE CIÊNCIAS SOCIAIS E HUMANAS, FCSH, UNIVERSIDADE NOVA DE LISBOA, 1069-061 LISBOA E CEIA, ISEC LISBOA

---

## INTRODUCTION

Our work has its basis in immersion in the Algarve territory in Southern Portugal, where our research is made, in the scope of Tourism Anthropology, concerning the dynamics of cultural changes, with the overcoming of tourist massification, and their impacts on tangible and intangible heritage. Our scientific approach has its basis in ethics and emic perspectives,<sup>1</sup> with the support of a literature review about heritage memory and authenticity and with data collected within the local population in the scope of participative fieldwork.

Territory and spatial identities, seen as elements essential to mark the landscape in its private and public aspects, also serve for creativeness branding for touristic purposes as attraction factors. However, the demographic growth throughout the timeline generates populations that no longer know their space, in the way that Marc Augé referenced in his work.<sup>2</sup>

Geography loses its meaningful animation to the communities that host newcomers and tourists, with consequent loss of symbolic interpretation of profane heritage. The perennial crystallizes in oblivion, and cultural products appear to be sold, depriving their identity. We notice this, including the unanswered questions about authenticity by some guests/tourists to host populations, which are getting used to the clichés of local touristic territorial marketing, that uniformizes what has been different.

Fragmented information traps local populations, and tourists are lost in meaningless jungles. How can a tourist or an outsider be like a local, and how can locals be knowledge transmitters? Furthermore, how can it be quality on communicational channels to heritage safeguard? These are the main issues that have oriented our work for several years and, subsequently, the present, mirrored in this paper.

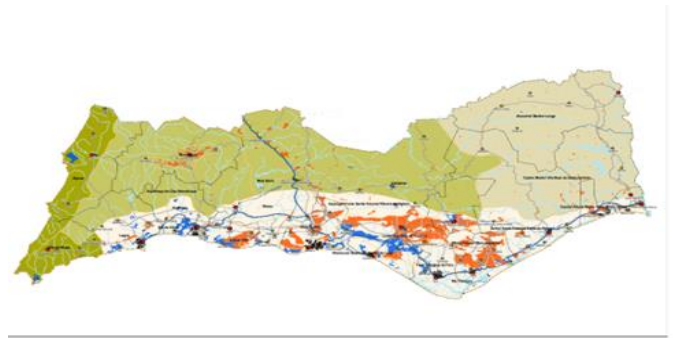
As we find differences in the balance of questions and answers that can transform information into knowledge and, subsequently, identify an attraction with something more, we see in artificial intelligence a possibility to enlighten tourists and residents.

Sustainability is the conducting wire for our research.

## THE TERRITORY

The Algarve region is located at the western end of Europe to the south of Portugal, limited to the north by *Alentejo* region, to the east by the Guadiana River and the south and west across the Atlantic Ocean, highlighting the coastline with a length of 320 km. As part of the Portuguese political Portuguese state, the oldest of Europe, with unchangeable frontiers that are culturally hegemonic in all kept within.

We focus on three sub-territories, from the four in Algarve, by their bio-sociocultural specificities: Vicentian Coast, Barrocal,<sup>3</sup> and Mountain. The territory of Baixo Guadiana,<sup>4</sup> in the right upper part of the figure, is excluded from our analysis in this paper.



*Figure 1. Algarve's territorial units and subunits*

In the territory, which name is a reminder of Garb Al- Andalus,<sup>5</sup> there are sixteen municipalities and only three of them<sup>6</sup> do not have in their heraldry the figures of a Muslim and a Christian King. Past is still a symbolic remembrance in the representation of local identity; however, according to Edward T. Hall<sup>7</sup> “Culture hides much more than it reveals, and strangely enough, what it hides, it hides most effectively from its own participants”. The spaces lived by locals, are embedded of its immediate meaning and personal interpretations, voided of collective knowledge.

How we see these spaces in this uni-ethnic and plural territory in terms of creative expressions broadly identifies with what had previously been mentioned by Boaventura Sousa Santos<sup>8</sup> regarding Portuguese culture and identity. Thus, our culture can be understood as acentric, favoring the plurality of localisms and the appropriation of what comes from outside, or what is alien, is more consistent in terms of form than content. However, we see in rurality, concerning its family ownership over hundreds of generations, the marks of the genesis of tradition mirrored in the discourses of material and immaterial heritage specific to each sub-region that we present.

The relative position, both to Europe, in external terms and with all other more globalizing realities, in which tourism is a vehicle for the transmission of ideas as an accelerator of change, can serve as a factor in understanding the devaluation of rooted traditional culture. The constant recreation, almost carnivalesque, to fill the symbolic void in the staging of spaces mediated by architecture is an alluring factor for our research. Our regard upon spaces, essentially, is focused on the municipalities of Aljezur, Lagos and Monchique .



*Figure 2. Algarve's municipalities*

## Aljezur

The first of these municipalities represents in Portuguese History a great achievement in the conquest of muslim territory and for the portuguese nation-state consolidation.<sup>9</sup> In recent History, Aljezur has been voted for development oblivion by political interests for being the only Algarve municipality that gave the majority of votes for the Presidential candidate Humberto Delgado, in 1958, during the dictatorship period. Its lifestyle kept its almost medieval essence till the 90s of the XX century.<sup>10</sup>

Aljezur, for its peculiarity of landscape, which includes the specificities of the seashore, almost unknown for decades for tourists<sup>11</sup> become, in the '90s, to seem an attraction for estate investment. Most parts of its territory began a process of mischaracterization and hiperbolization of capitalistic use of spaces. Building construction, part of them built in naturally protected areas, gains strength against good sense policies that favor circular economic development and sustainable ecological balance. By the end of the 80s, the inauguration of the new townhouse building, in a traditional agriculture first class soil, for that symbolic purpose, namely in the *várzea*,<sup>12</sup> generates polemics concerning the ecological balance. The building, with a Davidian star shape, was implanted in a water table area, creating future risks for the urban centre flooding.

The traditional dwellings that kept ways of living which include heritage logic of storage, production, and consumption of food, located in kitchens in the innermost part of the back of the house, disappear. Property identity marks, bright painted bars that identify families,<sup>13</sup> and embordering the four edges of the houses, start a whirlpool of possible new significative narratives with different aesthetics marked only by the new owners' taste, transformed frequency quantity trends in capitalistic modernity fashions.

Outside stairs, pilasters, and all the imported materials and shapes came to the renewal of places, within the municipality territory, with a great tendency of occupancy of the seashore near landscape, mainly in quaternary dunes, that were preserved from those purposes for hundreds of generations of territorial occupancy by humans.



Figure 3 New dwellings in Aljezur

The crescent number of local accommodations,<sup>14</sup> a phenomenon that increased in all Portuguese territory in the last decade, despite its formal creation in 2008,<sup>15</sup> generates polemics mainly in what concerns the social issues underlying the overvalue of consumption goods, mainly those of essential choice for subsistence.<sup>16</sup>

Traditional products such as those related with sweet potato<sup>17</sup> from Aljezur agricultural wetlands, obtain status with the foreign classification of *gourmet*, amongst others included in gastronomic heritage, and lose part of their symbolic meaning. Branding places with flavors are part of the commonly known strategy of touristic marketing. Being a guest in a promoted tourism territory is something other than something that includes the physical presence in situ. All the material that is

vehiculated by media and computer technologies in use, in the present times, give information for those, that even by virtual means, can visit a sort of places within a territory.

The process of discover other places and people, as an active form of obtaining knowledge<sup>18</sup> by making dialectics of simple things, is also to be applied to the ones who want to know their place, significantly if they have yet to gain knowledge throughout cultural heritage.

## Lagos

Lagos, as mentioned before, is the name of the territory known as the city of the Discoveries, where the caravels sail, as the beginning of the globalization process that started to motion with the arrival to India's territory.

The built city territory has at its genesis a military configuration within fortified walls that keep safe people and merchandise from external attacks. Within the old walls that kept it growing during the XVIII century, the places are occupied mainly by buildings related to governance functions, mainly with the military, the clerical, and the noble social classes. The people that lived within walls occupied less relevant buildings, in terms of size, regarding the visitor's gaze.

Outside the city walls, the soil use of dryland agriculture, which characterizes social occupation, configured most parts of local folklore, profoundly rooted in secular tradition that looks to the seashore as a gate opened to perils, especially those related to piracy raids.

The traditional way of living kept its essence in a circular economy based on the exchange of subsistence products within the territorial vicinity, exchanging fisheries for fruits, such as oranges, porc-smoked products, and arbutus is an example.

Dryland products, mainly figs, almonds, and carobs, configured the outland territorial skirts of city walls like liminal cultural markers. These products were mainly for outer consummation; their selling was necessary for the familiar economy. However, part of these products was kept for internal consumption as long-duration sources of caloric nutritional elements due to their transformation into a pastry that soon became part of the welcome products for foreigners, in the first pastries commercial establishments of the Algarve.<sup>19</sup>

Sun has its seasonal importance for primary economic activities, as well as water. These elements are essential for most local heritage stories<sup>20</sup> that fix traditional territorial knowledge-based information. Flourished almond trees in springtime were also a theme in local storytelling, as in all of *Barrocal*, where the traditional Moorish agriculture left its marks with all products and production techniques that survived throughout centuries. The legend of the almond trees is related to a Muslim Prince that saved one of his wives, of Nordic European origin, from severe depression, by the promise that in Springtime snow will come to their country. When that season came, the promise was accomplished with the sightseeing of fields full of snow-white flowers.<sup>21</sup>

With the massification process of tourism, due mainly to the Faro airport inauguration in 1965, the bias of commodification of tastes focused on the newcomers started, leaving its marks on the seashore, the city walls and the expansion of construction outside its limitation. New models of activities related to leisure fixed vocational purposes.

Sea sight became an attraction for buildings' seasonal occupancy and investors. The higher, the better sight and the best-selling price. Outside the city walls where buildings with more than five floors and condominiums made their fixation; social neighborhoods were built to accommodate dislocated families from the wall's historical town centre, which is almost empty of local residents, but full of local accommodations for tourists.

Dwelling owners see profit in the valuation of the urban and seashore view for foreigners; the clandestine construction of *Açoteias*,<sup>22</sup> in the centre of the historical town, mischaracterizes the narratives of the context, with the hidden connivance of municipal authorities, upon payment of fines.

The town center, which includes buildings from the XVI century, loses its cultural traces<sup>23</sup> and starts gaining others based on new social and cultural premises.



*Figure 4 Style amalgam within city walls of Lagos*

Salty water gains protagonism in leisure activities and potable water is transformed with chlorine for the same purposes. Swimming pools on top floors in restored buildings give social value to the disruptive commodity consumption of urban spaces. Dryland soils become green with golf camps on grounds where water is scarce.

### **Monchique**

This municipality, in terms of cultural heritage, is related to Aljezur, partially by kindred relations, that served almost as economic survival warranties, since the Christian conquest. Contained in mountain territory with the same name, kept for centuries genetic pools of kin, that upholds proudly their real estate, and family names, by endogamic marriages.

Historically, part of this territory was weakly connected by roads to the rest of the Algarve, and to the Alentejo province.<sup>24</sup> The economy based mainly in Florestal production,<sup>25</sup> granite stone extraction, agriculture, and porc product, started to obtain some relevance in tourism activities<sup>26</sup> in the last two decades of the twentieth century.

The traditional dwellings, made of granite and covered with mortar colored with lime mixed with natural pigmentation, are scarce to actual visitors' sight. The few left, almost in ruins, by local families are bought by foreigners<sup>27</sup> allured by the uniqueness of the buildings, integrated into the natural landscape, and keeping all its traditional architectural elements.

The landscape is modeled in *socalcos*<sup>28</sup> by generations of local inhabitants for arboriculture and agriculture purposes. The resulting products from the harvests went to the markets of the southern coast, namely to Portimão and even the capital of Portugal, *Lisboa*, distinguished by its formal look and exquisite flavor.

Due to its relatively late discovery by tourists and governance promoters for that particular mean, local tradition, namely gastronomy and artisan craft related to essential production technologies and shelter and conservation, kept its essence and soon became a territorial means of attraction.

## SENSORIAL-BASED KNOWLEDGE AI FOR SUSTAINABILITY

Despite local political concern in facing sustainability challenges, by innovative, creative answers supported by scientific knowledge, technology, and society,<sup>29</sup> this last appears to be seen as a whole number of users and consumers of spaces and services that fit in competitive global economic perspectives, that seems not caring for carrying capacity in tourist destinations,<sup>30</sup> followed by intelligent governance.

The focus of governance concerns is mainly on the digital technology that links the territory's cities through shared access to open data that permits management issues concerning territorial matters; however, the immaterial knowledge for practical use needs to be included. However, the local population from these municipalities make efforts to pass information for future memory in scientific papers blogs, and books,<sup>31</sup> with debates promoted by local civic associations<sup>32</sup> and cultural recreational/educative happenings<sup>33</sup>

We inform that AI technologies can be helpful to transmit knowledge, in an educative way, as helpful interpreters of individual senses of the local host population and tourists because individual choices for consumption are mainly made by available information and sensorial means. However, these require interpretation. Traditional food can be interpreted, not only by a receipt of its ingredients' authenticity but also by chemical smell interpretation, by words and scent emission on a mobile application,<sup>34</sup> as well as by the image and sound of its cooking confection.<sup>35</sup> A virtual holographic host<sup>36</sup> can show the landscape with all its stories, interpret all the app user sees and hears, and teach how to use the soil, keeping it without damaging it for future generations.

The individuals' free will to choose is always kept by those who turn in and turn off technology for knowledge purposes. In this sense, the holistic purpose of sustainable tourism, in particular, in its educational/pedagogical means,<sup>37</sup> can include individualistic positioning for creative itineraries with a recreation of memories and new uses of time and space.

The humanist era,<sup>38</sup> coexisting with intelligent technology, has more focus on senses filters. The words of *Eugénio de Andrade*<sup>39</sup> express the importance of feelings in place' memories and subsequently experienced knowledge that endures the fascinating tales of territories with alluring impact to those who visit it.

*Does a homeland have any meaning?  
when is the mouth  
who kisses us, talking about her,  
to bring in your syllables  
the wheat, the cicadas,  
the vibration  
of the mud or the body or the air,  
or the light that breaks through the house  
with the freesias and make, friend, the heart so light*<sup>40</sup>

## CONCLUSION

The dynamics of economic and sociocultural changes in Algarve territory in the last fifty years, operates in an almost complete change of a *Gemeinschaft* into a *Gesellschaft*<sup>41</sup> with inadequacy of the integrational rhythm of novelties by local populations<sup>42</sup> and subsequently knowledge oblivion of heritage typologies that were identity markers of territorial specificities, being these attraction factors for foreigners who come to experience *Europe's Most Famous Secret*.<sup>43</sup> The alluring factor for discovering the difference and the will of fixation in a territory by summer residents, in places where they seem to want to belong<sup>44</sup> vanishes by the overfull of typified information, made for capitalistic purposes.

Culture seems to be shown in a pragmatic way to quick profit, and the quality of its offer is absent in its originality. A rearrangement of products, with imported goods, is transforming places in all its concerning specific characteristics; natural people from these places, outnumbered by permanent immigrant residents<sup>45</sup> no longer apply local knowledge to interpret and protect their territories. The apparent feasibility of their tradition relies on the payment of outsider knowledge for its application. However, the results have pernicious results on daily lifestyles, especially for those natural residents who feel they do not belong in their places. Better inclusive places are needed for everyone and technology can be useful for those purposes.

AI is an exciting technology for personal use daily of choices, in real-time and not in the virtual one, whether for scientific purposes,<sup>46</sup> communication, or knowledge, based on realistic sensorial training. Metaphors could gain more sense; different senses for different users and territorial narratives would be enhanced by real discourses, with new perspectives, generating more pieces for the gamification of discovering nature and creational innovation processes.

Production and consumerism could majorate its quality with positive effects on local economies.

This way, the humanist era could be accomplished, opening the way to the new one, the post-humanist, where memories are fixed, recalled and reused as new information systems in meta reality.

## NOTES

<sup>1</sup> These perspectives were applied to the cultural context by Marvin Harris. See Thomas N. Headland, Kenneth L. Pike, and Marvin Ed Harris Emics and Etics: The Insider/Outsider Debate Sage, 1990.

<sup>2</sup> Marc Augé. *Non-Lieux* Introduction à une anthropologie de la surmodernité. Paris: Seuil, 1992.

<sup>3</sup> This Portuguese term comprehends the Algarve Territory between the Southern Coast and the Mountain, shown in Figure 1, retrieved from: <http://prot.ccdr-alg.pt/Storage/pdfs/PG08.pdf>

<sup>4</sup> The term means Low Guadiana, the river name establishing the political Frontier between Portugal and Spain.

<sup>5</sup> The western part of the territory of the muslim Alandalus civilisation. For better information, António Borges Coelho. *Portugal na Espanha árabe*. Leya, 2019.

<sup>6</sup> Lagos, the city of the Discoveries, Olhão and Faro. This last one is the District capital and head of the Episcopal Seat. Olhão has its essence as a place of commerce and fisheries. Nonetheless, these cities have Moorish/Muslim heritage easily identified in the traditional buildings and lifestyles.

<sup>7</sup> For better information, consult Edward T Hall, *The Silent Language* Garden City, N.Y.: Anchor Press/Doubleday, 1973 53.

<sup>8</sup> See B de Sousa Santos, "Modernidade, identidade a cultura de fronteira." *Tempo Social* [online] v. 5, n. 1-2, 1993: 31-52 ISSN 1809-4554.

<sup>9</sup> Its castle is situated in an elevation in the middle of two others with the designation of *Cabeças* and *Deguladoiro*, portuguese terms that have the meaning of Heads and Decapitator, referring to the remembrance of the slaughter that happened by the Christian conquest by the portuguese king, Afonso III, in the XIII century. A specific name still identifies all landscapes that can be seen from there by older natives and residents of this municipality. To belong and being belonged by places within the cultural frontiers of Aljezur includes identification of symbolic dominion and identificational meaning of private estates that still keeps the names of the owners' families. Private lands for agriculture in wetland soil, which characterizes most of the municipality by tradition, did not need walls to divide.

<sup>10</sup> Despite the dictatorship's fall in 1974, the referred period marks the beginning of the materializing of innovative transformation in the municipality with the application of EU funds. This fact favours the accelerational process of cultural changes, increased by newcomers of several sociological sorts, such as former emigrants' descendants, tourists and foreign entrepreneurs.

<sup>11</sup> The only airport of the Algarve is in Faro, opening in the early '60s. The roads that existed in that period did not favour the dislocation of Aljezur, and touristic promotion of the region of Algarve was beginning. The characteristics of images passed for the tourists that came first, the British, were those of sunny beaches and easy-going lifestyles. This fact generated an amount of demand for these people and others from northern Europe that do not have many sunny days in their countries.

<sup>12</sup> Portuguese term that identifies first wet-class soils for agricultural purposes.

<sup>13</sup> These identifying signs also served as identifiers of places where the ancient meaning of traditional inn's law could be applied, especially for broad sociological issues concerning people and goods, in terms of enlarged parental ship alliances. These were part of the mortar that kept the alliances of power between the families from the municipality and those to whom they had connections in the mountain territory, mainly in Monchique. These people had no cultural identification with the Southern and Eastern populations of the Algarve. A non-formal endogamic policy forbids alliances throughout marriages with the algarvians, also called by people from Aljezur and Monchique as people with dark skin, mainly for these were not pedigreed by family names associated with landowning.

<sup>14</sup> According to the data from portuguese statistics, the number of local accommodations in this municipality, considering the territorial population density, is one of the highest in the country.

<sup>15</sup> By Decree-Law 39/2008, from 7 March, due regulated by Decree-Law 128/2014, from 29 August.

<sup>16</sup> The central market in the head village, whose name is the same as the municipality, sells in estival periods, primal goods such as legumes, fish, amongst others, with prices that are, in percentage, three or four times more than in the city capital of the country.

<sup>17</sup> The municipality contributes to the highest productive soils for the plantation of sweet potatoes within the territory that received EU PGI Certification, which includes Odemira, with its coastal territories.

<sup>18</sup> Referred by Gaston Bachelard (2021).

<sup>19</sup> The brand of Taquelim Gonçalves is still a reference to the traditional pastry, namely in the production of *Dom Rodrigo*, a delicacy with its origins in Lagos. Dry fig paste with almond cakes and almond paste with egg filling cake are some of their specialities. The establishment has been in operational functions since 1935 in the same place in the middle of the town centre, a privileged place for social encounters.

<sup>20</sup> Such as the legends of *Moiras*, enchanted virgins associated with hidden treasures, and water caves, all feminine-related myths rooted in all Portuguese territory with a particular incidence in the South.

<sup>21</sup> Storytelling has a vital role in knowledge related to local sustainability. Traditional dryland agriculture is no longer active in Lagos territory; however, small families' production of vegetables and legumes is a factor of attraction in a centre near the open market to sell the so-called biological products, in function one day a week. Each production has its season and its meaning. The buyers are, in its essence, all-year residents.

<sup>22</sup> Portuguese word that identifies an open flat top floor where, by tradition moorish women could interact socially with other women in the vicinity, without going to the streets. This is still a characteristic of the houses of the city of *Olhão*, that enroots the moorish tradition. We can say that is a private space for public interacting. In Summertime hot nights, entire families used these spaces for sleeping. These places are still used nowadays for meal cooking, as before.

<sup>23</sup> The subsequence of the quantity number of this loss puts the cultural meaning of the city heritage system in peril.

<sup>24</sup> For better information on the isolation that the mountain territory of Algarve had till the '80s of the twentieth century and the sociocultural relations system, see Robin Jenkins. "Exploitation: The world power structure and the inequality of nations." (1970).

<sup>25</sup> In these products, we can refer to wood, and arbutus brandy, known in Portuguese as *aguardente de medronho*.

<sup>26</sup> Especially with the investments in restoring the old hotel's park within the Spa village of Caldas de Monchique. This village, much before the inauguration of the Faro airport, till two decades after it, hosted an elite of portuguese families that gathered in the summertime for water treatments and conviviality means. For marital, economic and political alliances were facilitated in this secluded mountain, where anonymity was a warranty.

<sup>27</sup> Most of them are from the European Union, for private residence use or rental.

<sup>28</sup> Portuguese word for terraces.

<sup>29</sup> See <https://smart-cities.pt/>.

<sup>30</sup> This issue, debated mainly since the late 70s of the twentieth century, still lacks discussions that relate carrying capacity with accommodation and transportation, issues of importance for local and regional development and its population wellbeing.

<sup>31</sup> Some of them of local popular poets, and some of scientists, with municipalities support for editions.

<sup>32</sup> We leave here the reference of *RACAL Club*, seated in Silves municipality, which has most of its territory in the Sierra, the promotor/organizer of *Congresso do Algarve*, which started in 1980, with more than ten years of an international call for papers on Algarve thematics.

<sup>33</sup> Like those promoted by the artistic cooperative *Lavrar o Mira e a Lagoa- Artes Além Tejo*. See, for better information <https://lavaromiraealagoa.pt/>.

<sup>34</sup> Although this app does not exist, all the available technology has already been created, as shown in our previous work (Neto, Ana Pereira 2020). Even textures interpretation is available to be applied in portable devices for personal use.

<sup>35</sup> Sound mapping can be refined in a micro-objective way for more objective and effective communication.

<sup>36</sup> This holographic character can interact with emotional language. That can speak all languages in the world, and who may have, at the choice of the APP user, the somatic characteristics that are most pleasant to him. However, it is still limited to rational, factual information based on a win-win relationship between the customer's tastes/desires and the available data.

<sup>37</sup> See (UNWTO *Tourism Definitions* | *Définitions Du Tourisme de l'OMT* | *Definiciones de Turismo de La OMT* 2019).

<sup>38</sup> See Jean Paul Sartre, *L'Être et le Neant*. Paris: Galimard, 1976.

<sup>39</sup> A portuguese poet from the twentieth century. See Eugénio Andrade. de *O sal da Língua – Precedido por Trinta Poemas*, Barcelona: Associação Portuguesa de Escritores Bibliotex, 2001

<sup>40</sup> Nonofficial free English translation of the poem *Frésias Andrade, Eugénio de. (2001) 37* written in Portuguese.

<sup>41</sup> See Ferdinand Tönnies, *Gemeinschaft und Gesellschaft (Classical Reprint), Grundbegriffe der Reinen Soziologie*, Forgotten Books, 2018

<sup>42</sup> Due mainly of tourism impact, see data for a more profound analysis in: *Municípios: Proveitos totais dos alojamentos turísticos: total e por tipo de alojamento* | *Pordata*. The local population includes not only the natural from the municipalities, with Portuguese nationality, but also foreign residents from several countries, most of them from the UK and EU countries.

<sup>43</sup> Phrase of use to promote, in 2011, the whole territory of Algarve, by the official regional tourism Channel. See the promotional video for UK, in Visit Algarve Youtube Channel: <https://www.youtube.com/watch?v=EbG4M--OlsU>

<sup>44</sup> See Urbain, Jean-Didier (2003).

<sup>45</sup> Consult *Anuário Estatístico de Portugal* (2022).

<sup>46</sup> For instance in building structure analysis, hydrology.

## BIBLIOGRAPHY

- Andrade, Eugénio de *O sal da Língua – Precedido por Trinta Poemas*, Barcelona: Associação Portuguesa de Escritores Bibliotex, 2001.
- Anuário Estatístico de Portugal-2021*. INE, Lisboa: 2022.
- Augé, Marc. *Non-Lieux Introduction à une anthropologie de la surmodernité*. Paris: Seuil, 1992.
- Bachelard, Gaston. *Le Rationalisme Appliqué*, Paris: PUF 2004. Paris: PUF, 2004.
- Baykurt, Burcu, and Christoph Raetzsch. "What smartness does in the smart city: From visions to policy". *Convergence*, 26(4), 2020: 775–789.
- Bolger, Ryan. "Finding wholes in the metaverse: Posthuman mystics as agents of evolutionary contextualization." *Religions*, 2021: 12(9).
- Bourdin, Alain, Tingting Wan, and Philippe Delbos. "Tourism and rural heritage: A win-win relation? The conditions of heritage making in touristic rural regions." *Built Heritage* 3 (2019): 24-36. "Tourism and Rural Heritage: A Win-Win Relation? The Conditions of Heritage Making in Touristic Rural Regions." *Built Heritage* 3, 2019: 24-36.
- Coelho, António Borges. *Portugal na Espanha árabe*. Leya, 2019.
- Das Neves, Augusto José, e Celeste Eusébio. "Capacidade de Carga Em Destinos Turísticos." *Revista Turismo & Desenvolvimento* 36 (2), 2021: 245-58.
- Gonçalves, José, Maria João de Mendonça and Costa Pereira Neto, João Mariano. *Aljezur 1869-1969 Memórias*. Aljezur: Município de Aljezur. 2018
- Hall, Edward, T, *The Silent Language* Garden City, N.Y.: Anchor Press/ Doubleday, 1973 53.
- Headland, Thomas N., Kenneth L. Pike, and Marvin Ed Harris *Emics and Etics: The Insider/Outsider Debate* Sage, 1990.
- Huggett, Jeremy. "Virtually Real or Really Virtual: Towards a Heritage Metaverse?" *Studies in Digital Heritage* 4 (1). Indiana University Libraries: 2020. 1–15.
- Jenkins, Robin *The Road to Alto: an account of peasants, capitalists, and the soil in the mountains of Southern Portugal*. London: Pluto Press, 1970.
- Mauss, Marcel *Techniques, Technology and Civilization*. Nathan Scclanger, Edit. N.Y, Oxford: Berghahn, 2020.
- Murray, Janet H. "Virtual/reality: how to tell the difference.." *Journal of Visual Culture*, 19(1), 2020: 11-27
- Nash, Kathryn, Verity Trott, and William Allen. "The politics of data visualisation and policy making." *Convergence* 28 (1, 2022: 3-12).
- Oliveira, Catarina Reis de, (Imigração em Números – Relatórios Anuais 7) ISBN 978-989-685-129-3. Indicadores de integração de imigrantes: relatório estatístico anual. *Imigração em Números – Relatórios Anuais 7* ISBN 978-989-685-129-3, Lisboa: ACM, IP, 2022, 1ª ed.
- Neto, Ana Pereira "The fantasy of the natural/cultural elements as symbolic tourist attractions through senses and technology". In *Intelligence, Creativity and Fantasy*. Ming Kong, Mário & Monteiro, Maria do Rosário Ed. London: N.Y: CRC Press. 2020. 533-536.
- Santos, B de Sousa, "Modernidade, identidade a cultura de fronteira." *Tempo Social* [online] v. 5, n. 1-2, 1993: 31-52 ISSN 1809-4554.
- Sartre, Jean Paul *L'Être et le Neant*. Paris: Galimard, 1976.
- Tönnies, Ferdinand *Gemeinschaft und Gesellschaft (Classical Reprint), Grundbegieffe der Reinen Soziologie*, Forgotten Books, 2018.
- Urbain, Jean-Didier *At the Beach*, Minneapolis: London: University of Minnesota Press, 2003.
- Werthner, Hannes A. "A digital humanism view on e-tourism." *Inf Technol Tourism* 24, 2022: 347–360

# EDGELANDS TWISTS: PERFORMING LIMINAL FISSURES IN EDGELANDS REPRESENTATIONS

Authors:

JOANNA LEAH

Affiliation:

LEEDS BECKETT UNIVERSITY, UK

---

## INTRODUCTION

Edgelands, coined by Marion Shoard, are liminal places. Like Marc Augé's non-places that result from global and capital production; Edgelands are the waste underbelly of this expansion. Ubiquitous, their matrix-like veins are characterized by activities of dog walkers, kite flyers, graffiti, parkour, and risk takers alongside foragers and photographers. Represented as 'ruin porn,' melancholic pasts, and the subterranean activities of trespass and vandalism, Shoard, in a 'call to arms,' asked for new value and representation of Edgelands that did not rely on the click of a camera for the proliferation of melancholic images. It is the mobile phone, GoPro, or body cams with the ability to be in those activities on the move that creates new imaginative encounters and a new stream of a dynamic dissemination of Edgeland activities. My creative project "*blubilds*" examines inside Edgelands movements; as Tim Ingold states, to be entangled and part of the lifelines of those that live there. "*Blubilds*" are the blueprint lifted off the paper, a live score, a dance diagram where movements taken from the bodies that occupy those places become part of the notation of my embodied diagram, akin to Emma Cocker's work on movement systems in choreographic figures. "*Blubilds*" are short films, serial and processual photographs that capture the process of intersections rather than single images. This paper concludes that "*blubilds*" perform intersecting movements between site and artist to construct new liminal fissures and minor gestures through mediated representations to synchronously break past representations and provoke new connections to rethink Edgelands as our inverted city.

## Edgelands space

Marion Shoard coined and defined edgelands as interfacial interzones, rural/urban wilds, distanced from everyday encounters.<sup>1</sup> Edgelands, are the fringes between what we call urban and what is countryside. Those post-industrial landscapes, motorway sidings, and scrub land tracing through and around our cities, caught in our periphery vision from a car or train window. Mitchell Schwarzer calls this fast-paced periphery vision at a distance, "Zoomscape" and identifies that it offers a view of the backs of cities,<sup>2</sup> the underbelly! Farley and Roberts in *Edgelands: Journeys into England's True Wilderness*<sup>3</sup> expand with a distinct typology of Edgelands ranging from pallets, fly-tipped zones, abandoned car parks, post-industrial sites, and land-banked sites. Existing in a dream like condition; they might as well be imagined areas of desolation we see in films such as Tarkovsky's *Nostalgia* (1983); melancholia and nostalgic ruins of an unearthly kind, part comforting and part eerie.<sup>4</sup> In the industrial ruins, where cables hang, and pools of water lie in cavernous pits where engineering equipment used to function, unearthly ferns spring up in wild gardens.



Figure 1. Edgeland Pool, Johnson's Wireworks, Derbyshire, 2015.

We picture, such modern ruins as a generic form of non-place. Marc Augé in *Non-places* (1985) introduces supermodern places as non-places; ubiquitous as a result of globalization such as one airport terminal looking much like another.<sup>5</sup> Similarly, Edgelands can have similar ecologies like of waste and are the most modern invention of the notion of ruin.<sup>6</sup>

However, Edgelands are not simply industrial ruins, or supermodern waste such as empty telecall centres, they are the railway sidings with make-shift poly tunnels; motorway sidings where wild flowers flourish; and car parks from the 1980s where buddleia spring up along the edges to order them in a grid whilst dog walkers hang poo bags on them like Christmas decorations. Edgelands are a strange mix of quarry scars, industrial waste, desire lines and obscured places that trail through and edge out towns.

This is a liminal typology with recognised characteristics of waste, neglect and periphery use. Edgelands could be described as fissures, the geological crack in our organised built environment. I would like to suggest they are also a little like the biological fissure. In the spirit of George Bataille and Yves - Alain Bois & Rosalind Krauss's *Informe* and *Formless* projects value was assigned to waste, excrement,<sup>7</sup> not to visualise shock but remind us of what we hide, shame and assign low value. Bataille's intention? To draw attention to human conditions, psyche and the values we associate with materials, and forms as a way to question our relationship to them.<sup>8</sup> Likewise, Edgelands are often considered an embarrassing fissure and split within our urban fabric as surplus zones, the excrement of capital waste. Within the *Formless* tome there is a cross-reference to the 'entropic proliferation'<sup>9</sup> coined by Krauss on waste zones and Shoard says: 'Although yesterday's interfacial zones are often swallowed up by subsequent building, sometimes they survive as edgelands within built-up areas'.<sup>10</sup> It seems to me Shoard echoes Bois's concern over the lack of value ascribed to such zones to say, 'we should square up to these hidden facets'.<sup>11</sup>

Edgelands are often aligned with exiled and abject inhabitants with addictions Sibley emphasises how sites of exclusion are not just the exclusion of people but sites where those that are excluded hang out, where certain social and cultural practices dominate.<sup>12</sup> They have become part of an Edgeland aesthetic, a codified landscape for 'other' voices as a cinematic field of melancholic surplus. In Andrea Arnold's writing and film making in *Fish Tank* (2009) edgelands are used as social and

‘intentional’ landscapes to express controversial voices, excluded voices.<sup>13</sup> In fact, their liminality has entered into cultural consciousness as negative. Shoard’s criticism is that edgelands are the lowest form of value amongst how we value objects, people and place, ‘where essential but despised functions are located’.<sup>14</sup> In a ‘call to arms’<sup>15</sup> she asked how artists might value Edgelands in their own right. I also consider “fissure” as a creative subversion to our cultural appreciations and assumptions of place and it is the thrust of this project to insert a crack in that mass of YouTube parkour videos and GoPro recorded feats of Edgelands as risky grounds of daring playgrounds with my film *It’s so serious doing the Twist* from a series I call “*blubilds*”. It sits as a fissure in our interpretation and representations of Edgelands.<sup>16</sup> Shoard says ‘this zone has expanded vastly in area, complexity and singularity’,<sup>17</sup> Edgelands are set to become an increasingly relevant playground becoming an affectionate blob in the landscape. Edgelands are a strange loophole where, covertly, they can abandon themselves to their own desired cities. In reality there are intersections between gender, economic, social and cultural positions that are ripe for new engagement.



Figure 2. Detail image from *It’s so serious doing the twist*, 2016.

While Edgeland cultures attempt to counter life’s other straightjackets, they have in themselves built communities that have become more reified and in turn produced obligations to rules and systems of their own. Typically pockmarked with graffiti, urban explorers, and parkour, networked as social groupings and generically dominated by a distinctly masculine literary discourse, Edgelands have captured the imagination of mostly male ‘wanderers, journeymen and wayfarers’.<sup>18</sup> They are territorialised and practiced spaces by men engaged in distinct forms of wayfaring. Doreen Massey

notes that any site is dominated and therefore excludes others; all sites are subject to social and relational concerns codes of representation and domination play out in cultural groups formed within those sites.<sup>19</sup>

This problem of representation and engagement acknowledges the convenient forms that now delineate and can confine a sense of place and meaning. Shoard asks of the arts - ‘what then to depict them?’<sup>20</sup> and requests a dynamism rather than ‘decay and redundancy’<sup>21</sup> based on participation and engagement as sites of activity. By performing and filming my encounters inside Edgelands, I propose it is the subjective and kinetic that creates a new liminal fissure. It is by these connective phenomena that the cracks of liminality could be expanded.

My films “*blubilds*” sit as transgressions to existing norms of a place;<sup>22</sup> choreographed as poetic articulations of my encounters with Edgelands, they engage with the cultural activities of graffiti, parkour and vandalism in an entangled encounter of correspondence, those life lines that Tim Ingold discusses in his works *On human correspondence*,<sup>23</sup> as ways to think of bodies as matter with environment. ‘Tim Ingold contrasts “the line that goes out for a walk” in Paul Klee’s terms—freewheeling, expressive and born of movement’.<sup>24</sup> In place, our lifelines are entangled in a meshwork, where ‘every living being is a line’ and tangled together in social or cultural life they create knots where we are individual but interlaced. Likewise, we could say “*blubild*” acts are individual but tangled with the cultural life lines I’ve observed.<sup>25</sup> Immersive, I discovered “the *twist*” as a key movement between self and place, between performance and immersion, and a literal twist within the parkour action between falling and landing. Michael Klein says:

‘Choreography is presented as an emerging, autonomous aesthetics concerned with the workings and governance of patterns, dynamics and ecologies. The research indicates that if the world is perceived as a reality constructed of interactions...constellations...choreography can assume...set the conditions for such relations, to emerge.’<sup>26</sup>

Along with Sarah Rubidge, Nicholas Gansterer, Emma Cocker and Mariella Greil’s choreographic perspectives,<sup>27</sup> *blubilds* perform propositions on how to embody, dwell, and rethink our interactions in relation to place; a rethink to how place is performed. In this case the thought to break with the cultural practices of Edgelands are refigured through embodied movement with the objects found within or associated with those places.



Figure 3. *It's so serious doing the twist*, diptych screenshot, 2016.

‘The Expanded sculptural field’ of Krauss’s thinking also poses performance in expanded fields of architecture.<sup>28</sup> Dwyre and Perry acknowledge the experimental phase of architecture as one located with characteristics of performance identified significantly since Bernard Tschumi’s *Parc de la Villette* (1987), to create in relationships between architecture and landscape.<sup>29</sup> Performance architecture plays with the static and temporary, each in tension with one another. Those red constructions focused on connections with people, spatially arranged as performance architecture - ‘there is no space

without event’.<sup>30</sup> In a similar way I take the blueprint and turn it into a “*blubild*”, a dynamic play on the blueprint to perform in framed encounters with place. While this paper does not presume to be architectural it’s conversation never-the-less reflects on what it means to be in mobile interactions with place – Edgelands abandoned architecture and the subcultural groups that dwell there.

“*Blubilds*” performances interact with the specific features that appear to perform a typology of Edgelands rather than the architecture; swampy, broken glass, and broken objects provide specific links to their past function and are embodied within my movements albeit obscured. If we now replace those red cubes of the *Parc de la Villette* with “*blubilds*”; blue performed constructions that cut into Edgelands, they create a split, a break with their past whilst simultaneously acknowledging it within the *blubild* vignette to perform a fissure in the cultural associations of Edgelands spaces.

If ‘Line is the basis of the diagram, therefore, the blueprint, it is also the representation of space and the projected vision’.<sup>31</sup> Ingold reflects that the body is also a line, a life-line of material, dynamic matter.<sup>32</sup> Line is the principal component of structuring and measuring space; a powerful way to investigate the nature of space via the body.<sup>33</sup> Therefore, my lively lines choreograph an embodied discursivity of Edgelands in a “Choreo – graphic” dimension of line, system and movement. The performance with objects creates a movement system. Krauss, Ingold and Cocker establish the diagram as an active model of spatial practices go a long way to think about grammar, punctuation or spacing between elements to inform situated notation derived from elements, objects, and movements as a grammar of ecology of Edgelands.<sup>34</sup> “*Blubilds*” choreographic installations play with spacing, as in, Certeau’s notion that mobile spaces are ‘spaces as practiced place’.<sup>35</sup> Since performances are key in undermining the traditions, representatives and normalization of behaviours of a place my “*blubild*” film *It’s so serious doing the twist* was a deliberate play with the movement and object codings of Edgelands activity in Johnson’s Wireworks and Uttoxeter Car park, Derbyshire, to create gaps and juxtapositions, where meanings are cut, explored, repositioned, reconciled and split. Dara Rigel says time dimensions are narratives that solidify lived encounters,<sup>36</sup> and informs my “*blubilds*” lived choreographic sequencing in teasing out new spaces as fissures.

The action of the twist, breaks the cultural ecology coding, causing new liminal fissures in the cultural practice of place. ‘Twist’ references Mark Wigley’s essay ‘doing the twist’<sup>37</sup>, which explored Jacques Derrida’s threads of deconstruction, via the choreography of the twist.<sup>38</sup> ‘The twist’, a function of the dancing gait twists things out of form, and undoes spatial representation. To ‘do the twist’ for Mark Wigley is to enact Derrida’s thinking of twisting out of the logic of place. To twist is to twist out of the logics, archetypes and characteristics that dominate systems, behaviour gestures and representations. The cultural practices of Edgeland produce, a certain logic to our interpretations and create certain limitations to our expectations. Wigley notes that to operate outside the logics of a place is to work in modes of deviation,<sup>39</sup> and informs my observation that the potential of Edgelands as sites of possibility lie in further deviations and altering practices. Elizabeth Grosz says bodies act like by-products of the spaces we’ve occupied,<sup>40</sup> so ‘To twist’ was an isolated action from a foundation of existing social and functional interactions placed it in a different light, and resets how we perform spaces.<sup>41</sup> Fig 4. Demonstrates to twist and fall to create a choreographic encounter with site.



Figure 4. 'to twist' off 'stairs' in *It's so serious doing the twist*, 2016.

Susanne Ravn and Leena Rouhianen's *Dance Spaces* (2012) points out that bodily movement deploys variable lines, which produce dynamic currents.<sup>42</sup> Both Cupers' and Garrett work highlights the importance of individuals to construct their own reality in the urban landscape – as other spaces through invention, lived encounters.<sup>43</sup> Susan Broadhurst in *Liminal Acts*<sup>44</sup> reflects on performative qualities and emphasis on body and technology and examines liminal performances mediated by screen in creating kinetic relationships as in Fig. 5 a still from the diptych film "Twist". It is this Edgeland Twists which could be viewed as a liminal fissure, mediated via film to create a connection with place on a different variable life line. Tim Etchells *Certain Fragments* (1999), asserts that this type of creative documentary writes over the site,<sup>45</sup> and Butler and Zegher say they are choreographic encounters.<sup>46</sup> Grosz in 'Bodies and Cities' says that our perception of bodies and their relationships with urban spheres are formed via the screen and says that through this type of kinetic connection we have the potential to shift the attention away from overriding functions of a site or place, and transform it into an active dynamic environment.<sup>47</sup> The body is directly responsible for the transformation of places,<sup>48</sup> and the screen interface contributes to our perceptions of how we conceive of our relationships of bodies and city through choreographic spaces that activate the embodied experience of the participant.<sup>49</sup>



Figure 5. chance encounters in *It's so serious doing the twist*, 2016.

Kyra Norman explains in ‘In and Out of Place: Site-based Screendance’ that screendance ‘creates, encounter, read through layers of space’.<sup>50</sup> In Douglas Rosenberg’s essay, ‘Video Space: A Site for Choreography’, he states that:

“video dance is a site-specific practice, that site being video itself . . . and it is further the architecture against and through which the audience perceives the work. . . ”<sup>51</sup>

“*Twist*” like a choreographic cartography, mapping an interface where Linda McDowell argues that space links the sociomaterial and the symbolic, where identities and place are remapped and restructured in order to challenge conventional ones.<sup>52</sup> *Twist* hopefully creates a liminal experience within those ecologies of Edgelands, to prise a crack into existing phenomena, as an action-based tactic. To ‘twist’ is a playful and strategic tool ‘to twist out of form’<sup>53</sup>; to undermine existing representations and displace the coded inscription of place. A liminal fissure, Edgelands Twists are offer potential in their fissure for further liminal spaces to emerge.

Edgelands as a networked community of participants is underway through YouTube, social media, and Vimeo with Go Pro movies. The *blubild* films are a bit of quackery within the agreed language and activity of Edgelands. Donna Haraway asserts the importance of unexpected situated knowledge.<sup>54</sup> It matters who’s speaking, or who’s moving – the conundrum of embodiment and its specificity. Simon Robinson developed his own immersive research method for Edgelands says these sites become a mirror for the individual to realise their own particular type of engagement.<sup>55</sup> We do not neutrally engage; we bring our own subjectivities to these sites which can provide new deviations and potentially new fissures.<sup>56</sup>

## CONCLUSION

To conclude “*Blubild*” films challenge the essentialisation of Edgelands by creating liminal fissures with embodied differences, vibrations and dynamics, a polyvocality of difference. Haraway and McDowell say these differences remap and restructure relationships,<sup>57</sup> and challenge assumptions about places. Maxine Sheets-Johnstone relies on kinetic connections with place<sup>58</sup> and Karoline Gritzner says such encounters with film create a lasting kinetic connection due to their physical sensitivity to place.<sup>59</sup> Edgeland Twists are dynamic connections that link us to Edgelands and provide the potential to activate new movements and rhythms by which to perform them.<sup>60</sup>

## NOTES

- <sup>1</sup> Marion Shoard, "Edgelands" in *Remaking the Landscape: The Changing Face of Britain* ed. Jennifer Jenkins, (London: Profile, Press, 2001), 117.
- <sup>2</sup> Mitchell Schwarzer, *Architecture in Motion and Media*, (New York: Princetown Architectural Press, 2004).
- <sup>3</sup> Paul Farley and Michael Symmons Roberts, *Edgelands: Journeys into England's True Wilderness*, (London: Penguin, 2012).
- <sup>4</sup> See Andrei Tarkovsky Dir. *Nostalgia*, Tonino Guerra and Andrei Tarkovsky, (Italy: Gaumont Italia and France: Grange Communications, 1983). The landscape scenes depict a combination of desolate earthly expanses wandered by a group of men creating scenes of alienation.
- <sup>5</sup> Marc Augé, *Non-Places: Introduction to Supermodernity*, (London: Verso, 1995).
- <sup>6</sup> Simon Robinson, *Archipelagos of Interstitial Ground: A Filmic Investigation of the Thames Gateway's Edgelands*, 2017, 72. [accessed 14.05.2016]  
<https://ualresearchonline.arts.ac.uk/id/eprint/13461/1/Simon%20Robinson%20PhD%20Thesis%20Final%20Corrections%20January%202018.pdf>.
- <sup>7</sup> George Bataille, 'Formless', *Documents* 1, (Paris: 1929, 332) translated. Allan Stoekl with Carl R. Lovitt and Donald M. Leslie Jr, (Minneapolis: University of Minnesota Press, 1985) 31.
- <sup>8</sup> George Bataille, *Visions of Excess, Selected Writings, 1927 – 1939*, translated. Allan Stoekl with Carl R. Lovitt and Donald M. Leslie Jr, (Minneapolis: University of Minnesota Press, 1985) 20.
- <sup>9</sup> Rosalind Krauss, *The Originality of the Avant-Garde and Other Modernist Myths*, (London, MIT Press, 1986), 143.
- <sup>10</sup> Marion Shoard, "Edgelands" in *Remaking the Landscape: The Changing Face of Britain* ed. Jennifer Jenkins, (London: Profile Books, 2001), 143.
- <sup>11</sup> Marion Shoard, "Edgelands", 143.
- <sup>12</sup> See David Sibley, *Geographies of Exclusion, Society and Difference in the West*, (London: Routledge, 1995) who aligns social inequalities with access to places commenting that those free spaces amongst our wastelands are likely to be occupied by those in poverty, outsiders and in the margins, those with health issues either seeking solace in exile or occupying those places as their leisure grounds.
- <sup>13</sup> See Lance Hanson, 'Edgelands Aesthetics: Exploring the Liminal in Andrea Arnold's *Fishtank*, *Writing Visual Culture* 6, (University of Wolverhampton, 2015), [accessed 14.05.16]  
[https://www.herts.ac.uk/\\_data/assets/pdf\\_file/0010/88093/WVC\\_TC\\_3\\_Hanson.pdf](https://www.herts.ac.uk/_data/assets/pdf_file/0010/88093/WVC_TC_3_Hanson.pdf).  
Hanson suggests that Arnold's cinematography draws attention to swathes of waste lands depicting lone and exile youths in trouble to make associations between the typology of place and the complex conditions facing youth cultures from urban areas, sections of society that exist in the liminality and peripheries virtually, socially, culturally, in terms of status and value and consequently also occupy those types of places we depict as empty, yet saturated with a sense of exile. Thus, Edgelands have become the dreamscape for such thinking.
- <sup>14</sup> Lance Hanson, 'Edgelands Aesthetics'.
- <sup>15</sup> Marion Shoard, "Edgelands" in *Remaking the Landscape: The Changing Face of Britain*. ed. Jennifer Jenkins, (London: Profile Books 2001), 118.
- <sup>16</sup> See Joanna Leah, *It's so serious doing the twist*, <https://www.youtube.com/watch?v=V0Y1pnyBgf8>, 2016.
- <sup>17</sup> Marion Shoard, "Edgelands" in *Remaking the Landscape: The Changing Face of Britain*. ed. Jennifer Jenkins, (London: Profile Books, 2001).
- <sup>18</sup> Garrett, Bradley L. *Explore Everything: Place-hacking the City*, London: Verso, 2013; Nancy MacDonald, *The Graffiti Subculture; Youth, Masculinity and Identity*, (London and New York: Palgrave Macmillan, 2001).
- <sup>19</sup> See Doreen Massey, *For Space*, (London: Sage Publications, 2005). Massey explores the local and global implications of spaces and representation taking into account gender that may create multiple spatial accounts.
- <sup>20</sup> Marion Shoard, "Edgelands" in *Remaking the Landscape: The Changing Face of Britain*. ed. Jennifer Jenkins, (London: Profile Books, 2001), 130.
- <sup>21</sup> Marion Shoard, "Edgelands", 17.
- <sup>22</sup> Henry Bial, *The Performance Studies Reader*, (London: Routledge, 2004), 27.
- <sup>23</sup> See Ingold, Tim. 'On Human Correspondence', [accessed 20.09.2019], *Journal of the Royal Anthropological Institute*, 2016.doi.  
[org/10.1111/1467-9655.12541](https://doi.org/10.1111/1467-9655.12541).
- <sup>24</sup> Kyra Norman, 'In and Out of Place: Site-based Screendance', *The International Journal of Screendance*, Vol 1, 2010, 14. [accessed 20.07.22]. <https://doi.org/10.18061/ijsd.v1i0.6141>.
- <sup>25</sup> Tim Ingold, *The Life of Lines*, (London: Routledge, 2015), 13-16.

- <sup>26</sup> Michael Klein, *Choreography as an Aesthetics of Change*, Edinburgh College of Art, Academia edu. 2008. [accessed 23.07.22]. [https://www.academia.edu/3809926/CHOREOGRAPHY\\_AS\\_AN\\_AESTHETICS\\_OF\\_CHANGE](https://www.academia.edu/3809926/CHOREOGRAPHY_AS_AN_AESTHETICS_OF_CHANGE).
- <sup>27</sup> Michael Klein, *Choreography as an Aesthetics of Change*.
- <sup>28</sup> See Rosalind Krauss, 'Sculpture in the Expanded Field' in *The Originality of the Avant-Garde and Other Modernist Myths*, (London: MIT Press, 1994). Krauss famously identifies relationship between landscape, architecture, and sculpture to create new sites of interaction, performance in expanded practices.
- <sup>29</sup> Cathryn Dwyre and Chris Perry, 'Performance Architecture', (Massachusetts: *PAJ: A Journal of Performance and Art*, Vol. 37, No. 1. 2015), 2-7. [accessed 25.07.22]. <https://www.jstor.org/stable/26386735>.
- <sup>30</sup> Cathryn Dwyre and Chris Perry, 'Performance Architecture', 2.
- <sup>31</sup> Joanna Leah Geldard, 'A processional Blueprint for our Edgelands: Exploring a Processional Spatial Model between site and elsewhere.' *Arts In Society* (Los Angeles: CG publishing, 2017), 14. <https://doi.org/10.18848/2326-9987/CGP/v12i03/13-26>.
- <sup>32</sup> Tim Ingold, 'On Human Correspondence', *Journal of the Royal Anthropological Institute*, 2016. [20.9.2019]. [doi.org/10.1111/1467-9655.1254](https://doi.org/10.1111/1467-9655.1254).
- <sup>33</sup> See [microcities.net/portfolio/measuring-space/31.1.20](http://microcities.net/portfolio/measuring-space/31.1.20).
- <sup>34</sup> Rosalind Krauss 'The Grid', *The Originality Of The Avant Garde And Other Modernist Myths*, (Massachusetts: The Mit Press, 1986); Tim Ingold, *Lines*, (London: Routledge, 2007); Nikolaus Gansterer, Emma Cocker, Mariella Greil Editors, *Choreo-Graphic Figures Deviations From The Line - Edition Angewandte*, University Of Applied Arts Vienna, 2017.
- all refer to diagrams in terms of Krauss, dynamic relations, Ingold and mapping movement and Cocker on Dance Diagrams as embodied and choreographic figures.
- <sup>35</sup> See Michel De Certeau, *The Practice of Everyday Life*. translated by Steven F. Rendall. (London: University of California Press, 1984). Certeau asserts that spaces are created through mobile and temporal instances in contrast to places which are usually named and identified with specific associations. Spaces depend upon social and cultural implications converging in specific time and space.
- <sup>36</sup> Dara Rigel, Temporal Drawing 'Experience', Drawing Research Network, *TRACEY*, Loughborough University, [accessed 21.4.21].
- <sup>37</sup> Marc Wigley, *The Architecture of Deconstruction*, Cambridge, Massachusetts: The MIT Press, 1993, 149.
- <sup>38</sup> Mark Wigley, *The Architecture of Deconstruction*, (Cambridge, Massachusetts: The MIT Press, 1993). Wigley takes French Philosopher's concepts the cut, twist and deconstruction to reconsider the disjunctions created through dance and place. He asserts Derrida's logic of place and the dance act to twist, twists the logic of place out of traditional or assumed logics.
- <sup>39</sup> Mark Wigley, *The Architecture of Deconstruction*, 6.
- <sup>40</sup> Elizabeth Grosz, *Volatile Bodies: Toward a Corporeal Feminism* (Theories of Representation and Difference), (London: Routledge, Taylor & Francis Group, 1994).
- <sup>41</sup> Ann Ring Petersen, *Art and Installation; Between Image and Stage*, (University of Copenhagen: Museum Tusculanum Press, 2015), 179.
- <sup>42</sup> Susanne Ravn and Leena Rouhianen's *Dance Spaces, Practices of Movement*, Odense: University of Southern Denmark Press, 2012, 23.
- <sup>43</sup> See Kenny Cupers and Markus Miessen, on *Spaces of Uncertainty*, Müller und Busmann, 2002 in Garrett Garrett, Bradley L. *Explore Everything: Place-hacking the City*, (London: Verso, 2013). 8. [accessed 13.7.2019] <https://books.google.co.uk/books?id=kblvDwAAQBAJ&printsec=frontcover&dq=Cupers+and+cultural+geography+and+trespass&hl=en&sa=X&ved=0ahUKEwjT2NKfjbLjAhWLN8AKHR-QAWcQ6AEIKDAA#v=onepage&q&f=false>.
- <sup>44</sup> Susan Broadhurst, *Liminal Acts: A Critical Overview of Contemporary Performance and Theory*, (London: Cassell, 1999).
- <sup>45</sup> See Tim Etchells *Certain Fragments, Contemporary Performance and Forced Entertainment*, (London: Routledge, 1999), 191. Etchells comments on the power of witnessing performances in places.
- <sup>46</sup> Cornelia H. Butler and Catherine de Zegher. *On Line: Drawing Through the Twentieth Century*. (New York: Museum of Modern Art, 2010).
- <sup>47</sup> Elizabeth Grosz, *Architecture from the Outside, Essays on Virtual and Real Space*, Cambridge, Massachusetts, (London: MIT Press, 2001), xv.
- <sup>48</sup> Elizabeth Grosz, *Architecture from the Outside*, 387.

- <sup>49</sup> Birringer, Johannes, 1998 'Media & performance: Along the border', Baltimore, John Hopkins University Press. in Sarah Rubidge, 'Choreographic Space', in Ravn, Susanne & Rouhiainen, Leena eds. *Dance Spaces: Practices of Movement*, (Odense: University of Southern Denmark Press, 2012), 5.
- <sup>50</sup> Kyra Norman, 'In and Out of Place: Site-based Screendance', *The International Journal of Screendance*, Vol 1, 2010, 14. [accessed 20.07.22]. <https://doi.org/10.18061/ijsd.v1i0.6141>.
- <sup>51</sup> Douglas Rosenberg, *Screendance: Inscribing the Ephemeral Image*, (Oxford: Oxford University Press, 2012), 6. Rosenberg's work in screendance has explored concepts on the drawing out of relationships with the body; that they body mediates and draws attention to specific relationships with a place.
- <sup>52</sup> Linda McDowell, 'Spatializing feminism: geographic perspectives' in Nancy Duncan, *Bodyspace: Destabilizing geographies of Gender and Sexuality*, (London: Routledge, 1996), 38.
- <sup>53</sup> Marc Wigley, *The Architecture of Deconstruction*, (Cambridge, Massachusetts: The MIT Press, 1993).
- <sup>54</sup> Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective", *Feminist Studies* (Vol. 14, No.3, Autumn, 1988), 590. <https://doi.org/10.2307/3178066>.
- <sup>55</sup> Simon Robinson, *Archipelagos of Interstitial Ground: A Filmic Investigation of the Thames Gateway's Edgelands*, 2017, 72. [accessed 14.05.2016]  
<https://ualresearchonline.arts.ac.uk/id/eprint/13461/1/Simon%20Robinson%20PhD%20Thesis%20Final%20Corrections%20January%202018.pdf>.
- <sup>56</sup> Bradley Garrett, *Explore Everything Place Hacking the City*, (London: Verso, 2013), 378.
- <sup>57</sup> Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective", *Feminist Studies* (Vol. 14, No. 3 Autumn, 1988); Linda McDowell 'Spatializing feminism: geographic perspectives' in Nancy Duncan, *Bodyspace: Destabilizing geographies of Gender and Sexuality*, (London: Routledge, 1996).
- <sup>58</sup> Maxine Sheets-Johnstone, *The Corporeal Turn*, (Exeter: Imprint Academic, 2009).
- <sup>59</sup> Karoline Gritzner, 'Form and Formlessness Participation at the limit', *Performance Research, A Journal of the Performing Arts*, Vol. 16, (London: Taylor and Francis, 2011).
- <sup>60</sup> Karoline Gritzner, 'Form and Formlessness Participation at the limit', 111.

## BIBLIOGRAPHY

- Augé, Marc. *Non-Places: Introduction to Supermodernity*. London: Verso, 1995.
- Bois, Yve-Alain., and Rosalind Krauss. *Formless: A User's Guide*. New York: Zone Books, 1997.
- Broadhurst, Susan. *Liminal Acts: A Critical Overview of Contemporary Performance and Theory*, London, Cassell, 1999.
- Butler, Cornelia, H. and Catherine de Zegher. *On Line: Drawing Through the Twentieth Century*. New York: Museum of Modern Art, 2010
- Cocker, Emma., and Nikolaus Gansterer. Mariella Griel. *Choreo-Graphic Figures: Deviations of the Line*. De Gruyter: Berlin, 2017.
- Dwyre, Cathryn and Chris Perry, 'Performance Architecture', *A Journal of Performance and Art*, The MIT Press, Vol. 37, No. 1, 2015.
- Farley, Paul., and Michael Symmons Roberts. *Edgelands: Journeys into England's True Wilderness*. London: Penguin, 2012.
- Garrett, Bradley. *Explore Everything: Place hacking the City*. London: Verso, 2013.
- Gritzner, Karoline, 'Form and Formlessness Participation at the limit'. *Performance Research. A Journal of the Performing Arts*. Vol. 16. Taylor and Francis. 2011.
- Grosz, Elizabeth. *Volatile Bodies: Toward a Corporeal Feminism* (Theories of Representation and Difference), London: Routledge, Taylor & Francis Group 1994.
- Haraway, Donna., "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". *Feminist Studies* 14. 1988.
- Klein, Michael, *Choreography as an Aesthetics of Change*, Edinburgh College of Art, Academia edu. 2008. [accessed 23.07.22].
- McDowell, Linda. "Spatializing Feminism, Geographic perspectives". In ed. Nancy Duncan. *BodySpace: Destabilizing geographies of gender and sexuality*. London and New York: Routledge, 1996.
- Norman, Kyra. 'In and Out of Place: Site-based Screendance'. *The International Journal of Screendance*. Vol 1. 2010.

- Petersen, A.R. *Art and Installation; Between Image and Stage*, University of Copenhagen: Museum Tusculanum Press. 2015.
- Sheets-Johnstone, Maxine. *The Corporeal Turn*. Exeter: Imprint Academic. 2009.
- Shoard, Marion. "Edgelands" in *Remaking the Landscape: The Changing Face of Britain*. ed. Jennifer Jenkins.
- Sibley, David., *Geographies of Exclusion: Society and Difference in the West*. London: Routledge. 1995.
- Robinson, Simon., *Archipelagos of Interstitial Ground: A Filmic Investigation of the Thames Gateway's Edgelands*. 2017.  
<https://ualresearchonline.arts.ac.uk/id/eprint/13461/1/Simon%20Robinson%20PhD%20Thesis%20Final%20Corrections%20January%202018.pdf> 2017.
- Rosenberg, Douglas. *Screendance: Inscribing the Ephemeral Image*. Oxford. Oxford University Press. 2012.
- Rubidge. Sarah. 'Choreographic Space'. in Ravn, Susanne & Rouhiainen. Leena eds. *Dance Spaces: Practices of Movement*. Odense: University of Southern Denmark Press. 2012.
- Thomassen, Bjørn., "The Uses and Meaning of Liminality". *International Political Anthropology* 2, no 1. 2009: 5 – 28.
- Wigley, Mark., *The Architecture of Deconstruction*. Cambridge, Massachusetts: The MIT Press. 1993.

# GODZILLA: THE BIG JAPANESE MONSTER, THE MONSTROUS BODY AND NATIONAL IDENTITY

Author:

KUO-WEI LAN

Affiliation:

I-SHOU UNIVERSITY, TAIWAN

---

## INTRODUCTION

Japan is the only country in the world to have suffered a nuclear attack twice in 1945 and rose from the war to become the world's second economy between the 1950s and 1960s.<sup>1</sup> Since Japan was the target of an American atomic bomb attack in the Second World War and acted as an anti-Communist ally with the US during the Cold War, *Godzilla* (1954) can be seen as a modern Japanese horror that expresses the fear of nuclear war and conveys the messages of anti-nuclear and anti-American. The 1954 *Godzilla* film is a milestone monster film produced outside the Western world and accordingly, *Godzilla* has become a globally recognizable icon of Japanese popular culture.<sup>2</sup> Accordingly, the biggest Japanese studio Toho used *Godzilla* as a prototype to create twenty-eight franchise films and four animation films, and the other four feature films were produced by Hollywood studios for over six decades,<sup>3</sup> all of which makes this franchise the largest series in cinematic history.<sup>4</sup> It is not hard to trace this consistent theme centering on Japan's nuclear trauma and ambivalent attitude towards the country's crushing defeat in the Second World War. The *Godzilla* franchises not only were produced with different directors, screenwriters, actors, composers, crew members, and special-effect technicians but also experienced the fluctuation in the state of the Japanese film industry.<sup>5</sup> Those franchises with the generic characteristic of the monster film centering on the *Godzilla* monster are involved in the representation and embodiment of cultural images and myths with universal and historical elements that are recognized by the audience.<sup>6</sup> Neale argues that genre film is a way of maintaining a dynamic relationship between the need to conform to the spectator's expectation and the element of novelty to secure continual interest.<sup>7</sup> A genre film, Grant argues, is based on the repetition of certain key elements such as conventions, iconography, setting, stories, characters, and audiences which are shaped by or shape the culturally-specific ideology.<sup>8</sup> Japanese producer Tomoyuki Tanaka for *Godzilla* (1954) and the *Godzilla* franchises made between 1954 and 1995 points out that:

[The Japanese] audiences hugely applauded Gojira (*Godzilla*). This is because in everyday life, people have to suppress their anger, and Gojira is a substitution for this.<sup>9</sup>

If *Godzilla*, according to Tanaka, is seen as a sympathetic response to the nuclear attack in 1945, the repetitive theme of the radioactive *Godzilla* monster can be argued to be a product of the social change and the changing way in which Japan sees herself in the world after recovering from the war. In particular, since the 1990s, Japan's anti-nuclear and anti-American sentiment become complex; not only does Japan's attitude towards nuclear technology, militarism, authority, and the relationship with the US become ambivalent, but also the role of *Godzilla* towards Japan oscillates between the protector and the destroyer.

In light of the representation of Japan's postwar social anxiety in the Godzilla series, I will analyze the first Godzilla film, *Godzilla* (1954), and its Hollywood re-edited version, *Godzilla: King of Monster* (1956) to explore this radioactive monster concerning war, nuclear technology, and Japanese national identity. As the Godzilla series provides cinematic spectacle by creating various giant monsters, the monstrous body created in the first Godzilla film is the highly significant landmark monster film in Japan where the power relations between scientists, military, government, and journalists can be seen as well as the Japanese national identity is constructed through the discourse that is shared among the Japanese institutions and authorities. This case study is divided into two sections; the social context of Godzilla and the otherness of Godzilla.

## THE CONTEXTUALITY AND INTERTEXTUALITY OF GODZILLA

The Godzilla series under the biggest Japanese Toho studios' production, establishing a distinctive genre since the 1950s, has been franchised for over six decades as well as become one of the most popular generic films for Japanese and international audiences. The emergence of the Godzilla monster genre is often associated with Hollywood science fiction cinema, and its narrative is usually located in the contextual relationship with the US after the Second World War. As Godzilla's debut became a box-office success in Japan in 1954, Toho defined Godzilla as the *kaiju eiga* (namely monster movies), creating unique characters of radioactive animal-like monsters repeatedly appearing in the twenty-eight Godzilla franchise films. These series are based on the 1954 version creating a common narrative that the destruction of Japanese urban landscapes and casualties results from Godzilla's revival through the development of nuclear weapons or energy and his fighting with the other monsters that constantly threaten the world. As a hit in Japan, *Godzilla* was remade by Hollywood and released in 1956 in the US and thirty years later, Hollywood made *Godzilla* appear in 1998. The Japanese Godzilla franchise films have been released internationally in the forms of theatrical, video, DVD, and TV, dubbed into different languages.<sup>10</sup> Moreover, Godzilla has become a logo that has produced its commercial by-products such as Godzilla animations, Godzilla comic books, monster toys, computer games, posters, and greeting cards.<sup>11</sup> The constant reproduction of the image of Godzilla through cinema and related merchandise makes Godzilla an international hit and creates the Japanese monster as a global icon.<sup>12</sup>



Figure 1. *Godzilla* (1954)

As Godzilla has become a popular cultural figure in the world through franchise films and merchandise, this monster does not receive the same valuation from film critics in the West. The film

reviews of the Godzilla series in the West, particularly in the US, are different from those in Japan. Although *Godzilla* (1954) was considered one of the top 20 Japanese films of all time according to Japan's oldest film magazine named Kinema Junpo and the remake of the Godzilla film *Godzilla, King of the Monsters* created by American production companies received strong box-office receipts, the different perceptions of Godzilla created in the two films are linked with the contexts of the film industry between Japan and Hollywood, the history between Japan and the US after the Second World War, and the social and cultural differences between Japan and the West.<sup>13</sup> For example, Godzilla.com, Toho's official Godzilla website, introduces Godzilla as the king of monsters who establishes his legend in postwar society and popular culture, the moral symbol who embodies the horror of a nuclear attack, and the hero who saves the world from the constant threat of other menacing monsters. In contrast to the heroic depiction on Toho's website claiming that "Godzilla.com is a testament to his staying power, to the force that surrounds the most recognizable monster in film history, to the cultural significance of this mighty giant",<sup>14</sup> American film critics often see the Godzilla series released in the US as either the imitation of Hollywood science fiction films with "bad dubbing" or a "cheesy, low-budget exploitation" production with "a man in a rubber monster suit stomping on a toy city".<sup>15</sup> For example, Kalat and Noriega both point out that Toho's *Godzilla* is considered by many critics as a copy of the 1953 Hollywood film *The Beast from 20,000 Fathoms* (1953).<sup>16</sup> The director of *Godzilla* (1954) had admitted to the reporter that he was inspired by the American monster films, *King Kong* and *The Beast from 20,000 Fathoms*.<sup>17</sup> Comparing the storyline of the two films, both films portray the two monsters not only as long-dormant prehistoric dinosaur which revives because of nuclear testing and then mutates into destructive and aggressive giant attacking the capital cities in New York and Tokyo and then is killed by the high technological weapons such as the radioactive isotope created by the American scientist and the Japanese scientist's Oxygen Destroyer. In addition to the similar narrative, when the low cost of *The Beast from 20,000 Fathoms* created one of the biggest film revenues in 1953 (the cost was around US\$ 400,000 but the revenue was about US\$ 5 million), Japan's filmmakers noticed the potential profit in making science fiction film in Japan.<sup>18</sup>



Figure 2. *Godzilla* (1954)

As the American film critics believe that the creation of Godzilla was heavily dependent on the influence of Hollywood science fiction films, Kalat points out that critics in the West prejudge the Godzilla films made by Toho as commercial films that lack aesthetic and cultural implications.<sup>19</sup> The West's film critics, Kalat points out, often consider that the value of commercial films is less than art

films since art films focus on artistic merit and cultural remit and commercial films only focus on profit and public taste.<sup>20</sup> However, Kalat opposes this arbitrary division in film and argues that both categories do consider commercial expectation and artistic expression.<sup>21</sup> The *Godzilla* series, according to Kalat, comprises the characteristics of art and popular films.<sup>22</sup> Moreover, Tsutsui proposes that the emergence of *Godzilla* did not come from no-where in Japan but was created out of Japan's complex dynamics between "political concerns, cultural influences, cinematic inspirations, genre traditions, economic crassness, simple opportunism, and sheer creativity".<sup>23</sup> Tsutsui suggests that the origin of *Godzilla* films is under the historical conditions of the Second World War and the Cold War. Hiroshi points out that after losing the Second World War and the two atomic bombs being dropped on Hiroshima and Nagasaki, Japan was under not only the American military occupation between 1945 and 1952 but also the tensions and anxieties that the Cold War and the testing of nuclear weapons provided.<sup>24</sup> Japan's nuclear anxiety reached its highest peak in March 1954 just before the release of *Godzilla* in December when a Japanese fishing vessel was accidentally exposed to massive amounts of radiation in an American nuclear weapon testing zone on Bikini Atoll in the Pacific Ocean.<sup>25</sup> One crew member died after radiation exposure and the radioactively contaminated tuna entered the Japanese markets. The Japanese media's strong hostility towards nuclear weapons and the US was triggered by these events.<sup>26</sup> After the fishing vessel's accident, most Japanese people refused to eat fish.<sup>27</sup> The tabloid newspapers claimed that the incident was another American attack and anti-nuclear weapon demonstrations spread over the country.<sup>28</sup> The director of *Godzilla* (1954), Ishiro Honda clearly expresses that his film is a "grave warning about the folly of nuclear testing and proliferation" since his experience during Second World II and the atomic bombs have inspired the creation of *Godzilla*:

"Most of the visual images I got were from my war experience. After the war, all of Japan, as well as Tokyo, was left in ashes. The atomic bomb had emerged and completely destroyed Hiroshima... If *Godzilla* had been a dinosaur or some other animal, he would have been killed by just one cannonball. But if he were equal to an atomic bomb, we wouldn't know what to do. So, I took the characteristics of an atomic bomb and applied them to *Godzilla*."<sup>29</sup>

According to Kalat and Tsutsui, it is clear that the West produces a different historical standpoint on the emergence of *Godzilla*. As the US played a role of triumph in the Second World War and launched the atomic bomb, Japan lost the war, being the victim of nuclear war. The nations had different views towards nuclear war and nuclear weapon development. Japan was the one suffering from nuclear attacks. The 1954 *Godzilla* film was inspired by the Hollywood film, but the purpose of making *Godzilla*, on the one hand, by considering the potential commercial profit, and on the other hand, deliberately representing the trauma of the war and nuclear attack in Japan. Moreover, the director's wartime experiences should be carefully considered in the film production and directorial signification. Honda had witnessed the firebombing in Tokyo as a soldier during the war and visited Hiroshima after the attack of the atomic bomb. In two interviews made in 1992 and 1994, Honda explicitly expressed that *Godzilla* was a reaction to the development of nuclear weapons and tried to portray "a thing of absolute terror" in a nuclear war.<sup>30</sup> In this sense, the director's political views about nuclear war shed light on *Godzilla*.



Figure 3. *The Beast from 20,000 Fathoms* (1953)

America's creation of nuclear weapons is a manifestation of the Cold War ideology. The development of nuclear weapons is a way of defending and preventing "wars between major powers in the post-World War II era".<sup>31</sup> The nuclear testing in *The Beast from 20,000 Fathoms* implies nothing to do with the major post-war powers between the US and the Soviet Union, and it is simply portrayed as a regular American scientific experiment. As two scientists from physics and paleontology try to convince other scientific experts and military officers of the existence of the monster awoken by radiation, the prehistoric dinosaur has been seen as a 'giant monster on the loose' which needs to be tamed or terminated.<sup>32</sup> In addition, the threat represented in the film is the carnivorous monster with unknown deadly bacteria in its blood. The public panic only spread in the area of New York City, but the panic is immediately eased by the killing of the monster in terms of the physicist's invention of the grenade with radioactive isotopes. As the monster dies in pain with his long and loud groaning sound, and the female paleontologists and the military congratulate the male physicist on his successful destruction of the monster, the ending does not include any commentary or remark by the experts or the civilians. The film shows that the monster crisis is resolved by the authority of scientists and the military and restores the status quo without questioning the relationship between the development of nuclear weapons in the US and the prehistoric dinosaur's awakening by radiation in the Arctic.

In contrast, the speculation on the relationship between the monster Godzilla and the nuclear bomb, the moral lesson on the misuse of technology, particularly nuclear weapons, and the traumatic experience of the destructive casualties are presented throughout the narrative in *Godzilla*. Public panic is heavily associated with national concern, emphasizing the possible destruction of a nation caused by Godzilla. Although both films highlight the debate between scientists who intend to keep the monster alive to study its mystery about nature and military officers who are determined to exterminate the monster to restore national security, *Godzilla* more focus on the controversial debates on the Godzilla monster about the political tension between the authority of the government which does not intend to cause the national panic and the media which defies the authority's decision in the name of telling truth to society that the monster is not related to the Japanese mythic tale but is a creature by the radiation of the H-bomb. In the scene of the press conference held by the Japanese authority, the journalists continuously defy the information given by the Japanese military officers. *Godzilla* underlines and questions the complex relationship between the Japanese government and military authorities, scientists, and media when all of them have discursive power to address different levels of social issues in responding to nuclear war. In this regard, according to the historical context of Japan's defeat in the Second World War, the development of nuclear weapons in the US, and the

director's experience of the war, *Godzilla* represents a historically and politically specific view of the nuclear war rather than being simply as an imitation of *The Beast from 20,000 Fathoms*.

### MONSTER, TECHNOLOGY, AND THE OTHER

Godzilla, a mutant creature derived from a prehistoric dinosaur awoken by radiation and a science fictional/horror monster, is involved in multiple layers of meaning production. In particular, the cultural context determines the understanding of this monster as the Other. Psychologically, the practice of othering is that by which the individual or the society projects the feared and repressed aspects of the self onto the Other to delimit the self and preserve social norms by expelling the Other.<sup>33</sup> When the sense of the self is unstable, the subject intends to reconstruct an 'Other' through classifying differences and defining boundaries to redefine the self. Politically and ideologically, the construction of the Other is associated with power relations; the representation of the Other is through the production and practice of discourse which defines the Other.<sup>34</sup> In the case of *Godzilla*, this creature is not only denaturalized as a radioactive mutant dinosaur but also monsterized as a destructive and irrational animal. However, *Godzilla's* otherness is perceived differently in terms of the Japanese version made in 1954 and the American version in 1956. On the one hand, *Godzilla* is the Other to Japanese people, representing the American's dominance of nuclear war; the Japanese reconstruct their postwar identity as war victims through the narrative of *Godzilla's* birth and death. On the other hand, the American perception of *Godzilla's* otherness is grounded in the Americanization of the film, not the original *Godzilla*; the American version reconstructs *Godzilla's* otherness according to Hollywood's narrative formula and the American's point of view on history during the Second World War and the Cold War. For example, to avoid dubbing from Japanese into English for the entire film, one-third of the Japanese version was cut, and the remake version was inserted with the American reporter and his Japanese translator and used the "editing tricks, body baubles, and over-the-shoulder shots" to allow the new characters talking to the original Japanese actors such as Dr. Serizawa and Emiko without disrupting and damaging the narrative, setting, and mise-en-scene.<sup>35</sup>



Figure 4. *Godzilla, King of the Monsters* (1956)

The Japanese version explicitly expresses *Godzilla's* origin results from a prehistoric creature mutating through the radiation of the hydrogen bomb tests. *Godzilla* is no longer an animal but a technological product. To a nation that has experienced the nuclear war firsthand, *Godzilla* is projected as the American superpower and the destructive nuclear weapon, and on the other hand, *Godzilla* is seen as the Other with the discourse of science, being a radioactive monster between the natural (the hibernating dinosaur) and the technological (the H-Bomb) defined by a Japanese

paleontologist. For instance, Godzilla is constituted by Japanese militants and scientists as a discursive object in the tension between being studied and being terminated. Godzilla in the eyes of the Japanese military is a destructive threat to society; however, Paleontologist Dr. Yamane intends to research Godzilla alive as a way of understanding nature. By contrast, Dr. Serizawa in the scene does not explicitly express his attitude towards Godzilla but strongly opposes the use of his invention Oxygen Destroyer in the killing of Godzilla; he sees that Japan is doomed by Godzilla. Compared with the definitions of Godzilla made by those experts, the masses assume that the destruction of society results from a natural force: a typhoon. In this sense, Godzilla is the absolute Other concerning religious definitions; in the eyes of the villagers of Odo Island where Godzilla is awoken by the nuclear testing, the monster is seen as a God in terms of the village's legendary belief. This absolute Other cannot be expelled through science but through a religious ceremony. Overall, Godzilla is represented as a threatening Other in contrast with humanity.

However, the American perception of this Otherness is different from Japan's experiences of the nuclear war and the loss of the Second World War. In addition to seeing *Godzilla* as a copy from the Hollywood film: *The Beast from 20,000 Fathoms*, Hollywood saw *Godzilla's* potential avenue in the US; Hollywood bought *Godzilla's* foreign copyright after the film's domestic hit in Japan and then remade the film as an Americanized theatrical version with a new film title: *Godzilla: King of Monsters*. As the copyright was sold for US\$ 25,000 and the American production was completed in less than one week, *The King of Monsters* made another hit in the US by reaching over US\$ 2 million in revenue in 1956.<sup>36</sup> The American market promotion, English translation and dubbing, and re-editing and re-shooting of the scenes reinforce *Godzilla's* Americanization; the Japanese-ness produced and intensified through *Godzilla's* film production and narrative is replaced with Hollywood's dominant norm of generic formula. The remaking of this monster film based on a Hollywood style resulted in the removal of political and historical conflicts between Japan and the US during the Second World War. *Godzilla: King of Monsters*, based on *Godzilla's* original footage, was re-edited by inserting new scenes of an American actor and a Japanese actor who speaks English. The chronological order of the story was changed through a new narrative. Raymond Burr, a Hollywood leading actor, plays Steve Martin who is a foreign correspondent for United World News in the US. The story begins with a flashback of the character of Steve Martin who witnesses Godzilla attacking Tokyo. Moreover, the Japanese actor plays Japanese Security Chief Iwanaga who does the English translation for Steve throughout the film. Only certain dialogues in the remake film were dubbed into English, but some of the translations were rephrased into other meanings. The narrative of *Godzilla, King of Monsters* is focused on the American journalist; the cause-effect relation of *Godzilla's* origin and death is dominated by this American character with his Japanese translator. As a journalist, Steve does not report the theory of *Godzilla* with the H-bomb testing made by Dr. Yamane in the public meeting on *Godzilla's* destruction of Odo Island. The origin of *Godzilla* is only slightly referred to Dr. Yamane's conversations without any critical reference to the nuclear war in Japan and the American nuclear testing. Instead, Dr. Yamane's definition of the monster is changed into a simplistic conclusion that the prehistoric dinosaur is awakened by H-bomb tests. Dr. Yamane's implication that the dinosaur is mutated by the bomb's radiation was completely deleted from the dubbing.

As the discourse of *Godzilla* is constantly redefined through scientists and governmental institutions, the implication of anti-Americanism and anti-nuclear war is eliminated. The testimony of the Odo villagers in Iwanaga's translation suggests that the authorities doubt the validity of the monster's existence and attack an island because of the villagers' strong religious belief in *Godzilla* as a God who causes the typhoon's strike. In the final scene of the film, Dr. Yamane's comment on the death of *Godzilla* is entirely replaced by the English translation without any critical reflection; "The monster was gone" says Steve. The whole world could wake up and live again." On the contrary, in the

Japanese version, Dr. Yamane's pointed remark is anti-nuclear and anti-American: "I cannot believe Godzilla was the last survivor of its species. If we continue nuclear testing, others of Godzilla's kind will appear again somewhere in the world."

The scenes that refer to the Second World War are kept but the dialogue is either cut or appears without translation and dubbing. In this sense, the interpretation of the visual images is not confined to the discursive explanation; those images without dubbing or translation merely indicate how Godzilla attacks Tokyo. The reference to war, "Godzilla is some kind of illegitimate child of the H-bomb", is cut from the translation. In the scenes of Godzilla's attack on Tokyo's commuter train, the lines which refer to war experience are deleted without dubbing and translation. A woman inside the commuter train describes herself as surviving the H-bomb attack in Nagasaki but being unable to avoid Godzilla's attack. The dialogue, such as "Back to the shelters again!" shouted by a man, and a mother who speaks to her children when all of them face the fire, "We're going to join daddy in a moment!" are completely deleted.

Moreover, the short scene of the reporter's interview with Dr. Serizawa is deleted. As the reporter says that he hears from Dr. Serizawa's German colleagues that the possible solution to Godzilla lies in the use of Dr. Serizawa's research, Dr. Serizawa denies the reporter's allegations about Oxygen Destroyer and German colleagues. This scene is another explicit indication of the Second World War that Japan and Germany were allies against the US. The American version represents Dr. Serizawa as a crazy scientist who is only concerned with his discovery, not the present social crisis. In the Japanese version, Dr. Serizawa worries that Oxygen Destroyer might be misused by the military to cause war; however, the American version translates this into a different meaning. Dr. Serizawa argues that the exposure of his research may end "in the wrong hands" and would like to sacrifice his life to protect his research secret. However, there is no further explanation about what are the wrong hands. In the Japanese version, it is clear that Dr. Serizawa worries about the potential of war because of his destructive weapon invention. The scene in which Dr. Serizawa's fight with Lieutenant Ogata represents the conflict between the use of technology and the stabilization of society is deleted. The wrong hands may refer to the power competition between the Cold War countries. The attitudes towards weapon invention are different in the historical context between Japan and the US.

The role of Americanized Godzilla is dealt with in the same way as the monster in *The Best from 20,000 Fathoms*, in that both prehistoric dinosaur monsters temporarily disturb the safety of society, and the elimination of the monsters through technological weapons re-stabilizes the society. Furthermore, the film's promotion is based on the comparison with Hollywood monster films. The producer Joseph E. Levine did not intend to emphasize the Japanese-made monster but added a subtitle, "King of Monsters", to highlight the similarity with Hollywood's blockbuster, *King Kong*. Defined as a king of monsters, Godzilla was transformed into the genre of horror by stressing its monstrous force and violence, as the theatrical trailer claims: "It's alive! A gigantic beast, stalking the earth! Crushing all before it in a psychotic cavalcade of electrifying horror!"<sup>37</sup>

## CONCLUSION

As *Godzilla: King of Monsters* was a big hit in the United States, Toho released this American version in Japan with the new title, "Monster King Godzilla". After that, Toho used "Monster King Godzilla" as a promotional nickname for the public and adopted the narrative style using a reporter in the following series between the 1960s and 1970s. Toho Studio and the Japanese audiences did not reject the American version which again made another hit in Japan even though the original anti-American and anti-nuclear war messages were removed. Indeed, in terms of humanity and nature, Godzilla portrayed in the two films as a radioactive mutant dinosaur is defined as the Other. However, in terms of American film production and audiences, *Godzilla: King of Monsters* undermines the cultural

difference of Japanese film production when the historical and political significance is removed. If the otherness is defined and differentiated regarding the Subject, in the case of the Americanization of Godzilla, the Subject is not constructed through the Japanese's experiences of history and film production to define Godzilla as the Other, but instead concerning Hollywood's dominance and the US's decision to defeat Japan as well as keep the Soviet Union out of Japan to demonstrate America's dominance.<sup>38</sup> Furthermore, when Japanese audiences accept the American version, the process of becoming Other occurs not only in the production of *Godzilla: King of Monsters* but also in the Japanese audience's response to this film. The Japanese audiences are subject to the American representation of the Second World War and nuclear war through the remake version of the Godzilla monster.

## NOTES

- <sup>1</sup> Fukunari Kimura, "Japan's Model of Economic Development: Relevant and Nonrelevant Elements for Developing Economies," in *WIDER Research Paper* (Helsinki: The United Nations, 2009), 1.
- <sup>2</sup> Janson Barr, *The Kaiju Film: A Critical Study of Cinema's Biggest Monsters* (Jefferson, North Carolina: McFarland & Company, 2016), 21.
- <sup>3</sup> "Filmography," TM & ©TOHO., LTD., accessed January 20, 2023, <http://godzilla.com/filmography/>.
- <sup>4</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 45.
- <sup>5</sup> Tsutsui, 82.
- <sup>6</sup> Ib Bondebjerg, "Film: Genres and Genre Theory," in *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright et al. 2<sup>nd</sup> ed. (Oxford: Elsevier, 2015) 9: 161.
- <sup>7</sup> Stephen Neale, *Genre* (London: BFI, 1987).
- <sup>8</sup> Barry Keith Grant, *Film Genre: From Iconography to Ideology* (London: Wallflower, 2007).
- <sup>9</sup> Julian C. H. Lee, Hariz Haliloveich, Ani Landau-Ward, Peter Phipps, and Richard J. Sutcliffe, *Monsters of Modernity Global Icons for Our Critical Condition* (Leeds: Kismet, 2019), 138.
- <sup>10</sup> The Godzilla franchise DVDs can be found on the world's largest online retailer Amazon, accessed January 20, 2023.  
[https://www.amazon.com/s?k=godzilla+DVD&crd=1HCWN9F6GYTBA&srefix=godzilla+dvd%2Caps%2C303&ref=nb\\_sb\\_noss\\_1](https://www.amazon.com/s?k=godzilla+DVD&crd=1HCWN9F6GYTBA&srefix=godzilla+dvd%2Caps%2C303&ref=nb_sb_noss_1).
- <sup>11</sup> The Godzilla merchandise and related products can be found in the world's largest online retailer Amazon, accessed January 20, 2023.  
[https://www.amazon.com/s?k=gozilla&crd=12PN7EN5EWEV9&srefix=gozilla%2Caps%2C327&ref=nb\\_sb\\_noss\\_2](https://www.amazon.com/s?k=gozilla&crd=12PN7EN5EWEV9&srefix=gozilla%2Caps%2C327&ref=nb_sb_noss_2).
- <sup>12</sup> Chon Noriega, "Godzilla and the Japanese Nightmare: When Them! Is U.S.," in *Asian Cinemas: A Reader and Guide*, ed. Dimitris Eleftheriotis and Gary Needham (Edinburgh: University of Edinburgh Press, 2006), 41.
- <sup>13</sup> See Steve Ryfle, *Japan's Favorite Mon-Star: The Unauthorized Biography of the Big G* (Toronto: ECW, 1998), 38 and William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 41.
- <sup>14</sup> "About Godzilla," TM & ©TOHO., LTD., accessed January 12, 2023, <https://godzilla.com/about/>.
- <sup>15</sup> See David Kalat, *A Critical History and Filmography of Toho's Godzilla® Series* (Jefferson, North Carolina and London: McFarland, 1997), 1 and William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 21.
- <sup>16</sup> See David Kalat, *A Critical History and Filmography of Toho's Godzilla® Series* (Jefferson, North Carolina and London: McFarland, 1997), 1 and Chon Noriega, "Godzilla and the Japanese Nightmare: When Them! Is U.S.," in *Asian Cinemas: A Reader and Guide*, ed. Dimitris Eleftheriotis and Gary Needham (Edinburgh: University of Edinburgh Press, 2006), 41.
- <sup>17</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 20.
- <sup>18</sup> David Kalat, *A Critical History and Filmography of Toho's Godzilla® Series*, (Jefferson, North Carolina and London: McFarland, 1997), 12.
- <sup>19</sup> Kalat, 2.
- <sup>20</sup> Kalat, 2.
- <sup>21</sup> Kalat, 2.
- <sup>22</sup> Kalat, 2.
- <sup>23</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 15.
- <sup>24</sup> Nakanishi Hiroshi, "Reading Comprehensive Security in Japan," in *Challenge for China-Japan-US Cooperation*, ed. Ryosei Kokubun (Tokyo: Japan Center for International Exchange, 1998), 44-70.
- <sup>25</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 18.
- <sup>26</sup> William Tsutsui, 18-19.
- <sup>27</sup> William Tsutsui, 19.
- <sup>28</sup> William Tsutsui, 19.
- <sup>29</sup> Steve Ryfle, "Godzilla's Footprint," *Virginia Quarterly Review* 81, no. 1 (2005): 52.

- <sup>30</sup> David Kalat, *The Strange Case of Dr. Mabuse: A Study of the Twelve Films and Five Novels* (Jefferson, North Carolina: McFarland, 2001), 15.
- <sup>31</sup> David Jary and Julia Jary. *Sociology*, 3<sup>rd</sup> ed. (Glasgow: Harper Collins, 2000), 423.
- <sup>32</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 19.
- <sup>33</sup> Lajos L. Brons, "Othering, An Analysis," *Transcience, A Journal of Global Studies* 6, no. 1 (2015): 71.
- <sup>34</sup> Jean-François Staszak, "Other/Otherness," in *International Encyclopedia of Human Geography*, ed. Rob Kitchin and Nigel Thrift (Amsterdam: Elsevier, 2009), 44.
- <sup>35</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 39.
- <sup>36</sup> David Kalat, *A Critical History and Filmography of Toho's Godzilla® Series*, (Jefferson, North Carolina and London: McFarland, 1997), 24.
- <sup>37</sup> William Tsutsui, *Godzilla on My Mind: Fifty Years of the King of Monsters* (New York: Palgrave Macmillan, 2004), 40.
- <sup>38</sup> Keith Crawford, "Re-visiting Hiroshima: The Role of US and Japanese History Textbooks in the Construction of National Memory," *Asia Pacific Education Review* 4, no 1 (2003): 113.

## BIBLIOGRAPHY

- Barr, Jason. *The Kaiju Film: A Critical Study of Cinema's Biggest Monsters*. Jefferson, North Carolina: McFarland & Company, 2016.
- Bondebjerg, Ib. "Film: Genres and Genre Theory." In *International Encyclopedia of the Social & Behavioral Sciences*, edited by James D. Wright et al., 160-164. 2<sup>nd</sup> ed. 9 vols. Oxford: Elsevier, 2015.
- Brons, Lajos L. "Othering, An Analysis." *Transcience, A Journal of Global Studies* 6, no. 1 (2015): 69-90.
- Crawford, Keith. "Re-visiting Hiroshima: The Role of US and Japanese History Textbooks in the Construction of National Memory." *Asia Pacific Education Review* 4, no 1 (2003): 108-117.
- Grant, Barry Keith. *Film Genre: From Iconography to Ideology*. London: Wallflower, 2007.
- Hiroshi, Nakanishi. "Reading Comprehensive Security in Japan." In *Challenge for China-Japan-US Cooperation*, edited by Ryosei Kokubum, 44-70. Tokyo: Japan Center for International Exchange, 1998.
- Jary, David and Jary, Julia. *Sociology*. 3<sup>rd</sup> ed. Glasgow: Harper Collins, 2000.
- Kalat, David. *A Critical History and Filmography of Toho's Godzilla® Series*. Jefferson, North Carolina and London: McFarland, 1997.
- , *The Strange Case of Dr. Mabuse: A Study of the Twelve Films and Five Novels*. Jefferson, North Carolina: McFarland, 2001.
- Kimura, Fukunari. "Japan's Model of Economic Development: Relevant and Nonrelevant Elements for Developing Economies." In *WIDER Research Paper*, 22: 1-17. Helsinki: UNU-WIDER, 2009.
- Lee, Julian C. H., Hariz Haliloveich, Ani Landau-Ward, Peter Phipps, and Richard J. Sutcliffe. *Monsters of Modernity Global Icons for Our Critical Condition*. Leeds: Kismet, 2019.
- Jary, David and Jary, Julia. *Sociology*. 3<sup>rd</sup> ed. Glasgow: Harper Collins, 2000.
- Neale, Stephen. *Genre*. London: BFI, 1987.
- Noriega, Chon. "Godzilla and the Japanese Nightmare: When Them! Is U.S." In *Asian Cinemas: A Reader and Guide*, edited by Dimitris Eleftheriotis and Gary Needham, 41-55. Edinburgh: University of Edinburgh Press, 2006.
- Ryfle, Steve. *Japan's Favorite Mon-Star: The Unauthorized Biography of the Big G*. Toronto: ECW, 1998.
- , "Godzilla's Footprint." *Virginia Quarterly Review* 81, no. 1 (2005): 44-63.
- Staszak, Jean-François "Other/Otherness." In *International Encyclopedia of Human Geography*, edited by Rob Kitchin Rob and Nigel Thrift, 43-47. Amsterdam: Elsevier, 2009.
- Tsutsui, William. *Godzilla on My Mind: Fifty Years of the King of Monsters*. New York: Palgrave Macmillan, 2004.

# DESIGNING A DYNAMIC SCOOTER DISTRIBUTION SYSTEM FOR EFFICIENT AND SUSTAINABLE URBAN TRANSPORTATION: THE DYMO SYSTEM

Authors:

**CARLOS DE AGUIAR, ZEZHI GUO, YUHE CUI**

Affiliation:

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN, USA

---

## INTRODUCTION

Empirical evidence reveals that a considerable number of individuals residing in urban localities experience anxiety regarding their daily commute.<sup>1</sup> The reasons behind such distress range from living far away from public transportation stations to waiting for a specific bus due to a fixed schedule.<sup>2</sup> As such, there is a need for a more efficient mode of transportation.<sup>3</sup> Prior attempts to address this issue include the development of self-driving scooters,<sup>4</sup> mobile scooter parking stations,<sup>5</sup> and flexible bus schedules<sup>6</sup>. However, these solutions fall short in handling complex traffic conditions and providing an optimal user experience.<sup>7</sup> Thus, we propose the implementation of a future dynamic scooter distribution system, Dymo, that leverages an all-day autonomous electric vehicle network to deliver and collect scooters for charging and redistribution. This system not only enhances the efficiency of short-distance commutes but also reduces greenhouse gas emissions, fostering a harmonious and secure environment. This new micro-mobility system is an inevitable component of the advanced future transportation infrastructure.

## Problem observation

The use of scooters has become a popular means of transportation in people's daily lives, often combined with other modes of transportation for "first or last-mile travel".<sup>8</sup> However, there are several issues with the current state of scooter usage, including safety,<sup>9</sup> distribution,<sup>10</sup> eco-friendliness,<sup>11</sup> and urban relations.<sup>12</sup> These issues include frequent scooter vibration, drivers not wearing helmets, and excessive scooter speed, which are the major causes of driver injuries.<sup>13</sup> Additionally, the poor distribution of shared scooters makes them difficult to locate, while the charging and short lifetime of scooters contribute to greenhouse gas emissions.<sup>14</sup> Finally, the use of pathways shared by both vehicles and pedestrians undermines the safety and stability of scooters on the road.<sup>15</sup>

Several tentative solutions to these issues have been proposed, including policies that regulate scooter usage, safety initiatives, improvements to scooter charging and parking, and the use of intelligent transportation systems. Current policies to regulate scooter usage include setting maximum and minimum speeds, and imposing age and licensing requirements, as well as using mobile applications to report inappropriate behavior. Improvements to scooter safety include advertising proper scooter use and using better materials to construct engines and batteries, as well as visible light

communication to warn the scooter driver about potential dangers. Wireless charging, redesigning the battery using longer-lasting materials to avoid maintenance, portable charging stations, and dynamic scooter parking places are potential solutions to the current scooter charging and parking problems. However, such solutions fail to address the issue of transportation time to and from charging and parking stations, while other proposals lack consideration of implementation costs or have the potential to create unsafe conditions. Several articles suggest that future public transportation systems will incorporate dynamic planning and eco-friendliness.<sup>16</sup> Intelligent transportation systems that utilize artificial intelligence, dynamic public transportation route planning, and electrified vehicle distribution could reduce both the number of vehicles and travel distances and reduce greenhouse gas emissions by 12%.<sup>17</sup>

We propose that our redesigned system will integrate with the current public transportation system to address the current issues with the public scooter system by improving distribution, reducing waiting times, and increasing safety and ease of use. To inform our research, we conducted a literature review, spending two weeks analyzing 28 articles on scooter design and scooter-sharing systems.<sup>18</sup> We categorized the key information of each article into two main categories (Design & Theory) and several sub-categories (Scooter's Design & Usage, Social Survey, Machine Algorithm, etc.) to gain a clearer understanding of what to focus on. The literature revealed that low rates of helmet use and high rates of head injuries are serious problems, while the current scooter commuting system lacks effective regulation. The distribution of shared scooters is poor, and their short lifetime is a significant contributor to greenhouse gas emissions. Finally, the high mobility and the variable speed of e-scooters make them an unstable factor on the road and impact traffic. In addition to examining the past and present, we explored how artificial intelligence and machine learning algorithms could contribute to our design and achieve our vision of “design for the future”.<sup>19</sup> To ensure an objective and accurate understanding of user needs in later stages, we developed two Goal-Based Personas based on the data collected during user observation and research.

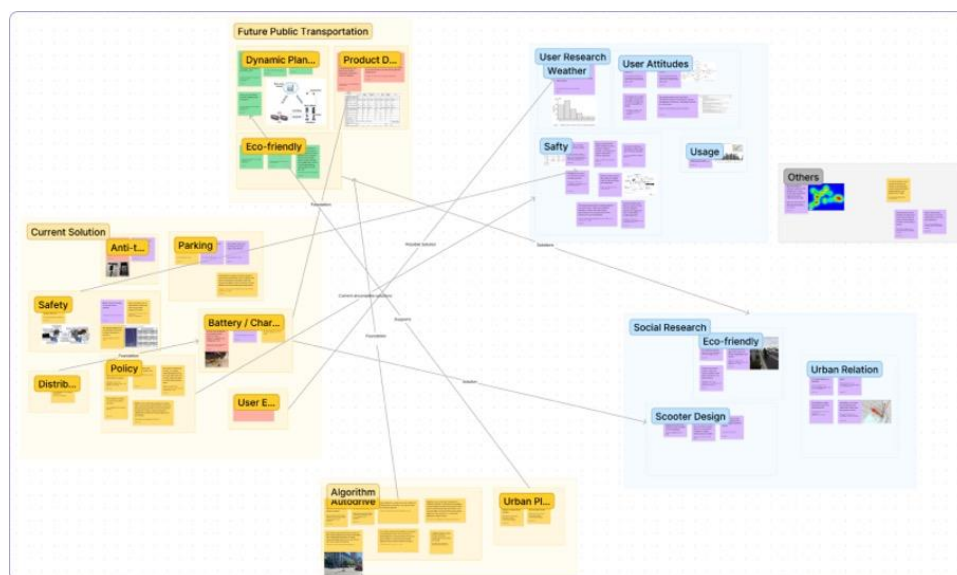


Figure 1. Literature Review Map

## USER RESEARCH

We recognized that the current micro-transportation system is an important part of our system design for a future society. Therefore, before creating added value for future users, it was necessary to first address the issues of the current micro-transportation system. To achieve this, we conducted user

research to better understand the pain points and demands of daily micro-commuters. Initially, we were undecided whether to focus on the electric bike-sharing or scooter-sharing system, as they share similarities yet also have unique features. Hence, we developed an open questionnaire to survey users of both systems to gain insights into their experiences and commuting habits. After collecting 110 responses, we found that over 54% of users are dissatisfied with the current system, with the top five reasons being “Broken” (19.6%), “No/Low Battery” (19.6%), “Could not find one when needed” (18.7%), “A little expensive” (17.4%), and “Too heavy to ride” (11.2%). Additionally, more than 57% of users indicated a preference for short commutes of less than 10 minutes, and over 62% were willing to make small upgrades in spending to enhance their commuting experience. After the quantitative research, we conducted a two-day field study to gain more in-depth insights from the customer's perspective. We experienced eight vehicles from three companies and recorded their performance and our subjective feelings through photos and audio recordings. Ultimately, our user research provided valuable feedback and allowed us to move forward to the next stage.



*Figure 2. Observing Participants Using Current System*

After integrating the outcomes of the survey and the field study, we proceeded to carry out semi-structured interviews with ten individuals residing on the campus in order to gain a more comprehensive understanding of their views regarding the present bike/scooter-sharing scheme. We then utilized an affinity diagram to categorize distinct themes based on their similarity, in order to more effectively assimilate the information collected in the discussions. Additionally, by assessing the advantages and drawbacks of both bikes and scooters in light of the feedback gathered, we concluded that the scooter-sharing system was a more appropriate focus of our attention than the bike-sharing system.

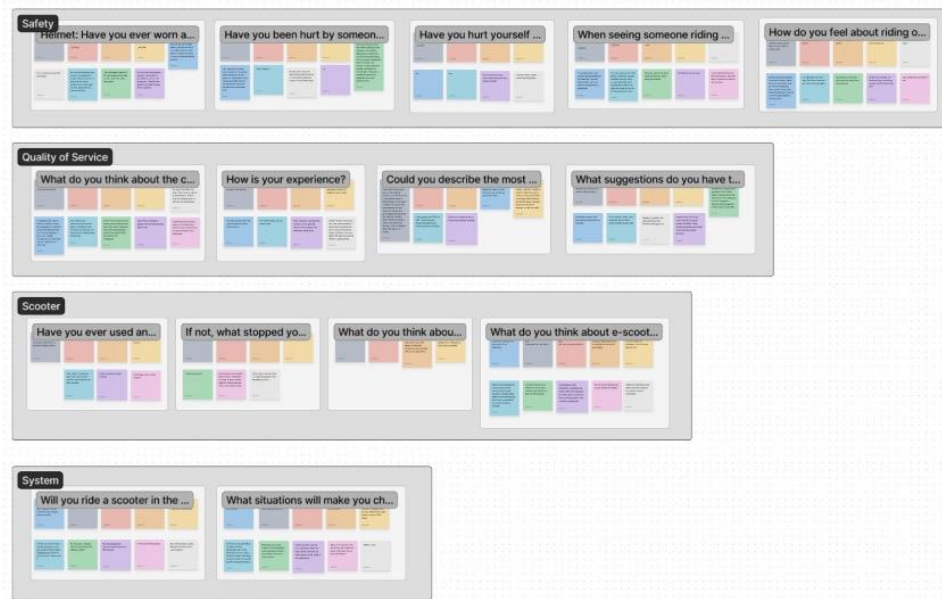


Figure 3. The Main Themes We Found from our User Research

Upon concluding the user observation and research phase, we sought to establish an accurate and unbiased understanding of the target users in subsequent stages. To this end, we created two Goal-Based Personas, drawing upon the data previously collected during the research process, to serve as a reference point in developing our proposed solution. By doing so, we aim to ensure that our design approach is attuned to the needs and preferences of the identified user groups.



Figure 4. Our Personas

## Design Goals

After conducting a comprehensive literature review and user research, we developed a set of design guidelines for our proposed system. Our research revealed that various stakeholders, including urban users, scooter companies, government, and service supporters, play a critical role in the success of the system. We created a stakeholder map that categorized these stakeholders into three levels and analyzed their significance, potential benefits, and requirements.

To address the current challenges of the scooter-sharing system and the commuting needs of the urban population, we propose a novel dynamic scooter-sharing system that utilizes vans to deliver scooters to customers and collect used scooters for redistribution simultaneously, providing an efficient and effective solution for short-distance commuting needs.

## Service Journey Analysis

Subsequently, we utilized the results of our prior user research to develop a customer journey map, which enables us to analyze the challenges and potential opportunities that users may encounter at every stage of their experience when utilizing the system. Additionally, the accompanying service blueprint map of the journey aids us in comprehensively constructing our services.

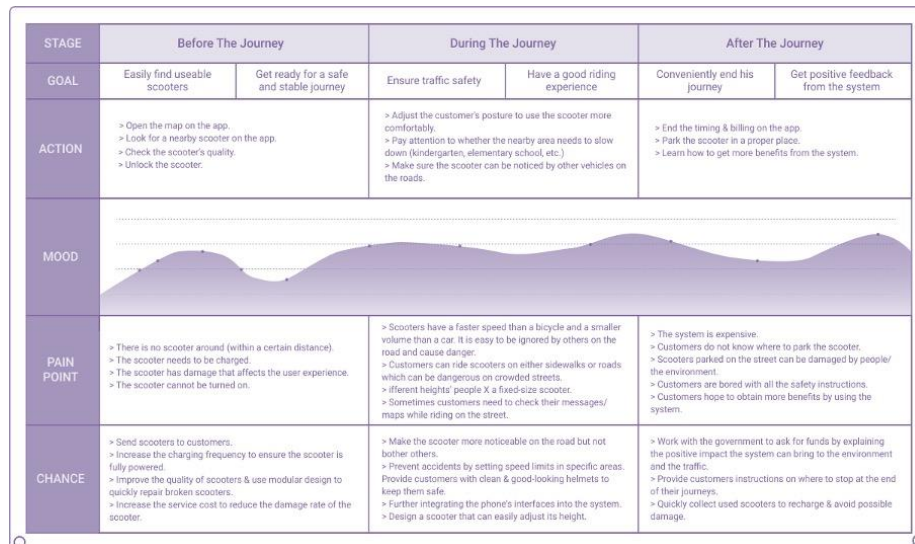


Figure 5. Customer Journey Map – Stages

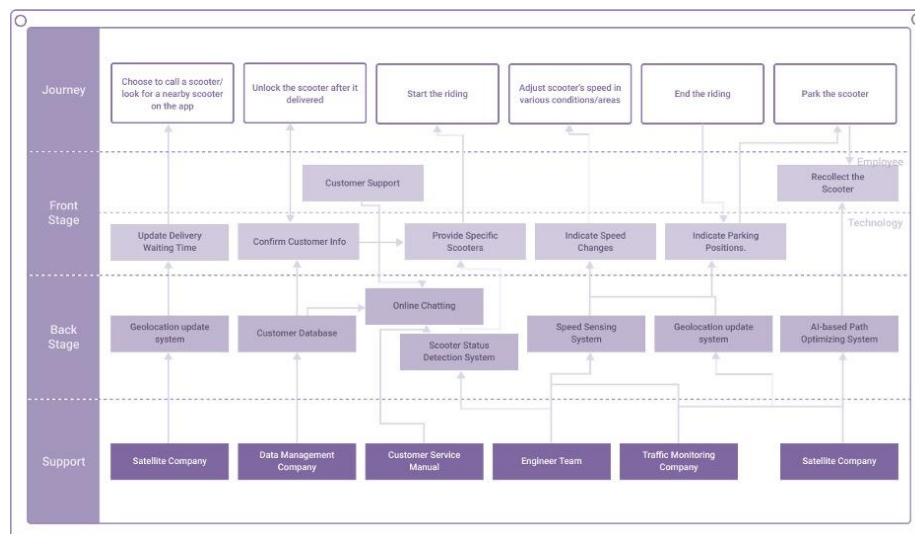


Figure 6. Customer Journey Map - Paths

## Brainstorming and Prototyping

In the following, a five-day brainstorming workshop was conducted to extensively explore various features of the system. Thereafter, two additional days were allocated to invite external reviewers to provide feedback aimed at refining and optimizing our idea list. Following the week-long brainstorming process, we envisaged the overall structure of the system and proceeded to prototype all its components. Subsequently, we tested how they functioned as a cohesive unit and evaluated the performance of each individual component.



*Figure 7. Our Early Prototype*

### Final Outcome

The final outcome of our design process is Dymo, a dynamic scooter distribution system that employs an all-day autonomous electric vehicle network to deliver and collect scooters for charging and redistribution. The Dymo system comprises three components: scooters, vans, and apps that serve as touchpoints for services. To access the system, users can open the app and locate a nearby DYMO scooter on the map or utilize the scooter delivery service. The distribution vans, which carry scooters, process user requests and drive to their location for pickup. The van opens its side rolling door at the scheduled time, allowing users to remove the activated scooter (and a helmet) by scanning the QR code on the scooter. After reaching their destination, users can park the scooter on the street, where it will be either used by other nearby users or recollected by the van for the next distribution.

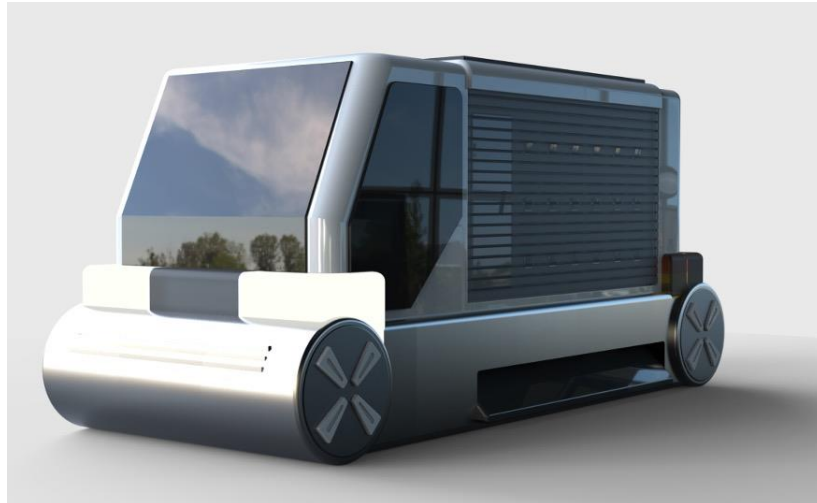
Our Dymo scooter, as depicted in Figure 1, is based on extensive research and features a compact and innovative design that maximizes space-saving during transportation. The handle and stem of the scooter can be conveniently folded, enabling more scooters to be transported in a single van. The handle incorporates a magnetic phone stand, allowing users to access their maps while riding. It also includes bell, accelerator, folding, and decelerator buttons, ensuring a smooth and safe ride. The stem is covered with LED strips, enhancing visibility for other road users and reducing the likelihood of accidents. The scooter's height is adjustable, catering to users of varying heights, and the swappable battery provides durability and facilitates quick battery replacement. The hubless wheel of the scooter makes it lightweight and has less rotational inertia, contributing to a smoother ride. The clamp mechanism ensures easy folding and free rotation of the stem, enhancing maneuverability. Furthermore, the rear section lights up when decelerating, improving user safety. Overall, the Dymo scooter aims to provide users with a safe, convenient, and comfortable riding experience.



*Figure 8. Our Final Dymo Scooter Design*

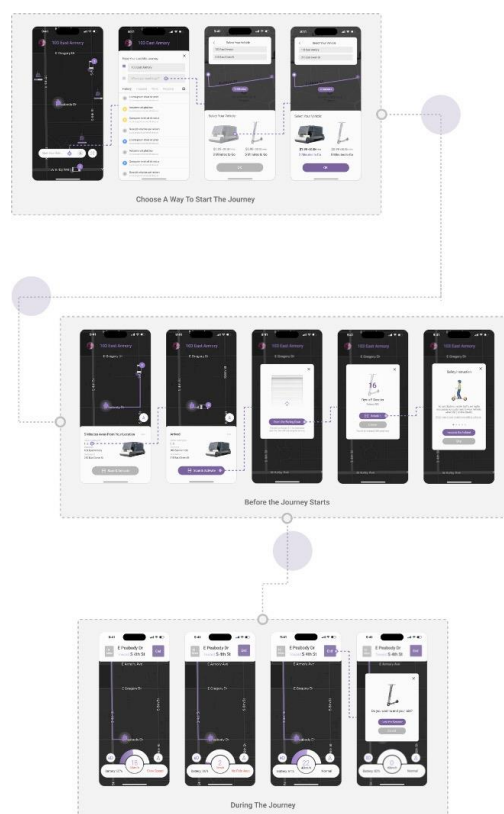
The Demo vans play a crucial role in the Dymo system as the dispatcher and distributor of the scooters. Thus, it is vital for them to be reliable and user-friendly. To ensure their uninterrupted operation throughout the day, we have designed large-scale foldable solar panels on the roof of the vans to provide electricity from multiple sources. While current research suggests that solar energy is not yet efficient enough to power vehicles, we anticipate advancements in solar energy technology in the future will overcome this challenge.

The delivery navigation system of Demo vans is based on a set of user-centric algorithms, ensuring an optimized delivery system that factors in user distance, real-time status updates, and waiting time. Furthermore, we have included a UV-sterilized helmet cabinet next to the hive-like scooter charging and storage cabinet in the van. To encourage safe riding practices, we have also introduced a set of incentive mechanisms for helmet usage. By considering these factors, we aim to provide a seamless and safe experience for users of the Dymo system.



*Figure 9. Our Final Demo Van Design*

The application serves as the interface for the system and plays a pivotal role in the user's experience. The user interacts with the system through the app, which provides real-time information and feedback on various operations. The accompanying images delineate the user's typical workflow on the application.



*Figure 10. Our Final Dymo App Design*

## **CONCLUSION**

In summary, the proposed Dymo dynamic scooter distribution system presents a groundbreaking solution to address the escalating demand for sustainable and efficient transportation. The system utilizes an all-day autonomous electric vehicle network to collect and distribute scooters for charging and redistribution, which not only enhances the effectiveness of short-distance commutes but also diminishes greenhouse gas emissions, thereby contributing to a safer and harmonious environment. As micro-mobility becomes an increasingly important and favored mode of transportation in urban areas, the Dymo system plays a crucial role in the future of transportation. Its ability to distribute scooters expeditiously and efficiently is likely to alleviate traffic congestion and reduce travel time in cities. Moreover, the system provides a secure and convenient way for people to travel short distances, reducing reliance on personal cars and decreasing the likelihood of road accidents. The use of autonomous electric vehicles also contributes to decreasing noise pollution, ultimately improving the quality of life for urban residents. In conclusion, the Dymo system presents a forward-thinking and innovative solution to the challenges of urban transportation.

## NOTES

- <sup>1</sup> Stefan Gössling. "Integrating e-scooters in urban transportation: Problems, policies, and the prospect of system change." *Transportation Research Part D: Transport and Environment* 79 (2020): 102230. <https://doi.org/10.1016/j.trd.2020.102230>; Shun-Hsiang You, Shih-Hao Chang, Hao-Min Lin, and Hsin-Mu Tsai. "Visible light communications for scooter safety." In *Proceeding of the 11th annual international conference on Mobile systems, applications, and services*, pp. 509-510. 2013. <https://doi.org/10.1145/2462456.2465707>; Daniel Schellong, Philipp Sadek, Carsten Schaetzberger, and Tyler Barrack. "The promise and pitfalls of e-scooter sharing." *Europe* 12 (2019). <https://www.bcg.com/publications/2019/promise-pitfalls-e-scooter-sharing>.
- <sup>2</sup> Living far away from urban transportation can impact someone's life and anxiety levels in several ways. The lack of accessible transportation may lead to social isolation, limited access to essential services, and increased reliance on personal vehicles. This can contribute to financial stress, reduced opportunities for employment and education, and feelings of disconnection from the community. Overall, these factors may heighten anxiety levels for some individuals, while others might experience reduced anxiety due to a quieter, less hectic environment.
- <sup>3</sup> Mahmoud Masoud, Mohammed Elhenawy, Mohammed H. Almannaa, Shi Qiang Liu, Sebastien Glaser, and Andry Rakotonirainy. "Heuristic approaches to solve e-scooter assignment problem." *IEEE access* 7 (2019): 175093-175105. <https://doi.org/10.1109/ACCESS.2019.2957303>.
- <sup>4</sup> Raffaele Soloperto, Philipp Wenzelburger, David Meister, Dominik Scheuble, Veronika SM Breidohr, and Frank Allgöwer. "A control framework for autonomous e-scooters." *IFAC-PapersOnLine* 54, no. 2 (2021): 252-258. <https://doi.org/10.1016/j.ifacol.2021.06.030>.
- <sup>5</sup> Denis Nikolaev, Vadim Davydov, and Nikita Chubur. "Smart Parking for Electric Scooter." In *The 5th International Conference on Future Networks & Distributed Systems*, (2021):532–36. Dubai United Arab Emirates: ACM. <https://doi.org/10.1145/3508072.3508182>.
- <sup>6</sup> Stefan Gössling. "Integrating e-scooters in urban transportation", 2020.
- <sup>7</sup> Tarak K. Trivedi, Charles Liu, Anna Liza M. Antonio, Natasha Wheaton, Vanessa Kreger, Anna Yap, David Schriger, and Joann G. Elmore. "Injuries associated with standing electric scooter use." *JAMA network open* 2, no. 1 (2019): e187381-e187381. <https://doi.org/10.1001/jamanetworkopen.2018.7381>; Mahmoud Masoud, Mohammed Elhenawy, Mohammed H. Almannaa, Shi Qiang Liu, Sebastien Glaser, and Andry Rakotonirainy. "Heuristic approaches to solve e-scooter assignment problem." *IEEE access* 7 (2019): 175093-175105. <https://doi.org/10.1109/ACCESS.2019.2957303>; Jijo K. Mathew, Mingmin Liu, and Darcy M. Bullock. "Impact of weather on shared electric scooter utilization." In *2019 IEEE Intelligent Transportation Systems Conference (ITSC)*, pp. 4512-4516. IEEE, 2019. <https://doi.org/10.1109/ITSC.2019.8917121>;
- <sup>8</sup> Stefan Gössling. "Integrating e-scooters in urban transportation: Problems, policies, and the prospect of system change." *Transportation Research Part D: Transport and Environment* 79 (2020): 102230. <https://doi.org/10.1016/j.trd.2020.102230>; Agachai Sumalee, and Hung Wai Ho. "Smarter and more connected: Future intelligent transportation system." *Iatss Research* 42, no. 2 (2018): 67-71. <https://doi.org/10.1016/j.iatssr.2018.05.005>.
- <sup>9</sup> Shun-Hsiang You, Shih-Hao Chang, Hao-Min Lin, and Hsin-Mu Tsai. "Visible light communications for scooter safety." In *Proceeding of the 11th annual international conference on Mobile systems, applications, and services*, pp. 509-510. 2013. <https://doi.org/10.1145/2462456.2465707>
- <sup>10</sup> Samuel Wozinski, Liang He, and Kang G. Shin. "Protecting electric scooters from thefts using batteries." In *Proceedings of the 20th Annual International Conference on Mobile Systems, Applications and Services*, pp. 595-596. 2022. <https://doi.org/10.1145/3498361.3538651>; Daniel Schellong, Philipp Sadek, Carsten Schaetzberger, and Tyler Barrack. "The promise and pitfalls of e-scooter sharing." *Europe* 12 (2019). <https://www.bcg.com/publications/2019/promise-pitfalls-e-scooter-sharing>.
- <sup>11</sup> Jijo K. Mathew, Mingmin Liu, and Darcy M. Bullock. "Impact of weather on shared electric scooter utilization." In *2019 IEEE Intelligent Transportation Systems Conference (ITSC)*, pp. 4512-4516. IEEE, 2019. <https://doi.org/10.1109/ITSC.2019.8917121>.
- <sup>12</sup> Sylvaine Tuncer, and Barry Brown. "E-Scooters on the Ground: Lessons for Redesigning Urban Micro-Mobility." In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, (2020):1–14. Honolulu HI USA: ACM. <https://doi.org/10.1145/3313831.3376499>.
- <sup>13</sup> Tarak K. Trivedi et al. "Injuries associated with standing electric scooter use.", 2019; Juan D.Cano-Moreno, Manuel E. Islán, Fernando Blaya, Roberto D'Amato, Juan A. Juanes, and Enrique Soriano. "E-scooter vibration impact on driver comfort and health." *Journal of Vibration Engineering & Technologies* (2021): 1-15. <https://doi.org/10.1007/s42417-021-00280-3>; Daniel Schellonget al. "The promise and pitfalls of e-scooter sharing.", 2019.

<sup>14</sup> Masoud offers valuable insights on greenhouse impacts of scooters.

<sup>15</sup> Gössling, Tuncer and Brown offers different perspective, but yet they all seem to agree that shared pathways might put pedestrians and scooter users in danger.

<sup>16</sup> It is often argued that future public transportation systems might incorporate dynamic planning and eco-friendliness through real-time route optimization, data-driven demand management, and the use of environmentally friendly technologies. By leveraging advanced data analytics and AI, systems can dynamically adjust routes and schedules to respond to fluctuating passenger demand, reducing wait times and improving overall efficiency. Eco-friendly measures, such as adopting electric or hydrogen-powered vehicles, and implementing energy-saving features like regenerative braking, can significantly reduce the environmental impact of public transit, contributing to a sustainable and efficient transportation future.

<sup>17</sup> It is also often argued that intelligent transportation systems, which employ AI-driven solutions, dynamic route planning, and electrified vehicle fleets, have the potential to revolutionize urban mobility. By optimizing routes, these systems can minimize traffic congestion and vehicle usage, while electric vehicles contribute to a reduction in fossil fuel consumption. Together, these innovations have the potential to lower greenhouse gas emissions by 12%, contributing to a more sustainable and eco-friendly transportation infrastructure. This highlights the importance of investing in smart technologies and green transit solutions to address the growing concerns of urbanization and climate change.

<sup>18</sup> The bibliography presents a remarkable selection of esteemed authors renowned in this subject area. However, we acknowledge that these publications provide a specific viewpoint on the issue. Therefore, we encourage fellow researchers to delve deeper into the literature to explore additional perspectives and enrich the understanding of the topic.

<sup>19</sup> In every design endeavor, designers are tasked with envisioning and speculating on the future, creating solutions based on these predictions. While it's true that future projections can be uncertain, and our designs may not always align with reality, this is a common challenge in the field. Nonetheless, our work plays a crucial role in shaping the development of technology and, subsequently, the future itself. By embracing this responsibility, we continually strive to refine our designs to account for the unpredictable and dynamic nature of the world.

## BIBLIOGRAPHY

- Cano-Moreno, Juan D., Manuel E. Islán, Fernando Blaya, Roberto D'Amato, Juan A. Juanes, and Enrique Soriano. "E-scooter vibration impact on driver comfort and health." *Journal of Vibration Engineering & Technologies* (2021): 1-15. <https://doi.org/10.1007/s42417-021-00280-3>.
- Ching-Chih Tsai, Hsu-Chih Huang, and Shui-Chun Lin. "Adaptive Neural Network Control of a Self-Balancing Two-Wheeled Scooter." *IEEE Transactions on Industrial Electronics* 57, no.4 (2010): 1420–28. <https://doi.org/10.1109/TIE.2009.2039452>.
- Franzen, C. "How Autonomous Vehicles Handle Austin's Thousands of e-Scooters." *Ground Truth*, 23 2021. <https://groundtruthautonomy.com/self-driving/how-autonomous-vehicles-handle-austins-thousands-of-e-scooters/>.
- Frisby, Josh. "How and Why Electric Scooters Are Harnessing Autonomous Technology." *Automotive IQ*, 30 2019. <https://www.automotive-iq.com/electrics-electronics/articles/how-and-why-electric-scooters-are-harnessing-autonomous-technology>.
- Gibson, Hebe, Angela Curl, and Lee Thompson. "Blurred Boundaries: E-Scooter Riders' and Pedestrians' Experiences of Sharing Space." *Mobilities* 17 no. 1 (2022): 69–84. <https://doi.org/10.1080/17450101.2021.1967097>.
- Gössling, Stefan. "Integrating e-scooters in urban transportation: Problems, policies, and the prospect of system change." *Transportation Research Part D: Transport and Environment* 79 (2020): 102230. <https://doi.org/10.1016/j.trd.2020.102230>.
- Kwan, Christopher H., Juan M. Arteaga, David C. Yates, and Paul D. Mitcheson. "Design and Construction of a 100 W Wireless Charger for an E-Scooter at 6.78 MHz." In *2019 IEEE PELS Workshop on Emerging Technologies: Wireless Power Transfer (WoW)*, 186–90. London, United Kingdom: IEEE. (2019) <https://doi.org/10.1109/WoW45936.2019.9030648>.

- Masoud, Mahmoud, Mohammed Elhenawy, Mohammed H. Almannaa, Shi Qiang Liu, Sebastien Glaser, and Andry Rakotonirainy. "Heuristic approaches to solve e-scooter assignment problem." *IEEE access* 7 (2019): 175093-175105. <https://doi.org/10.1109/ACCESS.2019.2957303>.
- Mathew, Jijo K., Mingmin Liu, and Darcy M. Bullock. "Impact of weather on shared electric scooter utilization." In *2019 IEEE Intelligent Transportation Systems Conference (ITSC)*, pp. 4512-4516. IEEE, 2019. <https://doi.org/10.1109/ITSC.2019.8917121>.
- Nikolaev, Denis, Vadim Davydov, and Nikita Chubur. "Smart Parking for Electric Scooter." In *The 5th International Conference on Future Networks & Distributed Systems*, (2021):532–36. Dubai United Arab Emirates: ACM. <https://doi.org/10.1145/3508072.3508182>.
- Schellong, Daniel, Philipp Sadek, Carsten Schaetzberger, and Tyler Barrack. "The promise and pitfalls of e-scooter sharing." *Europe* 12 (2019). <https://www.bcg.com/publications/2019/promise-pitfalls-e-scooter-sharing>.
- Severengiz, Semih, Sebastian Finke, Nora Schelte, and Norman Wendt. "Life Cycle Assessment on the Mobility Service E-Scooter Sharing." In *2020 IEEE European Technology and Engineering Management Summit (E-TEMS)*, (2020.):1–6. Dortmund, Germany: IEEE. <https://doi.org/10.1109/E-TEMS46250.2020.9111817>.
- Soloperto, Raffaele, Philipp Wenzelburger, David Meister, Dominik Scheuble, Veronika SM Breidohr, and Frank Allgöwer. "A control framework for autonomous e-scooters." *IFAC-PapersOnLine* 54, no. 2 (2021): 252-258. <https://doi.org/10.1016/j.ifacol.2021.06.030>.
- Sumalee, Agachai, and Hung Wai Ho. "Smarter and more connected: Future intelligent transportation system." *IATSS Research* 42, no. 2 (2018): 67-71. <https://doi.org/10.1016/j.iatssr.2018.05.005>.
- Trivedi, Tarak K., Charles Liu, Anna Liza M. Antonio, Natasha Wheaton, Vanessa Kreger, Anna Yap, David Schriger, and Joann G. Elmore. "Injuries associated with standing electric scooter use." *JAMA network open* 2, no. 1 (2019): e187381-e187381. <https://doi.org/10.1001/jamanetworkopen.2018.7381>.
- Tuncer, Sylvaine, and Barry Brown. "E-Scooters on the Ground: Lessons for Redesigning Urban Micro-Mobility." In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, (2020):1–14. Honolulu HI USA: ACM. <https://doi.org/10.1145/3313831.3376499>.
- Wozinski, Samuel, Liang He, and Kang G. Shin. "Protecting electric scooters from thefts using batteries." In *Proceedings of the 20th Annual International Conference on Mobile Systems, Applications and Services*, pp. 595-596. 2022. <https://doi.org/10.1145/3498361.3538651>.
- You, Shun-Hsiang, Shih-Hao Chang, Hao-Min Lin, and Hsin-Mu Tsai. "Visible light communications for scooter safety." In *Proceeding of the 11th annual international conference on Mobile systems, applications, and services*, pp. 509-510. 2013. <https://doi.org/10.1145/2462456.2465707>.

# AFFORDANCES OF VISUALISED FUTURE ENVIRONMENTS DO WE NEED OR WANT SUCH PLACES?

Authors:

**DAMIAN ROGERS<sup>1</sup>, LINUS TAN<sup>2</sup>, ANITA KOCSIS<sup>1</sup>**

Affiliation:

<sup>1</sup> DESIGN FACTORY MELBOURNE, INNOVATION & ENTERPRISE. SWINBURNE UNIVERSITY OF TECHNOLOGY, AUSTRALIA

<sup>2</sup> SCHOOL OF DESIGN AND ARCHITECTURE. SWINBURNE UNIVERSITY OF TECHNOLOGY, AUSTRALIA

---

## INTRODUCTION

Architects produce models, sketches, and digital renderings to visualise the design for the end users to imagine the space. Occasionally, these mediums prompt clients to articulate their memories and experiences activated by the visual cues in the image. However, understanding how visualisations afford spatial memories and experiences is rarely considered in the design process. Visualisations that afford place memories can deliver greater insight into the imagined affordances of the client and can be used as a method to evaluate what is proposed. Conversely exploring such methods can also provide architects with an understanding of other affordances imagined by the end user.

This study examines a visualised future environments in Melbourne, Australia. through video manipulation of an existing underutilised post-industrial waterscape environment. The Docklands urban precinct in Melbourne, Australia is a waterside development that has transformed the former docks and Victoria Harbour however, it has been criticized for lacking a sense of place. A general view is that sense of place is the experience of a particular setting that links a person's set of values to the place.<sup>1</sup> A sense of place is 'an internal, personal experience' that creates an attachment to place.<sup>2</sup> This study explores visualisations that affords associations with place memories and spatial experiences. Based on our findings, we proposed a framework to help researchers and designers elicit different aspects of the participants tacit experiences.

## Affordance theory

In his book *An Ecological Approach to Visual Perception*, James Gibson devised the theory of affordance.<sup>3</sup> His theory states: 'The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill'.<sup>4</sup> Affordances are the properties of the environment that create opportunities for action based on a person's capabilities. Design affordances' primary idea is to frame how organisms (people and mammals) interact with their environment. However, the environment, as Kaplan and Kaplan describe, goes beyond the physical objects present to include images and memories of past experiences of other places. Kaplan and Kaplan,<sup>5</sup> assert:

*'A great deal of information that is essential to functioning is already stored in our heads based on previous experiences. Such stored information not only makes it possible to assess a current situation but is essential in anticipating what might happen next. Humans can imagine, they can consider*

*alternate plans, they can give advice or instruction – all based on information that is not immediately present in the environment'*

Affordances are cues to the actual and possible actions or functions in the environment influenced by our experiences.<sup>6</sup> Potential actions as a result of perceptions of place in the built environment explored through affordances offer designers insight into tacit and new experiences.<sup>7</sup> Perceived affordances are vital ingredients in developing design tactics for users, including the assessment of action possibilities with artifacts.<sup>8</sup> However, urban places in the environment usually prescribed behaviours, whereby elaboration and imagination are constrained, limiting the action possibilities.<sup>9</sup> We position design affordances as a conduit to articulate people's desired experiences revealing different facets of the public's latent imagined affordances as valuable to the design process. Insights conveyed through design affordances albeit people's ideas, emotive responses, perceived reactions to place, space and site, whether real or imagined - may result in opportunities beyond the designers' intentions. Design affordances can emerge through different mediums, such as presentations of unbuilt architectural proposals, and video manipulation of existing conditions.

### **Visualisation and imagined affordances**

Before the 1970's buildings were mostly understood as being connected to practice and architectural visualisation was considered a means to serve a construction.<sup>10</sup> However, architectural visualisation has evolved beyond drawings that are intended for construction to other imagined realities. The evolution from hand drawings to hyper-realistic digital representations of space has blurred the lines between physical reality and visual representation. Architectural visualisation enables spaces to be imagined in unique contexts such as rugged natural landscapes without the restrictions and limitations imposed by regulatory powers. These images capture our attention and draw out emotional responses but they are often criticised for their fanciful structural integrity. Disparaged as obnoxious clickbait they divert attention from real-world projects.<sup>11</sup> However, for many online architectural websites such as Dezeen, Designboom and Architizer these evocative images are often the most viewed.<sup>12</sup> Keskey, writing for Architizer asserts that, 'Peeling away the vanity, the large amount of attention these renderings receive arguably proves their value to the architectural profession. Freed from the constraints of construction, contracts and clients, these conceptual projects are a pure manifestation of their author's imagination'.<sup>13</sup> These rendered images are not intended to be built rather they seek to create conversations about the possibilities of other realities for architecture and construction.

Architect Will Alsop describes much of today's urban designers as 'intensely boring' and driven by banality and normality which results in places that people don't visit.<sup>14</sup> He attributes this to neglecting the democratic urban design process that involves the end users of buildings and places to inform the outcomes. To overcome these failings, he states, 'we need to unleash, not the will of the architect, but the latent power and imagination of those who will have to inhabit it and live with it. This is an important conversation currently missing from contemporary architectural design'.<sup>15</sup> In this paper, we propose a method that creates an alternate reality of an existing post-industrial urban waterway redevelopment in Melbourne's Docklands to understand how disrupting the familiar image of the water can reveal other affordances imagined by the end user. The method shifts the image beyond the imagination of the designer to engage the end user and their imagined affordance of the disrupted image of the urban environment.

### **METHOD**

Surveys and questionnaires are widely used in research and are a common way of assessing natural areas and arranged places.<sup>16</sup> The data for this research was collected by an online digital survey that applied the visual method of representational photography and videos. This study applied a mixed

methods approach, drawing on images underpinned by affordance theory to examine the image of post-industrial waterways. The use of video collage in the survey design enabled the image of the water in a post-industrial setting to be disrupted and visually activated in motion. Eight different scenes of water were viewed across two different sites at Melbourne's Dockland. There were four scenes that replicated the existing conditions of the water and four that manipulated the image of the water using rolling waves and breaking waves. The survey questions were designed to extract the elements of the environment articulated as affordances by the participants. The responses were recorded in an online survey which used questions to understand the perception and affordance of the image and how this was affected when the familiar image was manipulated.

## RESULTS

The data were manually coded using thematic analysis. Thematic analysis is 'a method used to identify patterns and identify themes within data.'<sup>17</sup> Affordance theory for the analysis of the survey data explores perception, experience, and variations in people's responses to elements of the environment within the scenes. Furthermore, the response data was extended to analyse how applying the novel image of waves, which carry a strong mental image attached to the beach and ocean.<sup>18</sup> This can often afford a higher level of engagement through the user's memories and experiences. The findings revealed:

- The disruption of the urban context image afforded a surprising reaction
- The surprise led to updating the familiar image of the water
- The affordance of the water was imagined through past experiences and place memories.

The key finding of the affordance of surprise in response to the scenes which activated the water with waves provides new knowledge about the affordances of the environment when the unfamiliar image of waves in a post-industrial urban waterway activated the water. Tuan asserts that 'to experience in the active sense requires 'one to venture forth into the unfamiliar and experiment with the elusive and uncertain'.<sup>19</sup> He asserts that 'uncertainty and the potential for surprise are characteristics of the future and contribute to a sense of the future', whereas 'familiarity is a characteristic of the past'.<sup>20</sup> The respondent's imagination grounded the uncertainty about the unfamiliar image of waves in a post-industrial harbour as they sought to interpret the new image and give it meaning. Preference for the scenes with waves further demonstrates that curiosity and surprise influenced the attraction. Exploring the activation of the water ranging from subtle to overt, including colour and sound through video collage as set out by the survey design, revealed that expectations or assumptions of the water shifted towards surprise.

We argue that the theme of surprise represents an engaging questioning of the environment or the perception of a novel image. Samples taken from the results of the survey data in this thesis illustrate this focused curiosity:

- 'curious where the waves come from'
- 'how is the wave hitting the end of the dock'
- 'has a boat created the waves'

Surprise led participants to find new meanings and reappropriate the image as a representation of place. Surprise occurs when our expectations are disrupted. Expectations are based on different sources of information, such as the perception of the current stimuli, memories, and interpretations drawn from other experiences.<sup>21</sup> We argue that disrupting the expectation of the image of a post-industrial waterway which is often stagnant, lifeless and void of action can create stronger bonds through a reimagined experience associated with personal memories and place attachment. Environmental and social psychologists Altman and Low note several definitions of place attachment in the literature; however, the key theme is an emotional quality based on perception and these

perceptions create bonds with place.<sup>22</sup> People's knowledge, emotions and beliefs are central to this attachment.<sup>23</sup> Geographer Yi-Fu Tuan asserts that our knowledge is obtained from our experiences and that our reality is constructed by these experiences.<sup>24</sup>

The video and audio manipulation of the water triggered an imaginative interpretation of the undefined image of the water and activated imagined affordances. The visual methods of the survey created illusive animated images of the water activated by waves. This shifted the existing reality to something new and unfamiliar by changing the image of the water. The responses to these images led the participants to redefine the preconceived image of the water with their imagination coloured by memories and experiences. Alsop describes this as the 'noise' framed without reference where something new can immerse, 'i.e. the 'noise' is where completely new thinking can happen. The 'noise' is discovered by the users of his architecture through their dreams and imagination.<sup>25</sup> The visual methods used in the survey to activate the water intend to draw attention to it, and the responses to the new image are interpreted as affordances of the environment that provide new knowledge which is founded on user-based experiences.

Disrupting the image of the water in a post-industrial urban setting by activating it with waves, required the processing of the scene to be slowed down to extract the information needed to recognize and identify the objects within the scene.<sup>26</sup> This disrupted the semantic knowledge and prompted new meanings for the element of the environment within the existing context. The participants articulated these meanings through place memories and experiences. Activating the existing environment to change the image can reveal other affordances not yet perceived to add value and meaning to a place. The survey participant's interpretation of the unfamiliar image of the water provides new knowledge of other affordances not imagined by architects and planners. In the case of Melbourne's Docklands these insights can provide a framework to analyse the current state of the development against the disrupted image of the water and how this affects the perception and affordance of place.

## DISCUSSION

The data reveals the different users' individual and collective interpretations of an alternate reality presented as video manipulations. The key finding of surprise was afforded in response to disrupting the familiar image of the water. Such data about future public needs associated in this case with a post-industrial urban waterway, can then be used to guide and validate designers' proposals for the built environment. However, we also propose that disrupting the familiar image can be extended to other disciplines of the built environment. These future insights communicate beyond the current mainstream design development frameworks and can disrupt the atypical reach of existing community consultation and planning. For example, incorporating community desires through personal experiences articulated in response to the manipulation of a familiar image may more effectively mitigate the risks of creating architectural spaces, urban landscapes and cultural infrastructure that fail to excite and attract people.

Architect Will Alsop claims that when design quality is centred around master planning theories with preconceived ideas of how it should look, it does not necessarily result in the desired outcomes.<sup>27</sup> According to Alsop, it is 'democracy gone mad' and 'death by consultation'.<sup>28</sup> He attributes this to neglecting the democratic urban design process that involves the end users of buildings and places to inform the outcomes. To overcome these failings, he states, 'we need to unleash, not the will of the architect, but the latent power and imagination of those who will have to inhabit it and live with it. This is an important conversation currently missing from contemporary architectural design'.<sup>29</sup> This paper explores visualisation as a disruptive tool for a post-industrial urban waterway environment to understand how the new image affects the perception and affordance of place. We argue that places which people have a deep association with are connected to personal meanings and experiences.

Visualisation of future environments that evokes these references can provide architects and planners with insights that can help in the design of urban environments to create places people want to experience.

The use of mediums such as representation, prototypes, and video manipulation, are catalysts for communicating tacit experiences. Through this study, we report on how video manipulations of existing environments can stir up surprise and reframe the public's perception of post-industrial waterway experience. Furthermore, this design medium generates data necessary for analysing desired experiences and place attachment. These codified data offer evidence to reframe existing/established perceptions of project criteria.

### **CONCLUSION**

Manipulating the existing urban environment to disrupt the familiar image analysed through the lens of affordance theory provides new opportunities for designers to engage the end user and their experiences to discover the potential of other affordances the designer may not imagine. Designing places using affordance theory is rarely included in design methodologies for architects and planners. Furthermore, understanding how to extract imagined affordances of the users as a design tool has not been researched in the built environment. The data analysis reveals that disrupting the context frame of a post-industrial urban waterway afforded surprise. The new image was then interpreted by referring to other experiences that were not attached to the familiar image of the water, but rather, memories attached to other places. These memories and experiences carry meaning for the individual. Articulating these meanings provides insights into the activation of imagined affordances framed by meanings connected to place attachment. The affordances connected to experience and memory create bonds that may not have been imagined in the design of the constructed reality.

Visualisation as design affordance can express users' tacit and projected values of their future environment. By relying on design affordance to extract users' latent wants and needs, their articulated experiences can serve as evidence to question existing processes and improve traditional design formats. From the early findings of this research, we highlight the need for further investigation in design affordances as potential data sources of desired experiences for designing the built environments. Traditional participatory planning models can be improved by extracting the user's desires, wants, and needs earlier in the design process. Furthermore, we argue that designing without activating the imaginative affordances of the end users can result in missed opportunities that fail to create a sense of place.

## NOTES

- <sup>1</sup> Mina Najafi and Mustafa Kamal Bin Mohd Shariff, 'The Concept of Place and Sense of Place in Architectural Studies', *International Journal of Humanities and Social Sciences* 5, no. 8 (2011): 1054–60.
- <sup>2</sup> Lindsay J McCunn and Robert Gifford, 'Spatial Navigation and Place Imageability in Sense of Place', *Cities* 74 (2018): 209.
- <sup>3</sup> James J. Gibson, *The Ecological Approach to Visual Perception*, Classic (New York: Psychology Press, 2014).
- <sup>4</sup> Gibson, 119.
- <sup>5</sup> Rachel Kaplan and Stephen Kaplan, *The Experience of Nature: A Psychological Perspective* (Cambridge university press, 1989), 3–4.
- <sup>6</sup> Gibson, *The Ecological Approach to Visual Perception*.
- <sup>7</sup> Christopher M Raymond, Marketta Kytä, and Richard Stedman, 'Sense of Place, Fast and Slow: The Potential Contributions of Affordance Theory to Sense of Place', *Frontiers in Psychology* 8 (29 September 2017): 1674, <https://doi.org/10.3389/fpsyg.2017.01674>.
- <sup>8</sup> Donald Arthur Norman, 'Affordance, Conventions, and Design', *Interactions* 6, no. 3 (1999): 38–43, <https://doi.org/10.1145/301153.301168>; Udo Kannengiesser and John S Gero, 'A Process Framework of Affordances in Design', *Design Issues* 28, no. 1 (2012): 50–62.
- <sup>9</sup> Mike Michael and Arthur Still, 'A Resource for Resistance: Power-Knowledge and Affordance', *Theory and Society*, 1992, 869–88.
- <sup>10</sup> Jordan Kauffman, *Drawing on Architecture: The Object of Lines, 1970-1990* (MIT Press, 2019).
- <sup>11</sup> Paul Keskeys, 'Why the World Needs Crazy Architectural Renderings - Architizer Journal', Architizer, 27 May 2020, <https://architizer.com/blog/inspiration/stories/crazy-architectural-renderings/>.
- <sup>12</sup> Keskeys.
- <sup>13</sup> Keskeys.
- <sup>14</sup> Tom Porter, *Will Alsop: The Noise* (Taylor & Francis Group, 2010), 153.
- <sup>15</sup> Porter, 12.
- <sup>16</sup> Leonard Bickman and Debra J Rog, *The SAGE Handbook of Applied Social Research Methods* (Sage publications, 2008).
- <sup>17</sup> Virginia Braun and Victoria Clarke, 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology* 3, no. 2 (January 2006): 77–101, <https://doi.org/10.1191/1478088706qp0630a>.
- <sup>18</sup> Douglas Booth, *Australia Beach Cultures: The History of Sun, Sand and Surf* (Routledge, 2012).
- <sup>19</sup> Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 1977), 9.
- <sup>20</sup> Tuan, 217–128.
- <sup>21</sup> Geke D S Ludden, Hendrik N J Schifferstein, and Paul Hekkert, 'Surprise as a Design Strategy', *Design Issues* 24, no. 2 (2008): 28–38.
- <sup>22</sup> Irwin Altman and Setha M Low, *Place Attachment* (Springer Science & Business Media, 2012).
- <sup>23</sup> Altman and Low.
- <sup>24</sup> Tuan, *Space and Place: The Perspective of Experience*.
- <sup>25</sup> Porter, *Will Alsop: The Noise*.
- <sup>26</sup> Moshe Bar, 'Visual Objects in Context', *Nature Reviews Neuroscience* 5, no. 8 (2004): 617–29.
- <sup>27</sup> Porter, *Will Alsop: The Noise*.
- <sup>28</sup> Porter, 16.
- <sup>29</sup> Porter, 12.

## BIBLIOGRAPHY

- Altman, Irwin, and Setha M Low. *Place Attachment*. Springer Science & Business Media, 2012.
- Bar, Moshe. 'Visual Objects in Context'. *Nature Reviews Neuroscience* 5, no. 8 (2004): 617–29.
- Bickman, Leonard, and Debra J Rog. *The SAGE Handbook of Applied Social Research Methods*. Sage publications, 2008.
- Booth, Douglas. *Australia Beach Cultures: The History of Sun, Sand and Surf*. Routledge, 2012.

- Braun, Virginia, and Victoria Clarke. 'Using Thematic Analysis in Psychology'. *Qualitative Research in Psychology* 3, no. 2 (January 2006): 77–101. <https://doi.org/10.1191/1478088706qp063oa>.
- Gibson, James J. *The Ecological Approach to Visual Perception*. Classic. New York: Psychology Press, 2014.
- Kannengiesser, Udo, and John S Gero. 'A Process Framework of Affordances in Design'. *Design Issues* 28, no. 1 (2012): 50–62.
- Kaplan, Rachel, and Stephen Kaplan. *The Experience of Nature: A Psychological Perspective*. Cambridge university press, 1989.
- Kauffman, Jordan. *Drawing on Architecture: The Object of Lines, 1970-1990*. MIT Press, 2019.
- Keskeys, Paul. 'Why the World Needs Crazy Architectural Renderings - Architizer Journal'. Architizer, 27 May 2020. <https://architizer.com/blog/inspiration/stories/crazy-architectural-renderings/>.
- Ludden, Geke D S, Hendrik N J Schifferstein, and Paul Hekkert. 'Surprise as a Design Strategy'. *Design Issues* 24, no. 2 (2008): 28–38.
- McCunn, Lindsay J, and Robert Gifford. 'Spatial Navigation and Place Imageability in Sense of Place'. *Cities* 74 (2018): 208–18.
- Michael, Mike, and Arthur Still. 'A Resource for Resistance: Power-Knowledge and Affordance'. *Theory and Society*, 1992, 869–88.
- Najafi, Mina, and Mustafa Kamal Bin Mohd Shariff. 'The Concept of Place and Sense of Place in Architectural Studies'. *International Journal of Humanities and Social Sciences* 5, no. 8 (2011): 1054–60.
- Norman, Donald Arthur. 'Affordance, Conventions, and Design'. *Interactions* 6, no. 3 (1999): 38–43. <https://doi.org/10.1145/301153.301168>.
- Porter, Tom. *Will Alsop: The Noise*. Taylor & Francis Group, 2010.
- Raymond, Christopher M, Marketta Kyttä, and Richard Stedman. 'Sense of Place, Fast and Slow: The Potential Contributions of Affordance Theory to Sense of Place'. *Frontiers in Psychology* 8 (29 September 2017): 1674. <https://doi.org/10.3389/fpsyg.2017.01674>.
- Tuan, Yi-Fu. *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977.

# UNDOCUMENTED HISTORY: ACCESSING THE INTANGIBLE PAST THROUGH LOCATIVE MEDIA

Authors:

**DIANE DERR, SADIA MIR**

Affiliation:

VIRGINIA COMMONWEALTH UNIVERSITY IN QATAR

---

## INTRODUCTION

The field of locative media offers opportunities to excavate and access rich historic events through immersive storytelling, to create experiential geospatial experiences that delve into past, present and speculations of possible futures. This paper will discuss the role locative media plays in how we can engage in cultural histories from this spatiotemporal perspective through the examination of the augmented reality app, *Ambedo*, development as part of a broader interdisciplinary research project entitled, *Configuring Kommos: Narrative, Event, Place and Memory*. In September of 1943, during World War II, approximately 5,200 Italian soldiers were massacred on the Greek island of Kefalonia by German troops. This massacre left an indelible mark on the island of Kefalonia. With little to no in-depth documentation of this event, it is at risk of erasure. *Ambedo* relies on geo-referencing to layer oral stories from its community of survivors and descendants upon specific locations dotted across unmarked terrain –an olive grove, a dried-up well covered with brush, a church built into a cave — most appear seemingly banal, but in actuality, are infused with complex and meaningful history. This paper will explore how we can interact with a physical space through an integration of its intangible past into its evolving present. This paper aims to study the potential this mode of representation brings to how media makers visualize and approach a landscape and its people through site-specific, context-aware, participatory technology.



*Figure 1. Site of Significance: Troinata (Kefelonia, Greece)*

## **Place and space**

Understandings of histories of place rely, by default, on available technological developments and the prevailing communication media forms and modes of their respective time - albeit in written texts, paintings, printed texts or illustrations, photographic, film, or video imagery, and, of course, many other modes of representation. The field of locative media offers opportunities to excavate and access rich historic events in immersive storytelling, to create experiential geospatial experiences that delve into past, present, and speculations of possible futures.

We perceive place as a singular experience in space. However, place captures a plurality of experiences of space across a temporal spectrum. Place is the constant, the foundation upon which layers of experience are built. Over time, place captures countless histories and experiences, leaving layers of diverse indicators, markers, and residue. On the island of Kefalonia, a person may see a brick wall and a dried-up well in a nondescript field. What is not revealed are the personal stories derived from the place, for example, the massacre that unfolded decades prior.

An island resident, who was a child during World War II, recounts memories tethered to his village and more specifically, to his elementary school transformed into a place for wartime production efforts:

When the conflict happened, I was in third grade of elementary school and I was 9 years old. I was 9 years old back then when the war started, all the kids we were at school. How the story happened. It was a Monday, 28th of October and all the kids we are at school. At 9 o'clock the village's bell rang. Then the school's bell rang for us to get in and start the lesson. Our teachers, who were 5 in total, told us that we won't learn lessons, because the Italians declared war on us. Then they told us to ask from our mothers to get us sheep's wool so that we could start doing work at school, scrape the wool and that's where I learned to knit, in order to make the soldier's flannel like we used to call it, because our army didn't have clothes.<sup>1</sup>

On the events culminating in the massacre and deaths of approximately 5200 soldiers, island survivors recalled accounts of executions of Italian soldiers on ships off the coast of Kefalonia. These stories told from the first person point of view of multiple interviewees, when stitched together, create a mosaic of memory tied to beaches and waters of the island. Personal narratives offer sensory-rich

accounts of place, often retold in fragments, evocative of emotion and sharp detail, temporally embedded in space.

Interviews collected during this project highlight complex and at times surprising outcomes of the War. Whereas interviewees did speak to the oppressive circumstance of occupation, many also spoke to enduring relationships that formed between Italian soldiers and Greek island residents. One survivor recounts:

Once someone was celebrating at my house and my father had a small party there and invited some friends. We drank wine and sang. Coincidentally, a group, a patrol of Italians, passed by and they heard us singing and immediately entered the house. They left their weapons and asked if we wanted them to join the table and sing. We welcomed them and told them with pleasure to sit down. Then the lads sat and were excited. We had our own barrels of wine and some food. They participated, they were very happy and started singing Italian songs and then they danced. They sat until almost dawn.<sup>2</sup>

The consideration of how to capture a nuanced and multi-layered lived experience of place must be met with an ability to ensure that what is being captured is authentic and from within the community itself. Communities are becoming increasingly capable of capturing and preserving their lived experiences first-hand due to increased accessibility to communication infrastructures and tools, such as the smartphone and tablets.

While the Massacre of the Acquis Division continues to shape the collective identity of the residents of the island of Kefalonia, as well as the Italian community connected to this event, there is minimal publicly available documentation of this massacre. This is in part due to the German forces lack of acknowledgement and a leaning by the Italian government to not bring attention to this massacre. As a result, the historical public narrative of the Massacre is incomplete. However, personal accounts of what transpired are alive and shared by island residents, including survivors of the war and their descendants both on the island and in the diaspora.



*Figure 1. Site of Significance: Agia Barava (Kefalonia, Greece)*

## BACKGROUND

The central aim of the broader research project, *Configuring Kommos: Narrative, Event, Place, Memory*, has been to unpack a triangulated narrative of the events of the Massacre through the research of archival material, in-person interviews, and location scouting of events. While this event has become deeply embedded into the island's identity, it has not been well documented and is therefore at risk of erasure.

In 2019, a series of interviews were conducted with community members of the Greek and Italian communities based on the island who had either witnessed the massacre as children or were descendants of those associated by familial and collective memory. These interviews were a key component of the participatory-based research design. Capturing and preserving their personal experiences and family stories was an essential aspect in unpacking narrative threads and identifying the value and demonstrating the necessity for ensuring first-hand community experience is included in recorded and narrativized histories. These interviews further served as a guide to both identify the unmarked sites of significance across the island and contextualize artefacts of war still being found on the island. The stories of place collected through these interviews also serve to disrupt mainstream narratives, and also in this case, fill in narrative gaps. As Frith and Richter state, digital place-making can thus create participatory counter-narratives to push against existing dominant histories and dominant stories.<sup>3</sup> Furthermore, the process of capturing these stories first-hand from within the community itself became instrumental in informing the functional architecture of AR app. The sites of significance, Agia Barvara, Argostoli, Dilinata, Poulata, and Troinata, identified through the interviews, had no commemoration markers or indicators of the massacre, such as mass grave site markers. The insights shared in the interviews, coupled with common structural elements found within the sites, such as rock walls and wells, and the individual sites' own unique features, were instrumental in determining paths for the users to access the AR app within and between the sites.

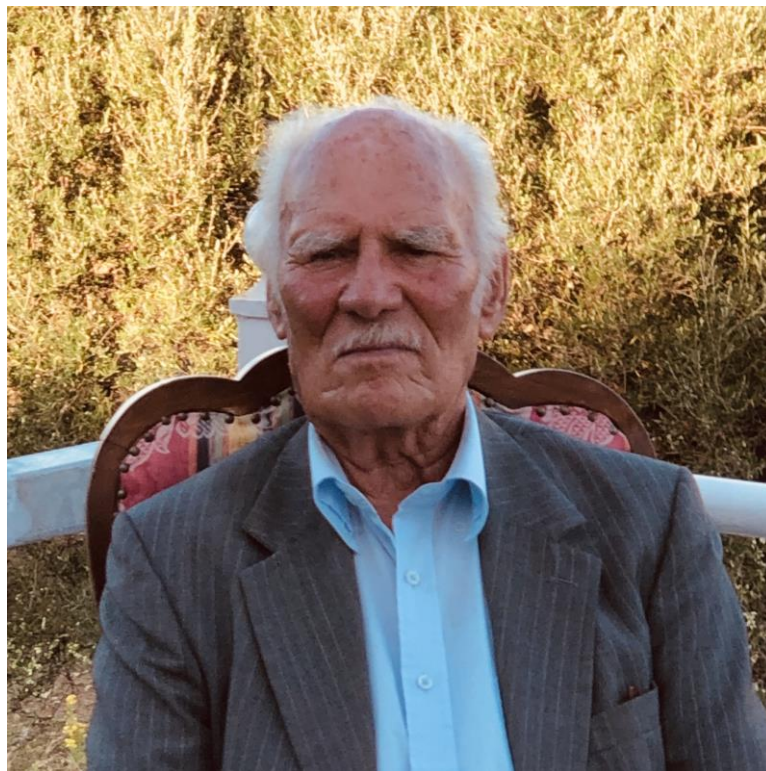


Figure 3. Island Resident (Kefalonia, Greece)

## ARCHITECTURE OF AUGMENTED REALITY + LOCATIVE MEDIA

Augmented reality was identified and used due to the ability of site visitors to access this history of events integrated within the physical space. The use of locative media was determined based on two primary needs; a practical need to ensure visitors could reach the sites and then move through the sites in coordination with the AR app content; and the conceptual aim to ensure visitors experience a tangible connection to place, to the sites of significance. Albeit evolving, the technological infrastructure and architecture of locative media require users to be physically present as site visitors in order to access the AR content and experience a connection between the present-day place and its captured history. As Michiel de Lange describes, locative media facilitates an ability to “induce us to reflect on ourselves in spatial terms.”<sup>4</sup> As defined by Julian Bleecker:

Locative media that is of most immediate concerns is that made by those who create experiences that take into account the geographic locale of interest, typically by elevating that geographic locale beyond its instrumentalized status as a ‘latitude longitude coordinated point on earth’ to the level of existential, inhabited, experienced and lived place. These locative media experiences may delve “into” the historical surface of a space to reveal past events or stories (whether fictional, confessional or standing on consensus as factual). Locative media experiences may also cross space, connecting experiences across short or long geographic, experiential, or temporal distances. At its core, locative media is about creating a kind of geospatial experience whose aesthetics can be said to rely upon a range of characteristics ranging from the quotidian to the weighty semantics of lived experience, all latent within the ground upon which we traverse.<sup>5</sup>

Reflective of both de Lange and Bleecker’s characterizations, locative media enables the formation of a new experiential space. An individual is grounded in a physical, sensory experience of place while accessing a revealed history. Locative media and augmented reality facilitate the integration of past histories with the physical, sensorial experience of the present, preserving the lived human experience of the event, which may otherwise be hidden or unacknowledged, with a tangible connection to place.



*Figure 4. Site of Significance: Poulata (Kefalonia, Greece)*

## AMBEDO - NON-LINEAR NAVIGATION OF PLACE AND HISTORY

The mobile augmented reality app, *Ambedo*, guides visitors through the sites of significance while connecting them with captured histories through an immersive, spatiotemporal experience across the island of Kefalonia. Through the use of geo-referencing and geolocated data, visitors trigger and access the captured histories through their personal smartphones as they traverse the physical landscape.

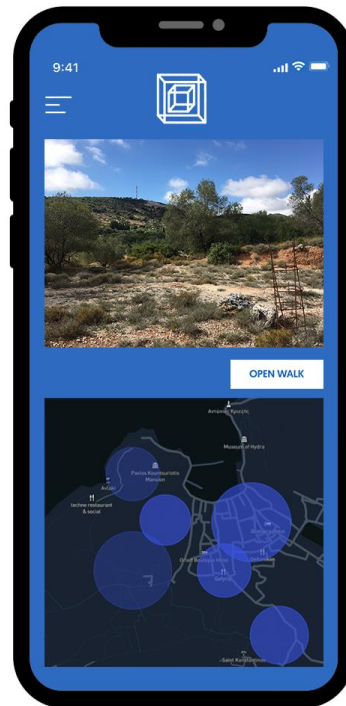


Figure 5. *Ambedo* - mobile app

A primary aim of the app is to enable the visitor to experience a non-linear narrative, wherein they determine the unique path they follow both within the individual sites and between sites, based on their experience of the physical environment and the captured histories. The sites, again, have no markers and, in some instances, are fairly remote. The use of geo-referencing provides the necessary way-finding between the different sites while navigating the island terrain. Once at a site, there is no clear entrance or exit.

Through the app, a visitor's position will trigger an audio node. There are five to seven audio nodes per site. The audio nodes within each site are a curated selection of clips addressing a common theme. Each audio node contains a recording of an interview related to the specific site. The volume of the recordings increases and decreases based on their proximity to geo-located audio nodes within the site. The audio nodes are located at key features within the sites that were determined based on the insights shared by community members. As a visitor moves closer to an audio node, the audio levels increase; as they walk away from an audio node, the audio levels decrease. The app's architecture was developed based on the unique conditions of the environment coupled with the aim of visitors to determine their own unique path and experience. The visitor's physical presence within a given site is the only way to access the captured histories. The visitor's presence activates a spatiotemporal monument to the Massacre of the Aquí Division.

As previously noted, the sites of significance are unmarked, typically hidden in plain sight across the island's diverse terrain. While known to the island's residents, these sites are largely imperceptible to

visitors. Through the site surveys, two recurring physical features were identified; a well and a rock wall. A shared understanding of the function of these features was revealed in the interviews as areas of executions and disposing of bodies. These features, as recurring markers, became tools for reading the land and anchor points for the audio nodes, as they revealed hidden realities and experiences of the event. The audio nodes within each site are a curated selection of clips addressing common themes of resilience and survival, family bonds and losses, and common stories, such as the bombing of a ship of captives off the coast of Kefalonia. An interviewee recounts a story passed through their family:

They filled a ship with Italians, under the promise that they would be taken back to Italy and of course all the soldiers accepted it. But they had installed a mine on the ship and when it reached the open sea, the mine exploded and of course the ship sank. No one escaped from here. For a long time the sea washed ashore dead bodies, drowned people, on all the beaches. I believe whoever saw this was feeling pain. My mother-in-law, from what my wife used to tell me, since they lived near the beach, where they had a small house nearby, when she went to the beach and found human remains, she dug a hole, buried them and cried over them. She also put a cross on their graves and lit incense.<sup>6</sup>

As a visitor traverses a site, audio levels rise and fall according to the proximity to one of the multiple audio nodes. The audio levels inform the visitor of the physical landscape and encourage both traversing the site on their own pathway, and pausing at certain areas, for example, near a feature of resonance (an unmarked well, a lighthouse with an obstructed view of the sea). This walking experience blends the intangible - memories of place - with the ever-changing tangible sensory layers of the site - the filtering of an overhead sun passing through clouds, the crunch of dried brush under feet, water hitting the rocks at the shore, or the fresh scent of sea air. Through locative media, *Ambedo* moves through space to offer an evolving conception of a genealogy of place.

## CONCLUSION

Place captures the complexity and plurality of lived human experiences. Emergent technology and tools such as locative media and augmented reality may afford a process of unearthing, collecting, and revealing the experience of place. The potential opportunities afforded through these tools offer the ability to capture, acknowledge, and preserve hidden, undocumented, counter narratives, and vulnerable histories. *Ambedo* presents a mechanism to consider how we can interact with a physical space through an integration of its intangible past into its evolving present. The use and application of context-aware, site-specific, participatory technologies can be instrumental in both the preservation of live-human experiences as well as forging new ground in the space between the tangible, sensorial experience of place and captured memory of the event.

## ACKNOWLEDGEMENTS

This paper has been produced through research funded by Virginia Commonwealth University and with special thanks to the Ionian Art Center, Kefalonia Greece.

## NOTES

<sup>1</sup> All interviews were conducted by authors of this paper. This interviewee was a Kefalonian resident survivor, witness to the massacre with direct childhood experience and memory of the event. The interview took place on October 14, 2019 on the island of Kefalonia.

<sup>2</sup> This interviewee was also a witness of the massacre with direct childhood experience and memory of the event. The interview took place on October 14, 2019 on the island of Kefalonia.

<sup>3</sup> Jordan Frith and Jacob Richter, "Building participatory counternarratives: Pedagogical interventions through digital placemaking," *Convergence: The International Journal of Research into New Media Technologies* 27, no. 3 (2021): 698.

<sup>4</sup> Michiel de Lange, "Moving Circles: Mobile Media and Playful Identities" (PhD diss., Erasmus University Rotterdam, 2010), 145.

<sup>5</sup> Julian Bleecker and Jeff Knowlton. *Locative Media: A Brief Bibliography and Taxonomy of Gps Enabled Locative Media* (Leonardo Electronic Almanac. MIT Press), [https://web.archive.org/web/20061014172644/http://leoalmanac.org/journal/Vol\\_14/lea\\_v14\\_n03-04/jbleecker.asp](https://web.archive.org/web/20061014172644/http://leoalmanac.org/journal/Vol_14/lea_v14_n03-04/jbleecker.asp).

<sup>6</sup> This interviewee is a descendent of a survivor of the massacre and recounts intergenerational stories of the war. The interview took place on October 13, 2019 on the island of Kefalonia.

## BIBLIOGRAPHY

Bleecker, Julian, and Jeff Knowlton. "Locative Media: A Brief Bibliography and Taxonomy of Gps Enabled Locative Media." *Leonardo Electronic Almanac* 14, no 3 (2006).

[https://web.archive.org/web/20061014172644/http://leoalmanac.org/journal/Vol\\_14/lea\\_v14\\_n03-04/jbleecker.asp](https://web.archive.org/web/20061014172644/http://leoalmanac.org/journal/Vol_14/lea_v14_n03-04/jbleecker.asp)

de Lange, Michiel. "Moving Circles: Mobile Media and Playful Identities". PhD diss., Erasmus University Rotterdam, 2010. <http://hdl.handle.net/1765/21334>.

Frith, Jordan, and Jacob Richter. "Building participatory counternarratives: Pedagogical interventions through digital placemaking." *Convergence: The International Journal of Research into New Media Technologies* 27, no. 3 (2021): 696–710. doi: 10.1177/1354856521991956.

Fisher, Joshua A, ed. *Augmented and Mixed Reality for Communities*. Boca Raton: CRC Press, 2021.

Galloway, Anne, and Matt Ward. "Locative Media As Socialising And Spatializing Practice: Learning From Archaeology." *Leonardo Electronic Almanac* 14, no 3 (2006)

<https://leoalmanac.org/wp-content/uploads/2012/07/Locative-Media-As-Socialising-And-Spatializing-Practice-Learning-From-Archaeology-Leonardo-Electronic-Almanac.pdf>

Hayden, Dolores. *The power of place: urban landscapes as public history*. Cambridge: MIT Press, 1997.

Harwell, Michael. "Research Design in Qualitative/Quantitative/Mixed Methods." In *The SAGE Handbook for Research in Education: Pursuing Ideas as the Keystone of Exemplary Enquiry*, edited by Clifton F. Conrad and Ronald C. Serlin, 147-180. Thousand Oaks: Sage Publications Inc., 2011.

Lamb, Richard. *War in Italy, 1943–1945: A Brutal Story*. Boston: Da Capo Press, 1996.

Lapenta, Francesco. "Geomedia: On Location-Based Media, the Changing Status of Collective Image Production and the Emergence of Social Navigation Systems." *Visual studies* 26, no. 1 (2011): 14–24. doi: 10.1080/1472586X.2011.548485

Livesay, Darden. "On This Day September 26, 1943: Nazis Massacre Thousands of Italian Soldiers in Kefalonia." *The Pappas Post*, September 26, 2019. <https://pappaspost.com/september-26-1943-nazi-massacre-acquisition-kefalonia/>.

Rieser, Martin. "Artistic Explorations: Mobile, Locative and Hybrid Narratives." In *Interactive Digital Narrative History, Theory and Practice*, edited by Hartmut Koenitz, Gabriele Ferri, Mads Haahr, Diğdem Sezen, and Tonguç İbrahim Sezen, 241–257. New York: Routledge, 2015.

# NOTES ON PUBLIC PLACES IN MADIBA'S MEMORY: USING ARCHIVAL RESOURCES FOR GRAPHIC HERITAGE INTERVENTIONS IN URBAN DEVELOPMENT

Authors:

**ROBERT HARLAND<sup>1</sup>, YOLANDI BURGER<sup>1</sup> AND EVERARDT BURGER<sup>2</sup>**

Affiliation

<sup>1</sup>LOUGHBOROUGH UNIVERSITY, UK

<sup>2</sup>TSHWANE UNIVERSITY OF TECHNOLOGY, SOUTH AFRICA

---

## INTRODUCTION

This paper reports on the early stages of an exploratory hypothesis that documents early responses and future possibilities to the proposition: What can be learned about Nelson Mandela from places named after him? The research was inspired by a visit to Nelson Mandela Park (NMP) in Leicester, United Kingdom (UK) in early 2021. Several questions arose: Why is a park named after Nelson Mandela in Leicester? How is he represented in the park? What can be learned about him in this setting? These questions were motivated by a recently migrated South African perspective and consciousness about the legacy of Mandela in South Africa. The questions spawned a curiosity to explore the park and further consider what inferences could be drawn about Mandela from similar public places and their immediate surroundings. These considerations are framed by the proliferation of places in South Africa that have been renamed in Mandela's honour before and after his death, but also in the light of apartheid planning policies in South Africa that contrast the mixed-land use within which NMP is situated in Leicester.

The starting point is Design Inquiry.<sup>1</sup> The particular aspects of a Design Inquiry approach utilised as part of this research uses observation, photo-documentation and annotated diagrams, in support of the formation of an exploratory hypothesis that leads to establishing an explanatory hypothesis to support preliminary answers to the questions "How did something occur?" and "Why did someone do something?"<sup>2</sup> Although the emphasis in this paper is on exploration, observation, and data gathering, rather than explanation, both are central to adopting a critical perspective on how and why in the mid-1980s a former recreation ground in Leicester – a post-industrial city in the UK – should become identified with Mandela.

In keeping with this intention, the research involved three elementary approaches to design research, namely descriptive, explorative, and empirical research.<sup>3</sup> The overall aims are:

- to understand the efficacy of the park's renaming by reviewing the national circumstances that contributed to the name change;
- to draw comparisons that highlight the park's unique context; and
- to propose that the link with Mandela could be enhanced through the use of graphic heritage as a development tool.

These aims will be met through the following objectives:

1. provide an overview of the underlying developments and background that determined the naming of the park;
2. provide new insights from a supposition about the relationship between toponymy and the graphic means through which a place is designated;
3. identify the scope of artefacts that enable the park to function within the Mandela name designation, and
4. speculate on how the park could better utilise Mandela's legacy through contemporary approaches to heritage interpretation.

Exploratory fieldwork and visual research reveal how graphic representations not only designate and promote the location but also show how they are connected to a network of urban infrastructure that link NMP to the rest of Leicester and firmly locate it in the cognitive map of the city's population.

### **NELSON MANDELA: A SHORT BIOGRAPHY**

Nelson Mandela – also known as Madiba in a national context and henceforth referred to in this paper – was born on 18 July 1918 and served the South African people until his death on 5 December 2013. Madiba was a twentieth-century black South African hero who fought against the white oppressive apartheid regime in South Africa. In 1994, he was elected as the first president of post-apartheid South Africa. Upon the end of his term in office in 1999, he founded the Nelson Mandela Foundation (NMF), a non-profit organisation focused on memory, dialogue, and the legacy of his work. His life was dedicated to serving his country and its so-called “rainbow nation” for 67 years so that all people can live together in harmony with equal opportunities. Madiba's legacy challenges all nations to live by his ideals to create a safer and just world where current and future generations are assured of their inalienable right to human dignity.

### **THE ANTI-APARTHEID MOVEMENT IN THE UNITED KINGDOM DURING THE 1980s**

The Anti-Apartheid Movement in the UK can be traced back to the late 1950s and reached its zenith in the 1980s. Reflecting on that decade, Christabel Gurney, the activist, historian, and editor of the journal of the Anti-Apartheid Movement between 1969–1980 identifies the means through which the movement expressed its disapproval of the South African apartheid regime in response to the weekly broadcasts of police shootings of township residents. Activism in London against British support for apartheid involved, typically: campaigning to boycott South African fruit; standing outside Barclays Bank (South Africa's biggest high street bank) with placards displaying the slogan Ban Barclays; rallies in Hyde Park; marches and picketing at the South African Ambassador's residence in Campden Hill Road; fundraising music events; wearing anti-apartheid badges; distributing anti-apartheid leaflets at tube stations and shopping centres; and fly-posting.<sup>4</sup> See Figure 1. Gurney also acknowledges the impact of the song “[Free] Nelson Mandela” written by Jerry Dammers and performed by The Special AKA as a backdrop to the activism. Released on the Coventry-based 2-Tone label, it was played especially loud by a neighbour of the South African Ambassador in London whenever he hosted a garden party at his residence in Campden Hill Road. The sleeve for the record is featured in the Coventry Music Museum, where a special panel about Madiba confirms the song was a global hit even though it was banned by the South African Government. See Figure 2. It was supposedly chanted in the streets of Soweto in South Africa, and Dammers was instrumental in organising the Artists Against Apartheid UK Freedom Festival concert in 1986 on Clapham Common in London, attracting 250 000 people.

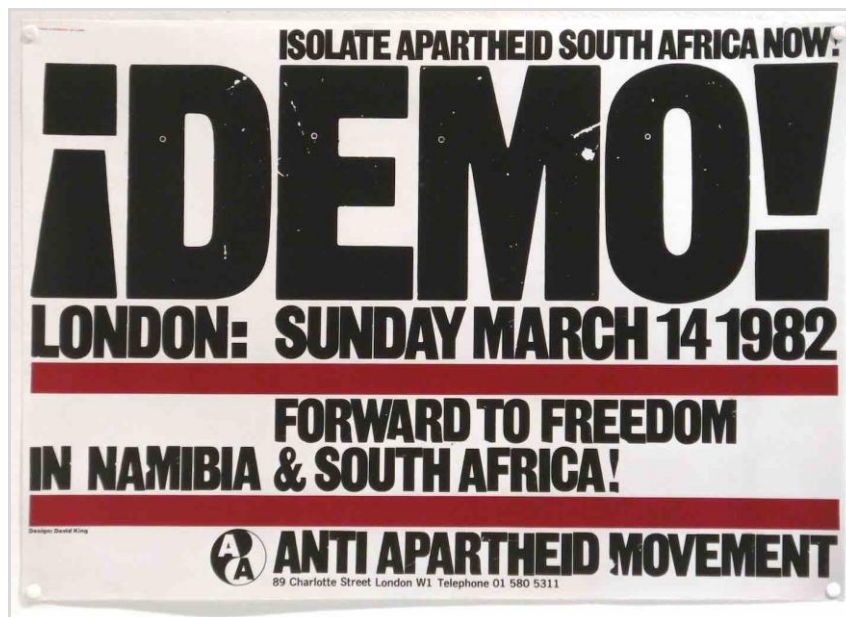


Figure 1. Anti-Apartheid demonstration poster on display at the South Africa in the 1970s - Photographs by Steve Bloom exhibition.<sup>5</sup> Design by David King.

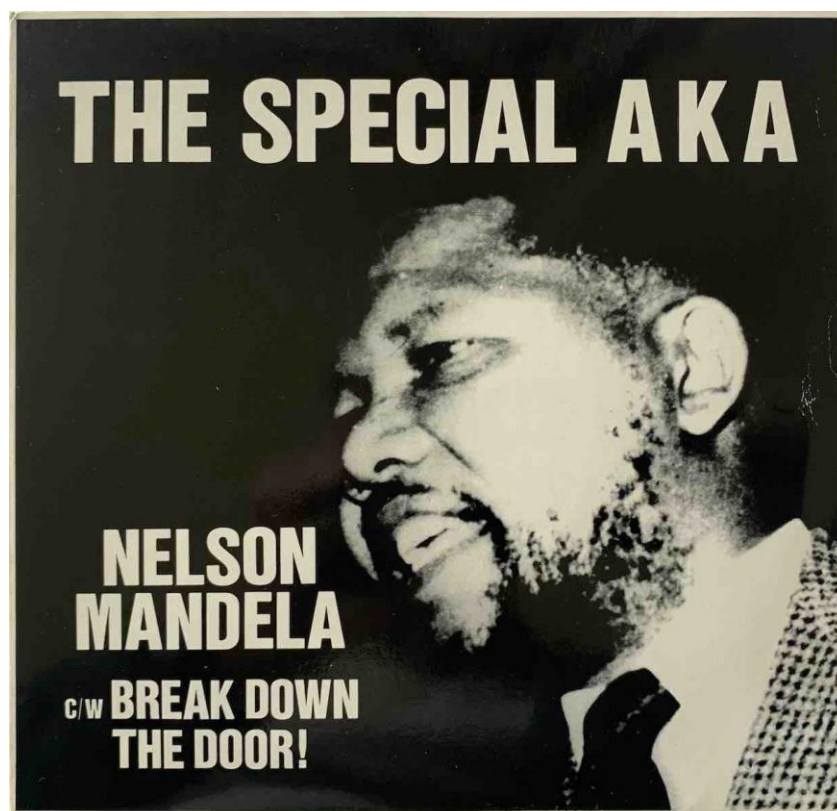


Figure 2. Sleeve design for [Free] Nelson Mandela record (released 5 March 1984).<sup>6</sup> 1984 Chrysalis Records Ltd.

### HONOURING MADIBA IN THE UNITED KINGDOM IN THE 1980s

NMP was one of numerous initiatives to honour Madiba in the UK in the early 1980s. For example, in August 1981, Glasgow District Council conferred on Madiba the freedom of the city, the first city in the world to do so. From that decade's beginning, a succession of public places in the UK that

adopted his name followed. Most of them have no link to Madiba. However, some indication of the number of places named after Madiba worldwide is registered in Johannesburg in the Nelson Mandela Centre of Memory's archive at NMF, which assists in providing a listing of locations under the title of "Nelson Mandela Tributes". For example, "human geography named after Mandela" registers streets, buildings, gardens, neighbourhoods, bridges, squares, and other (e.g. landfill site sites, hiking trail, routes, benches, memorial) whereas "educational institutions and related named after Mandela" includes schools, universities, honorary doctorates, student organisations, bursaries and scholarships, hospitals, and other awards from educational institutions.<sup>7</sup>

Locations in the UK feature prominently in the list. UK entries list streets, places, ways, roads, avenues, corners, closes, courts, leisure centres, council buildings, rooms, housing developments, and more. Some are in prominent city locations such as Nelson Mandela Gardens in Leeds, which was named in 1983. Such gestures reflected local concerns but also growing national awareness and resistance to Apartheid in South Africa. Widespread national exposure to Madiba's plight was also helped by mass media coverage. For example, the popular television comedy series *Only Fools and Horses* that ran between 1981–91 featured the fictitious Nelson Mandela House, a high-rise tower of council flats that served as the show's primary location.

These everyday examples contrast with the commissioning of a bust of Madiba by the Greater London Council from the sculptor Ian Walters. Unveiled by Oliver Tambo in 1985, the sculpture of Madiba's head is located at the walkway between the Royal Festival Hall and Hungerford Bridge on London's Southbank (a second statue of Madiba would be installed in London's Parliament Square in 2007). The inscription is updated in recognition of his release from jail in 1990, the award of the Nobel Peace Prize in 1993, and his inauguration as President of the Republic of South Africa in 1994. See Figure 3.

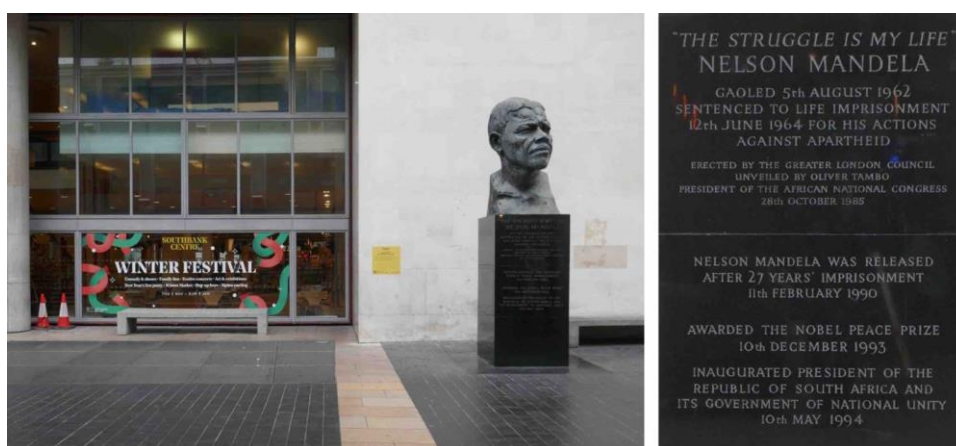


Figure 3. Bust of Nelson Mandela at the Southbank, London, and detail of the inscription<sup>8</sup>

### NELSON MANDELA PARK (NMP) IN LEICESTER

The City of Leicester is known for its rich cosmopolitan society. It is one of the fastest-growing cities in England and has a varied ethnic distribution across the city<sup>9</sup> – similar to South Africa's Rainbow Nation. The act of renaming the park in the 1980s aligns with the diverse cultural community of Leicester and their advocacy for a just society and equal rights for all.<sup>10</sup> Previously it had been known as the Welford Road Recreation Ground, as documented in the archive.<sup>11</sup>

The behavioural setting of the park did not change with the renaming of the park; however, with time the physical entities in the park have changed. To establish the frequency of occurrences that refer Madiba in NMP, the project commenced with the park's documentation through photography in 2021

during the Covid-19 pandemic. Although the photo-documentation was mainly concerned with recording commemorations of Madiba, there was a lot of activity happening in the space since the park has a variety of activities that the community can engage in. There is an outdoor gym on the side of the rugby pitch which the Leicester Tigers often use for informal rugby practice sessions together with the local community, a basketball court, and a children's play area. NMP is used as a thoroughfare by pedestrians and cyclists and also has common amenities such as public toilets and defibrillators. See Figure 5.

The setting for the park deserves a special mention when looked at from a South African perspective. NMP is situated in a comparatively unique mixed-land area in the city centre of Leicester with residential housing, a public hospital, a local prison, institutions for higher education, hotels, and a large sports stadium. This mixed-land use combination is not common in South Africa,<sup>12</sup> although the equivalent Nelson Mandela Park in Mamelodi, South Africa does share some similarities.<sup>13</sup> Mixed-land use promotes an economical blend of compatible land uses, creates strong neighbourhood characteristics, increases pedestrian movement and has a higher chance of job creation.<sup>14</sup> The presence of Leicester Prison in the mixed land use surrounding NMP is also quite rare and is often mentioned in reviews of the park on Google Maps. The annotated diagram in Figure 4 indicates the location of several points of interest in and around the park.

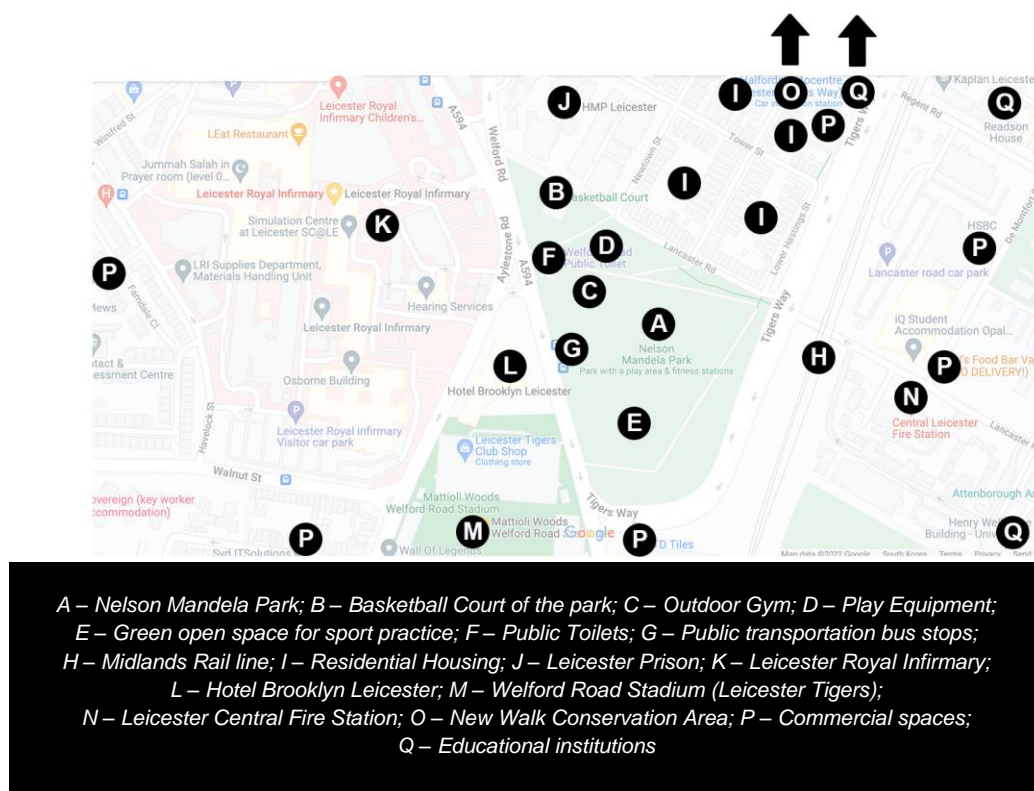


Figure 4. Annotated diagram of the mixed-land-use area of Nelson Mandela Park in Leicester, United Kingdom<sup>15</sup>

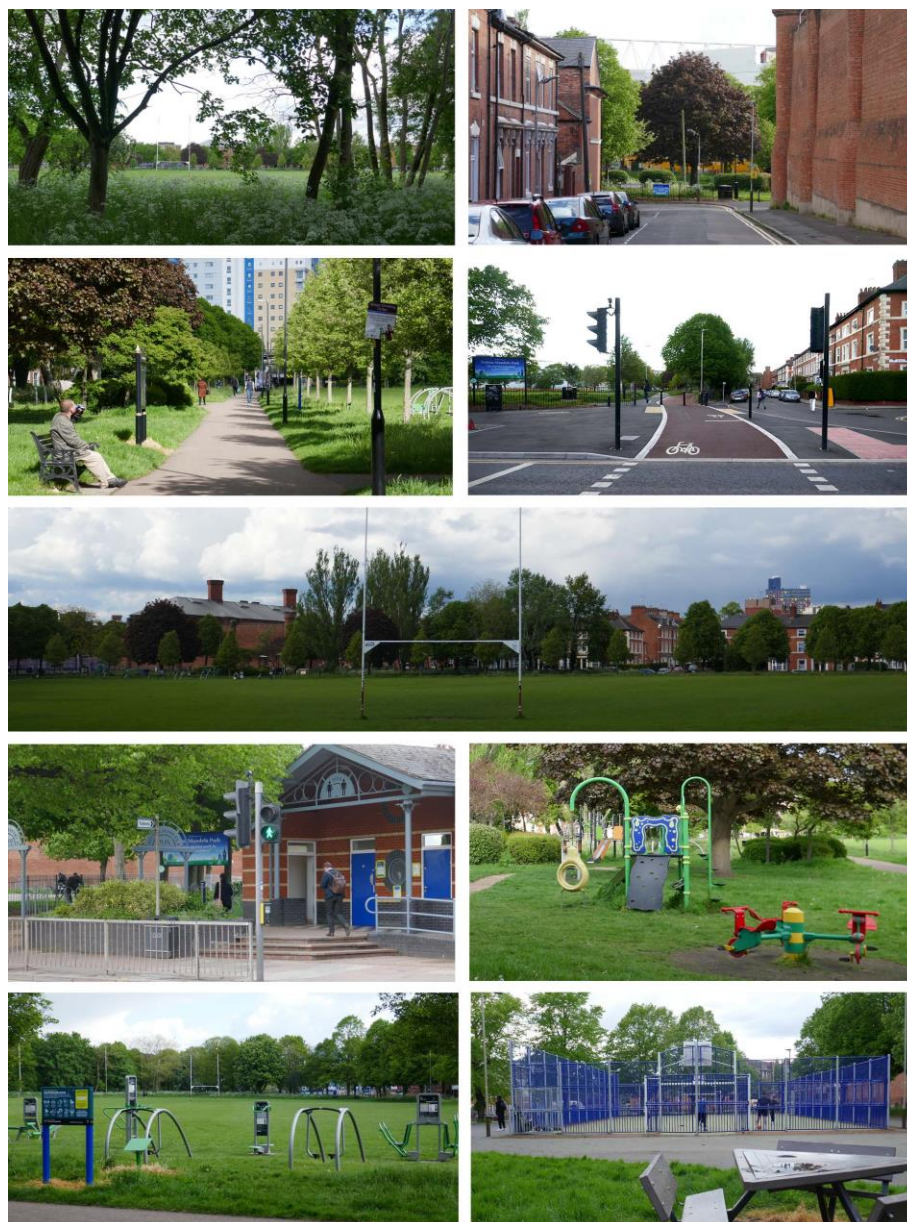


Figure 5. Nelson Mandela Park in Leicester, United Kingdom<sup>16</sup>

As a testimony to the park's impact on the local people, it is interesting to note what the community says about the park from their reviews on Google Maps. The park has a 4.1-star rating on Google Maps and received 528 reviews to date. The oldest review was written 9 years ago and the newest was in early February 2023 (at the time of writing this paper). Reviews include photographs of people's interaction with the park facilities and local wildlife. Walking is the most mentioned, followed by access to public toilets.<sup>17</sup>

### What do we learn about Nelson Mandela from visiting the park named after him?

A visit to NMP reveals many examples of the park name, on pedestrian signage, bus routes, entrance structures, notice boards and welcome addresses that include quotations from Madiba. See Figure 6. These confirm not only how well the park is known, but also the accessibility of the location that fulfils its recreation ground purpose but has also become a community resource if the information posted on the notice board is anything to go by. See Figure 7. These are all inherently graphic in their appearance.



Figure 6. The park's name appears in multiple places, confirming how it is embedded in the consciousness and connectedness of the city <sup>18</sup>



Figure 7. Detail of information displayed on the notice board cabinet in Nelson Mandela Park, Leicester <sup>19</sup>

A central commemorative plaque is the only opportunity to learn about Madiba, and why the park is named after him. It replaced the original plaque which marked the official naming of NMP in 1989 when Madiba was still imprisoned. On 19th April 2004, the plaque was unveiled by the South African High Commissioner, Dr Lindiwe Mabuba, on 19th April 2004 to commemorate ten years of Freedom in South Africa. On 21st July 2018, a more recent version was unveiled by the People of Leicester to commemorate the centenary birthday of Madiba. See Figure 8.

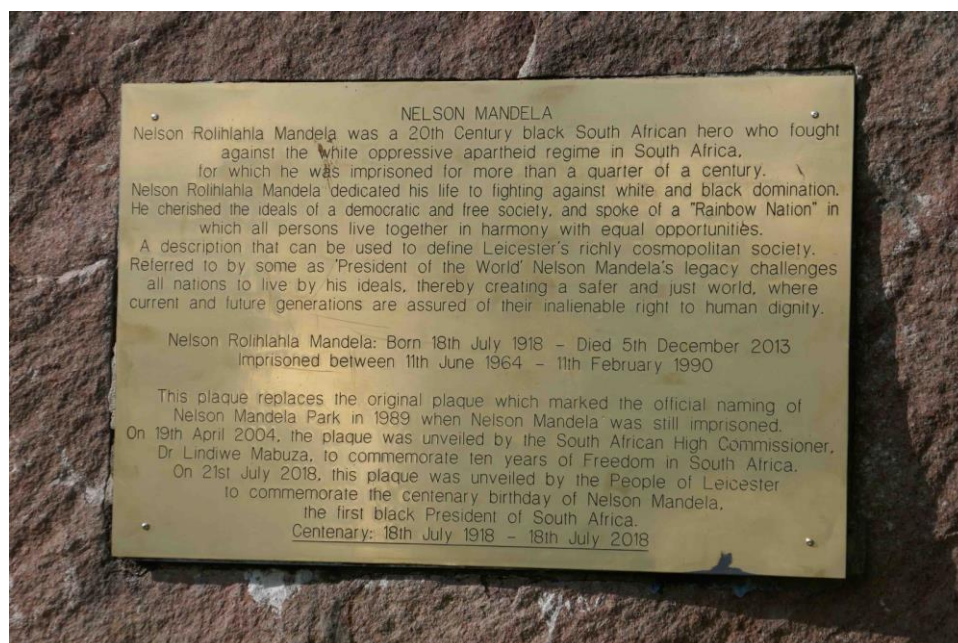


Figure 8. Plaque commemorating Nelson Mandela in Nelson Mandela Park, Leicester<sup>20</sup>

### PLACE ENDORSEMENT BY NELSON MANDELA FOUNDATION (NMF)

The City Council of Leicester renamed NMP before the founding of NMF. Therefore, the park was named but not endorsed by NMF. This differentiation might be important for institutions or entities that wish to promote the mission of NMF. The mission of NMF is to “contribute to the making of a just society by mobilising the legacy of Nelson Mandela, providing public access to information on his life and times, and convening dialogue on critical social issues.”<sup>21</sup> Therefore, it might be beneficial for future redevelopment opportunities to speak to the mission of the NMF by seeking their formal endorsement. One such means might be the reconfiguration of the design setting of the place by transforming its graphical outlook and functionality.

NMF acts as a gatekeeper, endorser, and facilitator of the living legacy of Madiba. An entity, project or initiative that wishes to use the Mandela name may write to NMF with such a request. The request is then reviewed internally and assessed against varying and differentiating criteria such as evidence of direct historical linkage, direct or indirect commercial intention, and geographical proximity in relation to other institutions or entities that already bear Madiba’s name, to name only a few. Once the foundation completes its assessment and decides to grant permission, a code of conduct needs to be signed. The Code of Conduct is an internal document that is used to govern granted permission to use the name of Madiba.<sup>22</sup>

### MISSED OPPORTUNITIES

Many places named after Madiba don’t display any graphic images of him at all. The earlier noted park in Mamelodi is a case in point. Others are abundant in their commemoration, such as Nelson Mandela Square in Sandton, Johannesburg, South Africa. NMP is disposed to opportunities, exploration, and speculation about future graphic interventions about Madiba to meet the emerging needs of the local community. Leicester Tigers, the local rugby club, advocated for improvements to NMP in 2018 as part of their £22 million project to redevelop the stadium's surrounding area.<sup>23</sup> However, Leicester City Council was not persuaded by the club’s proposal of a landscaped pedestrian walkway through the middle of the green space, which is currently used as a rugby pitch.<sup>24</sup>

Photo documentation of NMP traced how Madiba is represented in the park. But it also exposes the missed graphic and educational opportunities since the park communicates mostly through [typo]graphic images with limited information about Madiba's legacy (see Figures 6 - 8). Another overlooked graphic and educational opportunity is the public interest in commissioning a statue of Madiba in the city. The Nelson Mandela Community Programme previously tried to raise capital to fund a memorial in 2019. As stated "the statue would be a focal point for the rich and diverse people of all colours, cultures, and multi-faiths of Leicester for inspiration to live in peaceful harmony, share and enjoy each others' wealth of knowledge, activities, events and what it means to be human."<sup>25</sup> The programme highlights the historical links with Madiba through its "tireless campaign to free him from imprisonment of nearly a quarter of a century in Robben Island, South Africa". This is one missed opportunity that recent developers did not consider as part of their proposal to improve NMP and the surrounding area. Furthermore, the Nelson Mandela Centre of Memory's archive contains a vast collection of visual references that could be utilised as a creative resource to convey Madiba's graphic heritage in such a location.

## CONCLUSION

This article has reported on the instigation of a research project inspired by the unique context of NMP. The archival resources of the Centre of Memory at the NMF have been shown to provide a historical register of tributes to Madiba since the early 1980s which aided in understanding park's renaming by reviewing the national circumstances that contributed to the name change through an overview of the underlying developments and background at that moment in time in the UK. The archive proffers a creative resource for various stakeholders to explore how public spaces, such as NMP, could be enhanced using Madiba's graphic heritage as a development tool to strengthen the link between place designation and the scope of artefacts that places named in Madiba's honour could utilise.

## ACKNOWLEDGEMENTS

This paper has been produced as part of the *Memorialising Mandela in the Metropolis* project which is partially funded by the United Kingdom Research and Innovation Newton Fund. We highly appreciate the continued open and supportive correspondence with Zandile Myeka, Razia Saleh, and Heather Henriques at the NMF. We also want to acknowledge the roles of Alison Barnes and Mirella de Menezes Migliari during the inception and inspiration phase of the project.

## NOTES

<sup>1</sup> John Zeisel, *Inquiry by design* (New York: W.W. Norton & Company Inc, 2006).

<sup>2</sup> Zeisel, 37 - 40 and 160.

<sup>3</sup> Jack Breen, "Design driven research" in *Ways to study and research urban, architectural and technical design*, ed. Taeke, M. De Jong and Theo Van der Vordt (Delft: DUP Science, 2005), 138.

<sup>4</sup> Christabel Gurney, *Memories of the resistance, Programme for the musical Mandela* (London: The Young Vic, 2022), 4 - 5.

<sup>5</sup> Robert G. Harland, *Anti-Apartheid demonstration poster on display at the South Africa in the 1970s exhibition - photographs by Steve Bloom*, 2023, Leicester Museum & Art Gallery, Leicester, United Kingdom.

<sup>6</sup> Robert G. Harland, *Sleeve design for the [Free] Nelson Mandela record (released 5 March 1984) amongst other well-known songs of the decade*, 2023, Coventry Music Museum, Coventry, United Kingdom.

<sup>7</sup> "Human Geography named after Mandela," Nelson Mandela Foundation, accessed January, 31 2023, <https://archive.nelsonmandela.org/index.php/za-com-mr-t-7>

<sup>8</sup> Robert G. Harland, *Bust of Nelson Mandela at the Southbank, London and detail of the inscription*, 2023, London, United Kingdom.

<sup>9</sup> "How life has changed in Leicester: Census 2021," Office for National Statistics, accessed January 31, 2023. <https://www.ons.gov.uk/visualisations/censusareachanges/E06000016/>

<sup>10</sup> Nelson Mandela Community Programme, "Nelson Mandela Statue Leicester," accessed January, 31, 2023. <https://www.spacehive.com/nelson-mandela-statue-leicester>

<sup>11</sup> "Item 0531 - Nelson Mandela Park in the inner city area, junction of Welford Road and Tigers Way, Leicester," Nelson Mandela Foundation, accessed January, 31, 2023, <https://archive.nelsonmandela.org/index.php/za-com-mr-t-0531>

<sup>12</sup> David Simon, "Reform in South Africa and modernization of the apartheid city" in *Urban and Regional Change in Southern Africa, Chapter 2*, ed. David W. Smith (London: Routledge, 1992).

Philip Harrison, Alison Todes and Vanessa Watson, *Planning and transformation: Learning from the post-apartheid experience* (London: Routledge Taylor & Francis Group, 2008).

<sup>13</sup> See Robert G. Harland, Alison Barnes and Yolandi Burger, 2021.

<sup>14</sup> Rewati Raman and Uttam K. Roy, "Taxonomy of urban mixed land use planning", *Land Use Policy* 88, no. 104102 (2019). Doi: <https://doi.org/10.1016/j.landusepol.2019.104102>

<sup>15</sup> Yolandi Burger, *Annotated diagram of the mixed land use area of Nelson Mandela Park in Leicester, United Kingdom*, Google Maps (adapted image), 2023.

<sup>16</sup> Robert G. Harland, *Nelson Mandela Park in Leicester, United Kingdom*, 2021, Leicester, United Kingdom.

<sup>17</sup> See Google Maps information on Nelson Mandela Park, Leicester here:

<https://www.google.com/maps/place/Nelson+Mandela+Park/@52.6255861,-1.1329891,17z/data=!3m1!4b1!4m6!3m5!1s0x487761268c54d1ef:0x73dd2280e21c8259!8m2!3d52.6255829!4d-1.1308004!16s%2Fm%2F080hfyn>

<sup>18</sup> Robert G. Harland, *The park's name appears in multiple places, confirming how it is embedded in the consciousness and connectedness of the city*, 2021, Leicester, United Kingdom.

<sup>19</sup> Robert G. Harland, *Detail of information displayed on the notice board cabinet in Nelson Mandela Park, Leicester*, 2021, Leicester, United Kingdom.

<sup>20</sup> Robert G. Harland, *Detail of information displayed on the notice board cabinet in Nelson Mandela Park, Leicester*, 2021, Leicester, United Kingdom.

<sup>21</sup> Nelson Mandela Foundation, "About the Nelson Mandela Foundation," accessed January, 31, 2023. <https://www.nelsonmandela.org/content/page/about-the-centre-of-memory1>

<sup>22</sup> Heather Henriques, "Enquiry: Criteria for naming places in the honour of Mr Mandela", email message to author, November, 29, 2022.

<sup>23</sup> Dan Martin, "Leicester Tigers eye up some major changes to Nelson Mandela Park," accessed January, 31, 2023. <https://www.leicestermercury.co.uk/news/leicester-news/leicester-tigers-eye-up-major-2231309>

<sup>24</sup> Martin

<sup>25</sup> Nelson Mandela Community Programme, "Nelson Mandela Statue Leicester."

## BIBLIOGRAPHY

- Breen, Jack. "Design driven research." In *Ways to study and research urban, architectural and technical design*, edited by Taeke, M. De Jong and Theo Van der Vordt. Delft: DUP Science, 2005. Accessed January, 31, 2023. <http://resolver.tudelft.nl/uuid:ae1372aa-dfeb-4744-abcb-3d58c79194e9>
- Gurney, Christabel. *Memories of the resistance. Programme for the musical Mandela*. London: The Young Vic, 2022.
- Harland, Robert, G., Barnes, Alison And Burger, Yolandi. "The Absence Of Graphic Representations Of Madiba In Nelson Mandela Park, Mamelodi, South Africa" In [ ] *With Design: Reinventing Design Modes. Proceedings Of The 9th Congress Of The International Association Of Societies Of Design Research (lasdr 2021)*, Edited By Bruyns, Gerhard. And Wei, Huaxin. Springer: Singapore. Doi: <https://doi.org/10.1007/978-981-19-4472-7>
- Harrison, Philip, Todes, Alison and Watson, Vanessa. *Planning and transformation: Learning from the post-apartheid experience*. London: Routledge Taylor & Francis Group, 2008.
- Henriques, Heather. "Enquiry: Criteria for naming places in the honour of Mr Mandela", email message to author, November, 29, 2022.
- Martin, Dan. "Leicester Tigers eye up some major changes to Nelson Mandela Park." Accessed January, 31, 2023. <https://www.leicestermercury.co.uk/news/leicester-news/leicester-tigers-eye-up-major-2231309>
- Nelson Mandela Community Programme. "Nelson Mandela Statue Leicester." Accessed January, 31, 2023. <https://www.spacehive.com/nelson-mandela-statue-leicester>
- Nelson Mandela Foundation. "About the Nelson Mandela Foundation." Accessed January, 31, 2023. <https://www.nelsonmandela.org/content/page/about-the-centre-of-memory1>
- Nelson Mandela Foundation. "Archive Home." Accessed January, 31, 2023. <https://atom.nelsonmandela.org/>
- Nelson Mandela Foundation. "Human Geography named after Mandela." Accessed January, 31 2023, <https://archive.nelsonmandela.org/index.php/za-com-mr-t-7>
- Nelson Mandela Foundation. "Item 0531 - Nelson Mandela Park in the inner city area, junction of Welford Road and Tigers Way, Leicester." Accessed January, 31, 2023, <https://archive.nelsonmandela.org/index.php/za-com-mr-t-0531>
- Nelson, Harold. G. and Stolterman, Erik. *The Design Way*. Cambridge and London: The MIT Press, 2012.
- Mitchell, William J.T. *Iconology, Image, text, ideology*. Chicago: The University of Chicago Press, 1986.
- Office for National Statistics. "How life has changed in Leicester: Census 2021." Accessed January 31, 2023. <https://www.ons.gov.uk/visualisations/censusareachanges/E06000016/>
- Raman, Rewati, and Roy, Uttam K. "Taxonomy of urban mixed land use planning", Land Use Policy 88, no. 104102 (2019). Doi: <https://doi.org/10.1016/j.landusepol.2019.104102>
- Simon, David. "Reform in South Africa and modernization of the apartheid city" in *Urban and Regional Change in Southern Africa, Chapter 2*. Edited by David W. Smith. London: Routledge, 1992.
- Zeisel, John. *Inquiry by design*. New York: W.W. Norton & Company Inc, 2006.

## **FUTURE HISTORIES: (RE)CONSTRUCTING THE INFRASTRUCTURES OF RITUAL IN AUSTRALIA'S *NEW WORLD CITY***

Author:

**SHANE SUGRUE**

Affiliation:

CAMBRIDGE DESIGN RESEARCH STUDIO

---

### **INTRODUCTION**

*This research was conceived on the Country of the Jagera, Turrbul and Bigambul people. I begin by paying respect to the Traditional Custodians of these lands, and their elders past, present, and emerging. Sovereignty was never ceded.*

*Future Histories* was a series of ‘creative occupations’<sup>1</sup> that took place in late 2019 in Meanjin (Brisbane), Australia.<sup>2</sup> These events, instigated by the author, formed the core experiment in a project of participatory action / design research<sup>3</sup> examining contemporary cultural & political movements in the Gabba Ward, a group of neighbourhoods on the city’s inner south side.<sup>4</sup> The Gabba prides itself on a rich tradition of political engagement and activism<sup>5</sup> – a tradition which this project sought to tap into by using an experimental design process to provoke dialogue around questions of spatial justice and environmental responsibility.



Figure 1. Collage: Un-mapping Brisbane's historic boundaries (author)

With successive fires, plagues, and floods lending life in southeast Queensland a somewhat biblical air in recent years, such questions are increasingly urgent. Yet opportunities to engage in a meaningful discourse around them are increasingly constrained by municipal & state governments wedded to a

fundamentally unsustainable and inequitable model of resource extraction<sup>6</sup> and financialised urban development<sup>7</sup>. Starting from the assumption that wider participation in design and decision-making about the built environment has the potential to change this – in Lefebvrian terms, by revealing to people their own power as agents in the ‘production of space’<sup>8</sup> – the aim of this research was to develop a practical methodology for participatory design that might be incorporated into new and emerging models of active citizenship in Australia and elsewhere.

This paper focuses on a period of reflexive practice carried out under the auspices of BURN Arts Inc, a non-profit community organisation with whom I served as a committee member between 2016 and 2018, and subsequently re-engaged as an artist in 2019. I begin by sketching a brief theoretical outline for the research, situating it within broader arguments around neoliberal urban governance, place-making practices, and concepts of value in the built environment. I then provide a brief account of the *Future Histories* project and the resulting architectural proposal for a community arts hub and theatre space integrated into future residential development. It should be emphasised that this fictional scheme is not a definitive proposition, but rather a speculation on the trajectory that the process outlined might take on one particular site. Finally, I offer a short reflection on the implications of the proposed methodology for architects, considering what it means to devolve our professional expertise by facilitating wider participation in design.

### Infrastructures of ritual

‘Festivalisation’ has been described as a phenomenon of contemporary urbanism in which arts & culture are employed in the name of place-making.<sup>9</sup> In Brisbane, this can be seen in the proliferation of Temporary Art Programmes, laneway ‘activations’, and officially sanctioned street-parties that have accompanied recent urban renewal in many parts of the city.<sup>10</sup> Heralding the arrival of Australia’s *New World City* – the ubiquitous slogan of the Brisbane Economic Development Agency<sup>11</sup> – these events help to promote the image of Brisbane as an emerging global capital worthy of international tourism and investment.<sup>12</sup> Meanwhile, the policies and strategic plans that underpin these events often make explicit the aim of attracting a new ‘creative class’<sup>13</sup>, promoting the city itself as a lifestyle brand and its river as a cultural destination.<sup>14</sup>



Figure 2. Still from animation ‘Voyage to the New World City’, composed from Brisbane City Council marketing materials (author)

Critics thus suggest that festivalisation amounts to little more than a cynical branding exercise, strategically serving the interests of capital by fuelling gentrification and aiding the expansion of new property markets.<sup>15</sup> While this may largely be true of many contemporary cultural events, festivals

have also traditionally served as drivers of civic engagement and catalysts of radical political action.<sup>16</sup> In Mikhail Bakhtin's conception of the *Carnavalesque*,<sup>17</sup> festivals have the capacity to manifest 'temporary worlds', prefiguring momentary alter-realities by reordering familiar environments and suspending social hierarchies. Central to the construction of these worlds are the performative and participatory spatial practices of street theatre, parades, and large-scale puppetry, such as those still common in many contemporary urban carnivals.<sup>18</sup> Like architecture, these practices modify physical space in order to set forth shared imaginaries both of past and future, serving as a kind of collectively produced ritual by which mythologies of place are formed and challenged. Conceived in these terms, the underlying social and material relations that support such spatialised mythmaking thus become the 'infrastructures of ritual'.

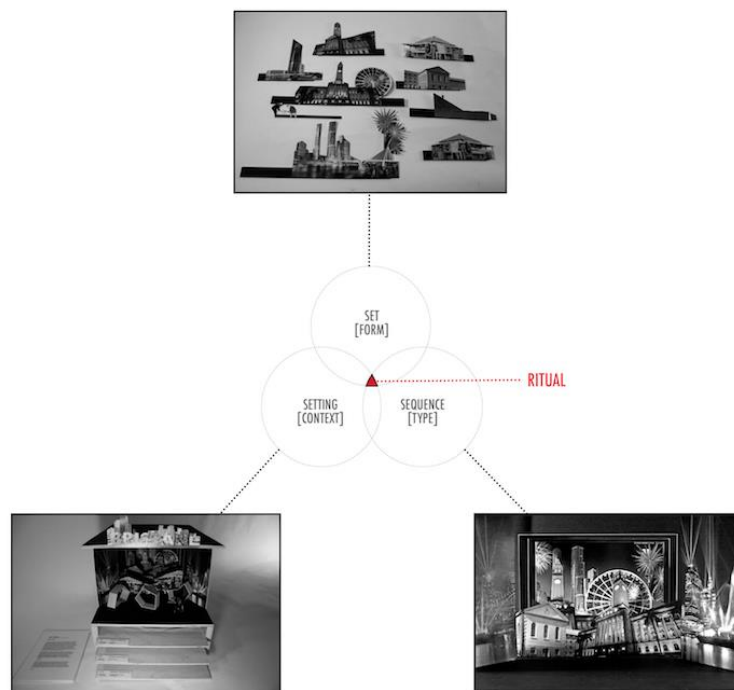


Figure 3. Set, setting, sequence: the infrastructures of ritual

The central premise of this paper is that active engagement in the production of community-led arts events can act as a model for wider engagement with architecture and urban design. By equipping people to articulate plausible alternative visions for a given site, street, neighbourhood or city, I argue, 'place-making' can be reclaimed as a means of self-empowerment and critique by urban communities faced with the existential threat of speculative development.<sup>19</sup> I propose that participation in the making of a place-based 'ritual' works to reveal its underlying social and material 'infrastructure' to those participating, and thus has the potential to de-mystify the processes by which our conceptions of place are constructed. The suggestion is that this offers a kind of scale model for what Jeremy Till terms 'transformative participation'<sup>20</sup> in architecture and urban design; that is, participation in which creative agency is devolved through a process of collectively improvised storytelling which radically transforms the expectations of both people and place.

## METHODOLOGY

To begin putting this ‘scale model’ of transformative participation into practice, I set out first to articulate an experimental design methodology and then to test the application of this methodology in a specific urban context.

### Approach: Trust, care, emplacement

Part of a constellation of pre-figurative community organising projects centred in and around the Gabba Ward, BURN Arts supports its members to produce artworks and events within their communities by providing access to tools and resources, financial auspicing, and a network of volunteers.<sup>21</sup> Prioritising care for organisers, participants, and places over any specific outcome – what Brisbane-based scholar-activist Natalie Osborne calls “joyful, relational organising”<sup>22</sup> – these activities are often explicitly geared towards facilitating the experience of transformative participation, by encouraging those involved to take on roles as active convenors rather than passive observers of events. Borrowing from the ideas of Carlson and Walker<sup>23</sup> I propose that this experience emerges through cultures of *trust*, *care*, and *emplacement*, and that these cultures in turn are built upon a relational infrastructure of *immediacy* – that is, social interactions unmediated by transaction or exchange – a foundational principle of the group<sup>24</sup>.

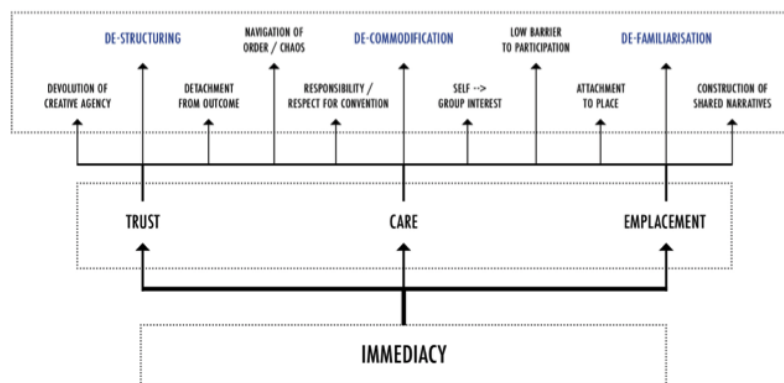


Figure 4. Implementation strategy for ‘transformative participation’ in design

Drawing on the framework set out in David Graeber’s *Anthropological Theory of Value*<sup>25</sup> I argue that this principle of immediacy gives rise to transformative experiences chiefly by asserting the primacy of intrinsic value over use or exchange value – effectively inverting the ‘normal’ social relations of contemporary capitalist society. I suggest that the producers of BURN Arts events intentionally put in place design constraints that require immediacy in their negotiation, self-consciously promoting and rewarding cultures of care, trust, and emplacement – for example, by withholding budget information and encouraging participants to reach out to their personal networks for materials, equipment and resources. Without the usual lubricant of social transaction (eg. money / power) people are compelled into a mutual exchange of trust and care, towards each other and towards the project, building community through the process of building an artwork. At the same time, the site(s) where this occurs is established in the minds of those who share the experience as a place of significance for this nascent community, embedding a new sense of place through a recurrent ephemerality.<sup>26</sup> Thus, I set forth a hypothesis that by identifying the key characteristics of transformative participation as it occurs at BURN Arts events, and translating them into a set of specific implementation strategies aimed at reproducing the conditions of immediacy, the design process itself could become a reliable means of facilitating the experience.

### Application: Future history tours

In order to begin testing this hypothesis, I instigated a project with support from BURN Arts. Combining set design, audio-visual installation, and documentary story-telling, *Future Histories* took an audience of ‘tourists’ on a journey through the imagined future of the Gabba Ward. Unfolding across multiple locations, participants were invited to imagine a near-future world in which a cataclysmic event has caused collective loss of cultural memory.



Figure 5. *Future Histories* call for participation (images: Evey Skinner)

As a point of departure, I took the story of several houses removed to facilitate the widening of Lytton Road, a major thoroughfare in East Brisbane. Assembling a team of collaborators with expertise in community theatre, photography / projection, and construction, I made an open call for participants to visit the yard where the Lytton Road houses were in storage – a common practice with traditional Queensland houses, made possible by their stilted timber construction – inviting participants to produce creative responses in a variety of media.



Figure 6. *Future History Tour #1* (images: Rookie)

This formed the basis for a series of subsequent events: First, open workshops at Hackerspace Brisbane, a community maker space, during which participants were invited to build skeletal

‘fragments’ of the houses, improvising with construction materials collected from the yard; second, a public walking tour, during which another group of participants learned about the so-called ‘future history’ of the area, collecting ‘memories’ of the vanished houses en route and producing their own ‘visions’ for the *New World City* (with the assistance of some ‘real-world’ architects); and finally, an improvised immersive theatre performance in a vacant lot on Vulture Street<sup>27</sup> – one of a proliferation of such sites along Brisbane’s historic boundary<sup>28</sup> – during which participants enacted the narrative developed in the first yard visit and gave short interviews reflecting on the whole experience.



Figure 7. Future History Tour #2 (images: Thomas Oliver and Megan Keane)

The resulting production might be thought of as a 1:1 iteration of the scale model described above – a momentary ‘ritual’ coalescing after months assembling the ‘infrastructure’. But how does a series of events like *Future Histories* achieve what it claims: resurfacing lost memories and re-imagining presumed futures? Is it really possible to re-route the history of a gentrifying neighbourhood by temporarily occupying disused spaces with obscure, experimental works of improvised fiction? To begin considering these questions, in what follows I illustrate how the above outlined approach to design might start to take form as an architectural proposition – in this case, for argument’s sake, a headquarters for the work of BURN Arts Inc.

### SPECULATING ON THE NEW WORLD CITY

For many in Brisbane’s arts community, the displacement of the city’s traditional housing fabric equates to a loss of cultural identity. Against the historical backdrop of a suffocated civic realm, the much-loved Queenslander has been an important alternative site of public action for decades, seeding a DIY culture of backyard radicalism that remains a defining feature of Brisbane’s cultural and political landscape.<sup>29</sup> With their shaded verandas and spacious under-crofts, these houses provide an invaluable resource to artists and activists who open up their rented homes as performance and exhibition spaces, community meeting rooms, and workshop facilities. Paradoxically, many of these cultural producers are the same people engaged by government agencies to produce the place-making initiatives of the *New World City*. Thus facilitating the co-optation of their critical ideas and practices into the institutions they set out to critique, these aesthetic experts<sup>30</sup> become the vanguard to the very processes of gentrification and displacement which they oppose, generating the cultural capital to price themselves out of the same inner-city neighbourhoods the destruction of which they mourn.

### Imagination ‘as-built’

In this final section, I show how events like *Future Histories* might offer an alternative approach in which place-making is reconfigured as a pre-figurative political practice – a means of breaking the cycle of dispossession and displacement, and staking a claim to a place in the *New World City*. Architecture in this instance is conceived not as a finite commodifiable product but as a critical terrain for negotiating how a community structures itself through spatial organisation. Drawing is redefined as a tool of collective communication rather than a codified language of professional expertise, and the ordinary logic of the design process is reversed, from ideation to documentation – as in the attempt *post-hoc* to capture the design of people’s improvised structures. This process self-consciously calls into question the role of the architect as an authoritative agent of space, positioning them instead as a facilitator of others’ spatial agency – in Gramscian terms,<sup>31</sup> an embedded practitioner whose putative ‘expertise’ lies in drawing out the spatial implications of others’ collective imaginations and feeding it back to them. Thus, the cast of characters developed by participants in the course of producing the event can be seen to comprise the constituent parts of role of the architect, wrapped in a narrative fiction as a direct attempt at devolving agency through collective story-telling. At the same time, the basic social and material infrastructure that underpins the event is made clearly visible and accessible to participants, equipping them to produce further events of their own.

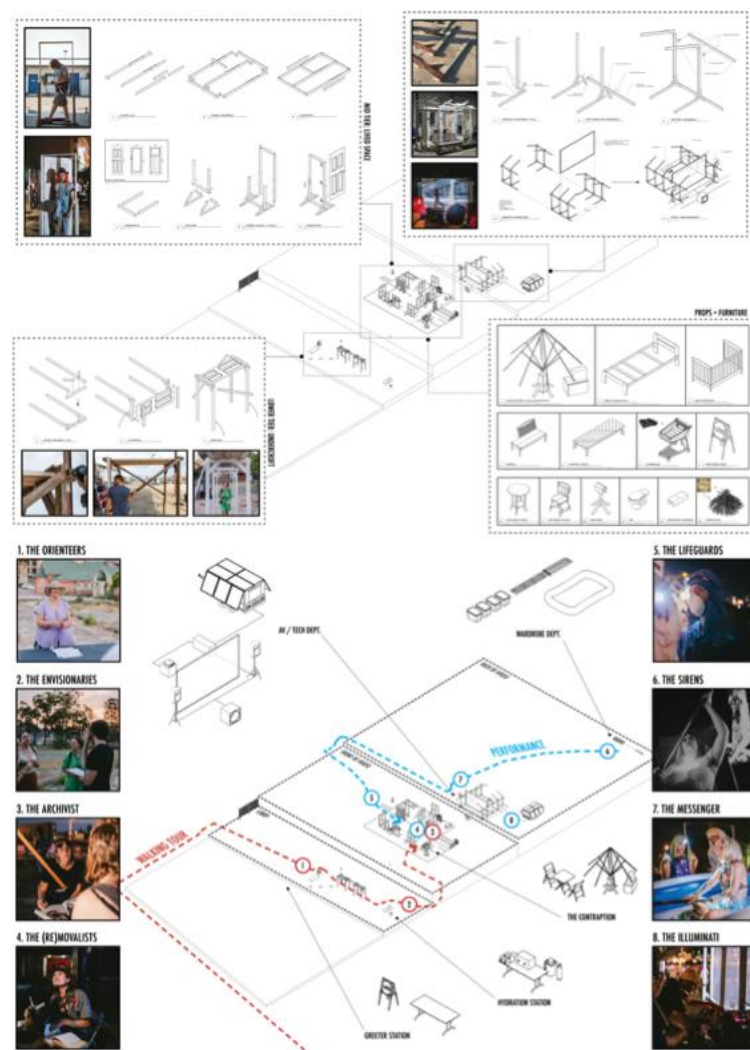


Figure 8. Future History Tour #2 unpacked (image: author)

## Re-framing design

BURN Arts functions as a kind of networked institution – the equipment required to pull off events like *Future Histories* resides piecemeal in sheds and under houses around the city. Bringing this equipment together relies on the goodwill of a community to build and maintain key infrastructure. The proposed scheme considers the prospect of centralising this institution by occupying the Vulture Street site over the long term, both as a venue in its own right and as a base of operations for other events around the city. The process begins with the suggestion that the next addition to BURN Arts tactical arsenal of PA systems and costume boxes would be a demountable timber shade structure, suitable for short-term events like the one described. A simple system of bolted connections would permit a construction that can be easily replicated as materials become available, creating an opportunity for participants to teach and learn from each other the relevant skills and tools to create their own structures. In the process of creating the physical infrastructure for the event, participants would thus build the social infrastructure from which it derives its meaning and purpose – the process of designing and building itself being ritualised.



Figure 9. Collage: 'Theatre of Future Histories' (author and Amy Learmonth)

As the capacity of the community grows, so too might the scale and ambition of the structures they are capable of building, framing the space of the original event with decks and walkways to create an outdoor theatre setting – a venue, perhaps, for an annual 'Festival of Future Histories'. Finally, traditional framing pine might give way to engineered timber podiums, suitable for multi-storey construction above the established theatre space, strategically integrating sustainable building materials and a practiced knowledge of their assembly into future development plans. The resulting space would be theatrical in composition, yet domestic in expression and scale. The familiar language of corrugated rooves, verandas and under-crofts would embed the legacy of the Queenslander as a site of cultural production within the architecture of the space, while at the same time claiming the site itself a place of cultural significance set aside for continuing community use.

## CONCLUSION

In this final speculative rendering, the original unsolicited *Future Histories* event on Vulture Street acts as a catalyst for a wider process of development. By earning the trust of stakeholders and demonstrating care for their needs, BURN Arts is able to place itself at the centre of future development plans – for example by agreeing a share of the site to be retained for use by its members, affordable housing for their families, or priority tenancies for future retail spaces. With imagery of the unsolicited event in hand, they can approach the landowner to negotiate an interim use of the site,

offering up the cultural capital ordinarily created through developer- or Council-led ‘place-making’ initiatives. In this way, the group can appear to align its interests with those of the property owner – ie. increasing the perceived ‘value’ of the site. However, by doing so pre-emptively, an opportunity is created to resurface and reintegrate divergent narratives of place into this cultural offering. And so, what begins as a temporary use becomes a permanently established, integrated community hub, diverting the story of place from one of displacement and dispossession to one of emplacement and empowerment.



*Figure 10. Constructing the future history: emplacement through recurrent ephemerality*

As a means-oriented process, however, participation in design cannot be quantified or evaluated by its outcomes. So what then, would be the measure of success for such a project? For BURN Arts, I would argue, it is the enthusiasm of participants in recounting the stories of their events. This shared mythology is the currency that allows the group to continue the work of holding space for varied cultural expressions to take place. Architecture also has the capacity to uphold this essential diversity and complexity in the context of a political system that strives towards singularity, by fostering critical dialogue around issues of sustainable development and spatial justice. To do this, however, architects must work to place cultural value above exchange value, by embedding care and trust into our design processes, and by challenging reductive place-branding narratives like that of the *New World City*. We must recognise that our cities are not built upon a blank slate, as in the fiction of *terra nullius*, and that our communities are not static entities to be defined in economic impact assessments. Ultimately, we must embrace the reality that imagination is more durable than timber, concrete or steel, and that our stories last far longer than our houses.

## **ACKNOWLEDGEMENTS**

This project was initiated through the Cambridge Design Research Studio and supported by a visiting researcher position within the Centre for Architecture Theory Criticism History at the University of Queensland. It was funded by the Kettle's Yard Travel Award. The events of *Future Histories* were developed in collaboration with members of Unqualified Design Studio alongside Joseph Burgess, Thomas Oliver, Alea Monsour, Amanda Haworth and Leonor Gausachs. Special thanks to Tom 'Bundy' Hamlyn.

## NOTES

<sup>1</sup> Greens representative and local Councillor for the Gabba Ward, Sri coined the term 'Creative Occupation' to describe the street party-cum-protests typical of grassroots organising in Brisbane – the term first appears in reference to the twenty-four hour occupation of the Queen's Wharf casino site in April 2017.

<sup>2</sup> For details, see <https://www.unqualified-design.com/future-histories>

<sup>3</sup> MacDonald, 'Understanding participatory action research'. Norrie, 'Transformative Participation and Collaborative Practice-Led Design Research'. Inquiry based on PAR principles attempts to make sense of the world through collective efforts to actively transform it. As outlined by Norrie, in the context of a community design process, this means first mobilizing creative responses to constraints as they arise and then understanding these responses through documentation, reflection, and dissemination.

<sup>4</sup> Kerkhove, 'Indigenous Sites of Woolloongabba'; Kerkhove, 'From West End to Woolloongabba: Indigenous Camps and Brisbane's Parks'. The Gabba Ward takes its name from the Indigenous name for the area, Woolloongabba, translated alternately in different sources as "whirling waters", describing the string of natural pools running through the area between modern day Stanley Street and Vulture Street, or "fight talk place", referencing the major pullen-pullen (tournament ground) adjacent to the pools. According to Kerkhove, Woolloongabba was an important gathering place for Indigenous communities from across the region, marking the termination of major pathways to the east, south, and west, and made particularly attractive by the presence of freshwater. It is perhaps no accident that the area was chosen by the settlers for their own symbolic tournament ground, The Gabba cricket stadium – now set to host the Olympics in 2032.

<sup>5</sup> Historically regarded as a symbolic periphery to Brisbane's core, the Gabba can be understood as a contested territory where uncomfortable histories are not readily forgotten. Home to many marginalised groups during the city's short history, people here make a point of celebrating difference and diversity in a context that has not always been tolerant of such things. For a brief introduction, see Capelin, 'A Streetwalker's Guide to West End - No. 2 - Beyond the Boundary'.

<sup>6</sup> Government in Queensland has an undistinguished record of suppressing public protest – for an overview see Davies, 'Remembering Brisbane's "Big March" — It's Still a Simple Case of Freedom'. The most recent attempts to silence popular dissent have focused on climate activism, particularly the prolonged and widely covered campaign to halt the Carmichael coal project – Fickling, 'Analysis | The World's Most Controversial Coal Mine Doesn't Add Up'. By way of example, see Smee, 'Queensland Police to Get New Powers to Search Climate Change Protesters'.

<sup>7</sup> For a sense of the scale of current urban development in Brisbane, see <https://brisbanedevelopment.com/>.

<sup>8</sup> Lefebvre, *The Production of Space*.

<sup>9</sup> Cudny, *Festivalisation of Urban Spaces: Factors, Processes and Effects*; Edensor and Sumartojo, 'Reconfiguring Familiar Worlds with Light Projection'.

<sup>10</sup> The 'Experiences and Culture' the section of Brisbane City Council website gives an overview of current initiatives. For some recent examples, see the BCC Temporary Art Program; 'Curiosity' festival of "innovation"; 'Botanica' light festival; and 'End of the Line', a developer-funded street festival in Woolloongabba.

<sup>11</sup> <https://www.choosebrisbane.com.au/corporate>

<sup>12</sup> For a brilliant analysis of the language and imagery of the 'world city', see Roy and Ong, *Worlding Cities*; particularly Goldman, 'Speculating on the Next World City'; and Ghertner, 'Rule by Aesthetics: World-Class City Making in Delhi'.

<sup>13</sup> Florida, 'Cities and the Creative Class'. Schacter, 'The Ugly Truth: Street Art, Graffiti and the Creative City'.

<sup>14</sup> See for example Brisbane City Council's 'Creative Brisbane Creative Economy'; 'River Art Framework'; 'City of Lights'; and Brisbane Economic Development Agency's, 'Lifestyle' page.

<sup>15</sup> Greenop and Darchen, 'Identifying "Place" in Place Branding' provides an excellent critique of the *New World City* brand. For a broader analysis of the role of art and artists in processes of gentrification, see Deutsche, 'Property Values'; and Sachs Olsen, 'Socially Engaged Art and the Neoliberal City'; and of course Neil Smith's classic *New Urban Frontier*.

<sup>16</sup> There is a wealth of literature on the subject of carnival-inspired practices in radically progressive social movements. See for example Graeber, *Direct Action*; Shepard, *Play, Creativity, and Social Movements*; and Bogard, *Tactical Performance*. A thread of what Shepard (2011) terms 'ludic protest' – that is spontaneous, absurd, and playful practices that lampoon authority and disrupt familiar patterns of behavior – runs through the repertoire of movements from Dada and the Situationists to the Yippies and Ya Basta (see Bishop, 'The Historic Avant-Garde' in *Artificial Hells*; and Marcus, 'The Long Walk of the Situationist International' for thorough analyses, plus Shepard and Graeber cited above). More recently, ludic tactics have seen a resurgence through

the likes of Extinction Rebellion and 'Right to the City' movements around the world, including those in Brisbane (for more on the latter see Osborne, 'The Right to the City'; Harvey, 'The Right to the City').

<sup>17</sup> Bakhtin, *Rabelais and His World*.

<sup>18</sup> By way of example, see Ferris, 'Incremental Art: Negotiating the Route of London's Notting Hill Carnival'; De Soto, 'Reading the Fools' Mirror: Reconstituting Identity against National and Transnational Political Practices'; and Kearney, 'Revisiting Samhain: Two Directions on a Theme'.

<sup>19</sup> This argument draws on considerable literature around the 'participatory turn' in art & urbanism, in particular the work of Blundell Jones, Petrescu, and Till in *Architecture & Participation*. For a useful overview, see Krivý and Kaminer, 'Introduction: The Participatory Turn in Urbanism'. This paper gives an account of one possible approach to participatory design in practice. However, the question remains as to how the effect of participation in design might be measured and evaluated – a question that goes to the heart of the debate between art historians Grant Kester (*The One and the Many*) and Claire Bishop (*Artificial Hells*).

<sup>20</sup> Till, 'The Negotiation of Hope'.

<sup>21</sup> The general criteria for the types of activity that BURN Arts promotes is that they be non-commercial, community-oriented, and broadly participatory, in the sense that they encourage as broad a spectrum of participants as possible to take an active role in their production. For details see: [www.burn-arts.org](http://www.burn-arts.org)

<sup>22</sup> Osborne, 'For Still Possible Cities: A Politics of Failure for the Politically Depressed'.

<sup>23</sup> Carlson and Walker, 'Free Universities and Radical Reading Groups: Learning to Care in the Here and Now'.

<sup>24</sup> It should be noted that the notion of immediacy as a guiding principle is borrowed directly from Larry Harvey's '10 Principles of Burning Man', the festival-turned-global cultural phenomenon held annually in the desert of northern Nevada ([burningman.org](http://burningman.org)). The origin of Harvey's use of the term can be traced (via San Francisco's various latter-twentieth-century underground art movements) to Guy Debord's *Society of the Spectacle* – a kind of Situationist manifesto in which Debord identifies the 'mediated' reality of branding and advertising as the root cause of alienation under late capitalism. For a useful critique of Burning Man's claim to this counter-cultural credential, see Rohrmeier and Starrs, 'The Paradoxical Black Rock City: All Cities Are Mad'.

<sup>25</sup> Graeber, 'Three Ways of Talking about Value'.

<sup>26</sup> For a more detailed analysis, see the author's account of building the 'Temple', a large-scale artwork built each year at BURN Arts' flagship event, Modifyre

<sup>27</sup> The chosen site overlooks the former Woolloongabba Park (now bus station) – the location of the core pullen-pullen (Kerkhove, 'From West End to Woolloongabba'). JC Burnett's 1844 *Brisbane Town Land Survey* shows a house on this site, overlooking the string of pools (Kerkhove, 'Indigenous Sites of Woolloongabba') – one of the first such settler homes to be built in the area – lending it a layered symbolism in the context of the *Future Histories* project.

<sup>28</sup> Kidd, 'Aboriginal History of the Princess Alexandra Hospital Site'. Significantly, three of Brisbane's four historic boundary streets traverse the Gabba Ward – Vulture Street, Wellington Road and Boundary Street. Acting as borders between the colonial city and the Aboriginal encampments that encircled it in the 19th and 20th centuries, these streets represented a zone of exclusion for Indigenous people. As such, the areas around them have been and remain key sites of cultural resistance and contestation up to the present day.

<sup>29</sup> Van der Plaats et al., 'Radical Houses: Identity and Public Life in the Queensland House 1975-1989'.

<sup>30</sup> Theodor Adorno's classic critique 'Culture and Administration' outlines the role of professional creative expertise as a conduit between cultural production and regimes of bureaucracy.

<sup>31</sup> Santucci, 'The Prison Notebooks'. Till's notion of the 'embedded expert' directly echoes Gramsci's 'organic intellectual', a figure who straddles the worlds of ideas and actions, and thus emancipates themselves from the tyranny of both – a conception at the heart of Gramsci's philosophy of praxis.

## BIBLIOGRAPHY

Adorno, Theodor. 'Culture and Administration'. In *The Culture Industry: Selected Essays on Mass Culture*, 93–113. London: Routledge, 1991.

Bakhtin, Mikhail. *Rabelais and His World*. First Midland Book Edition. USA: Indiana University Press, 1984. [https://monoskop.org/images/7/70/Bakhtin\\_Mikhail\\_Rabelais\\_and\\_His\\_World\\_1984.pdf](https://monoskop.org/images/7/70/Bakhtin_Mikhail_Rabelais_and_His_World_1984.pdf).

Bishop, Claire. *Artificial Hells: Participatory Art And the Politics of Spectatorship*. London: Verso, 2012.

———. 'Artificial Hells: The Historic Avant-Garde'. In *Artificial Hells: Participatory Art And the Politics of Spectatorship*. London: Verso, 2012.

- Blundell Jones, Peter, Doina Petrescu, and Jeremy Till, eds. *Architecture & Participation*. Abingdon: Spon Press, 2005.
- Bogad, L. *Tactical Performance: Serious Play and Social Movements*. Taylor & Francis, 2016. <https://books.google.co.uk/books?id=s9ejCwAAQBAJ>.
- Brisbane City Council. 'Botanica: Contemporary Art Outside'. Text. Accessed 24 February 2020. <https://www.brisbane.qld.gov.au/things-to-see-and-do/council-venues-and-precincts/parks/botanic-gardens-in-brisbane/city-botanic-gardens/botanica-contemporary-art-outside>.
- . 'Brisbane's River Art Framework'. Text. Accessed 24 February 2020. <https://www.brisbane.qld.gov.au/things-to-see-and-do/experiences-and-culture/public-art/brisbanes-river-art-framework>.
- . 'City of Lights'. Text. Accessed 24 February 2020. <https://www.brisbane.qld.gov.au/things-to-see-and-do/experiences-and-culture/vibrant-city/city-of-lights>.
- . 'Creative Brisbane Creative Economy'. Text. Accessed 22 February 2020. <https://www.brisbane.qld.gov.au/community-and-safety/community-support/creative-brisbane/creative-strategy>.
- . 'Experiences and Culture'. Text. Accessed 22 February 2020. <https://www.brisbane.qld.gov.au/things-to-see-and-do/experiences-and-culture>.
- 'Brisbane City Council – Temporary Art Program – Brisbane Art Guide'. Accessed 13 February 2020. <http://bneart.com/brisbane-city-council-temporary-art-program/>.
- BrisbaneDevelopment.com. 'Brisbane Development', 2019. <https://brisbanedevlopment.com/>.
- Brisbane Marketing. 'Lifestyle'. Brisbane - Australia's New World City, 2017. [http://www.choosebrisbane.com.au/invest/why-brisbane/lifestyle?sc\\_lang=en-au](http://www.choosebrisbane.com.au/invest/why-brisbane/lifestyle?sc_lang=en-au).
- Capelin, Steve. 'A Streetwalker's Guide to West End - No. 2 - Beyond the Boundary'. West End Community Association, 2012.
- Carlson, Anna, and Briohny Walker. 'Free Universities and Radical Reading Groups: Learning to Care in the Here and Now'. *Continuum* 32, no. 6 (2018): 782–94. <https://doi.org/10.1080/10304312.2018.1525925>.
- Cudny, Waldemar. *Festivalisation of Urban Spaces: Factors, Processes and Effects*. 1st ed. Springer Geography. Springer International Publishing, 2016.
- Curiocity. 'Curiocity – Where Imagination, Invention + Innovation Collide'. Accessed 24 February 2020. <https://curiocitybrisbane.com/>.
- Davies, Glenn. 'Remembering Brisbane's "Big March" — It's Still a Simple Case of Freedom'. *Independent Australia*, 8 September 2017. <https://independentaustralia.net/politics/politics-display/remembering-brisbanes-big-march--its-still-a-simple-case-of-freedom,10695>.
- De Soto, Hermine G. 'Reading the Fools' Mirror: Reconstituting Identity against National and Transnational Political Practices'. *American Ethnologist* 25, no. 3 (August 1998): 471–88.
- Debord, Guy. *The Society of the Spectacle*. Translated by Ken Knabb. London: Rebel Press, 2005.
- Deutsche, Rosalyn. 'Property Values: Hans Haacke, Real Estate, and the Museum'. In *Evictions - Art and Spatial Politics*, 159–91. Cambridge, Mass: MIT Press, 1996.
- Edensor, Tim, and Shanti Sumartojo. 'Reconfiguring Familiar Worlds with Light Projection: The Gertrude Street Projection Festival, 2017'. *GeoHumanities* 4, no. 1 (2 January 2018): 112–31. <https://doi.org/10.1080/2373566X.2018.1446760>.
- End of the Line Festival. 'End of the Line Festival'. End of the Line Festival, 2019. <https://www.theendofthelinefestival.com/>.
- Ferris, Lesley. 'Incremental Art: Negotiating the Route of London's Notting Hill Carnival'. *Social Identities* 16, no. 4 (July 2010): 519–36.
- Fickling, David. 'Analysis | The World's Most Controversial Coal Mine Doesn't Add Up'. *Washington Post*, 28 May 2019. [https://www.washingtonpost.com/business/energy/the-worlds-most-controversial-coal-mine-doesnt-add-up/2019/05/27/3a2b0b8c-8056-11e9-b585-e36b16a531aa\\_story.html](https://www.washingtonpost.com/business/energy/the-worlds-most-controversial-coal-mine-doesnt-add-up/2019/05/27/3a2b0b8c-8056-11e9-b585-e36b16a531aa_story.html).
- Florida, Richard. 'Cities and the Creative Class'. *City & Community* 2, no. 1 (March 2003).
- Fullagar, S, A Pavlidis, S Reid, and K Lloyd. 'Living It up in the "New World City": High-Rise Development and the Promise of Liveability'. *Annals of Leisure Research* 16, no. 4 (30 September 2013): 280–96.
- Ghertner, D Asher. 'Rule by Aesthetics: World-Class City Making in Delhi'. In *Worlding Cities: Asian Experiments and the Art of Being Global*, edited by Ananya Roy and Aihwa Ong, 279–306. Studies in Urban and Social Change. Chichester, West Sussex ; Malden, MA: Wiley-Blackwell, 2011.

- Goldman, Michael. 'Speculating on the Next World City'. In *Worlding Cities: Asian Experiments and the Art of Being Global*, edited by Ananya Roy and Aihwa Ong. Studies in Urban and Social Change. Chichester, West Sussex; Malden, MA: Wiley-Blackwell, 2011.
- Graeber, David. *Direct Action: An Ethnography*. Oakland: AK Press, 2009.
- . 'Three Ways of Talking about Value'. In *Toward an Anthropological Theory of Value: The False Coin of Our Own Dreams*, 1–22. New York: Palgrave, 2001.
- Greenop, Kelly, and Sébastien Darchen. 'Identifying "Place" in Place Branding: Core and Periphery in Brisbane's "New World City"'. *GeoJournal* 81, no. 3 (June 2016): 379–94. <https://doi.org/10.1007/s10708-015-9625-7>.
- Harvey, David. 'The Right to the City'. *New Left Review* 53 (2008): 18.
- Harvey, Larry. 'The 10 Principles of Burning Man', 2004. <https://burningman.org/culture/philosophical-center/10-principles/>.
- Kearney, Daithí. 'Revisiting Samhain: Two Directions on a Theme'. In *New Crops, Old Fields: (Re)Imagining Irish Folklore*, 99–124. Dublin: Peter Lang Publishing Group, 2016. <http://eprints.dkit.ie/614/>.
- Kerkhove, Ray. 'From West End to Woolloongabba: Indigenous Camps and Brisbane's Parks', 2013. <https://ssrn.com/abstract=2508610>.
- . 'Indigenous Sites of Woolloongabba', 2017. [https://www.academia.edu/35278688/INDIGENOUS\\_SITES\\_OF\\_WOOLLOONGABBA](https://www.academia.edu/35278688/INDIGENOUS_SITES_OF_WOOLLOONGABBA).
- Kester, Grant H. *The One and the Many: Contemporary Collaborative Art in a Global Context*. Duke University Press, 2011. <http://www.jstor.org/stable/j.ctv11smfch>.
- Kidd, Ros. 'Aboriginal History of the Princess Alexandra Hospital Site'. Brisbane: The Diamantina Health Care Museum Association Inc, 2000. <https://metrosouth.health.qld.gov.au/sites/default/files/content/pah-aboriginal-history.pdf>.
- Krivý, Maroš, and Tahl Kaminer. 'Introduction: The Participatory Turn in Urbanism'. *Footprint* 7, no. 13 (January 2013): 1–6.
- Lefebvre, Henri. *The Production of Space*. Translated by M. Gottdiener. 'Culture, Ideology, and the Sign of the City' in *The City and the Sign*, Eds. Gottdiener and Lagopoulos. Oxford: Blackwell Publishers, 1991.
- MacDonald, Cathy. 'Understanding Participatory Action Research: A Qualitative Research Methodology Option'. *Canadian Journal of Action Research* 13, no. 2 (2012): 34–50.
- Marcus, Greil. 'The Long Walk of the Situationist International'. In *Guy Debord and the Situationist International*, edited by Tom McDonagh, 1–20. Cambridge, Mass: MIT Press, 2002. <http://docplayer.net/51854111-The-long-walk-of-the-situationist-international.html>.
- Norrie, H. 'Transformative Participation and Collaborative Practice-Led Design Research'. In *Transformative Pedagogies and the Environment: Creative Agency Through Contemporary Art and Design*, 115–37. USA: Common Ground Research Networks, 2018.
- Osborne, Natalie. 'For Still Possible Cities: A Politics of Failure for the Politically Depressed'. *Australian Geographer* 49, no. 1 (2018). <https://doi.org/10.1080/00049182.2018.1530717>.
- . 'The Right to the City: In Pursuit of a More Just, Sustainable, and Democratic Brisbane'. *The Machinery of Government* (blog), 2016. <https://medium.com/the-machinery-of-government/the-right-to-the-city-a4ffb9d4dc76>.
- Rohrmeier, Kerry, and Paul Starrs. 'The Paradoxical Black Rock City: All Cities Are Mad'. *Geographical Review* 104, no. 2 (2014): 153–73.
- Roy, Ananya, and Aihwa Ong, eds. *Worlding Cities: Asian Experiments and the Art of Being Global*. Studies in Urban and Social Change. Chichester, West Sussex; Malden, MA: Wiley-Blackwell, 2011.
- Sachs Olsen, Cecilie. 'Introduction: Producing Urban Imaginaries in Socially Engaged Art'. In *Socially Engaged Art and the Neoliberal City*. Abingdon: Routledge, 2019.
- Santucci, Antonio A. 'The Prison Notebooks'. In *Antonio Gramsci*, 111–58. New York: Monthly Review Press, 2010.
- Schacter, Rafael. 'The Ugly Truth: Street Art, Graffiti and the Creative City'. *Art & the Public Sphere* 3, no. 2 (2014): 161–76.
- Shepard, B. *Play, Creativity, and Social Movements: If I Can't Dance, It's Not My Revolution*. Routledge Advances in Sociology. Taylor & Francis, 2012. [https://books.google.co.uk/books?id=Aim\\_KChqLgC](https://books.google.co.uk/books?id=Aim_KChqLgC).
- Shepard, Benjamin. 'From Play to Panic: Ludic Organising in Absurd Times'. In *Play, Creativity, and Social Movements*, 213–45. New York: Routledge, 2011. [https://books.google.com.au/books?id=Aim\\_KChqLgC&pg=PA268&lpg=PA268&dq=ludic+protest&source=bl&ots=m2cn6oFwWH&sig=ACfU3U2o0XS-9RRvKrUoqi3XqKJ3u0-KpQ&hl=en&sa=X&ved=2ahUKEwih2e-MtpbIAhUYXSsKHYznD-MQ6AEwB3oECAgQAQ#v=onepage&q=ludic%20protest&f=false](https://books.google.com.au/books?id=Aim_KChqLgC&pg=PA268&lpg=PA268&dq=ludic+protest&source=bl&ots=m2cn6oFwWH&sig=ACfU3U2o0XS-9RRvKrUoqi3XqKJ3u0-KpQ&hl=en&sa=X&ved=2ahUKEwih2e-MtpbIAhUYXSsKHYznD-MQ6AEwB3oECAgQAQ#v=onepage&q=ludic%20protest&f=false).

- Smee, Ben. 'Queensland Police to Get New Powers to Search Climate Change Protesters'. *The Guardian*, 20 August 2019, sec. Australia news. <https://www.theguardian.com/australia-news/2019/aug/20/queensland-police-to-get-new-powers-to-search-climate-change-protesters>.
- Smith, Neil. *The New Urban Frontier: Gentrification and the Revanchist City*. London and New York: Routledge, 1996.
- Sri, Jonathan. '24-Hour Occupation of the Queen's Wharf Casino Site This Weekend'. *Development and Housing Affordability* (blog), 20 April 2017. <https://www.jonathansri.com/24houroccupation>.
- Sugrue, Shane. 'Infrastructures of Ritual: Festival Architecture & the Transformative Potential of Participatory Design'. Essay. UK, October 2019. [https://static1.squarespace.com/static/584906bf6b8f5bc8ca8e8c3c/t/62483fcbdc01ee7644fc58ad/1648902095351/00\\_STS\\_MAUD\\_Essay\\_4\\_Infrastructures+of+Ritual\\_reduced.pdf](https://static1.squarespace.com/static/584906bf6b8f5bc8ca8e8c3c/t/62483fcbdc01ee7644fc58ad/1648902095351/00_STS_MAUD_Essay_4_Infrastructures+of+Ritual_reduced.pdf).
- Till, Jeremy. 'The Negotiation of Hope'. In *Architecture and Participation*, edited by Peter Blundell Jones and Doina Petrescu, 19–40. Abingdon: Spon Press, 2005.
- Van der Plaats, Deborah, Silvia Micheli, Ursula Collie, Jeanelle Hurst, Vicki Gordon, Anne Jones, Alan Reilly, and John Willsteed. 'Radical Houses: Identity and Public Life in the Queensland House 1975-1989'. Museum of Brisbane, Brisbane, 10 June 2019. [https://www.academia.edu/39391284/Radical\\_Houses\\_Identity\\_and\\_Public\\_life\\_in\\_the\\_Queensland\\_House\\_1975\\_1989](https://www.academia.edu/39391284/Radical_Houses_Identity_and_Public_life_in_the_Queensland_House_1975_1989).

# TEMPOROSPATIAL MEDIATOR: SITE-SPECIFIC THEATER WITHIN CULTURAL HERITAGE

Author:

**CHING-PIN TSENG**

Affiliation:

NATIONAL SUN YAT-SEN UNIVERSITY, TAIWAN

---

## INTRODUCTION

In a developing city, the preservation of traditional buildings and historical places could be confronted with impetuous constructions of modern buildings and cityscape. In other words, historical built environment and traces of the city may be evacuated because of commercial profit, or be demolished by unrooted constructions. The reading of a city's history and the recollection of inhabitants' memories of living in the city may thus become ambiguous and fragmental. As historical sites and cultural heritage are closely related to past events and people's collective activities, they are efficient clues for local inhabitants to recall their memories of events that happened at the sites, as well as being tangible emblems for representing cultural signification of the specific places. To reconstruct inhabitants' identification with local cultures and places, it is essential to incorporate the preservation of cultural heritage and historical sites with local people's contemporary lives. The preservation, conservation and regeneration of cultural heritage and historical sites are not only urgent tasks at present, but also substantial ways to re-discover and recompose the past history and material culture of specific loci in the city.

Cultural heritage "includes artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance. It includes tangible heritage (movable, immobile and underwater), intangible cultural heritage (ICH) embedded into cultural, and natural heritage artefacts, sites or monuments."<sup>1</sup> Although there are diverse viewpoints for the preservation and conservation of cultural heritage, it has been a trend that many historical monuments and buildings have been preserved and transformed into museums, art galleries, restaurants and studios in various cities of the world.<sup>2</sup> In these cases, the viewers may be attracted more by the new content or functions of the transformed spaces, art exhibitions for example, rather than by the historical functions or the past of the heritage. Even though some information or historical data would be exhibited in the historical monuments or at the sites, the spectator might not bodily and sensationally perceive the happenings of the past events occurred in the places. To explore potential means of recalling local inhabitants' memories of historical monuments and narratives about living in the places, it is essential to study theories and cases of exhibiting and performing narratives within regenerated cultural heritage.

Furthermore, in the light of Christopher B. Balme's statement that site-specific performances "utilize natural features or historical spaces and buildings to provide a spatially determined semantic frame for the actual performance"<sup>3</sup>, the paper will apply precedential study to discuss some site-specific works/performances curated in cultural heritage, so as to analyze the ways that have been used to

stimulate spectators' recollection of related narratives. Finally, the project – *Listening, Stories of the Year in Takao* (聽見, 那一年的打狗憶事) in Kaohsiung city will be discussed through participatory observation method. In other words, in addition to the study of some international cases, the paper will discuss two site-specific theaters held in historical places or monuments in Taiwan, so as to examine the correlation between site-specific performances and the spatial narration of conserved tangible cultural heritage. Moreover, *Listening, the stories of the year in Takao* that was produced by utilizing multiple media and was curated by the author could be further analyzed. It is thus possible to connect the stories of the cultural heritage with the history of the city. Finally, the paper will discuss the potential of recalling participants' and inhabitants' memories of the place through multiple media, as well as exploring the limit of narrating the city's stories by this temporospatial mediator, i.e., site-specific theatrical guide.

### THE CITY AS A THEATER OF COLLECTIVE MEMORIES

Because of complex political factors and social development, a city's "physical structure constantly evolved, being deformed or forgotten, adapted to other purposes or eradicated by different needs."<sup>4</sup> As M. Christine Boyer states that "...the city is the collective expression of architecture and it carries in the weaving and unraveling of its fabric the memory traces of earlier architectural forms, city plans, and public monuments"<sup>5</sup>, the city can thus be regarded as a bearer of past events and inhabitants' memories. Furthermore, "[i]t is in these physical artifacts and traces that our city memories lie buried, for the past is carried forward to the present through these sites."<sup>6</sup> Accordingly, this paper argues that historical sites in a city can be thought of as theaters of collective memory, and historical traces remained may act as silent characters for performing the past of the city and for recalling inhabitants' memories of related narratives.

From the viewpoint of architectural and environmental semiotics, Marvin Carlson proposes the notion of "the city as theater"<sup>7</sup> by historical studies that European religious ceremonies and celebrating performances have been demonstrated at the frontal square of the cathedral, market places or other public places since medieval time. Some public spaces of a city could also have been employed as venues for religious demonstrations and performances in many traditional societies of Asian countries, such as Japan, Taiwan and Indonesia, since ancient time.<sup>8</sup> This notion of "the city as theater" focuses on the interrelation between public open spaces in the city and religious celebrations as well as festival performances. The scenarios of these performances could be set at certain temporal dimension and be associated with existing spatial framework of the historical site. In the light of the notion of "the city as theater", the paper would regard the narration and representation of some historical events that occurred at specific cultural heritage and in certain temporal sections of the city's history as a kind of theatrical performance.

### HISTORICAL SITES AS CONVEYORS OF A CITY'S NARRATIVES

In the historical area of a city, the preservation of tangible cultural heritage suggests a potential connection between the cultural heritage and its related narratives or past events took place at the places. Through reading the composition of architectural constructions or spatial signifiers of historical monuments, the viewer may grasp temporal indications and spatial signification of the cultural heritage. Moreover, in association with existent architectural relics, physical historical traces and the surrounding urban context, the relationship between the milieu of the cultural heritage and related historical happenings can be discovered. The old Fongshan city (鳳山城) in Kaohsiung as an example, the construction of some historical fortifications and gates reveals the history of Ching dynasty's governance over Taiwan, as well as suggesting political conflicts between Ching

government and Taiwanese local reactionaries. Moreover, by reviewing Kaohsiung city's process of constructing urban infrastructure, train station and harbors etc. during Japanese colonization of Taiwan, the modern history of the city can be conceived gradually. It can also be realized that the preservation of cultural heritage is closely related to the conflict of political ideology between the colonist and the colonized, or may suggest the contradiction between the idea of modern planning and its historical urban context. For instance, because of the political domination of Japanese colonizer, part of the built environment and settlements of Taiwanese people that were developed in the period of Ching's governance might be destroyed by Japanese forces, and the construction of Japanese infrastructures could be demolished by the following forces, i.e., Kuomintang government (國民黨政府).

The acts of construction, transformation and demolition of cityscape and built environment could be dynamic events of political confrontations, or could be imagined as a series of theatrical scenarios that were performed in historical sites of a city. Accordingly, various layers of existent cityscape and relics of historical buildings that were constructed by one regime and later were destroyed by other authority have been shaped into multiple spatial-temporal networks for narrating the city's historical stories. From a broader viewpoint, this paper suggests that the historical places of a city may act as theatrical sites for the performance of historical events or interactions among inhabitants. To older generations of local inhabitants, collective memories of specific events and the history of a city may be recollected by bodily going around and into these historical sites and tangible cultural heritage with the assistance of some media. That is, the spatial narrations of the sites and preserved historical monuments might have set up temporal and spatial frameworks for relating the city's past events, dramatic occurrences and inhabitants' daily lives.

### **SITE-SPECIFIC THEATERS AND MEMORY RECOLLECTION**

Following the discussion on historical sites as conveyors of a city's narratives, it can be suggested that a city's historical sites may possess specific spatial signifiers for narrating the city's stories, as well as revealing specific temporal relationship between the events and the environmental context. From spatial and temporal dimension, the spatial specificity of historical places can act as silent characters for the performance of related historical scenarios and as means for memory recollection. Performance theorist Nick Kaye states that "a 'site-specific work' might articulate and define itself through properties, qualities or meanings produced in specific relationships between an "object" or "event" and a position it occupies."<sup>9</sup> Based on the notion of site-specificity, it can be argued that a site-specific work may help visitors to recall memories of the specific place or to imagine stories related to the site through grasping the semantic association between the work and the place. A site-specific theater may thus demonstrate a correlation between the theatrical performance or narrations and the spatial semantics embedded in the spatial settings of its location. Moreover, artistic director and performance theorist Mike Pearson suggests that "... site-specific performance is other than a transposition and modification of stage practices. If the stage is essentially synecdochic – in which limited resources stand in for a complete picture, as when a table and chairs suggests a domestic scene – site is frequently a scene of plenitude, its inherent characteristics, manifold effects and unruly elements always liable to leak, spill and diffuse into performance."<sup>10</sup>

Pearson's experiences of making site-specific performances in three companies, i.e., Cardiff Laboratory Theatre, Brith Gof and Pearson/Brookes, exemplify a particular artistic and cultural tendency. In the 1970s for example, some *special events* directed by Richard Gough in Cardiff Laboratory Theatre utilized disused churches and abandoned country house for events at special times by the form of a banquet, a guided tour or a procession.<sup>11</sup> The selected sites and their spatial qualities contributed to these performances, although the notion of site-specificity was not proposed by the

company.<sup>12</sup> In Brith Gof, site was adopted as “a place of both artistic and cultural invention and innovation.”<sup>13</sup> Moreover, the site chosen for Brith Gof’s performances could be conceived as a place to examine cultural identities and social relationship embedded in the projects.<sup>14</sup> Especially, Pearson performed a guided walk - *Bubbling Tom* by interactively recollecting his and local people’s memories of the places on the streets of his hometown -Hibaldstow.<sup>15</sup> It can thus be discovered that site-specific theaters are closely associated with their sites, and the audience may grasp theatrical significations from the temporospatial context of environmental settings as well as the performances. To further explore the role of site-specific theaters within cultural heritage for recollecting the places’ narratives, the following sections will discuss two projects held or curated in the south of Taiwan.

### **Countryman Enters into Sin-sian Hu (草地郎入神仙府), the Great South Gate of Tainan City, Tainan, Taiwan.**

Traditional Tainan city used to be Taiwan’s political center during Kingdom of Tungning in Ming Dynasty (明鄭時期) and Ching Dynasty before 1887. The designation of Sin-sian hu (神仙府) came from the Taiwanese pronunciation of Cheng Tian Fu (承天府), the political center of Kingdom of Tungning in Tainan, and which was transformed into Taiwan Fu (台灣府)/Tainan Fu (台南府) in Ching Dynasty. Being one of the 14 relics of the fortification of Taiwan Fucheng (Tainan Fucheng), the great South Gate of Tainan city was firstly built by wood in 1725 and was rebuilt by earth in 1788.<sup>16</sup> This site-specific theater was set in and around the great South Gate (Figure 1) and was organized by National Museum of Taiwan History in 2009. Its script was written and directed by Wang, Wan-Jung, Professor of Department of Drama Creation and Application, National University of Tainan. The original ideas of this play, according to Wang, W-J: “it intends to present the difference of living environment and living style between outside countrymen and inside townsmen of Tainan city in Ching period of Taiwan. By means of portraying a countryman’s experiences of entering the city for earning money by selling vegetable, to reflect ordinary people’s living images during that time.”<sup>17</sup> It is a movable and interactively educational theater. There are several actors/actresses who guide audiences to experience the protagonist’s encountering with various people and his spatial experiences when entering into the Fucheng in 1780 during Ching period. (Figure 2) This site-specific theater utilizes the great South Gate of traditional Tainan city as a symbolic element for separating upper, middle and lower social hierarchies and for portraying lives and stories of outside countrymen that would be ignored in official history and in traditional dramas. The play is narrated from the viewpoint of a countryman with lower social class, rather than from a rich person living inside the city.<sup>18</sup> In other words, through discovering peripheral inhabitants’ stories that were neglected by official history and by means of interactive dialogues among actors/actresses and audiences, the occurrence and voices of local peoples could be revealed in association with the presence of the reset country house, scenic settings and restored great South Gate.



Figure 1. The great South Gate of Tainan city. Photograph by Ching-pin Tseng, 2021.



Figure 2. The countryman is encountering troubles before the South Gate. Source: *Countryman enters into Tainan Fucheng (草地郎入神仙府)*. The Cultural Bureau of Tainan City Government.

### ***Listening, Stories of the Year in Takao (聽見, 那一年的打狗憶事), Kaohsiung, Taiwan.***

Thresholds of a city can be temporospatial mediators for visitors to travel into the spatial and temporal networks for unfolding the city's narratives and recollecting people's collective memories. This broadcasting theater - *Listening, stories of the year in Takao* is presented at Kaohsiung Port Station, Kaohsiung, Taiwan. This Kaohsiung Port Station is the first train station in Kaohsiung city (Figure 3), and it was built by Japanese colonial government for transporting goods and travelers to Takao Port and Hamasen. This port station played a significant role in the achievement of industrialization in Kaohsiung as well as contributing greatly to the boom of Taiwan's economy. Hamasen used to be prosperous and the first financial district of the city was once established in the frontal area of the station. However, because of the urban development of Kaohsiung city and the construction of Kaohsiung's main train station had been moved from the western part to the center of the city, this port station thus lost its importance of transportation in the end of 20<sup>th</sup> century. Accordingly, the government of Kaohsiung city terminated the function of this station in 2008 and has transformed the station into Takao Railway Museum. To preserve the symbolic cultural heritage and present the historical traces of Kaohsiung harbor and the city, the train station has been conserved as historical architecture, and its surrounding train tracks as well as building facility have been conserved as cultural landscape.

This site-specific broadcasting theater was scripted by reviewing historical data and records of the cultural heritage, as well as being associated with a celebrated event held for the station. The story of this project is set on November 9<sup>th</sup>, 2008, when a university student and her grandfather visited Kaohsiung Port Station on the final day of its running. On November 9<sup>th</sup>, the last train of a celebration event called "The Glory History of Kaohsiung" left the station at 5:30PM. In the first section, the university student has learnt stories of Hamasen and the history of Kaohsiung by visiting some historical sites and from the narration of her grandfather. In this section, the audience is conducted by digital map shown by scanning QR code, a museum guide and live audio broadcast in front of the museum. (Figure 4) In the second section, the story line flashbacks to 1980, when the grandfather guided his son into the station for delivering chemical products to a company. The grandfather's son shows his curiosity about the inner settings, maps and the uniform of the head of the station. In this scenario, visitors are listening the audio story together with the introduction of these objects by the museum guide inside the station. (Figure 5)

In the third section, the story line goes back to the event of "The Glory History of Kaohsiung" in 2008, and the audience are directed to the platform of the station. (Figure 6) The museum guide

seriously narrates the age of the exhibited trains and the technological values of the steel structure built by Japanese government. In the meantime, the audio broadcasts the celebration lecture by Kaohsiung Mayor-Chen Chu as well as the joyful sounds revealed from the broadcasting. During this physical guide and the narration of audio broadcasting, a lot of distraction of imagination from the present to the past are generated.



Figure 3. Kaohsiung Port Station in Japanese colonial period. Source: Bureau of Cultural Affairs, Kaohsiung City Government (高雄市政府文化局).



Figure 4. The audience is listening the museum Guide in front of Museum. Photograph by Ching-pin Tseng, 2021.



Figure 5. An introduction of a historical map by the museum guide. Photograph by Ching-pin Tseng, 2021.



Figure 6. In the scenario of the event of “The Glory History of Kaohsiung” in 2008, the audience are directed to the platform of the station. Photograph by Xuan-You Chen, 2021.

## CONCLUSION

From the above discussions on site-specific works, the paper suggests that tangible cultural heritage or historical monuments can be utilized as sites for holding site-specific performances and for local people to recollect related narratives occurred at the sites. Because the tangible cultural heritage of a historical site is a bearer of local history and culture, the spectator can grasp the interrelationship between the existent heritage and past events through temporospatial dialogues and mediations between the past and the present. That is, from the notion of synchronicity, the temporal gap between the existence of cultural heritage and historical narratives can be connected by the narration of guided tour as well as the demonstration of site-specific broadcasting theater. Moreover, by scripting peripheral people’s stories into a theatrical performance and spatial narrations within cultural heritage, subterranean memories can be unveiled and the absence of spatial subjects can be re-presented. Although a formal museum guide will be interrupted continuously in *Listening, stories of the year in Takao*, by associating multiple media with the materiality of the spatial settings in the site-specific audio theater, the audience may have multiple readings and immersive experiences of the cultural heritage.

## NOTES

- <sup>1</sup> UNESCO: Institute for Statistics, *Cultural Heritages*. <https://uis.unesco.org/en/glossary-term/cultural-heritage>, retrieved on Feb., 10, 2023.
- <sup>2</sup> For example, Musée d'Orsay in Paris and Serpentine Art Galleries in London.
- <sup>3</sup> Christopher B. Balme, *The Cambridge Introduction to Theatre Studies*. (Cambridge: Cambridge University Press, 2008), 60.
- <sup>4</sup> M. Christine Boyer, *The City of Collective Memory*. (London and Cambridge: The MIT Press, 1994), 31.
- <sup>5</sup> M. Christine Boyer. *The City of Collective Memory*, 31.
- <sup>6</sup> M. Christine Boyer. *The City of Collective Memory*, 31.
- <sup>7</sup> Marvin Carlson, *Places of Performance: The Semiotics of Theatre Architecture*. (London: Cornell University Press, 1992), 17-8.
- <sup>8</sup> These are seasonal festivals and ceremonies held at the frontal squares of temples, as well as religious blessing and processions around communities by streets.
- <sup>9</sup> Nick Kaye, *Site-Specific Art*. (London and New York: Routledge, 2000), 1.
- <sup>10</sup> Mike Pearson, *Site-specific Performance*. (New York: Palgrave Macmillan, 2010), 1.
- <sup>11</sup> Mike Pearson, *Site-specific Performance*, 2.
- <sup>12</sup> Mike Pearson, *Site-specific Performance*, 3.
- <sup>13</sup> Mike Pearson, *Site-specific Performance*, 4.
- <sup>14</sup> Mike Pearson, *Site-specific Performance*, 5.
- <sup>15</sup> Mike Pearson, *Site-specific Performance*, 54-7.
- <sup>16</sup> National Cultural Heritage Network (國家文化資產網), *The Great South Gate of Tainan Fucheng* (台南府城大南門). <https://nchdb.boch.gov.tw/assets/overview/monument/19851127000059>, retrieved on Sep., 16, 2021.
- <sup>17</sup> Wan-Jung Wang, Whose History? Who Will Interpret It? (誰的歷史？誰來詮釋？) In *Countryman enters into Tainan Fucheng* (草地郎入神仙府) Qui, Wan-ting, ed. (Tainan: National Museum of Taiwan History, 2009), 10.
- <sup>18</sup> Wen-cheng Shi, Introduction. In *Countryman enters into Tainan Fucheng* (草地郎入神仙府), 12.

## BIBLIOGRAPHY

- Balme, Christopher B., *The Cambridge Introduction to Theatre Studies*. (Cambridge: Cambridge University Press, 2008).
- Boyer, M. Christine, *The City of Collective Memory*. (London and Cambridge: The MIT Press, 1994).
- Carlson, Marvin, *Places of Performance: The Semiotics of Theatre Architecture*. (London: Cornell University Press, 1992).
- Kaye, Nick, *Site-Specific Art*. (London and New York: Routledge, 2000).
- National Cultural Heritage Network (國家文化資產網), *The Great South Gate of Taiwan Fucheng* (台灣府城大南門). <https://nchdb.boch.gov.tw/assets/overview/monument/19851127000059>, retrieved on Sep., 16, 2021.
- Pearson, Mike, *Site-specific Performance*. (New York: Palgrave Macmillan, 2010).
- Wang, Wan-Jung. Whose History? Who Will Interpret It? (誰的歷史？誰來詮釋？) In *Countryman enters into Tainan Fucheng* (草地郎入神仙府), Qui, Wan-ting, ed. (Tainan: National Museum of Taiwan History, 2009).
- Shi, Wen-cheng. Introduction. In *Countryman enters into Tainan Fucheng* (草地郎入神仙府), *ibid*.
- UNESCO: Institute for Statistics, *Cultural Heritages*. <https://uis.unesco.org/en/glossary-term/cultural-heritage>, retrieved on Feb., 10, 2023.

# **A MOTHER'S PLACE: EXPLORING SPATIAL EXPERIENCES OF EARLY MOTHERHOOD**

Authors:

**MARETHA DREYER**

Affiliation:

HASSELT UNIVERSITY, BELGIUM; CAPE PENINSULA UNIVERSITY OF TECHNOLOGY,  
SOUTH AFRICA

---

## **INTRODUCTION**

In order to understand how a diverse group of women in situations of cross-border displacement can be supported more effectively, my PhD research aims to identify how motherhood and gender influence asylum seekers' spatial experiences of making homes. A combination of participatory feminist and architectural design research methods will be employed in a qualitative study with cross-border displaced mothers. The aim of the project as a whole is ultimately to suggest ways in which architectural design processes can be employed to better support mothers in situations of forced displacement.

Despite increasing numbers of women migrating to South Africa, both forced and electively, there is a lack of reliable data on the topic. Women are more vulnerable to violence, exploitation, human trafficking and homelessness during migration and resettling, and face more challenges in accessing available services. In South Africa, refugees and asylum seekers are allowed to settle and work wherever they choose. Although this might seem progressive, in practice, individuals in circumstances of forced displacement are inadequately supported and face many challenges in finding housing and employment.<sup>1</sup> Available research suggests that many women in situations of forced cross-border displacement in South Africa find employment in unskilled, low-paid, informal and poorly regulated work, including informal trading, domestic work, care, sex<sup>2</sup> or agricultural work that is often temporary, part-time or seasonal. Poor living conditions, including: shacks, overcrowded apartment and a lack of access to washing facilities and toilets, are reported in the existing literature. Women seeking refuge in South Africa also have to navigate xenophobia and high crime rates.<sup>3</sup> Motherhood further heightens the challenges and vulnerabilities of migrating women in general, as mothers often have more difficulty entering the labour market and earn lower wages due to their child care responsibilities.<sup>4</sup>

## **METHODOLOGY**

This research draws on feminist theory to find more ethically sound and appropriate ways to conduct research with displaced people as an outsider. In previous research<sup>5</sup>, I identified several limitations and shortcomings that arise when carrying out such research. For me, the most pressing of these concerns are:

- The authority that an external researcher has to speak on behalf of – and specialize in the lived experiences – of others.

- Ethical considerations regarding consent and the power imbalances in the relationship between the researcher and subject.

- Most problematically, the creation of knowledge about others that, as Sara Ahmed<sup>6</sup> explains, inevitably reproduces colonial inequalities by setting them up as ‘strangers’.

To navigate the complexities of conducting research as an outsider, I embarked on my research journey with an autoethnography of my own experience of home-making during early motherhood. Firstly, my intention is to obtain a better understanding of how I navigated the cultural constraints in finding my own way as a mother by doing what Xue and Desmet<sup>7</sup> refer to as ‘researcher introspection’. This will be followed by practising ‘interactive introspection’ where research participants and the researcher co-create knowledge by shared empathic introspection. In response to Hilde Heynen’s<sup>8</sup> call for multidisciplinary research to achieve a more holistic understanding of the interaction between space and social behaviour, I experiment with architectural drawing techniques to read the interior geography of ‘spatial, social, psychological and emotive’<sup>9</sup> meaning that constructs a home.

The images and drawings generated during this initial phase will be used later on in the research process to start conversations with cross-border displaced mothers, about our respective spatial experiences of motherhood. It is also envisioned that these visual methods could be adapted to create knowledge about participants’ experiences. Conceivably, the end result will establish an intersectional dialogue between myself as the embodied researcher and the lived experiences of participants.

## REASERCHER INTROSPECTION

This part of the article takes on the form of a critical reflection on my own positionality as a researcher. The purpose of this section is to foreground the assumptions and biases I hold towards my research topic at the project’s outset. The intent is for this initial reflexive exercise to form the basis for continuous reassessment of my positionality throughout the PhD project:

*As a South African national, I am an outsider to the research. I am privileged: a white, able-bodied, cisgender, married, middle-class, first-time mother. Our daughter was born in a private hospital during strict Covid-19 lockdown. At the time, we were living in an eighty square meter, two-bedroom apartment in Cape Town. For several reasons mostly related to becoming parents, we have since moved to a three-bedroom, suburban house with a double garage and garden.*

Kathy Davis<sup>10</sup> suggests that intersectional analysis can be a useful framework for acknowledging the situatedness of all knowledge<sup>11</sup> by critically reflecting on the role that a researcher’s own identity can play throughout the entire research process. More specific to my own research topic, I previously suggested using an intersectional lens to explain asylum seekers’ unique experiences of displacement.<sup>12</sup> However, according to Davis<sup>13</sup>, a non-exhaustive list declaring a researcher’s identity markers (as I included in the first paragraph of this section) is not an effective way to situate a researcher within the research. She suggests developing a rich biographical narrative of everyday interactions between the researcher and the people the research will focus on. This should reveal how the researcher’s own identity shapes the research in specific ways. What follows is an attempt to critically reflect on my pre-conceived ideas, biases and blind spots regarding two of the themes in this research, namely cross-border displacement and motherhood.

## My Current Understanding of Cross-border Displacement

*I am in no way a specialist on the topic of migration or seeking refuge. My experience working with asylum seekers is very limited: while on a research mobility in Ireland, I volunteered for a while at a weekly skillshare event in an institutional setting where asylum seekers were housed. I took part alongside the asylum seekers in activities set up by the organisers. Also being from the African*

continent, my informal conversations with asylum seekers mostly covered our shared love for the African sun and our families. I presented my experience at an academic conference and published a chapter in an international edited and peer-reviewed book on the topic.

In my day-to-day life in South Africa, I probably encounter refugees: perhaps as someone I pass in the street, maybe a parking attendant or someone who collects my shopping trolley and helps me pack my groceries into my car or perhaps some of the people living in the village of tents that has recently popped up opposite the local police station. For a while, we had a weekly domestic worker who came from Zimbabwe. She would annoy me slightly by asking: 'Is Maretha still sleeping?', every time she arrived before 07:00 in the morning and my husband opened the door in his pyjamas while I was still drinking my tea in bed. When I asked her about her family's safety during a time when there was a rise in xenophobic attacks in Cape Town, she told me that she was worried because her oldest daughter, who was twelve at the time, was alone with the little ones in the morning after she herself had left for work with her husband at 05:30am. The oldest daughter had to get the little ones ready, walk the youngest to the creche and then get a lift with the other sibling to school. There was also a man who sometimes slept on the pavement in front of our apartment block. He would wake us up at night sometimes when he screamed in his sleep. Now that we are renting our apartment out, our tenants have complained about him and said that they have called the police numerous times to 'have him removed.' I also recall gardeners, builders, an electrician who renovated our apartment and some of the students in my class who were from Malawi, Somalia, Angola and the Democratic Republic of Congo. Some of these people could have been forcibly displaced, others voluntary migrants. I never asked. In fact, I suspect that – like what is very often the case in the general media – I conflated terms such as 'refugee', 'asylum seeker' and 'forced economic migrant' by assuming that anyone I met from another African country could be a refugee. I hope that through this research, my knowledge and understanding of this topic will expand.

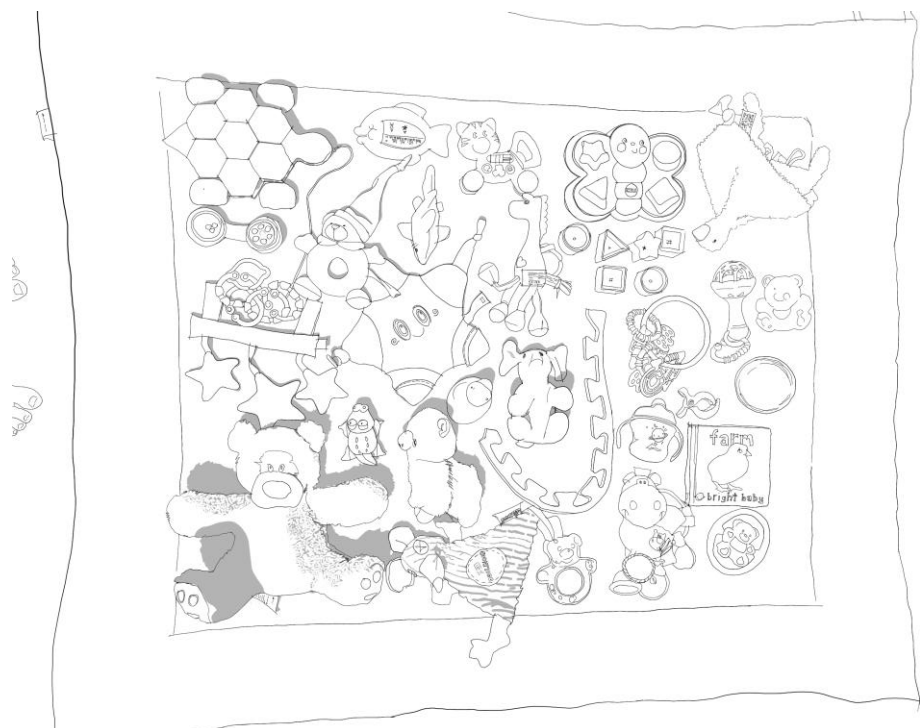
### Transitioning into Motherhood: A Visual Reflection Process

For me, early motherhood felt like a constant negotiation between finding my own way around the acceptable norms and expectations of society. The way we mother, what we do and what we find acceptable, is culturally produced.<sup>14</sup> Yet, it is often difficult to evaluate our own actions as such. Moreover, the Western conventions in which I was brought up is often seen as neutral or 'cultureless'. In an attempt to uncover how my own engagement with space during motherhood was guided by cultural norms, I started by taking photographs of collections of 'things' we use on a daily basis to transform space into a home. This includes several assemblages constructed around themes: the 'essential' toys we took with us when we went away with our daughter when she was ten months old (fig.1a); the multitude of equipment and cutlery we simply 'had to have' to feed her since birth (some still waiting to be used) (fig.1b); the array of medicine and medical equipment we keep in our medicine cabinet, some used, some kept 'just in case' (fig.1c) – in a nutshell, the 'profusion of stuff that can go along with early parenting' as Boyer<sup>15</sup> describes it.



Figure 1. Collections of some of our essential baby items: a) toys we took with us when we went away for three nights with a ten-month-old baby; b) most of the nursing and feeding equipment we have used for our baby from newborn to seventeen-month-old; c) some of the medicine and equipment we keep in our medicine cabinet, some used, some 'just in case' (photos by author).

As I suspected that architectural-drawing techniques could encourage deep thinking and analysis of images, I then traced these photographs, making use of basic architectural drawing conventions such as a limited colour palette, line weight, notes and annotations and scale. Through the process of drawing and slowly thinking through each of the different elements in the photographs, I came to new insights regarding not only the ‘things’ we kept, but also about myself as a new mother. One of these ‘contemplations’ are included here (Fig 2):



*Figure 2. Initial stages of a drawing of Fig. 1a, making use of architectural-drawing techniques (drawing by the author).*

However, the intention behind focusing on myself as a research subject was partly to try and negotiate the power relations intrinsic to my main study: to in the very least, open up the private sphere of my day-to-day life for critique in the same way that I am planning to ask of my research participants. It struck me that the assemblages I had been photographing were so stylized and controlled that once juxtaposed with similar information from displaced mothers as my research participants, these images would perhaps illustrate the power imbalances that exist between myself and the participants, but will do little to neutralize them. If I want participants to let me into their raw, unfiltered, un-stylized homes, I must certainly be willing to do the same. I therefore started taking photographs of the places in my house where ‘things’ seemed to be taking on a life of their own, where the clutter was piling up. I noticed that these photographs started telling a story of what was happening in our lives by leaving traces in the form of clutter on every possible horizontal surface in the house. The larger pieces of furniture also contributed to this narrative. We now regularly found new places and uses for items of furniture to ease our interactions with the baby: we moved the cot further away from our bed so she could sleep better, we moved the cot away from the window because it was getting colder, we moved the rocking chair to the opposite side of the room to make more space to rock her to sleep, we started sleeping on a mattress on the floor because she was becoming more mobile and we were worried she would fall off the bed (Fig.3). What struck me was the continuous process of making and remaking place in reaction to either the changing needs of our baby or to external factors such as temperature,

light and noise. Home had become a process that was taking up a large amount of mental space and physical effort.



Figure 3: ‘Then and Now’: Photos showing how we set up a sleep space for our baby in preparation for her arrival (3a) and how we ended up sleeping (3b).

The most recent stage of my investigation involves sieving through the photographs on my phone that document the traces of these spatial memories by unintentionally showing positions of furniture and other items as a background to family photographs (Fig. 4).

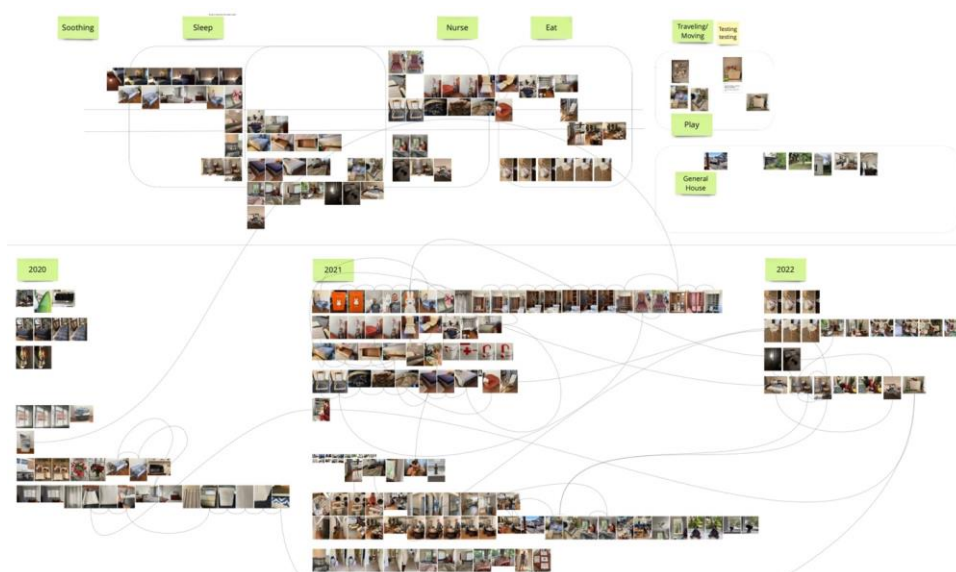


Figure 4. Tracing the movement of furniture items from family photos.

Through this exercise, I could identify several themes that were directing our daily placemaking efforts: soothing, sleeping, nursing, eating/feeding, dressing and bathing, and getting mobile. These themes will be used to create links with the existing body of knowledge on the topic and will be suggested as starting points when reflecting on the spatial experience of motherhood with research participants.

## CONCLUSION

This research project is currently still in the early stages. I am in the process of communicating with social workers at several non-profit organizations that work with asylum seekers in Cape Town in order to explore the most suitable ways for me to engage with mothers in situations of displacement. My plan is to start with fieldwork soon with the aim of collaboratively creating knowledge about the

experiences of mothers making homes in situations of displacement. This text contains an excerpt of the process of researcher introspection, intending to uncover some of the power imbalances and complexities that are inherent in this research.

### **ACKNOWLEDGEMENTS**

This study was supported by the Special Research Fund (BOF) of Hasselt University. BOF Number: BOF20BL10.

## NOTES

- <sup>1</sup> Mpho Makhema, *Social Protection for Refugees and Asylum Seekers in the Southern Africa Development Community* (Washington, DC: World Bank, 2009).
- <sup>2</sup> Rebecca Walker, "Selling Sex, Mothering and 'Keeping Well' in the City: Reflecting on the Everyday Experiences of Cross-Border Migrant Women Who Sell Sex in Johannesburg," *Urban Forum* 28, no. 1 (2017): 59–73, doi: 10.1007/s12132-016-9284.
- <sup>3</sup> Aimée-Noël Mbiyozo, *Gender and Migration in South Africa: Talking to Women Migrants* (Pretoria: Institute for Security Studies, 2018).
- <sup>4</sup> "Reclaiming Power: Womxn's Work and Income Inequality in South Africa," OXFAM South Africa, accessed February 19, 2023, <https://www.oxfam.org.za/wp-content/uploads/2020/11/oxfam-sa-inequality-in-south-africa-report-2020.pdf>.
- <sup>5</sup> Maretha Dreyer, "Years in the Waiting Room: A Feminist Ethnography of the Invisible Institutional Living Spaces of Forced Displacement," in *Making Home(s) in Displacement: Critical Reflections on a Spatial Practice*, eds. Luce Beeckmans et al. (Leuven: Leuven University Press, 2022), 197–218.
- <sup>6</sup> Sara Ahmed, *Strange Encounters: Embodied Others in Post-Coloniality* (London: Routledge, 2000).
- <sup>7</sup> Haian Xue and Pieter M. A. Desmet, "Researcher Introspection for Experience-driven Design Research," *Design Studies* 63 (2019): 37–64.
- <sup>8</sup> Hilde Heynen, "Space as Receptor, Instrument or Stage: Notes on the Interaction between Spatial and Social Constellations," *International Planning Studies* 18, no.3–4 (2013): 342–357.
- <sup>9</sup> Hazel Easthope, "A Place Called Home," *Housing, Theory and Society* 21, no. 3 (2004): 128–38.
- <sup>10</sup> Kathy Davis, *Writing Academic Texts Differently: Intersectional Feminist Methodologies and the Playful Art of Writing* (New York: Routledge, 2014).
- <sup>11</sup> Donna Haraway, "Situated Knowledges: The Science Question in Feminism as a Site of Discourse on Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (1988): 575–99.
- <sup>12</sup> Dreyer, 214.
- <sup>13</sup> Davis, 22.
- <sup>14</sup> Kate Boyer, *Spaces and Politics of Motherhood* (London: Rowman & Littlefield Publishers, 2018).
- <sup>15</sup> Kate Boyer, 40.

## BIBLIOGRAPHY

- Ahmed, Sara. *Strange Encounters: Embodied Others in Post-Coloniality*. London: Routledge, 2000.
- Boyer, Kate. *Spaces and Politics of Motherhood*. London: Rowman and Littlefield Publishers, 2018.
- Davis, Kathy. *Writing Academic Texts Differently: Intersectional Feminist Methodologies and the Playful Art of Writing*. New York: Routledge, 2014.
- Dreyer, Maretha. "Years in the Waiting Room: A Feminist Ethnography of the Invisible Institutional Living Spaces of Forced Displacement." In *Making Home(s) in Displacement: Critical Reflections on a Spatial Practice*, edited by Luce Beeckmans, Alessandra Gola, Ashika Singh, Hilde Heynen, 197–218. Leuven: Leuven University Press, 2022.
- Easthope, Hazel. "A Place Called Home." *Housing, Theory and Society* 21, no. 3 (2004): 128–38.
- Haraway, Donna. "Situated Knowledges: The Science Question in Feminism as a Site of Discourse on Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575–99.
- Heynen, Hilde. "Space as Receptor, Instrument or Stage: Notes on the Interaction between Spatial and Social Constellations," *International Planning Studies* 18, no. 3–4 (2013): 342–357.
- Makhema, Mpho. *Social Protection for Refugees and Asylum Seekers in the Southern Africa Development Community*. Washington, DC: World Bank, 2009.
- Mbiyozo, Aimée-Noël. *Gender and Migration in South Africa: Talking to Women Migrants*. Pretoria: Institute for Security Studies, 2018.
- OXFAM South Africa. "Reclaiming Power: Womxn's Work and Income Inequality in South Africa." Accessed February 19, 2023, <https://www.oxfam.org.za/wp-content/uploads/2020/11/oxfam-sa-inequality-in-south-africa-report-2020.pdf>

- Walker, Rebecca. "Selling Sex, Mothering and 'Keeping Well' in the City: Reflecting on the Everyday Experiences of Cross-Border Migrant Women Who Sell Sex in Johannesburg." *Urban Forum* 28, no. 1 (2017): 59–73. doi:10.1007/s12132-016-9284.
- Xue, Haian and Pieter M. A. Desmet. "Researcher Introspection for Experience-driven Design Research." *Design Studies* 63 (2019): 37–64.

## A SPLICE OF LIFE (HOME, LAPTOP, WI-FI)

Authors:

**SHELLIE HOLDEN**

Affiliation:

THE UNIVERSITY OF WALES TRINITY ST DAVID, UK

---

### INTRODUCTION

Metamorphosis is a process of change on borderlines and thresholds between being and absence, memory and oblivion, I and non-I, a process of transgression and fading away. The metamorphic consciousness has no centre, cannot hold a fixed gaze -or, if it has a centre, it constantly slides to the borders, to the margins.<sup>1</sup>

This paper examines Bracha Lichtenberg Ettinger's matrixial theory in relation to her concept of Metamorphosis as "a process of change on borderlines and thresholds"<sup>2</sup> when experienced from the perspective of living at home during the pandemic. It attempts to do this by addressing the circumstances of the artist/author of this paper, as a way to (re)produce encounters, firstly lived through the screen, then later developed upon through a palimpsestic process whereby layers and layers of 'artworking' are applied through interdisciplinary virtual, digital and analogue methods, as a response to working through the pandemic. The term artworking is derived from the title of Ettinger's exhibition and catalogue of the same name - Artworking (1985- 96) and thus forms a referential place to consider a host of materialities as those produced in accretions.

This seems relevant in the context of thinking through, but also beyond a Freudian Psychanalyses utilising the tangible concept of a mystic writing pad in which to inscribe memories into a pre - existing surface. Here traces of past experiences form part of a memory board upon which further and future inscriptions might be placed. Indeed, via Freuds tools, the Oedipus complex provides a concept in which to expand upon, by adopting Ettinger's matrixial theory as a point of reference. Extending upon Sigmund Freud, but more importantly, Jacques Lacan, Ettinger proposed further perspectives on the female body; femininity and female identity so that subjectivity is not approached as fixed, the 'feminine' itself denotes a being not structured in the binary, or as Other, but as fluid and dynamic, in the process of becoming. This combined with "a Laconian analytical perspective with Deleuze and Gauntari's emergent model of the "residual subject"<sup>3</sup> introduces (albeit very succinctly), some aspects of Ettinger's matrixial theory, involving the "hybridization of psychoanalysis with schizo -analysis".<sup>4</sup> Understanding this context is important since it then enables the visual aspect through her painting methods to proceed with these aspects in mind.

Ettinger's influence on the fields of psychoanalysis and painting from the early 90's onwards through a post - structuralist lens, has been significant, and, in this paper, my aim is to 'work with' some of these key aspects which she denotes to the 'matrixial'. For example, it is important to outline how Ettinger's psychoanalysis departs from more traditional forms of psychoanalysis, since this challenges patriarchal/phallogocentric power structures, and is itself is an important aspect of her matrixial theory, which also reside within this praxis.

My approach here, has been to consider matrixial theory and practice through my own pandemic methods, utilising both the new circumstances of working from home as well as navigating a new set

of artistic tools. This shift away from the office and open studio teaching environment, literally occurred over the course of one day on March 26<sup>th</sup>, 2020, forcing (many of us) into our homes, as a result of the strict Covid 19 pandemic.

As a result, professional paid work (teaching) then defaulted online to virtual Microsoft Teams teaching, as the core object of our fascination or even frustrations and became dependent upon computing devices. These devices literally enabled many of us to stay connected with one another, as a point of convergence across time and space. At times, however, I would argue, overly exposing us, as we met the daily challenges of teaching online, or meeting with family members, for example.

As an artist however, this new situation also involved relinquishing many favoured or familiar artistic tools - the abandonment of the xerographic processing machine was one such intrinsic instrument in my artistic method which became off limits. I mention this since Bracha L. Ettinger's own process of artworking is dependent upon the use of scanning devices. This is essential to her working method/painting practice providing a way of looking and demonstrates the importance of developing an artist's tool kit. This is important to note, since the pandemic shift in working conditions depended upon an over reliance of some aspects (digital technologies/the digital screen/ virtual Microsoft Teams) and an under reliance of others (in- person face-face contact, photocopier). Evolving around digital screens, this then offered a different and new space of encounter in which to view domestic-professional life, when experienced through the eyes of the artist/author.

Matrixial theory, here, through the digital/virtual screen, could therefore provide a glimpse into work(wo)manship, (my neologism) as a particular feminist lens, in which to apply during and beyond the pandemic. This change in circumstances enabled the participants of the house to be put on public display by making the screen a constant feature of the interior, altering not only the domestic space, but also the participants within it. As kerkoff suggests, feminism provides a way to "address multiple issues blurring the edges of the binary artifice of the object/subject"<sup>5</sup> and here, through this encounter with the screen new bodies of knowledge and new bodies of work (creative practice) could be developed. I mention this, since in not wanting to lose site of the context, as an applied theory inherited from Bracha L. Ettinger, it is important to also not lose site of the visual arts practice. I mention this now, since it is in and through the process of 'artworking' – of an experiencing and experimenting through (new or altered) interdisciplinary materials/methods that it seemed possible to capture real life events, in the moment, but also as after- effects, and affects.

This is of the upmost importance keeping the examination in relation to Ettinger close. Here, the artist is concerned with how these experiences might be captured through here machinic visual method, so that painting acts as a screen; an encounter between artist and others, a space to confront the issues at play in her work.

As art historian Grizelda Pollock suggests,

Ettinger's identity as a Holocaust survivor and immigrant, and the trauma related to it are of particular significance to her. She interrogates this through her painting practice, so that "metramorphosis opens another pathway for meaning donation that is not based, phallically on substitution and displacement, but on borderlinking".<sup>6</sup>

Over her lifetime, Ettinger has developed a set of concepts that are fundamental to her psychoanalytical and painting practice. As mentioned above, these include 'metramorphosis' and 'borderlinking' – just two frames of reference that are combined with many others and featured on her glossary below. I have attempted to explore just some of these key terms and to demonstrate how they also can be rife for re-contextualisation through further visual experimentation in ways that are multiple and miscible, producing both psychic traces, and a range of interdisciplinary practical outcomes.



Ettinger's interrogation of the threshold here can be understood at intersections, which overcome the binary artifice between distinct subjectivities; a process, which she refers to as 'metramorphosis' (Ettinger). Here, it is possible and necessary to weave in "systems of reference; symbolic and discursive systems, such as myth, philosophy, art theory, psychoanalysis, and any number of others" <sup>7</sup> This interrogation of the threshold involves addressing the psychological aspects of working from home as a way to enmesh aesthetics, ethics and feminist politics. The intention here was to make the occupations of other(s) visible, in turn shaping or changing the phenomenon around contemporary domestic professional work(wo)manship, to promote feminist ideals and shape a more equitable world, much like Ettinger herself. Here bringing constitute parts together, is a way of weaving together a visual - textual analysis of lived experience, which focuses "on 'art/ life', boundaries, which has the capacity to "raise awareness for political action" <sup>8</sup> but also to create a shared space between individuals through the matrixial.

This experience became evident because of these encounters through the digital screen, enabling fleeting/lasting documents of domestic professional daily life to be documented (through Microsoft teams recordings) then worked upon as memory boards, also enmeshing “systems of reference; symbolic and discursive systems, such as myth, philosophy, art theory, psychoanalysis, and any number of others”<sup>9</sup>

Here metamorphosis but also Ettinger's development of the concept 'metramorphosis' might be explored through first-hand experience of the pandemic in which women's work, domesticity, and the home became significant parts, and in turn enabled intersubjective experience within a self- weaving "differential matrix" of part- objects, part- subjects"<sup>10</sup> to be contemplated. This in turn, could be explored in relation to considering the interrelatedness of individuals, so that isolated experience could also form part of a collective palimpsest of emotions and impressions.

Historically, matters related to women's work, domesticity, and the home have been undervalued, and yet they continue to have an impact on how the home, and woman (in particularly) are viewed (because of their status within patriarchal systems). The portrayal of woman/wives and mothers

within arthouse cinema, and women's first-hand experiences as artists and activists has therefore become a feature of this analysis, with examples finding their way into the visual representation, much like Ettinger's matrixial theory, which can be understood to impact on the female psyche, and woman's oppression generating a need for feminist activism. This provided raw material in which to embellish upon through both visual exploration and textual analysis, to question these gendered representations. Here, private space conversely, and (perhaps perversely) became public property viewed through digital/virtual home/work, in turn bringing issues of spectatorship, through the visibility of (undervalued) others in the screen.

I want to suggest that this experience, enabled new or altered subjectivities, what might be referred to as a 'residual subject',<sup>11</sup> to be encountered through these new threshold spaces, because of this period of social transformation and that this in turn has prompted a feminist art enquiry. Citing myself at the kitchen table, I am conscious of how everything, "Things and thoughts," as Gilles Deleuze states might "advance or grow out from the middle" because "that's where everything unfolds."<sup>12</sup> but further to this feel splintered and fractured, scattered, and spliced between matters of home and work.

As a contemporary (pandemic) representation of these politics, aspects of daily life become enmeshed through the continual presence of the digital / virtual screen occupied for both work and leisure, formal meetings, family meetings, online lecturing, online schooling, making transactions, online shopping, gaming, administration, research, reading, recording, and using software to navigate and negotiate a maelstrom of activity in myriad ways. Here, 'borderlinking', via screen-based technologies – home – wi-fi – laptop activated the autoethnographic lens of author/artist/lecturer/mother, as a response to this condition during, but also beyond the pandemic.

As a consequence, this utilised autoethnography as a research method in which to address and reflect on these issues, as others have. Autoethnography when approached from a moderate perspective "allows for innovation, imagination, and the representation of a range of voices"<sup>13</sup>, a stance which, it is hoped can be explored here. As Wall says,

I used my unique positioning as a mother, a health care practitioner, and a sociologist to contribute an alternative discourse to literature on a social practice that significantly impacts people's lives (Wall, 2012a, 2012b)<sup>14</sup>.

Similarly, I use my own unique positioning as a mother, an artist, a university lecturer, and researcher to contribute to the ever - expanding literature related to homeworking during and after the pandemic, and as a way to generate visual arts practice.

For example, in *Jeanne (Dielman) and Me: Lockdown*, I overlay one domestic chore with another, one subject with another, one household with another, an act which in one sense might seem superficial and simple and yet is loaded with political significance, as a representation of feminist activism through arts practice.

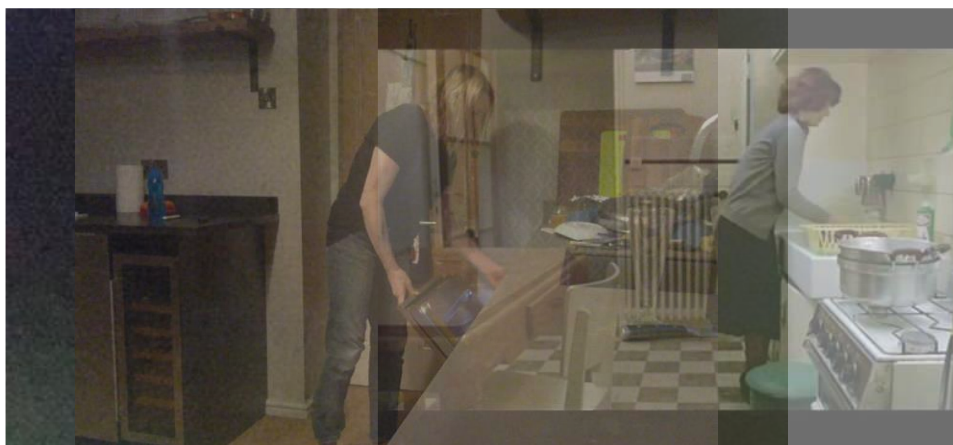


Figure 2. *[Jeanne (Dielman) and Me: Lockdown, Digital assemblage by [Shellie Holden] ©[Shellie Holden][2022] combining [film still] 'Jeanne Dielman, 23 Commerce Quay, 1080 Brussels' directed by Chantal Akerman © The Criterion Collection 1975 All rights reserved.*

Unlike the fictional depiction of Jeanne, whose life appears neatly organised into the routine activity of daily household chores, in this pandemic life it feels difficult to tease apart one occupation from another, as it drifts in and out between screen time, but also between households as collective audio-visual resonances. In this way the virtual /digital meeting space can be used as a site to stir emotional and/or affective responses, through computational post - production gestures. For example, turning off cameras and microphones, or blurring backgrounds to obscure or block out sounds and (facial/bodily) expressions, can act as a form of 'tidying up', as editing out.

*Jeanne (Dielman) and Me: Lockdown*, exemplified a way of communicating this experience holding or folding together Jeanne with I is a way to bring relational aspects of woman's life into contact. Technically speaking, using the found image is a surface in which to layer upon/ or alongside, to combine my contextual references. This work demonstrates how 'borderlinking' (woman's) independent experiences, can be unified in a single image - bringing those peripheral, or overlooked events into the screen, "those moments that are typically left out of cinema" <sup>15</sup> a presence on screen, as director Chantal Akerman did in the making on Jeanne.

I have alluded to in the description of the piece above, to a feminist assemblage, whereby assemblage itself represents a particular method of working, that involves "the action of matching or fitting together a set of components (agencer), as well as to the result of such an action: an ensemble of parts that mesh together well." <sup>16</sup>

My title, A S/PLICE OF LIFE (Home, laptop, wi-fi), conversely is suggestive of severed or selected parts. Splice, which refers specifically to genetics and molecular biology, seemed a suitable reference point to consider, what at times, seemed like scattered and disparate actions or events as part of pandemic lived experience. Here, though, through a methodological approach, selected elements (images/ jpeg images) could be spliced together, utilising the screen, as a place of convergence, to assemble such matters in a unified meeting point, but also in multiple (alternative) arrangements, whilst being open to further alteration. Ettinger's theory refers to "fragments without totality, cut-up particles, vessels without communication, partitioned scenes analogous to part-objects" <sup>17</sup> and this particularly, becomes a viable metaphor in which to view subjectivities, especially when viewed partially or disparately. Splices and splits, facets and fragments, pieces and patches – all form tangible aspects in which to reproduce documents of daily life through combination. Here, aspects of lived

experience, can be retrieved or discarded (binned) through creative and conceptual method, quite literally taking screen grabs of documented moments and impressing them upon a (digital) surface to produce further visual and textual accretions.

Making the comparison to Ettinger's methods embodies both the psychological experience of her life and legacy but also that of artistic production itself. Here, enmeshing conventional (painting) method with inventive (low fi, experimental, intuitive) artistic process has involved developing a scanning process, as "a multimedia technique or visual language" the resulting effect to "create strong effects and intellectual reactions in the viewer."<sup>18</sup> Here, 'metramorphosis', as that which involves a combination of actions seems paramount to the artistic process, enabling the allusive, fragmentary and at times figurative aspects of the work to come into contact, through ethics, aesthetics and affects, and "to remove the image from the empirically graspable instant"<sup>19</sup>. Here it produces aesthetic and affective elements through experimentation with different digital expressions so that matrixial provides a way of working, combining selected splices, parts, facets, or pieces, as material entities, (including digital software, and found imagery), and methods (feminist practices) as equal and contributory elements.

In my experimentation juxtaposing image and surface, digital and analogue, produces this assemblage between past and present, here and now, as a process of retrieval and borderlinking. Borderlinking is suggestive of a way of working across virtual, digital and physical interfaces but is also a way of bringing together disparate aspects of everyday life as a palimpsest of digital screen grabs, found imagery, digital and analogue gesture, colour sampling, stacking, cutting, splitting, duplication, looping, fading, layering as recurrent computational postproduction methods. This echoes the experience of domestic chore through the reproduction of processes and procedures, as production in accretion as and

ever evolving and expanding assemblage.

This is very much a body of work in process which is intended as a way of 'holding together', aspects of daily life from the margins, and indeed the marginal. In this way, the process of 'artworking' serves as a reparative outlet in which to reflect on experience, as a point of interaction.

## NOTES

- <sup>1</sup> Grizelda Pollock, "Nichsapha: Yearning/languishing The Immaterial touche of colour in painting after painting after history" in *Bracha Lichtenberg Ettinger. Artworking 1985-1999*, (Ghent-Amsterdam: Ludion, 2000) p.61.
- <sup>2</sup> Grizelda Pollock, "Nichsapha: Yearning/languishing", p.61.
- <sup>3</sup> Brian Massumi, "Painting:The Voice of the Grain" in *Bracha Lichtenberg Ettinger. Artworking 1985-1999*, (Ghent-Amsterdam: Ludion, 2000) p.30
- <sup>4</sup> Brian Massumi, "Painting:The Voice of the Grain" p.30
- <sup>5</sup> Sonja van Kerkhoff, "Fuzzy- Edged Feminism When the artist is a she" in Katy Deepwell, *Feminist Art Activisms and Artivisms*, (Amsterdam: Valiz, 2020) p. 18.
- <sup>6</sup> Grizelda Pollock, "Nichsapha: Yearning/languishing The Immaterial touche of colour in painting after painting after history" in *Bracha Lichtenberg Ettinger. Artworking 1985-1999*, (Ghent-Amsterdam: Ludion, 2000) p.51.
- <sup>7</sup> Brian Massumi, "Painting:The Voice of the Grain" in "Bracha Lichtenberg Ettinger. Artworking 1985-1999", (Ghent-Amsterdam: Ludion, 2000) p.29.
- <sup>8</sup> Katy Deepwell, *Feminist Art Activisms and Artivisms*, (Amsterdam: Valiz, 2020) p. 18
- <sup>9</sup> Brian Massumi, Painting:The Voice of the Grain 'in' "Bracha Lichtenberg Ettinger. Artworking 1985-1999", (Ghent-Amsterdam: Ludion, 2000) p.29.
- <sup>10</sup> Brian Massumi, "Painting:The Voice of the Grain", p.13
- <sup>11</sup> Brian Massumi, "Painting:The Voice of the Grain", p.11.
- <sup>12</sup> Gilles Deleuze, *Negotiations 1972- 1990* Translated by Martin Joughin. (New York: Columbia University Press, 1995), P.161
- <sup>13</sup> Sarah Stahlke Wall: "Toward a Moderate Autoethnography" in *International Journal of Qualitative Methods*, 15(1) (2016).
- <sup>14</sup> Sarah Stahlke Wall: "Toward a Moderate Autoethnography", 2016.
- <sup>15</sup> Glickstein, A: *Radical Banality: On Chantal Akerman, Labour in Cinema, And Legacy on May '68*. 2018 Available at <https://www.anothergaze.com/radical-banality-chantal-akerman-labour-in-cinema-and-legacy-may-68/> (Accessed 12 May 2020)
- <sup>16</sup> Micheal DeLanda: *A New Philosophy of Society: Assemblage Theory and Social Complexity*. (London: Continuum, 2006).
- <sup>17</sup> Bracha L. Ettinger B: *The Matrixial Borderspace*, (Minneapolis: University of Minnesota Press, 2006) p.100.
- <sup>18</sup> Piet Coessens, (Foreward) in *Bracha Lichtenberg Ettinger. Artworking 1985-1999*, (Ghent-Amsterdam: Ludion, 2000) P.7.
- <sup>19</sup> Brian Massumi, "Painting:The Voice of the Grain" in *Bracha Lichtenberg Ettinger. Artworking 1985-1999*, (Ghent-Amsterdam: Ludion, 2000) p.10,11.

## BIBLIOGRAPHY

- Bryant, Antony, and Griselda Pollock, eds. *Digital and other virtualities: renegotiating the image*. New York: IB Tauris, 2010.
- DeLanda, Manuel. *A new philosophy of society: Assemblage theory and social complexity*. London: Bloomsbury Publishing, 2019.
- Deepwell, Katy, ed. *Feminist Art Activisms and Artivisms*. Amsterdam: Valiz, 2020.
- Deepwell, Katy. "Feminist problematic (s) in contemporary art." Lecture, Middlesex University, 20 May 2014, Middlesex. 1.03.44. URL <https://www.youtube.com/watch?v=S6fleVxoDeQ> [accessed 04. 09.2021]
- De Zegher, Catherine & Pollock, Grizelda (Ed). *Art As Compassion Bracha L Ettinger*: Brussels: Asa Publishers Ghent, 2011.
- Deleuze, Gilles. *The Fold, Leibniz and the Baroque*. London: Continuum, 1988.
- Deleuze, Gilles. *Negotiations 1972- 1990*. Translated by Martin Joughin. New York: Columbia University Press, 1995.
- De Certeau, Michel. *The Practice of Everyday life*. USA: University of California Press Ltd, 1984.
- Ellis, Carolyn, and Michael G. Flaherty. *Investigating subjectivity: Research on lived experience*. Vol. 139. London: Sage, 1992.

- Ellis, Carolyn, & Bochner, Arthur. P, eds. *Composing ethnography: Alternative forms of qualitative writing*. Walnut Creek, CA: AltaMira Press, 1996.
- Ettinger. Bracha L. *The Matrixial Gaze*. Leeds: Feminist Arts and Histories Network, 1995.
- Ettinger Bracha L. *The Matrixial Borderspace*, Minneapolis: University of Minnesota Press, 2006.
- Dielman, Jeanne. "quai du Commerce, 1080 Bruxelles (1975) Directed by Chantal Akerman [Film]." *New York: The Criterion Collection* (23).
- Ettinger. Bracha L. "(M)other re-spect: Maternal subjectivity, the readymade mother-monster and the ethics of respecting." *Studies in the Maternal* 2, no. 1 (2010).
- Gaal-Holmes, Patti. *A History of 1970's experimental film: Britain's Decade of Diversity*. London: Palgrave Macmillan, 2015.
- Glickstein, Adina. *Radical Banality: On Chantal Akerman, Labour in Cinema, And Legacy on May '68*. 2018. Available at: <https://www.anothergaze.com/radical-banality-chantal-akerman-labour-in-cinema-and-legacy-may-68/> (Accessed 12 May 2020)
- Fowler, Catherine. *Jeanne Dielman, 23, quai du commerce, 1080 Bruxelles*, London: UK BFI Classics, Bloomsbury Publishing, 2021.
- Miller, Nancy K. *The poetics of gender*. New York: Columbia University Press, 1986.
- Monteiro, Stephen. *The fabric of interface: Mobile media, design, and gender*. MIT Press, 2017. Spry, Tami. "Performing autoethnography: An embodied methodological praxis." *Qualitative inquiry* 7, no. 6 (2001): 706-732. Available at: <https://doi.org/10.1177/107780040100700605> (Accessed 04 March 2019)
- Valle Corpas, Irene. "Between home and flight: interior space, time and desire in the films of Chantal Akerman." *Journal of Aesthetics & Culture* 13, no. 1 (2021): 1914969. Available at: <https://doi.org/10.1080/20004214.2021.1914969> (Accessed 10 November 2021)
- Warren, Tracey. "Work-life balance/imbalance: the dominance of the middle class and the neglect of the working class." *The British journal of sociology* 66, no. 4 (2015): 691-717. Available at: <https://doi.org/10.1111/1468-4446.12160> (Accessed 18 November 2021)
- Warren, Tracey (2021, November 16) Woman's work, Class and Covid [webinar]
- Wall, Sarah Stahlke. "Toward a moderate autoethnography." *International journal of qualitative methods* 15, no. 1 (2016): 1609406916674966

# HOW HAS THE EMERGENCE OF NFT TECHNOLOGY IN THE MUSIC INDUSTRY AFFECTED HOW A GENERATION Z AUDIENCE CONSUMES A MUSICAL ARTISTS WORK?

Authors:

**MARK ASHMORE**

Affiliation:

LIVERPOOL JOHN MOORES UNIVERSITY, UK

---

## INTRODUCTION

Generation Z, are often referred to as digital natives, a term used to describe individuals born between 1995 and 2012.<sup>1</sup> This generation grew up with technology and the internet being a ubiquitous part of their daily lives. This Generation is causing disruption to the music industry through innovation which is being driven by changing consumer habits which take place inside the digital spaces that these digital natives in-habit.<sup>2</sup>

## GENERATION Z

These 'Digital Natives' according to a study by the Pew Research Center, “97% of teens have access to a smartphone, and 45% say they are online almost constantly.”<sup>4</sup>

With increased access to technology and the internet from a young age, with many having their first experiences with smartphones, tablets, and laptops before the age of 10.<sup>5</sup> This has led to Generation Z spending more time on social media than any other generation, with the average teenager spending around eight hours per day on social media platforms<sup>6</sup>.

With the advent of online learning platforms, many members of Generation Z have grown up with the ability to access educational resources and take classes online.<sup>7</sup> During the Covid-19 lock down, the majority of the school year in the UK moved to virtual teaching.

Generation Z also prefer streaming services like Netflix and YouTube over traditional forms of entertainment such as television and movies.<sup>8</sup>

These examples - universal access to technology, connected lives via social media, and with learning, entertainment and spending (consumption) all happening within digital online market places, we are seeing a new media market place emerge, that of Extended Reality, or XR.

## EXTENDED REALITY (XR)

XR is an umbrella term for Virtual Reality, Augmented Reality, Mixed Reality.<sup>9</sup> XR is a technological advancement which is shifting the way the internet is consumed from a 2D text based interface, to a 3D immersive space for social interaction, gaming and commerce.

One of the ways in which Generation Z consumes music is through the use of XR technology, such as virtual concerts in the popular video game Fortnite and short music videos on the social media platform TikTok – other platforms also exist, including social video game worlds of Roblox and

Minecraft and streaming platforms such as Spotify and Tidal, but we will focus on Fortnite and TikTok here.

Fortnite, in particular, has become a major platform for virtual concerts, with artists such as Travis Scott and Marshmello performing in-game concerts to millions of players.<sup>10</sup>

These virtual concerts allow fans to experience live music in a unique and immersive way, and also provided a new revenue stream for artists who may be unable to tour due to the COVID-19 pandemic, this trend continued into 2023, with no signs of stopping, demonstrating that XR entertainment made popular during the pandemic, is here to stay.

These virtual concerts have grown out of the cultural shift of listening via streaming, with the most popular Fortnite virtual concerts being performed by top 10 streaming music artists, such as Ariana Grande and Travis Scott.<sup>11</sup>

According to a report by Music Business Worldwide, Generation Z is driving the growth of music streaming, with streaming now accounting for 75% of all music consumption among this age group.<sup>12</sup> further evidence to support this comes from a study by the IFPI, which found that Generation Z is more likely to discover new music through social media and streaming services than through traditional media. This study revealed that 70% of Generation Z respondents said they discovered new music through streaming services, compared to just 53% of older respondents.<sup>13</sup>

This behavioral shift in music consumption leading to music discovery and then fandom leads to the natural evolution of these streaming fans. Gen Z are discovering new music via streaming and then attending XR virtual concerts, without leaving the phone, tablet, laptop or headset – and the reverse is also true, with artists connecting with a global audience of data points, at a global scale – the location of artists and fans is now irrelevant in an XR based music economy.

According to a report by MIDiA Research, Generation Z is more likely to engage with music through virtual and augmented reality (XR) than any other age group. The report found that 63% of Generation Z respondents said they would be interested in using XR to experience live music events, compared to just 51% of older respondents.<sup>14</sup>

Generation Z is also leading the charge when it comes to music consumption on TikTok, with the app's users mostly aged between 16 and 24. A recent Billboard report found that TikTok users spent an average of 52 minutes per day listening to music on the platform, with the app's algorithm making personalized recommendations based on their listening history and preferences.<sup>15</sup>

Tik Tok's arrival as a disruptor to the music industry is relatively new, with the app launching in the UK in 2017<sup>16</sup>, and so this field of research is relatively new, but it demonstrates that Gen Z consumer behavior appears to be affected by the Tik Tok app, coupled with early adopter usage of XR technology, further demonstrates to this researcher that habits are shifting.

The advent of virtual concerts have been successful in bringing together large audiences, in Fortnite Travis Scott had 12.3 million attendees, Ariana Grande had been priming her audience ready for a virtual tour over several years prior to her debut virtual concert.<sup>17</sup>

The largest music venue in the world is Great Strahov Stadium in Prague, Czech Republic, capacity 250,000<sup>18</sup> – for an artist to reach via live performance to equal these Fortnite performances, they would need to play 48 times in this one venue, clearly unsustainable, and so virtual concerts and tours, open up both creative and business opportunities for the music artist.

Alongside virtual concerts, XR technology is being used through the use of AR filters on social media platforms like TikTok and Snap Chat.

Artists and music labels have been using TikTok's AR filters to promote their music and create interactive experiences for their fans. For example, Ariana Grande has used TikTok's AR filters to promote her album "Positions"<sup>19</sup>.

To an older generation of Millennial through to Boomers, what is being presented here is an abstract and very alien concept – what we are seeing is a digital society co-exist, yet influence our existing in real life / IRL society and will be the basis I am sure of future academic research.

## TIKTOK TRENDS

TikTok has become a powerful platform for music discovery and promotion. The app's algorithm is designed to match users with content that they are likely to enjoy, which has led to many viral music hits, and for new ways for artists to earn from their IP.

Music-based events that take place on TikTok.

1. **Music Challenges:** These are viral challenges that involve using a specific song or sound in a video, often with a specific dance or lip-sync routine.
2. **Virtual Concerts:** Some musicians and performers have started hosting virtual concerts on TikTok, live streaming their performances for fans to watch and interact with.
3. **Music Collaborations:** Musicians and artists have begun collaborating on TikTok by creating videos together, often using the app's duet feature.
4. **Music Contests:** Some music labels and record companies have started holding music contests on TikTok, giving up-and-coming artists an opportunity to showcase their talents and potentially get signed to a record deal.
5. **Music Education:** Many music teachers and educators have started to use TikTok as a way to teach music lessons and share their knowledge.<sup>20</sup>

## NON FUNGIABLE TOKENS (NFT)

As Generation Z continues to shape the music industry, the use of NFTs (non-fungible tokens) and blockchain technology is becoming increasingly important.

NFTs are a type of digital asset that can represent ownership of a unique item, such as a piece of art or a collectible. In the music industry, NFTs can be used to represent ownership of a digital album or a virtual concert ticket, for example. This allows artists to monetize their music in new ways and for fans to own a piece of their favorite artist's work.<sup>21</sup>

So how are Generation Z using NFT's and how might these disrupt the music industry – 4 key points of interest.

**Collecting digital art:** Trading NFTs to collect and trade digital art, with platforms like Rarible and SuperRare becoming popular among young collectors.<sup>22</sup>

**Virtual real estate:** Many young people are using NFTs to buy and sell virtual real estate in online gaming worlds such as Decentraland and Somnium Space.<sup>23</sup>

**Collecting in-game items:** Some young gamers are using NFTs to collect and trade unique in-game items from popular games like Axie Infinity and Sorare.<sup>24</sup>

**Music collectibles:** Young music fans are using NFTs to collect and trade digital collectibles tied to their favorite artists, such as exclusive audio recordings and virtual meet-and-greets.<sup>25</sup>

All of this NFT technology sits upon Blockchain technology.

Blockchain technology is a decentralised ledger of ownership and here is an example of how this can work for the music industry.

An artist might release just 1000 digital MP3 singles of a music track, for \$50 each as an NFT, yet there are 1 million MP3's in circulation on laptops and phones across the world of the same song, its also on Spotify streaming for free.

But because the artists minted 1000 NFT versions of the music track, there are only 1000 true originals, each with its own Block chain serial number. A unique trait of these 1000 true NFT originals is that they have in-coded within them, a way for fans to attend a virtual space and meet the artist,

with the NFT acting as a kind of membership card – this slight difference, and unique way of engaging fans, <sup>26</sup> means that the NFT version of the music track has a greater value on the primary and secondary market, making them highly sort after, if demand outstrips supply then the secondary market resell price goes up.

A streaming version of the same song has none of the same benefits.

Blockchain music releases can be used to create a transparent and secure system for tracking the ownership and distribution of music. This can help to ensure that artists are properly compensated for their work, and can also help to combat piracy.

### CONCLUSION

Disruption is certainly happening and both artists and fans are benefiting – but this technology and the digital society that is the driving force of this early adoption is still in its infancy– this researcher has attempted to capture what has stayed with us for the past 3 years, by giving a snapshot into this evolving industry.

The Covid-19 lock downs formed a catalyst for an acceleration which might have taken years to come to fruition, with the lockdown events giving entrepreneurs and business a literal captive audience to experiment with on a daily basis.

As Generation Z continues to shape the industry, the use of NFTs and Blockchain technology will likely become increasingly important in helping artists monetize their work by creating proof of ownership, and a direct link to the fan who purchased. <sup>27</sup>

My Hypothesis is, that we are likely to see digital artists as avatars, selling millions of NFTs, whom are able to work 24/7 and perform virtual concerts to hundreds of millions of fans on a Metaverse tour, in all sorts of XR music situations, <sup>28</sup> from VR concerts and meet and greets in VR to the way music is performed, we are likely to see a singular music avatar being performed by a collective of creatives, piloted by humans and AI in IRL.

This will co-exist with legacy IRL musicians – but earnings, which are the main driving force of the music business (the likes of Universal music and Warners have shareholders) have a ceiling with how much revenue they can earn, a ticket to a gig can only cost so much, performed to so many people <sup>29</sup> and be replicated X amount of times before that artist decides enough is enough – but with Avatars and video game technology – the revenues are seemingly infinite.

## NOTES

- <sup>1</sup> Tom Koulopoulos, *Gen Z Effect: The Six Forces Shaping the Future of Business*, (Taylor & Francis Inc, 2016) 5.
- <sup>2</sup> Jason Dorsey, *Zconomy : How Gen Z will change the Future of Business and what to do about it.* (Harper Business, 2020), 4
- <sup>3</sup> Anderson, Monica, and Jingjing Jiang. "Teens, social media & technology 2018." *Pew Research Center* 31, no. 2018 (2018): 1673-1689.
- <sup>4</sup> Common Sense Media, "Generation Z Goes Digital: The New Digital Divide," 2016 – Common sense media platform, Accessed January 19th 2023, <https://www.commonsensemedia.org/>
- <sup>5</sup> New York Times, Accessed Dec 18th 2022, <https://www.nytimes.com/2022/03/24/well/family/child-social-media-use.html>
- <sup>6</sup> Further Education News – Accessed January 18th 2023, <https://www.fenews.co.uk/skills/more-generation-z-youngsters-choose-distance-learning/>
- <sup>7</sup> 5 ways Gen Z are consuming media – Accessed 13th January 2023, <https://variety.com/2021/digital/news/gen-z-survey-deloitte-tv-movies-ranking-1234954207/>
- <sup>8</sup> What is XR, Matthew Ball has written a foundational book on the Metaverse / XR and the Future of Consumption in this area – Matthew Ball, *The Metaverse and how it will revolutionize everything*, (Liveright, 2022)
- <sup>9</sup> Travis Scott, BBC, Accessed 19th January 2023, <https://www.bbc.co.uk/news/technology-52410647>
- <sup>10</sup> Forbes deep dive, Forbes, Accessed 20th January 2023, <https://www.forbes.com/sites/marisadellatto/2022/12/01/most-popular-music-of-2022-bad-bunny-dominates-billboard-spotify-pandora-and-apple-music-charts/>
- <sup>11</sup> Insights into the growth happening in the market, Accessed 23rd January 2023 <https://www.musicbusinessworldwide.com/generation-z-drives-streaming-growth-as-75-of-consumption-comes-from-younger-listeners/>
- <sup>12</sup> Ifpi represent the recording music industry, Accessed 12th January 2023, <https://www.ifpi.org/downloads/GMR2019.pdf>
- <sup>13</sup> Midia Research, Accessed 19th January 2023, <https://midiaresearch.com/generation-z-are-more-likely-to-engage-with-music-through-xr-than-any-other-age-group/>
- <sup>14</sup> Billboard is the US Official charts company, Accessed 19th January 2023, <https://www.billboard.com/articles/business/chart-beat/8544511/tiktok-music-consumption-study>
- <sup>15</sup> TikTok was launched back in September 2017, 2017 usage 1.8 percent of smartphone users in the United Kingdom (UK). Accessed January 19th 2023 <https://www.statista.com/statistics/1091398/tiktok-penetration-in-the-uk/>
- <sup>16</sup> Travis Scott's Fortnite concert drew 12.3 million players, Variety, Accessed 19th January 2023, <https://variety.com/2020/digital/news/travis-scott-fortnite-record-viewers-live-1234589033/> Ariana Grande in the Verge (Tech bible) Accessed 19th January 2023, <https://www.theverge.com/2021/8/9/22616664/ariana-grande-fortnite-rift-tour-worldbuilding-storytelling>
- <sup>17</sup> Largest music venue in the world and capacity as reported by Newsweek is Great Strahov Stadium Initially built for synchronized gymnastics, the Great Strahov Stadium in Prague, Czech Republic, Capacity 250,000 spectators. Newsweek, Accessed 19th January 2023, <https://www.newsweek.com/biggest-music-venues-world-1627611>
- <sup>18</sup> Ariana Grande is changing the face of marketing music – Marketing magazine, the appreciation engine, Accessed 13th January 2023, <https://get.theappreciationengine.com/2019/03/19/ariana-grande-digital-marketing-campaign/>
- <sup>19</sup> Excellent TikTok Book. D.Bondy Valdovino Kaye, Jing Zeng and Patrik Wilkstrom has laid the foundation for how Tik Tok works and why. D.Bondy Valdovino Kaye, Jing Zeng and Patrik Wilkstrom Tik Tok, (Polity Press, Cambridge, 2022)
- <sup>20</sup> Das, Dipanjan, Priyanka Bose, Nicola Ruaro, Christopher Kruegel, and Giovanni Vigna. "Understanding security issues in the NFT ecosystem." *arXiv preprint arXiv:2111.08893* (2021).
- <sup>21</sup> Gen Z and NFTs – Forbes, Accessed 17th January 2023, <https://www.forbes.com/sites/forbesbusinesscouncil/2022/04/13/why-gen-z-may-prove-nfts-to-be-more-than-just-hype-culture/>

- <sup>22</sup> Generation Z investing in Virtual real estate – Accessed 13th January 2023, <https://techround.co.uk/news/gen-z-likely-to-buy-digital-land-in-the-metaverse-as-their-first-property-purchase/>
- <sup>23</sup> Generation Z and NFT gaming – Coin Desk, Accessed 13th January 2023, <https://www.coindesk.com/layer2/2022/07/12/watch-out-for-illicit-actors-gaming-crypto-games/>
- <sup>24</sup> Forbes and how NFT's are changing the music industry – Forbes, Accessed 23rd January 2023, <https://www.forbes.com/sites/falonfatemi/2022/01/24/nfts-and-the-future-of-music/>
- <sup>25</sup> Das, Dipanjan, Priyanka Bose, Nicola Ruaro, Christopher Kruegel, and Giovanni Vigna. "Understanding security issues in the NFT ecosystem." *arXiv preprint arXiv:2111.08893* (2021).
- <sup>26</sup> Marc Beckham. *The Comprehensive Guide to NFTs, Digital Artwork, and Blockchain Technology*. Simon and Schuster, 2021.
- <sup>27</sup> Henry Jenkins. "The future of fandom." *Fandom: Identities and communities in a mediated world* (2007): 357-364.
- <sup>28</sup> Célin Jiang,. "The making of popstar fembots: Participation, co-creation, or online cultural exploitation?." *Hybrid. Revue des arts et médiations humaines* 8 (2022).
- <sup>29</sup> Taylor swift sues Ticket master, The Guardian online, Accessed 12th January 2023, <https://www.theguardian.com/music/2022/dec/05/taylor-swift-fans-sue-ticketmaster-over-tour-sale-debacle>

## BIBLIOGRAPHY

- Anderson, Monica, and Jingjing Jiang. "Teens, social media & technology 2018." *Pew Research Center* 31, no. 2018 (2018): 1673-1689.
- D.Bondy Valdovino Kaye, Jing Zeng and Patrik Wilkstrom, *Tik Tok*, (Polity Press, Cambridge, 2022)
- Matthew Ball, *The Metaverse and how it will revolutionize everything*, (Liveright, 2022)
- Beckham Marc. *The Comprehensive Guide to NFTs, Digital Artwork, and Blockchain Technology*. Simon and Schuster, 2021.
- BBC, "Travis Scott" Accessed 19th January 2023, <https://www.bbc.co.uk/news/technology-52410647>
- Billboard, "Tik Tok Music Consumption" Accessed 19th January 2023, <https://www.billboard.com/articles/business/chart-beat/8544511/tiktok-music-consumption-study>
- Business Insider, Accessed January 23rd 2023, <https://www.businessinsider.com/gen-z-shopping-habits-kill-brands-2019-7?r=US&IR=T>
- Coin Desk, "Generation Z and NFT gaming" – Coin Desk, Accessed 13th January 2023, <https://www.coindesk.com/layer2/2022/07/12/watch-out-for-illicit-actors-gaming-crypto-games/>
- Common Sense Media, "Generation Z Goes Digital: The New Digital Divide," 2016 – Common sense media platform, Accessed January 19th 2023, <https://www.common Sense Media.org>
- Das, Dipanjan, Priyanka Bose, Nicola Ruaro, Christopher Kruegel, and Giovanni Vigna. "Understanding security issues in the NFT ecosystem." *arXiv preprint arXiv:2111.08893* (2021)
- Dorsey Jason, *Zconomy : How Gen Z will change the Future of Business and what to do about it*. (Harper Business, 2020)
- Further Education News – Accessed January 18th 2023, <https://www.fenews.co.uk/skills/more-generation-z-youngsters-choose-distance-learning/>
- Forbes, "Bad Bunny Dominates" Accessed 20th January 2023, <https://www.forbes.com/sites/marisadellatto/2022/12/01/most-popular-music-of-2022-bad-bunny-dominates-billboard-spotify-pandora-and-apple-music-charts/>
- Forbes look at "Gen Z and NFTs" – Forbes, Accessed 17th January 2023, <https://www.forbes.com/sites/forbesbusinesscouncil/2022/04/13/why-gen-z-may-prove-nfts-to-be-more-than-just-hype-culture/>
- Forbes, "NFT and the future of music; – Accessed 23rd January 2023, <https://www.forbes.com/sites/falonfatemi/2022/01/24/nfts-and-the-future-of-music/>
- Guardian online, "Taylor Swift fans sue ticketmaster", Accessed 12th January 2023, <https://www.theguardian.com/music/2022/dec/05/taylor-swift-fans-sue-ticketmaster-over-tour-sale-debacle>
- Jenkins Henry. "The future of fandom." *Fandom: Identities and communities in a mediated world* (2007): 357-364.
- Jiang Celin,. "The making of popstar fembots: Participation, co-creation, or online cultural exploitation?." *Hybrid. Revue des arts et médiations humaines* 8 (2022).
- IFPI, Accessed 12th January 2023, <https://www.ifpi.org/downloads/GMR2019.pdf>

Koulopoulos Tom , *Gen Z Effect: The Six Forces Shaping the Future of Business* , (Taylor & Francis Inc, 2016  
Midia Research "Generation Z are more likely to engage" Accessed 19th January 2023,  
<https://midiaresearch.com/generation-z-are-more-likely-to-engage-with-music-through-xr-than-any-other-age-group/>  
Music Business World-wide, "Generation Z drives growth", Accessed 23rd January 2023  
<https://www.musicbusinessworldwide.com/generation-z-drives-streaming-growth-as-75-of-consumption-comes-from-younger-listeners/>  
News Week, "Biggest music venues" Accessed 19th January 2023, <https://www.newsweek.com/biggest-music-venues-world-1627611>  
New York Times, Accessed Dec 18th 2022, <https://www.nytimes.com/2022/03/24/well/family/child-social-media-use.html>  
Statista, "Tik Tok and the UK" Accessed January 19th 2023 <https://www.statista.com/statistics/1091398/tiktok-penetration-in-the-uk/>  
Techound, "Generation Z investing in Virtual real estate" – Accessed 13th January 2023,  
<https://techround.co.uk/news/gen-z-likely-to-buy-digital-land-in-the-metaverse-as-their-first-property-purchase/>  
The Appreciation Engine, Accessed 13th January 2023,  
<https://get.theappreciationengine.com/2019/03/19/ariana-grande-digital-marketing-campaign/>  
Variety "5 ways Gen Z are consuming media" – Accessed 13th January 2023,  
<https://variety.com/2021/digital/news/gen-z-survey-deloitte-tv-movies-ranking-1234954207/>  
Variety, "Travis Scott and Fortnite", Accessed 19th January 2023, <https://variety.com/2020/digital/news/travis-scott-fortnite-record-viewers-live-1234589033/>  
Vice, "Digital fashion", Accessed 12th January 2023, <https://i-d.vice.com/en/article/pkgpgg/digital-fashion>

# ALTERNATIVE FUTURES – ENVISIONING BOLZANO, ITALY

Authors:

**MUSTAPHA EL MOUSSAOUI, KRIS KROIS**

Affiliation:

FREE UNIVERSITY OF BOLZANO, ITALY

---

## INTRODUCTION

When we talk about cities, the first thing that pops up in our minds is functional concrete blocks with vehicle-demarcating urban zoning.

As humans yearn to be in nature, we could have other choices where citizens and trees demarcate city zoning instead of vehicles, a city that could be beautiful, natural, and sustainable, an alternative to the current polluted, noisy, exclusive, and alienating cities.

Many urban dwellers have attempted to make a living in dominant global multicultural, fractured, cosmopolitan, and highly varied environments over the past century, where difference, not homogeneity, is the rule. Yet, mainstream urban planning problematizes the city's increasing heterogeneity and the tensions and conflicts that come with it in an effort to control the urban wilderness through policies and plans. According to this perspective, today's metropolis is "divided," "unsafe," and made up of "the underclass" and "the poor".<sup>1</sup>

However, many writers, urbanist, and philosophers, talked about the importance of changing the nature of how we approach cities by integrating nature into our urban fabric, and how this could be of a benefit to our ecology, biodiversity, and our personal well-being. Some theorists approached these ideas from a sociological perspective like Lefebvre and the notion of space production. Others approached the concept in a form of a science fiction, like the Canadian novelist Margret Atwood in her 2009 novel "The Year of the Flood", where it is set in a post-apocalyptic world where most of humanity has been wiped out by a pandemic. The remaining survivors live in a self-sustaining, ecological community called God's Gardeners, who prioritize living in harmony with the natural world. The novel explores themes of environmentalism, genetic engineering, and the relationship between humans and other species.<sup>2</sup>

This paper looks into alternatives of how we could approach our cities from a speculative design perspective before hindering into policies. In specific, this paper looks at Bolzano-Bozen in Italy and what are the other alternatives that we could have in some specific neighbourhoods. Our research focuses on developing a visual narrative of city streets where citizens gain back their cities by endorsing healthy public spaces and by showing how streets could be safer for all.

For this research, we used collages, AI aided technologies, and renderings to imagine a different outcome for our city streets. Moreover, we collect and highlight the main ideas into approach a sustainable eco social utopia collected from wide range of academics and writers.

## **CITIES PROBLAMATICS AND PROSPECTED CHANGES**

Cities play a crucial role in the advancement of human kind. Cities' diverse time structures enable their inhabitants to see history and culture, and as a result, "the mind takes form in the city" and it is "man's greatest creation of art".<sup>3</sup> However, western governments have retreated from the responsibility of creating and managing public spaces in cities due to economic neoliberalism and austerity, making way for corporate interests.<sup>4</sup> Commercialization and commodification have aided in raising maintenance, safety, and hygiene standards in public areas but have also weakened the democratic function that these areas are meant to serve.<sup>5</sup> Even in places that are officially open to the public, poor and minority populations are frequently made to feel uncomfortable or completely excluded.<sup>6</sup>

The city is a complex, open, and dynamic system due to the numerous relationships among the constituent parts, the ability of exogenous factors to alter its status, and the relationships among the parts themselves. Cities are both the biggest resource consumers and the biggest contributors to environmental deterioration, therefore sustainable development can only be achieved in sustainable cities. Moreover, cities face a range of interconnected problems that impact the well-being of their residents and the environment. One of the most pressing problems is pollution, which can have serious health impacts on residents, especially in cities with poor air quality. In addition to pollution, cities also face problems with traffic congestion, which can lead to longer commute times, increased stress, and decreased productivity. Social inequality is another major problem in many cities, with marginalized communities often facing barriers to accessing basic services and opportunities. This can include limited access to quality education, healthcare, and affordable housing. Additionally, many cities struggle with insufficient green spaces, which can impact mental health and limit opportunities for outdoor recreation. These problems are often the result of an urban planning model that prioritizes economic growth and private property over social and environmental well-being. Even though rankings are frequently created and prizes are given, especially in Bolzano, to undertake initiatives aimed at sustainability there still appears to be a long way to go before there is a comprehensive project that addresses synergistically all the dimensions of sustainability and aims to ensure the sustainability of the urban system as a whole.<sup>7</sup> Nevertheless, in response to these concerns and problematics the EU launched the New European Bauhaus<sup>8</sup> initiative in order to combat part of these concerning issues.

Nonetheless, as urbanization continues to drive global population growth, cities face a range of challenges that impact the well-being of their residents and the environment. Innovative approaches to urban planning, offer a vision of a more sustainable and just future for cities. Bolzano,<sup>9</sup> a city in the northern Italian region of South Tyrol, is one example of a city that is applying eco-social principles to its urban planning. Bolzano has long been committed to sustainability and has implemented a range of policies and programs to reduce carbon emissions, promote active transportation, and enhance green spaces. As a result, Bolzano is consistently ranked as one of the most livable cities in Italy. However, Bolzano is not without its challenges, and as an institution part of the New European Bauhaus under the New European Bauhaus of the Mountains, we work on processes to create a better future with new implications to make our cities more liveable and just, a model for a futuristic utopia. Henceforth, by applying eco-social principles to these existing problems, Bolzano has the potential to become a model for sustainable and just urban development.

## **ECO-SOCIAL UTOPIAS**

Ecosocial utopia is a vision for a future society that is both socially just and ecologically sustainable. The concept is based on the idea that humans are part of an interconnected web of life, and that our economic, social, and political systems should reflect this reality. Ecosocial utopia is an alternative to

the dominant model of capitalist development, which has led to environmental degradation, social inequality, and the exploitation of people and resources around the world. The vision of ecosocial utopia is grounded in principles of ecological sustainability, social justice, and participatory democracy.<sup>10</sup>

One of the key features of ecosocial utopia is a more equitable distribution of resources. Ecosocial utopians argue that access to resources such as food, water, and energy should be considered a fundamental human right, and that these resources should be managed in a way that benefits everyone rather than just a privileged few.<sup>11</sup> This would require a radical shift in economic and political power, as well as a new ethic of care for the natural world. Moreover, the concept opens up to a new relationship between humans and the natural world, as humans should live in harmony with the environment, rather than exploiting it for short-term economic gain. This requires a shift in values and attitudes towards nature, as well as a new approach to economic development that prioritizes sustainability over growth.<sup>12</sup>

While ecosocial utopia is a hypothetical concept, it has inspired many social and environmental movements around the world. Ecosocialists and ecofeminists, for example, have drawn on the ideas of ecosocial utopia to argue for more sustainable and just economic systems, and to promote policies that prioritize the well-being of people and the planet over short-term economic gains.<sup>13</sup>

Donna Haraway, for example, is a prominent scholar and feminist thinker who has written extensively on the relationship between humans and the natural world, and the need for a new ethics and politics of the environment. In her book "Staying with the Trouble: Making Kin in the Chthulucene," Haraway argues for the need to move beyond the categories of nature and culture, and to recognize the complex and entangled relationships that exist between humans and other species.<sup>14</sup>

Haraway's vision of a more just and sustainable future is grounded in the idea of "staying with the trouble," or the willingness to face and engage with the complex challenges of our time, such as climate change, economic inequality, and social injustice. She argues that we need to embrace new ways of thinking and being in the world, and to work towards building more collaborative and mutually beneficial relationships with other species and ecosystems.

Haraway's ideas is a step closer to an eco social society, which envisions a more just and sustainable future for all. Both Haraway and ecosocial utopians recognize the need for a radical rethinking of our relationship with the natural world, and the need to build new systems and structures that prioritize ecological sustainability and social justice.

The conceptual relation between thinkers and ecosocial utopias wasn't only limited to philosophers, and urbanists, actually the first thinkers to indulge in such visions are novelists. For example, Ernest Callenbach, envision a type of eco social utopia or "Ecotopia", that is set in a future world where the Pacific Northwest region of the United States has seceded from the rest of the country to form a new nation called Ecotopia. The new nation is based on ecological principles and emphasizes environmental sustainability, social justice, and decentralized decision-making.<sup>15</sup>

In Ecotopia, the cities have been redesigned to prioritize human-scale communities, public transportation, and green spaces. The novel explores themes of environmentalism, alternative energy, and the relationship between humans and nature. It has been influential in the environmental movement, and has been cited as an inspiration for the creation of real-life ecovillages and intentional communities. Likewise, Margaret Atwood has dedicated much of her writing to ecological topics. In her novel "The Year of the Flood," she depicts a world after an apocalyptic event that destroyed most of humanity due to a pandemic. The survivors of this catastrophe live in a self-reliant and eco-friendly society, which values coexisting in balance with the natural environment. The book discusses subjects such as environmentalism, genetic modification, and the interdependent relationship between human beings and other species.<sup>16</sup>

Nevertheless, after all what have been mentioned regarding eco-social utopias, a practical guideline is needed. These guidelines take a form of general instructions rather than specified detailed guidelines.

### **SUSTAINABLE PRINCIPLES TO ACHIEVE AN ECO-SOCIAL UTOPIA**

As ecosocial utopia could be ambiguous in its general term, and it is open to many forms and ideas, in the following we tried to highlight the most important aspects to abide by when considering or designing an ecosocial sustainable utopia.

1. Prioritize sustainable and renewable energy sources: Energy production should come from renewable sources such as solar, wind, or geothermal power. The city's infrastructure should be designed to minimize energy consumption and maximize energy efficiency.<sup>17</sup>
2. Design for walkability and active transportation: Prioritize pedestrian-friendly design and provide safe and efficient bike lanes and public transportation systems to encourage active transportation. This can reduce the city's carbon footprint while promoting healthy lifestyles.<sup>18</sup>
3. Incorporate nature and green space: Prioritize the incorporation of green spaces and nature throughout the city, such as parks, gardens, and green roofs. This can provide numerous environmental and health benefits, including improved air quality, biodiversity, and mental health<sup>19 20</sup>.
4. Encourage community engagement and social cohesion: Foster a strong sense of community and social cohesion by providing safe public spaces, community centers, and cultural institutions. This can promote a sense of belonging and social well-being<sup>21</sup>.
5. Prioritize waste reduction and recycling: Reduction of waste by promoting sustainable consumption and reducing single-use items. The city should also provide efficient and accessible recycling and composting systems<sup>22</sup>. Moreover, minimize resource consumption and waste, through strategies such as circular economy principles, zero-waste policies, and reducing the environmental impact of resource extraction.
6. Embrace innovative technology: Leverage innovative technologies and design to minimize the city's environmental impact and enhance the quality of life for its citizens. This can include innovative waste management, water conservation, and energy-efficient buildings. Moreover, the use of technology and AI to improve sustainability outcomes, such as energy efficiency, waste reduction, and transportation. For example, smart grid systems can reduce energy waste by optimizing energy use, while smart traffic management systems can reduce congestion and emissions.
7. Foster local food production and urban agriculture: Encourage and prioritize local food production through urban agriculture, community gardens, and local farmers' markets. This can promote food security, reduce the carbon footprint of food transportation, and provide citizens with access to fresh, healthy, and locally-sourced food.
8. Design for resilience and adaptability: Prioritize designs that is resilient and adaptable to changing environmental conditions, such as extreme weather events or natural disasters. This can include infrastructure that is resistant to flooding, or buildings that are designed to be easily retrofitted for new uses.
9. Encourage citizen participation and democratic decision-making: Prioritize citizen participation and democratic decision-making to ensure that the city's design and policies reflect the needs and desires of its citizens. This can include participatory budgeting, citizen advisory committees, or other forms of direct democracy<sup>23</sup>.
10. Promote equity and social justice: Prioritize equity and social justice in its policies and design. This can include prioritizing affordable housing, accessible public transportation, and policies that address income inequality and racial disparities<sup>24</sup>.
11. Ensure ethical use of technology and AI: Prioritize the ethical use of technology and AI to ensure that they are used to benefit society and the environment. This can include ensuring transparency in

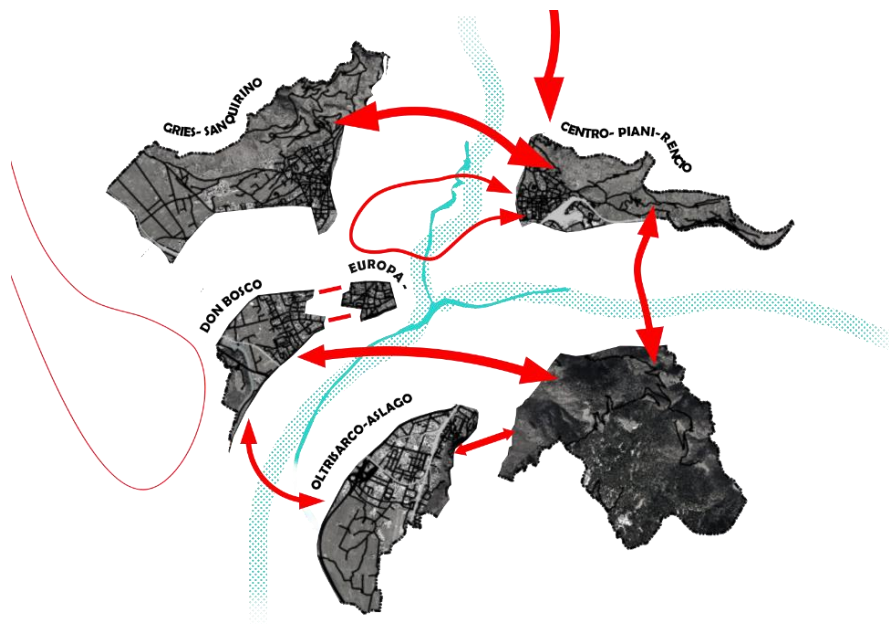
the development and deployment of technology, and ensuring that they do not reinforce existing power imbalances or exacerbate environmental issues.

12. Prioritize open data and data privacy: Prioritize the use of open data and data privacy to ensure that citizens can access and use information to make informed decisions. This can include ensuring that data is collected and used transparently, and that citizens have control over their personal data.

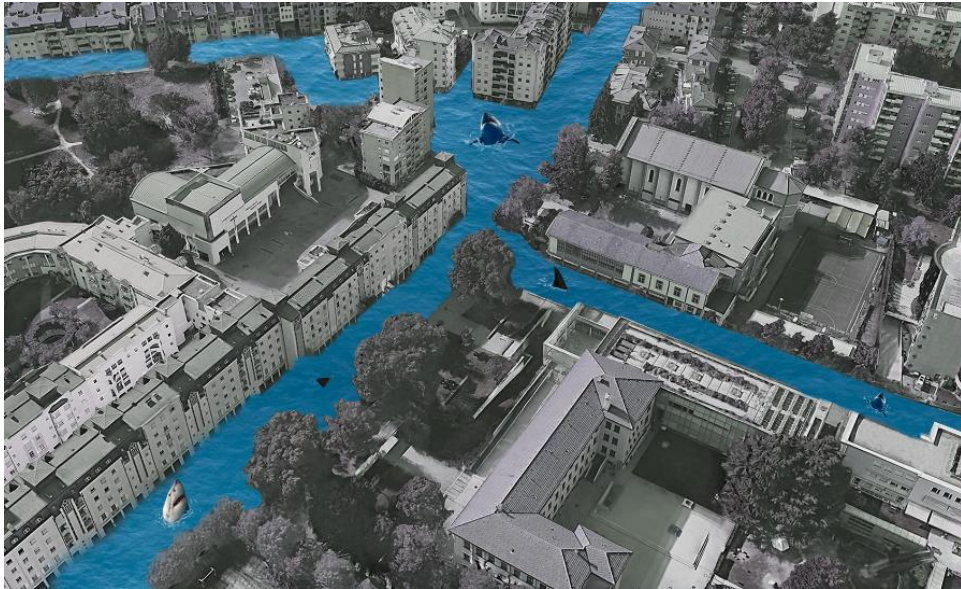
13. Foster innovation and entrepreneurship: Foster innovation and entrepreneurship in the technology sector to promote sustainable solutions to environmental and social challenges. This can include creating incubators or accelerators that provide resources and support for sustainable tech startups.

## VISIONS, DREAMS, AND ALTERNATIVE FUTURES OF BOLZANO

As the we are facing a range of challenges that impact the well-being of their residents and the environment, innovative approaches to our cities surface offering visions of more sustainable and just future for cities. From eco-cities that prioritize environmental sustainability to smart cities that leverage technology to enhance efficiency and livability, there are a range of alternative futures that cities can pursue. In the process of achieving such utopic future we applied some of the rules where it could be applies in order to achieve a different form of neighbourhoods in Bolzano. In that process we used computer renderings and collages at instances, and at other instances we tried with using AI to envision their own perspectives, according to the parables that we are feeding the system. In the following images we will portray the images of the original street, and its alternative. These alternative futures prioritize the well-being of all residents, while also promoting social and environmental sustainability.



*Figure 3. Bolzano Re-imagined as how urban corridors are disconnecting city regions. These disconnections and continuations are applied based to sociological readings on the city This image is inspired by the Situationists.*



*Figure 4. City streets and infrastructure around Piazza Don Bosco depicted as water bodies disconnecting the flow and connection of humans between neighborhoods.*



*Figure 5. Original Image from around Don Bosco Piazza in Bolzano*



*Figure 6. Image recreation by collage and renderings - The mode created is one of a sustainable approach where it is still a normal city street, however, streets belong more to pedestrians and cyclists rather than cars. In this format we changed into one car lane rather than two. The other lane is detoured to another street.*



*Figure 7. In this image it considers the street as a complete wild urban corridor, where fauna and flora can flourish without any interpretation.*



*Figure 8. Don Bosco Piazza original photo*



*Figure 9. Don Bosco Piazza remodeled by considering the principles discussed earlier in this paper.*



Figure 10. AI created image by DALL-E with the following sentence "Alternative green sustainable Don Bosco Piazza"



Figure 11. AI created image by DALL-E with the following sentence "Alternative future utopic Bolzano"



Figure 12. AI created image by DALL-E with the following sentence "Alternative post-apocalyptic dystopic Bolzano"

## CONCLUSION

When we think of cities, many of us imagine the classic urban landscape of functional concrete buildings, busy roads, and streets filled with cars. However, there is growing recognition that this model of urban design is not sustainable, and that cities need to be reimagined to better reflect the needs and desires of their inhabitants.

One way to do this is by incorporating nature into the urban fabric. As humans, we have an innate connection to the natural world, and research has shown that exposure to nature can have significant benefits for our mental and physical well-being. By demarcating city zoning with trees and green spaces rather than vehicles, we can create a more beautiful, natural, and sustainable city that better meets the needs of its citizens.

Unfortunately, mainstream urban planning often emphasizes control and homogeneity over diversity and inclusivity. Planners may view the increasing heterogeneity of the modern city as a problem to be solved rather than an opportunity to be embraced. This can lead to tensions and conflicts, particularly in neighborhoods where different cultures, socioeconomic groups, or lifestyles coexist.

However, there is a growing movement among urbanists, writers, and philosophers to reimagine the city as a space that embraces diversity and incorporates nature. Some theorists approach these ideas from a sociological perspective, such as Henri Lefebvre and his notion of space production, while others explore them through science fiction, such as Margaret Atwood's novel "The Year of the Flood."

In this paper, we take a speculative design approach to explore alternative ways to approach urban design. Specifically, we focus on Bolzano-Bozen, a city in northern Italy, and explore the possibilities for creating healthier, safer, and more inclusive streets in some of its neighborhoods. Our research uses collages, AI technology, and renderings to create a visual narrative of what these streets could look like and how they could function.

By reimagining the city in this way, we hope to spark a conversation about the future of urban design and the role of nature in creating healthier, more sustainable, and more inclusive cities. While it can be challenging to move from vision to reality, we believe that by exploring new possibilities and challenging the status quo, we can create a better future for all urban inhabitants. Moreover, to put a corner stone for an eco-social approach we enlisted a guideline of ideas to be thought about when designing a city.

## ACKNOWLEDGEMENTS

This paper has been produced through a research funded by the National Recovery and Resilience Plan (PNRR) recovery fund by the Municipality of University and Research in Italy.

## NOTES

- <sup>1</sup> Guy, Baeten. "Western Utopianism/Dystopianism and the Political Mediocrity of Critical Urban Research." *Geografiska Ann: Series B, Human Geography* 84, no. 3/4 (2002): 143-152.
- <sup>2</sup> Margret, Atwood. *The Year of the Flood*. Toronto: McClelland & Stewart, 2009.
- <sup>3</sup> Mumford, Lewis. "The Culture of Cities." In *Metropolis: Center and Symbol of Our Times*, edited by Philip Kasinitz, 15-32. New York: New York University Press, 1995. Originally published in 1938.
- <sup>4</sup> Matthew, Carmona. "Re-Theorising Contemporary Public Space: A New Narrative and a New Normative." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 8 (2015): 373-405.
- <sup>5</sup> Lidia, Mierzejewska. "Appropriation of Public Urban Space as an Effect of Privatisation and Globalisation." *Quaestiones Geographicae* 30 (2011): 39-46; Elton, Chan. "Public Space as Commodity: Social Production of the Hong Kong Waterfront." *Proceedings of the Institution of Civil Engineers-Urban Design and Planning* 173 (2020): 146-155.
- <sup>6</sup> Yosef, Jabareen. "'Do It Yourself' as an Informal Mode of Space Production: Conceptualizing Informality." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 7 (2014): 414-428.
- <sup>7</sup> Baeten, "Western Utopianism/Dystopianism," 145.
- <sup>8</sup> The New European Bauhaus is a design initiative launched by the European Commission in September 2020. The initiative aims to create a sustainable and inclusive future for Europe through the integration of art, culture, and technology in the design of buildings and public spaces. The New European Bauhaus is inspired by the Bauhaus movement, which originated in Germany in the 1920s and was known for its emphasis on functional and efficient design. According to the European Commission, the New European Bauhaus aims to "combine design, sustainability, accessibility, affordability, and investment in order to help deliver the European Green Deal." The initiative is focused on three main areas: the built environment, the living environment, and the digital environment.
- <sup>9</sup> Bolzano is a city located in northern Italy, in the region of Trentino-Alto Adige/Südtirol. It is the capital of the province of South Tyrol, and is situated in a valley surrounded by the Dolomite Mountains. Bolzano is a unique city that reflects its rich cultural heritage and history, and has a diverse population of Italian and German speakers. The city's strategic location and its history of being a cultural and economic crossroads has shaped its unique architecture, urbanism and culture.
- <sup>10</sup> Ariel Salleh, Vandana Shica, and John Clark. *Ecofeminism as Politics: Nature, Marx, and the Postmodern*. London: Zed Books, 2017. 21.
- <sup>11</sup> Isabelle Anguelovski, and Carmin JoAnn. "Something Borrowed, Everything New: Innovation and Institutionalization in Urban Climate Governance." *Current Opinion in Environmental Sustainability* 3, no. 3 (2011): 169–75. doi:10.1016/J.COSUST.2010.12.017.
- <sup>12</sup> Saul, Quincy. *The View from Mount Olympus "The Ecosocialist Horizon."* July 6 (2015)
- <sup>13</sup> Salleh, Shica, and Clark, *Ecofeminism as Politics*, 43.
- <sup>14</sup> Donna, Haraway. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press, 2016.
- <sup>15</sup> Ernest, Callenbach. *Ecotopia*. New York: Bantam Books, 1975.
- <sup>16</sup> Margret, Atwood. *The Year of the Flood*. Toronto: McClelland & Stewart, 2009.
- <sup>17</sup> Jeffery, Tumlin. *Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities*. Wiley, 2012
- <sup>18</sup> Michael, Southworth. "Designing the Walkable City." *Journal of Urban Planning and Development* 131, no. 4 (2005): 246–57. [https://doi.org/10.1061/\(asce\)0733-9488\(2005\)131:4\(246\)](https://doi.org/10.1061/(asce)0733-9488(2005)131:4(246)).
- <sup>19</sup> Camilo Ordóñez, Caragh Threlfall, Dave Kendal, Dieter Hochuli, Melanie Davern, Richard Fuller, Rodney van der Ree, and Stephan Livesley. *Urban forest governance and decision-making: A systematic review and synthesis of the perspectives of municipal managers*. *Landscape and Urban Planning*. (2019). 189. 166-180. 10.1016/j.landurbplan.2019.04.020.
- <sup>20</sup> Secretariat of the Convention on Biological Diversity. 2020. *Global Biodiversity Outlook 5*. Accessed February 19, 2023. <https://www.cbd.int/gbo5>.
- <sup>21</sup> Julian Agyeman, Robert D. Bullard, and Bob Evans. *Just Sustainabilities: Development in an Unequal World*. MIT Press, 2016. 43
- <sup>22</sup> Michael A. Berry, and Dennis A. Rondinelli. "Proactive Corporate Environmental Management: A New Industrial Revolution." *The Academy of Management Executive* (1993-2005) 12, no. 2 (1998): 38–50. <http://www.jstor.org/stable/4165456>.

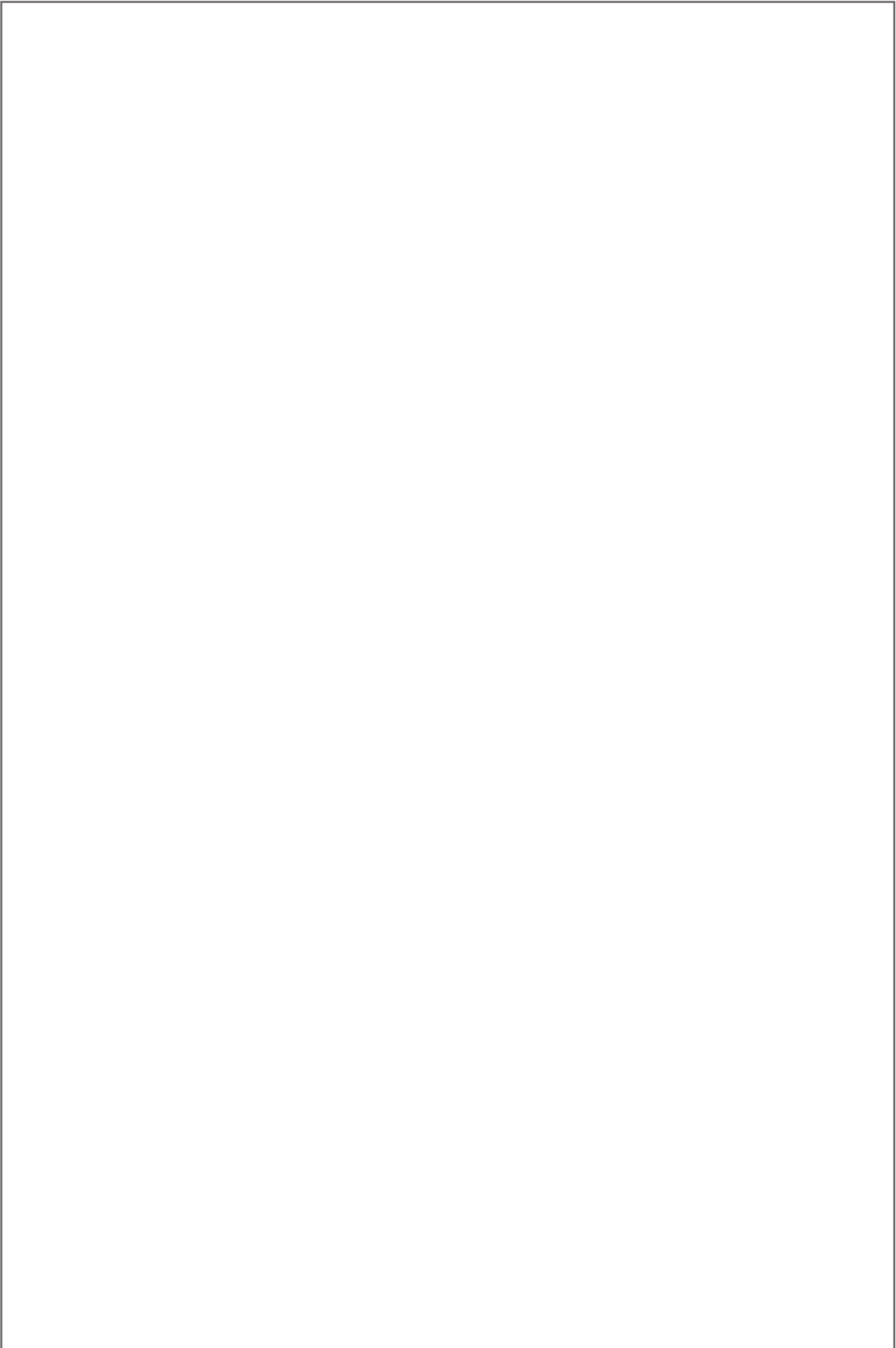
<sup>23</sup> Renée A. Irvin, and John Stansbury. "Citizen Participation in Decision Making: Is It Worth the Effort?" *Public Administration Review* 64, no. 1 (2004): 55–65. <http://www.jstor.org/stable/3542626>.

<sup>24</sup> Agyeman, Bullard, and Evans, *Just Sustainabilities*, 43.

## BIBLIOGRAPHY

- De Biase, Claudia, and Bianca Petrella. 2019. "Residential Neighbourhoods: Utopia and Sustainability." *Resourceedings* 2 (3): 20–30. <https://doi.org/10.21625/resourceedings.v2i3.621>.
- Baeten, Guy. "Western Utopianism/Dystopianism and the Political Mediocrity of Critical Urban Research." *Geografiska Ann: Series B, Human Geography* 84, no. 3/4 (2002): 143–152.
- Atwood, Margaret. *The Year of the Flood*. Toronto: McClelland & Stewart, 2009.
- Beatley, Timothy. *Biophilic Cities: Integrating Nature into Urban Design and Planning*. Washington, D.C.: Island Press, 2011.
- Haraway, Donna. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press, 2016.
- Quincy, Saul. *The View from Mount Olympus "The Ecosocialist Horizon."* July 6 (2015)
- Kellert, Stephen R., and Edward O. Wilson, eds. *The Biophilia Hypothesis*. Washington, D.C.: Island Press, 1995.
- Anguelovski, Isabelle, and Joan Martínez Alier. "The 'Environmentalism of the Poor' Revisited: Territory and Place in Disconnected Glocal Struggles." *Ecological Economics* 102 (2014): 167–76. doi:10.1016/J.ECOLECON.2014.04.005.
- Callenbach, Ernest. *Ecotopia*. New York: Bantam Books, 1975.
- Benyus, Janine M. *Biomimicry: Innovation Inspired by Nature*. New York: HarperCollins Publishers, 2002.
- Newman, Peter, Timothy Beatley, and Heather Boyer. *Resilient Cities: Overcoming Fossil Fuel Dependence*. Island Press, 2017.
- United Nations. "Sustainable Development Goal 11: Sustainable cities and communities." Accessed February 19, 2023. <https://www.un.org/sustainabledevelopment/cities/>.
- Agyeman, Julian, Robert D. Bullard, and Bob Evans. *Just Sustainabilities: Development in an Unequal World*. MIT Press, 2016.
- Irvin, Renée A., and John Stansbury. "Citizen Participation in Decision Making: Is It Worth the Effort?" *Public Administration Review* 64, no. 1 (2004): 55–65. <http://www.jstor.org/stable/3542626>.
- Ordóñez Camilo, Threlfall Caragh, Kendal Dave, Hochuli Dieter, Davern Melanie, Fuller Richard, van der Ree Rodney, and Livesley Stephen. *Urban forest governance and decision-making: A systematic review and synthesis of the perspectives of municipal managers*. *Landscape and Urban Planning*. 2019. 189. 166–180. 10.1016/j.landurbplan.2019.04.020.
- European Commission. 2020. "EU Circular Economy Action Plan." Accessed February 19, 2023. [https://ec.europa.eu/environment/circular-economy/index\\_en.htm](https://ec.europa.eu/environment/circular-economy/index_en.htm).
- Berry, Michael A., and Dennis A. Rondinelli. "Proactive Corporate Environmental Management: A New Industrial Revolution." *The Academy of Management Executive* (1993-2005) 12, no. 2 (1998): 38–50. <http://www.jstor.org/stable/4165456>.
- Intergovernmental Panel on Climate Change (IPCC). 2011. *Special Report on Renewable Energy Sources and Climate Change Mitigation*. Accessed February 19, 2023. <https://www.ipcc.ch/report/special-report-on-renewable-energy-sources-and-climate-change-mitigation/>.
- Southworth, Michael. "Designing the Walkable City." *Journal of Urban Planning and Development* 131, no. 4 (2005): 246–57. [https://doi.org/10.1061/\(asce\)0733-9488\(2005\)131:4\(246\)](https://doi.org/10.1061/(asce)0733-9488(2005)131:4(246)).
- Secretariat of the Convention on Biological Diversity. 2020. *Global Biodiversity Outlook 5*. Accessed February 19, 2023. <https://www.cbd.int/gbo5>.
- Sallis, James F., Christina Spoon, Nick Cavill, Jacqueline Kerr Engelberg, Klaus Gebel, Michael Parker, Carol M. Thornton, et al. 2016. "Co-Benefits of Designing Communities for Active Living: An Exploration of Literature." *International Journal of Behavioral Nutrition and Physical Activity* 13, no. 1 (April): 1–12.
- Tumlin Jeffery. 2012. *Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities*. Wiley.
- European Commission. (2020). *New European Bauhaus*. [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/new-european-bauhaus\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/new-european-bauhaus_en)
- European Parliament. (2021). *Resolution of 21 January 2021 on the New European Bauhaus*.

- [https://www.europarl.europa.eu/doceo/document/TA-9-2021-0015\\_EN.html](https://www.europarl.europa.eu/doceo/document/TA-9-2021-0015_EN.html)
- Anguelovski, Isabelle, and JoAnn Carmin. "Something Borrowed, Everything New: Innovation and Institutionalization in Urban Climate Governance." *Current Opinion in Environmental Sustainability* 3, no. 3 (2011): 169–75. doi:10.1016/J.COSUST.2010.12.017.
- Mumford, Lewis. "The Culture of Cities." In *Metropolis: Center and Symbol of Our Times*, edited by Philip Kasinitz, 15-32. New York: New York University Press, 1995. Originally published in 1938.
- Kasinitz, Philip. "Introduction." In *Metropolis: Center and Symbol of Our Times*, edited by Philip Kasinitz, 1-13. New York: New York University Press, 1995.
- Carmona, Matthew. "Re-Theorising Contemporary Public Space: A New Narrative and a New Normative." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 8 (2015): 373-405.
- Jabareen, Yosef. "'Do It Yourself' as an Informal Mode of Space Production: Conceptualizing Informality." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 7 (2014): 414-428.
- Chan, Elton. "Public Space as Commodity: Social Production of the Hong Kong Waterfront." *Proceedings of the Institution of Civil Engineers-Urban Design and Planning* 173 (2020): 146-155.



---

# AMPS PROCEEDINGS SERIES 32

---

Front cover image: Stokpic

AMPS, Queen's University Belfast, Cape Peninsula University of Technology,  
National University of Singapore. 1-3 Dec, 2022

© AMPS