Repurposing Places

for Social and Environmental Resilience

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Repurposing Places for Social and Environmental Resilience

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Whilst the 20th century was mostly about starchitects, 21st century is about synergies and the relevant complex dynamics that these allow to grow. This shift happens in parallel to others; reusing, retrofitting, and giving a new life to the existing places, buildings and neighbourhoods, in an environmentally and socially resilient manner, developing ways for the existing communities to grow in a symbiotic relationship with new ones, designing processes of circular economy and upcycling, which allow people to collaborate and find viable solutions. Participation in architecture is a notion that continuously evolves, even more so in recent years. Knowledge and innovation that contributes to social justice and responsible design practices, emerges from complex networks and agile cross-disciplinary collaborations.

In this context, this conference examined the relationship between social and environmental resilience, by looking into designed projects, cross-disciplinary research and investigations, participatory and collaborative design methods. It welcomed architects, designers, artists, planners, urbanists, engineers, academics, educators, as well as researchers and practitioners of other relevant disciplines, who have addressed some of the above themes through their work. Projects on adaptation and retrofitting of places in an environmentally and socially responsible way, as well as participatory projects, were particularly welcomed. The conference also included presentations of ongoing projects and collaborations, which will drive the relevant conversations forward. This volume includes the short articles of the peer-reviewed and accepted presentations delivered at the conference, in London, in March 2023.

It is often argued that environmental resilience leads to social resilience. Indeed, there is an inextricable link between environmental (spatial) resilience and social resilience and the former leads to, or effects, the latter. However, in the context of this conference, we did not consider this as a simple one-way equation, and we aimed at investigating further the complex relationship between the two.

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Keynote speakers: Simon Allford, Juliet Mian, Anna Minton, Prof Doina Petrescu, Alex Scott-Whitby

Sustainable Cartography: Mapping the ecological imagination of cities

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Introduction: What is a Sustainable Cartography?

Maps as mediums of spatial production are strategic elements in the description, regulation, and destruction of human and non-human habitats. The transmission of geospatial facts is a crucial necessity since creatures move in space and need to communicate. As soon as these activities become disturbed, the existence of any creature is in danger. The basic survival of human and non-human species does not necessarily use graphics or words, but some kind of understandable language, to establish a bi-directional information flow. (Jobst, 2009, p.44)

In the realm of urban design, mapping as a communication science cannot produce useful results without considering the effects of storytelling, a form of cognitive mapping of cities. Maps can be responsible for motivation, emotional arousal, and interaction between citizens, urban planners, and local governments. However, as Mehta (2018) writes, the conversation around urbanism these days is like the Latin Mass, charged with specialised vocabulary, jargon, and lingo, reinforcing the barriers around a professional guild:

'As a result, people don't listen to good and professional planners in Mumbai or Mexico City, because planners don't speak in a language that people can understand. […] Meanwhile, the real estate developers invest in professional storytellers to sell their sugared dreams of swimming pools and towers in the park to an uninformed populace. […] If philosophers or literary theorists write incomprehensible jargon, it might hinder the rest of the populace's ability to comprehend philosophy or literature – but it's not going to affect their daily lives. But when it comes to urban planners, their dreams could become our nightmares. The rest of us have to walk in them, sleep in them, live in them. We need to understand the story they're selling us.' (Mehta, 2018, p.82)

In this context, how can we communicate the characteristics of ecological imaginaries and their role in the construction of environmental resilience in cities? By mapping the desires (utopias) and fears (dystopias) of civil society, urban planners, and local governments. Stakeholders that constantly make challenging trade-offs between their environmental discourses, economic development, and pragmatic viability in cities. (Mazzucato, 2022) Additionally, by mapping human, non-human, and technological values (eco-centrism and techno-centrism) in the design of urban infrastructures.

Mapping Eco-Utopias and Eco-Dystopias

One of the properties of a Sustainable Cartography is the ability to identify ecological narratives in the form of utopias and dystopias. Marius de Geus (1999) utilises the term Ecological Utopias to describe the capacity of politics, literature, and art to create fictional, sustainable imaginary habitats in the quest for a just city. The meaning of the word Utopia is literally 'nowhere land', a perfect culture in 'another place', where justice prevails. Utopia is also depicted by counter-images of an alternative society, one that has achieved stability in all the spheres of human reality, including one that protects and respects nature. (De Geus 1999, p.30)

Mexico City, 2022

Ernesto Valero Thomas

Singapore 2020

Ernesto Valero Thomas

Shanghai, 2019

Ernesto Valero Thomas

Mexico City, 2022

Ernesto Valero Thomas

The first three photographs are Eco-Utopias portrayed in the streets of Mexico City, Singapore, and Shanghai. They are counter-images that function as a contrast to ecological problems that these cities experience every day. For instance, Mexico City suffers severe water stress and scarcity in a valley that hosts 21 million people. Canals and lakes shaped the configuration of Tenochtitlan, the city-state of the Mexica Civilisation that inhabited the same valley from the year 1321 to 1525 AD. However, over the last century, official policies from local and central governments in Mexico City have 'hidden' those bodies of water into inefficient sewage lines and underground pipes.

Singapore, with little farming land, imports over 90% of the food consumed in the country. (Singapore Food Agency, 2020) Relying on food supplied from overseas means that the city faces unique challenges in ensuring a steady supply of food for the population of 5.6 million people. Shanghai, which hosts 24 million people, has witnessed a massive rural migration from the hinterland of China

to the city in the last forty years. The photograph illustrates the nostalgia for utopian rural values in this megalopolis.

On the other hand, we can understand Ecological Dystopias as the allegorical metaphor of cities that deplete natural resources due to ecological mismanagement of their habitats. Lands where cultural circumstances, political orders, and scientific communities fail to anticipate and repair the debacle of their cities. Eco-Dystopias expose the lack of comprehensive sustainable practices that eventually cause the collapse of urban worlds (Diamond, 2015). The last photograph is a dystopian representation painted on the walls of a water well in the streets of Mexico City. The city's aquifer is filtrated into a fishbowl and then into a bottle, ending up in the hands of the death, who washes a car.

Ecological Utopias and Dystopias are anticipatory tales of our actions on Earth. They are 'film-make' ideas, transferred to us by sequences of images, texts, and sounds that have been intentionally assembled by the authors. They have a fictitious character and contain representations that are based on invented elements and are usually shaped in the form of a story. The examples in Mexico, Singapore, and China are critical in regards to the present society, and at least in images, contain 'the blueprints' for a completely new environment.

Eco and Techno Centrisms in the Imagination of the Future

Two approaches are often applied in the construction of ecological imaginaries. On one end of the spectrum, the uncritical reception of any technological application, camouflaged as indispensable and inevitable. (Marras, 1999, p.4) This techno-centric narrative has faith in the capacity of science to solve problems such as soil erosion, urban mobility, or water scarcity in the longer term through technological applications. The discourse believes in careful economic management such as project assessment, cost-benefit analysis, and risk evaluation. (Thompson, 2000, p.145)

One example of a techno-centric policy that is gaining exposure is the plan to develop charging stations for electric automobiles, replacing petrol stations in cities. The policy suggests that this action will reduce the ecological footprint of the car-dependent lifestyle. It is a view that focuses solely on the technical efficiency of automobiles, often ignoring the role of walkable cities and cycling districts as the most sustainable policies of urban mobility.

On the other end, eco-centric attitudes demand redistribution of power towards decentralised environmental policies with more emphasis on the informal economy and social transaction in the pursuit of participatory justice. (Marras, 1999, p.4) Eco-centrism bases its ethics on the view that all living beings – and, in some theories, even non-living things like the rain, rocks, or mountains, have intrinsic moral value and therefore we owe duties towards them. (Thompson, 2000, p.143) This approach has limited usefulness if, under the banner of a 'clean' environment, it stimulates a political straitjacket, mass control, and economic stratification of society. (Li and Paredes-Peñafiel, 2019)

An eco-centric policy toward the reduction of our carbon footprint related to food consumption is the development of cultural attitudes, new markets, and infrastructures to ensure plant-rich nutrition at a global scale (plant-based burgers, for instance). The main argument for this alternative to animal-based nutrition is that agriculture, particularly for cattle and animal feed production, is the leading driver of tropical deforestation and associated greenhouse gas emissions. (Drawdown, 2023)

Conclusion

The ambition of establishing environmental justice in cities of the world involves the construction of mapping tools that shape languages of urban sustainability. We need to better understand the way imaginative ideas travel and influence us from a variety of different sources. When we 'draw and read' cities symbolically and spatially, we are able to delineate a storyline of environmental justice that

eventually shapes policies for a sustainable future. For every cartographic system, there is a certain appropriate scale in the city that we can represent. The more intimate activity we map (desires, fears, small-scale infrastructures), the greater is the number of interactions that citizens, urban designers, and local governments can establish with their environments. This is the target of a Sustainable Cartography.

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FIGURE: Eco-Utopias in Mexico City (2022), Singapore (2020), and Shanghai (2019). Eco-Dystopia in Mexico City (2022). Photographs: Ernesto Valero Thomas