RESILIENCE STRATEGIES FOR POST-COVID-19 CITIES

POLICY BRIEF

Insights from Centres and Peripheries:
Reconfiguring Post-Covid-19 Urban Landscapes

Leading thinkers from diverse fields including ecology, anthropology, philosophy, architecture, risk studies, art, and urban design, discussed multiple approaches and multiple geographic perspectives on the lessons learned post-Covid-19, and shared their visions for how our cities and our world might work better.

Organised by Dr Meredith Root-Bernstein, Musée National d’Histoire Naturelle, Paris and Dr Alexa Hagerty, University of Cambridge, with funding from the British Embassy, Paris, the symposium called for a more connected, holistic approach to our 21st century urban landscape, one that is resilient and connected rather than fragilized and fragmented.
Covid-19 has changed the way we live in cities and how we view the relationship between centres and peripheries.

It is predicted that 70% of people worldwide will live in cities by mid-century, but the Covid-19 pandemic has changed the way we live in cities and our perceptions of the risks and benefits of urban and rural spaces. Centres and peripheries shape the texture and quality of everyday life, our ability to live together with and benefit from nature, and our global risks and resiliency. The pandemic has given rise to many claims that this moment represents a leverage point that could be used to rebuild smarter and greener. In the lead-up to COP26, the UK presidency, in partnership with Italy, wants to meet climate change goals through international cooperation focused on a green recovery from the pandemic. Yet, Covid-19 raises profound questions about unequal distributions of risks and benefits within and between cities, and the relationship between urban and rural. Centres and peripheries are not immutable, they are always being created, perpetuated, and contested; they exist in in a mutually constituted relationship.

This symposium examined the new dynamics emerging between urban and rural, center and periphery, at global, regional, and landscape scales. Keynotes and panels considered how the globalized landscapes created by economic and development logics have weaknesses that overlap with concerns about biodiversity conservation and green cities; and with concerns about inequality, access, diversity, and health. Interdisciplinary panels explored how we can rethink the center-periphery divide in these thematic areas. With an international comparative context, the symposium identified solutions and approaches beyond a narrow focus on the smart, green city to bring new focus on the systems and physical infrastructures of human habitation, as a connected urban-rural global system, that can reduce structural risks and add resilience.
Six resilience principles for post-Covid-19 cities

Six underlying principles emerged as cross-cutting themes from the day which provide guidance for policy, design, and management.

1. Cities need to work with peripheries to be resilient.

   To create greater resilience we need to resolve the connections or misconnections that cause inequity and we must encourage diversity and mobility across networks.

   In practice: Rather than trying create either homogeneity or centralization of land-uses and infrastructures, focus on corridors (for wildlife), transportation (for people), supply chains (for resources), and environmental flows (for waste). When the connections or misconnections that cause inequities and other harms are resolved, geographic unevenness can emerge as a driver of diversity and resilience.

2. Look outside the system to spillover systems.

   Connections always have impacts on other connections but the greatest impact of a change to a system may be actually outside the system.

   In practice: Urban design and management cannot understand its boundaries as the political borders of the city. Cross-boundary collaborations between cities, between city and countryside, between cities and natural resource extraction areas, between cities and protected areas, and so on, will be key to forward-looking urban planning for a resilient national and global system.

   In practice: Waste management should be given a central position in urban planning for resilience. Social taboos around the re-valorization of waste and waste sites should be challenged.

3. Grassroots resilience is as important as infrastructural and systemic resilience.

   Engage with communities and individuals; provide mental health and wellbeing services. Greater equality promotes greater resilience.
In practice: Access to good mental health and wellbeing services and infrastructures, training programmes, and community engagement are critical factors to promote resilience. Social equity and equality are central to increasing resilience.

4. **Be smart about "smart green cities".**

While smart cities have potential to create more sustainable urban landscapes, they come with risks for civil liberties and democracy. Technologies are not neutral and their impact on urban socio-ecological systems must be carefully analysed.

In practice: In any system extracting or integrating data from people, decision-makers should always ask, is there built-in capacity to accept variation in behaviour and individual differences? Resilient, optimal systems will have this capacity.

5. **Design for the unpredictable nature of nature.**

Living things are not standardised and inert but actively shape the natural and socio-ecological process networks we depend on, in multiple ways that cannot be totally controlled.

In practice: The multiple benefits from nature-friendly construction and urban design are real, but the approach may backfire if decision-makers and users do not work to develop coping mechanisms and tolerance towards unpredictable aspects of nature through outreach and design interventions. In any system involving animal and plant components (e.g. Nature-Based Solutions), decision-makers should always ask, is there built-in capacity to deal with variation in behaviour and individual differences? Resilient, optimal systems will have this capacity.

6. **Consider re-writing our narratives about spaces, cities and landscapes.**

Embedded narratives are powerful, they set our expectations and can stop us from learning from the past.

In practice: Cultural and arts engagements around cities, nature, connections and diversities are essential means to help the public envision, interpret, and adapt to risks and resilient innovations in centres and peripheries.
Deploy Nature-Based Solutions | Marten Boekelo and Sylvia Breukers

We need nature in the city to:

- Temper climate extremes
- Improve the quality of the environment and biodiversity
- Promote green jobs
- Enhance resource efficiency
- Foster well-being, social cohesion, and security

Nature-Based Solutions can be designed flexibly and deployed at various scales. Examples range from urban forests, greening gardens, to composting, or renaturing riverbanks.

As part of the H2020 project Nature4Cities, we developed a step-by-step guide that helps cities realize benefits, collaborate with residents and other stakeholders, and thus secure inclusiveness of the NBS. The guide helps project initiators to:

- align expectations of stakeholders
- understand the context in which the solution must work
- set up a collaboration and communication plan with and for stakeholders
- leverage local networks and assign roles and responsibilities
- implement the plan flexibly and dynamically
- ensure long-term maintenance

The guide is an easy-to-use process-support tool and can be used in conjunction with other tools that help identify the right nature-based solution. The guide and these other solutions can be found on the Nature4Cities Platform: https://www.nature4cities.eu/platform.

Dr Marten Boekelo, PhD is a researcher and consultant at DuneWorks (www.duneworks.nl). He works on issues of citizenship in sustainable energy transitions, including challenges posed by digitalization of energy services, the need for participation and user-centred design, and the ascent of community energy. You can subscribe to his newsletter on climate policy and society here: https://sociallifeofenergy.substack.com

Dr Sylvia Breukers works at DuneWorks (www.duneworks.nl) focusing on the social and societal dimensions of sustainability transitions, with the aim to better understand how to improve the democratic quality of innovation processes, and how to better take into
account distributive impacts of policy and other institutional arrangements. Her areas of work include Nature Based Solutions, Circular Economy and the energy transition.

Invest in Green/Blue Urban Spaces | Catharine Ward Thompson

Cities need green/blue spaces close to where you live and work and play – part of the environment around our everyday lives for everyone.

- Nearby greenery, easily visible from most places (important for mood regulation, stress relief and mental restoration)
- Small or private/semi-private green areas at local scale (for children’s play, schools, older people, outdoor living, gardening, etc.)
- Green infrastructure networks to make active transport enjoyable and attractive, to get to all parts of the city
- Large parks and natural areas, readily accessible for all (for sports pitches, active recreation, big family gatherings, environmental education, nature study, biodiversity)

A Social-Ecological model of Public Health, and investment in salutogenic and equitable environments is crucial to well-being.

Catharine Ward Thompson is Professor of Landscape Architecture and Director of OPENspace research centre for inclusive access to outdoor environments at the University of Edinburgh. Her work focuses on inclusive access to outdoor environments and links between landscape and health. She contributed to WHO’s European Regional office Urban Green Spaces and Health report and has advised on Scottish Government’s Good Places, Better Health initiative and the development of its Place Standard.

www.openspace.eca.ed.ac.uk
www.mobilitymoodplace.ac.uk

Reconsider Risk | Lara Mani

We are not only at risk from shock events – we’re at risk from compounding drivers of risk. We may consider ourselves resilient to siloed risks but the interaction between hazards can amplify the risk, often bringing ‘mild’ risks into the realms of disaster causation.

- Some risks we face in urban environments are slow burn risks and require a long-term view on their mitigation and management.
• Risk is systemic and complex. In order to understand how to build resilience we must understand our vulnerabilities and capacity to deal with risk. Societal, individual, institutional and financial resilience are all important factors.
• Adaptive learning is essential to ensure we strengthen vulnerabilities when they’re exposed – COVID-19 has shown us many weaknesses from local to global and we must adapt and transform our systems to increase resilience.
• Collective action is essential. Participatory processes are a good way to develop acceptable and robust policies for risk mitigations.

_Lara Mani_ is a Research Associate in Communication and Outreach for the University of Cambridge Centre for the Study of Existential Risk. Lara work focuses on building an empirical evidence base for a variety of outreach and communication techniques adopted to present global risk. Her work also explores how an improved knowledge of global risk can translate to action. Lara holds a PhD in Geo-communications from the University of Plymouth, where her research examined the effectiveness of video game technology in volcanic hazard education and communication practices in the Eastern Caribbean. [https://www.cser.ac.uk/team/lara-mani/](https://www.cser.ac.uk/team/lara-mani/)

**Consider Rights in the “Smart Green City” | Stephanie Hare**

Smart cities offer many opportunities and advantages to tackle some urgent problems, such as climate change, public health, resilience and good governance. However, smart city technology also risks amplifying existing inequalities, poses challenges for privacy and civil liberties, and increases cybersecurity risks.

In particular, two risks stand out:

First, _facial recognition technology_ has already inspired several US cities and states to pass bans or moratoriums, while some US technology giants have said they will not sell this technology to law enforcement. Amnesty International is seeking to have it banned outright.

Second, liberal democracies that are thinking about implementing smart city technology must be _transparent_ with, and _accountable_ to, their citizens about data protection, privacy and civil liberties. Further, they should not work with suppliers that are connected in any way with countries that pose either a _national security risk_ or are committing _human rights abuses._
Dr Stephanie Hare is an independent researcher focused on technology, politics and history. Her work has been published in the Financial Times, The Washington Post, the Guardian/Observer, WIRED, and CNN, and she is a frequent commentator on BBC television, radio and online. Her book on technology ethics will be published in 2021.

Speakers and Participants

The event was introduced by Matthew Lodge, UK Deputy Ambassador to France, and attended by over 100 ecologists, anthropologists, urban strategists, policy makers, architects, researchers, artists, designers and students.

Keynote speakers

Lesley Green, anthropologist and environmental humanities scholar, author of the recent book Rock | Water | Life, which examines inequality, racism, colonialism, and environmental destruction in South Africa.

Simone Farresin (Formafantasma), co-founder of Formafantasma design, and co-leader of the GEO Design masters course at the Eindhoven Design Academy, NL; co-curator of the exhibition ‘Cambio’ at the Serpentine Galleries (London).

Emanuele Coccia, philosopher known in particular for his work on plants and his cross-disciplinary collaborations. Author of The life of plants and Métamorphoses.

Jianguo “Jack” Liu, an ecologist focusing on sustainability and global connections and interactions (‘telecoupling’).

Stephanie Hare, technologist, political risk analyst and historian, author of forthcoming book Technology Ethics which explores how biometrics and other data are central to smart cities and how it relates to our privacy, civil liberties and human rights.

Panel speakers

Connecting: Conservation and Resilience: Vanessa Reid, Global Environments Network; Lara Mani, University of Cambridge.
Designing: Governance and the Good City: Marten Boekelo and Sylvia Breukers, Duneworks; Mary Ann Kong, Environmental Policy Consultant; Raphaël Languillon, Université de Genève; Catharine Ward Thompson, University of Edinburgh.


Interpreting: Reading Urban Histories: Robert Desjarlais, Sarah Lawrence College; Khalil Habrih, University of Ottawa; Margaux Fitoussi, Columbia University.

Coexisting: Urban Ecology: Xavier Japiot, Ville de Paris; Harini Nagendra, Azim Premji University; François Chiron, Université Paris Saclay.


All of the talks, panels, and round tables will be available on the Urboretum Youtube channel, for those who missed the live event. Visit www.urboretum.org for related videos and more information.
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is the second annual Urboretum international public symposium on smart green cities.
Urboretum | noun
\'ør-bə-'rɛ-təm\n
a large garden of ideas cultivating the city with
ecology | anthropology | art | design

cो-founded by
alexa hagerty | meredith root-bernstein

open to all