

Preface to Transitioning to Sustainable Cities and Communities

Hubert Klumpner and Klearjos Eduardo Papanicolaou

1. Introduction: One Earth

Where did the concept of ‘sustainability’ come from? A number of moments in history come to mind that may have played a part in its development. One example is 20 July 1969. On that day, around 650 million people were glued to the television, listening to Neil Armstrong’s iconic words as he landed on the moon: ‘One small step for man, one giant leap for mankind’. Another example is 7 December 1972, when astronauts captured an image in the rearview mirror of the Apollo 17 mission on the way to the moon. The ‘Blue Marble’—the first ever photograph of Earth on analog film—would go on to be one of the most reproduced images in history (see Figure 1).

Both events, sparked by the technological and scientific achievements that made them possible, ushered in a novel awareness of the planet itself, becoming the basis for future slogans like ‘There is no planet B’. Yet, while the photograph pushed the upper limits of representation in terms of scale, it also raised a deeper question: who actually lives on this planet?

Back on Earth, in February 2023, our collective of architects, artists and activists visited Ciudad Perdida in Colombia, on the Sierra Nevada de Santa Marta, or ‘Teyuna’, by its indigenous name (Figure 2). Next to Machu Picchu in Peru, it is the largest rediscovered pre-Columbian human settlement in South America to date, with the difference that the area around this stone city is still inhabited by around 25,000 thousand Kogis, Arahucos, Wayyus, Wiwas, and other groups living and protecting the Sierra.

The entire spectrum of the Western idea of freedom and urban life seems to be turned upside down here. The Kogi communities exist under a different cosmological paradigm, without borders and dichotomies between their concept of Earth and their everyday actions. Their conception of the ‘real’ world has a united view of agricultural and forest areas. Maximal preservation of the original landscape is achieved by modelling terraces and retaining walls, generating large, open elliptical areas in steep terrains. Small and large buildings stand on massive stone bases. Buildings and roofs consist mainly of plant material which is constantly regrown and renewed, and the city itself is one with the landscape surrounding it, in such a

way that only minor interventions are necessary to use the pedestrian paths, canals, bridges, and other forms of getting around. The number of inhabitants is therefore distributed over the area according to its capacity for production.



Figure 1. The Blue Marble, Apollo 17 Mission. Source: Image credit NASA (n.d.).

An indigenous woman greeted us with a welcome ceremony, during which the Mamo, or spiritual community leader, Fermin, explained that our way of building cities destroys too much of the Earth's balance, and is therefore not in a state of harmony. He confidently told us that we, the 'younger brothers', should take an example from them, the Kogi and Arhuaco, and find a way to stop disturbing the ancestral balance of the Earth with our destructive ways of life.

In the West, we are taught to see Earth 'scientifically', as a biosphere consisting of an approximately 20 km thin shell of a contact zone in which all living organisms of air, land and water thrive. Compared to the size of the entire Earth, this biosphere is akin to the skin of an apple. What Nobel Prize-winning scientist Paul Crutzen coined as 'anthropogenic' is a three-stage process within this biosphere: first, the absorption

of energy in the form of daylight; second, the biological cycle of photosynthesis by plants and oceans in the biosphere; and third, the sedimentation of organic material that eventually mineralizes over time as a rock formation absorbing energy in the form of heat and pressure (Crutzen 2006).



Figure 2. Ciudad Perdida, 2023. Source: Photo by authors.

Can the ‘cosmos’ of ideas of the Kogi be reconciled with the Western scientific logic that brought about the photograph of the ‘Blue Marble’? Additionally, if so, then what platforms, languages, and frameworks could we develop into equitable forms of accountability, responsibility and action-based practices on common principles, such as that of a shared planet Earth?

Perhaps a shift in our understanding of urbanization may provide some clues. After all, when we refer to global warming, greenhouse gas emissions, CO₂ emissions, the destruction of natural habitats, the extinction of natural diversity and resources, the extraction and burning of fossil fuels, and other changes to the biosphere, we are talking about the scale and impact of human activities. This includes industrialization and urbanization, reaching far beyond our traditional city model. We propose calling this the phenomenon of an ‘Urbanizing Earth’.

The dependencies, exclusion, domination and exploitation within this phenomenon reveal the hypocrisy in popular notions of ‘saving the Earth’—evidence shows that, on the contrary, we humans are in the process of killing ourselves and the forms of life around us. Clean air, water and soil are increasingly out of circulation.

Questioning these models force us to search for new perspectives on de-carbonization, citizenship, and perhaps de-urbanization.

Balancing the impact caused by the burning of fossil fuels on the biosphere and the absence of capacity to regenerate our living systems must be seen as the most urgent problem of our times—one that stretches from the Kogi settlements in the Sierra Nevada de Santa Marta in Colombia all the way to the highest institutions of science in the West. It is time to update our concept of sustainability once again, beginning with a better understanding both of what we mean by ‘our’, and what we mean by sustainability.

We therefore ask the following question: can the SDG 11, focusing on ‘sustainable cities and communities’, inform our wide spectrum of ideas, practices, relations, and processes towards new and more regenerative projects of habitat making?

2. SDG 11

Is urbanization sustainable?

Our current urbanization model is not sustainable in many ways: it is socially unfair, environmentally damaging, and generates unnecessary costs.

Joan Clos (2017) (Sub-secretary of UN-Habitat, and former Mayor of the city of Barcelona)

Never before in human history have we been confronted with a set of multi-crises of this scale, bringing forth a series of mitigation promises in the format of principles that are hard to make and even harder to hold. Beginning with the 30-point Universal Declaration of Human Rights in 1948, and then the Millennium Development Goals after it, a process aiming toward global shared solidarity and responsibility began and has continued. The current climate emergency is exceptional, as it levels out differences among inhabitants of the Earth, and does away with any false feelings of superiority of modernity and knowing better—we are indeed in a process of doubt and unlearning. We turn to discourses of sustainability for answers, and yet, there is no single definition of the term. Attempts have been made to establish one; the UN itself, through its 1987 Brundtland Commission, suggested sustainability meant ‘meeting the needs of the present without compromising the ability of future generations to meet their own needs’, (Brundtland 1987). But what does it take to meet these needs in the present, and how can we respect the needs of future generations?

Building on this history, on the 1st of January 2015, the 17 SDGs came into force, setting goals for the next 15 years, until 2030. Yet, it seems the strategies proposed are not operational. In the meantime, the conditions that such concepts refer to keep changing. What was considered 'sustainable' yesterday is no longer so today, nor will today's forms of sustainability provide solutions for tomorrow.

Take the metamorphosis of Colombian cities over the second half of the 20th century (Corburn et al. 2020): the evolution of Medellin from one of the world's most dangerous cities to one of the flagship examples of urban regeneration and social-ecological transformation was not a straightforward linear transition, but rather, a continuous adaptation to multifaceted challenges. It was led both by top-down government initiatives and bottom-up, community-led forms of organization over the course of a generation. However, this is not the whole story; actors took matters into their own hands, going in search of small contributions to their overarching aims, often finding roadblocks that required creativity (Figure 3). Did this make things more 'sustainable'? Actually, one thing led to another, and then to another—ecological transformation, for example, through the design and implementation of Green Corridors, led to a solution, which has since opened the door to a multitude of new paths on a variety of scales.



Figure 3. Antanas Mockus, Mayor of Bogota 1995–1997 and 2000–2003, Colombia.
Source: Reprinted from (Alexander 2010), used with permission.

Arguing for a singular focus on one SDG would thus miss the point; to consider SDG 11, we ultimately have to comprehend the implications of the bigger picture, a

notion exemplified by SDG 17, 'Partnerships for the Goals'. This is especially true for SDG 11, which advocates for the creation and management of 'inclusive, safe, resilient, and sustainable cities and communities'. Indeed, science and technology are called upon to respond to this goal; architects, urban designers, urban planners, and similar practitioners are focused on moderating conditions of flux, such as those in cities, communities, and neighborhoods.

This volume therefore not only associates our thinking with actions, but it considers what modernism in architecture and urban planning is today, through the lens of the theories of contemporary discourse of sustainability. Ultimately, this sheds light on the condition of contemporary design itself. Because of that, it is predicated as much on the limitlessness of approaches we are drawing upon, as much as by a fundamental condition of conflicting ideas and ideologies of what is next: the reality of limits on a variety of scales. As Serge Latouche reminds us, 'the limitations of ecology are also the limits of other factors, such as education and territory' (Latouche 2011).

3. Urbanizing Earth

As urbanization takes command, movements like Solar Punk and Afro-Futurism are the avant garde that prove that reality is stranger than science fiction. The stories within the seminal works of Isaac Asimov and Ursula Le Guin have unexpectedly become reality. Today, we deal with frameworks and conditions that require radically new approaches, as in Asimov's 'Trantor' (Asimov 1991), an Earth- like planet totally covered by machines, or Le Guin's 'Anarres' and 'Urras' from her classic, *The Dispossessed* (Le Guin 1974), where citizens are dispossessed because of their lack of access to resources. In many ways, just like the inhabitants of Trantor, we have no choice but to reconcile all forms of life and take responsibility for all processes related to our existence.

In our urban age, the terms 'city' and 'urban' are too often used synonymously. Urban or metropolitan areas cover 3% of Earth land surface, consume 80% of energy, and produce 70% greenhouse gasses (UN Climate Action Report n.d.). Urban areas are developed and equipped with a high degree of infrastructure and services referring to cities, towns, suburbs, and agglomerations. Cities, instead, are smaller, constituent forms within urbanization processes on Earth.

It is therefore worth correcting the idea that more than 50% of the world population lives in cities (UN Department of Economic and Social Affairs Report n.d.), and that cities are the principal indicators used to understand development. In Switzerland, for example, less than 30% of the population live in inside the core of city

borders. Manhattan in New York City has a density of 28.000 p/km², compared to metropolitan region of Silicon Valley, with 3.000 people/km². The slum of Petare, an enclave inside the city borders of Caracas, Venezuela, has a density of 11.220 p/km² on approximately 40 km², with hardly any public infrastructure, despite the fact that close to half a million people call Petare their home. The uneven development of urbanization confronts us with the conditions of people owning two smartphones and a 75-inch flatscreen television, but at the same time lacking social services, running water, and wastewater infrastructure. None of these numbers provides evidence or prepare us for real-life confrontations with urbanization. In many ways, living conditions have diminished in quality within the frame of urbanizations that pull populations into cities even without the promise of work. What we see today is an increasingly service-dependent urbanization wherein new technologies provide and produce urban spaces that only deepen exclusion along lines of class, gender, race, income, education, language, and religion, while leading to increasingly high costs of living for everybody.

The ordinary living experiences of people in these environments require much closer observation through responses from actors in multiple fields, for example, from those engaged with the SDG 16.3, which concerns what a family is today, or SDG 17.1, which concerns guaranteeing the right to private property. As long as migration is seen as the exception to the rule, the insecurity of urban life runs the risk of being too abstract for the majority of communities in need.

If the city is only one form of urbanization, how do we distinguish it? One way is to see it as a critical overlap of cultural, environmental, social, and political transactions, replacing all things 'natural'. It is fueled by the specific cultures and infrastructures of a place, often challenging variegated notions of territory with clearly defined borders. Urbanization, instead, features borderless and fragmented flows of people and the idea of the availability of services.

Furthermore, both the city and urbanization in its current iteration are only to a *small* extent the result of modern urban planning. People have not been prepared for cities, and cities have not been prepared for people. Illustrating this, in a recent conversation with the head of Shenzhen City Planning, we learned that they planned for a city of 7 million people—he confessed that the result was at least double.

While urbanization has become a global phenomenon, many of the forces driving it are still invisible to many. Only when millions of people from crisis zones, under regimes such as those in Syria, Venezuela, Ukraine, Myanmar, or sub-Saharan countries, are forced into transnational migration by climate catastrophes, conflict, xenophobia, and aggression, do they become the focus of global attention. Beyond

this, internal migration, which has been the major driver of urbanization for over a century, continues to be largely invisible and unattended, despite its massive impact on affected countries.

Only in recent years has the international community taken an explicit interest in this trans-scalar situation, asking for alternative approaches and scrutiny. This is despite the fact that informal communities, slums, bidonvilles, favelas and other fragile forms of settlement such as agro-settlements, mining settlements, and refugee camps have themselves been brought about by industrialization and urbanization over the last two hundred years. Before this, only very few cities like London, Paris and Beijing had populations of over 1 million inhabitants. It must be acknowledged that, today, one in seven people, or more than 1.2 billion of the Earth's current population, already live in such and similar urban conditions. In sub-Saharan Africa and Southeast Asia, where the largest urban population growth is expected, around 50% of all people are already growing up in informal settlements, and the trend is rising. It is imperative to harness new-found interest in these topics.

Our future survival as a global community in solidarity is based on our ability to deal with each other as equals by changing the political and economic system into a model based on social and environmental justice, democracy, and human rights. This is also an urban question, which means more conflict resolution within the framework of human rights. Neoliberal practices of enrichment at the expense of unprecedented levels of economic inequality and poverty, in particular in the Global South, should no longer be acceptable. While the Millennium Goals showed us that while, statistically, poverty has been reduced, in part due to social mobility in China and India trending upwards, unprecedented levels of poverty exist in sub-Saharan Africa and Latin America. This is happening while the cost and exploitation of urban development continues to massively contribute to the climate crisis, further exacerbating conflict potential and radicalizing societies across the Earth.

This discussion of participation requires a heightened awareness of what is going on around us. Yet, as democracies get involved in the shaping of their environments, substantive participation becomes increasingly difficult. As architects, designers and creatives engaging in research and training the next generation, we are in the frontline in defining the dead-end road that we are on. On this basis, we are also ready to guide the ways to leave this supposed comfort zone, taking the risk of asking the transformative question: what is next? People will decide for themselves if they want to proceed—being uncomfortable about doing something new is inherent to the contemporary situation. We have to accept the reality, and finally come to an understanding that we will feel a lot more uncomfortable in not doing anything

at all. This is what a long view of sustainability is all about—communion with the uncomfortable.

Organizations like the UN will need to adopt new frameworks of decision making such as those proposed by Kofi Annan in 2005 (Annan 2005), for example, by replacing the ‘veto’ with a simple majority within an extended Security Council framework. We need not only principles and soft laws, but a separation of powers in the interest of anticipating more and deepening conflicts in a more diverse and pluralistic world. In short, the task of making a truly sustainable Earth for all will not be an easy one, but can be based on a combination of binding legal frameworks such as the 30 points of the Universal Declaration Human Rights and the 17 SDGs.

Thus, it is not differences in opinion regarding the paths being taken towards sustainable forms of urbanization of the Earth that are paralyzing us, but silence about differences in values, perceptions, and life experiences. We have all been socialized with old models, and with old structures of ideas of the city as a place of consumption, and have internalized the idea of marketing and ‘selling the city’ for profit as something self-fulfilling. Real social change cannot only address the obvious neglect of issues such as the lack of affordable housing for the bottom of the pyramid, land and settlement space, the existence of informal neighborhoods, poverty and otherness, but will also address those parts of the history of exclusion and ignorance that have been characteristic of neoliberal modernist urban development since the 1960s. The nation-state, among other political structures that Western societies have internalized, constructs actual walls as well as metaphorical walls within us.

If we really want to live together as a society—that is, if we really want to build bridges and experience genuine coexistence—we have to tear down these inner walls. Important social movements have been set in motion: newer, post-colonial, feminist discourses are stronger than ever, involving the young, migrants, and others in the fight against poverty, racism, violence and exclusion with a new naturalness. We look to the practice of architecture, urban design, and urban planning to provide open-ended alternatives, anchored in a growing architectural discourse based on the idea of ‘minimum inventory with maximum payoff’ (Burckhardt 1980). Our intention for this volume is to take another step in this direction.

4. Transitioning to Sustainable Cities and Communities

It is always difficult to diagnose paradigm shifts when you are in the midst of one. Through the conversations in this volume, we attempt to initiate debate about the changes that are parts of these shifts. As editors of this volume, we sought architects of practice, researchers, scientists, students, artists, implementers, thinkers,

and curators whose praxis incorporates a design agenda related to an urbanizing Earth with the potential for making sustainability a possible path to follow.

Based on our desire to take advantage of the potential within the sphere of the extended field of design, we selected contributors in view of the targets and indicators of the SDG 11 as a means to interrelate them, problematize them, and find combinatory ways of thinking. In this sense, this volume contains a multitude of voices speaking directly to the other contributors of the volumes in the rest of this series. These voices work across scales, suspending separations of formal and informal, quantitative and qualitative schools of thought, transcending form and meaning by giving shape to our environment, and addressing the science, technology and policy of inequality, insufficiency, contradictions, inadequateness, indifference, disruptiveness, normality, ambiguity, conflict, crisis, and doubt that still dominate the conventions of the design world.

This volume is divided into two formats: interviews and evidence-based research papers. For the interviews, we invited experienced practitioners and outstanding thinkers to share reflections that have shaped their practice and their field over several decades. For the evidence-based research papers, we sought researchers early in their careers in order to connect emerging practices and perspectives with those of the interviewees, through original and unconventional research emerging from diverse positions and backgrounds. All the pieces speak to each other in many ways, not only by choosing different scales and approaches, but also in terms of different worldviews. We consider various combinations: one piece might highlight different elements of urban transformation, while another might feature reflections on social impacts. What emerges are a number of broad themes that blend into each other. Movement, weight, pedagogy, interdisciplinarity, and cultural heritage are a few examples.

Rahul Mehrotra inaugurates the volume invoking the condition of flux and lightness of ephemeral urbanism as a point of departure to frame all subsequent arguments, asking 'how can you make things that actually move in response to the flux that we're engaged with on our planet?' Flux, both in terms of demography, but also in terms of climate, weather and other forces that make us think differently about how we 'rest' on the planet. As if in response, Tanya Chandra's piece, 'Cognitive Blindspot: Challenges of Measuring Coupling Effects of Isolated Development Policies on the Regional Scale' reflects on the importance of the 'heaviness' of infrastructures such as roads, vis-a-vis the often 'elastic' and dynamic needs of transformations in social structures like that of the family.

Alejandro Restrepo introduces a new scalar view on such topics with his article, 'Medellin: Urban Planning as an Instrument of Social Equity, Ecological Quality, and Sustainability', thinking not only about heavy infrastructures, but also about ecological service infrastructures in the frame of 'social urbanism', such as 'green corridors', as the basis for urban transformation led by an 'ecological turn' at the urban scale. The challenges of this approach are further articulated by Weijen Wang, speaking about his native city, the mega-dense Hong Kong. What challenges and opportunities can such a city provide us as we see factors like physical and social densities confronted by the climate crisis and rising sea levels?

The waves of the sea are contrasted with the waves of tourism in terms of the conservation of cultural heritage in Clara Rellensmann and Win Tin Htut Latt's piece entitled, 'Studio Bagan: Engaging with Cultural Heritage Conservation Through Problem-Based Learning Across Disciplines', in which Myanmar becomes a focal point for understanding contemporary ways of preserving not only the tangible, but also the intangible dimensions of heritage sites and memory across the world. The dimensions of the tangible and intangible are also a focal point for Andres Lepik's study on the role of curatorship within the role of the institution of the contemporary museum in society. Reminding us of the 'Social Turn' in architecture inaugurated by his 2010 MoMA exhibition, 'Small Scale/Big Change', he speaks of a 'new turning point' today.

Any contemporary point of inflection also brings with it a reflection on temporality, intergenerational progress, and inevitably, education. Melanie Fessel's piece, 'Method Design: Re-imagining a Circular Urban Design Pedagogy' brings the idea of a didactic paradigm shift informed by discourses of sustainability into the light, drawing from her experience teaching architecture and urban design across institutions and moments of crises of urbanization and climate. Paradigmatic change in perspective is also the basis of our conversation with Mitchell Joachim, Peder Anker and Nicholas Gervasi, who shared the following: 'We tend to think of urbanization as a realm apart, somehow separate from the ecosystem, but nothing could be further from reality. We need to search below the urban veneer to reveal the teeming wildlife that symbiotically shares our streets and dwellings.' Going beyond human-centered approaches, the trio expand our view of the criteria for urban transformation as a basis for their 'animal-aided design' approaches.

Resonating with this, Vincent Chukuwemeka takes us on a journey across African markets in Nigeria, expanding our idea of what an urban market is, what it does, who it is for, and what future roles it can play in sustainable urban development. Naturally, there are no single answers to these questions, a sentiment underlined by

Christian Werthmann, who speaks about 'Wicked Problems', those that appear to be unsolvable. Problems that cannot even be properly defined' have informed and tested his work in Haiti, Colombia, and beyond.

Working across a variety of scales and climate zones, Anna Heringer and Martin Rauch, renowned practitioners of rammed-Earth construction methods, provide notable ideas from their project experience: 'Ultimately, the essence of nature is not a limitation—it is abundance. We have to learn to look at it with the sensitivity to see those resources that are given by nature for free'. Yet, there are limits to this; Stephanie Briers and Yael Borofsky remind us of such limits in their study, 'Every Nightlife in Informal Settlements', in which they dwell on nighttime environments that are not properly serviced by infrastructure, using lighting in the townships of South Africa as their example.

The politics of inequality are also at the center of Teddy Cruz and Fonna Forman's work. We need 'new models of redistribution of knowledge', they tell us as they reflect on their study on the US–Mexican border. They share that sustainability for us means to transform environments from logics of consumption to logics of productivity'. How is this achieved in practice? David Kretzer offers an example, through his work in informal settlements in Colombia, through a piece entitled 'The Relationship Between Public Lighting and Urban Sustainability in Bogota's Informal Settlements'. He reminds us that infrastructure, after all, 'touches on ecological, political, economic and cultural aspects of safety and sustainability'.

Manuel Herz's Tambacounda Hospital in Eastern Senegal provides a further case study of how design deploys sustainability in architectural practice. Focusing on the need to embrace local know-how and attitudes, the description of how this project came together speaks about the need to deeply understand local contexts. This continues as a central theme of Michael Walzac's study on air quality as an indicator of social inequality in Sarajevo and Bosnia and Herzegovina, entitled 'Impact of Urban Planning on Air Quality: The Consequences of the Mismatch Between Natural Wind Flows and Building Typologies'.

The conversation between Diego Ceresuela-Wiesmann and Hubert Klumpner reflects on sustainable urban transformation understood through the lens of engagement in post-conflict Colombia through the implementation of numerous prototypical buildings across the country. They describe their strategy of urbanization through architecture as a process accompanied by the development of built projects, such as the 'Fábrica de Cultura' and the 'Megacolegio de Aranjuez', through systemic environmental design and on-the-ground community engagement. Gruia Bădescu reflects on conflict conditions that indelibly create various forms of disruption in

urbanization processes around the world, through his piece, 'Towards Sustainable Post-war Reconstruction: Reflecting on City-Making and Conflict'.

Looking towards the future, Aaron Betsky closes the volume with his reflections on the future of urbanization in light of planetary crisis. 'Sustainability is about re-use, re-assembly and re-thinking of what we already have', he tells us, spelling out scenarios of future urbanization across a variety of scales. 'The notion of ex-urban communities is becoming more and more common, connected to other nodes, so we are moving beyond suburbs that are dependent on an inner core, towards an interdependent, interconnected nodal system'.

What marks these contributions is that they can be read in any order, and in that sense, much like a puzzle that can miraculously be put together in various ways, create combinatory points of overlap. Taken together, they make it possible to fathom the new possible forms of *designing* sustainability.

5. What Is Next?

The complete urbanization of society: today virtual, tomorrow real.

Henri Lefebvre (1970) (*La Révolution Urbaine*)

Wealth and opportunity, along with the built environment, serve an elite of 10% at the top of the income pyramid in most so-called developed countries, resulting in miserable human environments for the other 90% at the bottom of this pyramid. Injustices in war zones and poor areas call into question what human rights have been able to achieve since their inception. As the urgencies of social and environmental justice rise, so does our obligation to set the conditions for everything under the rubric of sustainability to take place.

No sustainable development can happen without the larger project of peace and democracy. This is not the exception, but the rule of current urbanization models, bringing with them catastrophic climate and environmental consequences, especially for those who have benefitted from the burning of fossil fuel the least. No country alone will come to agreements or implementations to change this situation, nor will they consider scenarios to prevent resulting environmental degradation. The collective acceptance of injustice continues to lead to an intolerable imbalance of possibilities and opportunities between rich and poor worlds, which is particularly reflected in models of urbanization on Earth. Modern cities and mega-cities, along with the people in charge of their design, stewardship and operation, have willingly (or unwillingly) betrayed the promise of freedom for citizens that these places once promised. Only when we can question the concept of cities within the larger context of urbanization can we understand that leading a purely protected and comfortable

life is morally and ethical unjustifiable. We can only understand sustainability in the context of SDG 11 if we think of urbanization as one unified Earth-wide phenomena.

Until now, the common likely scenario has been 'business as usual'. Radically changing the legal framework in areas such as the automotive industry or the energy consumption of building construction and operation seems to be an unthinkable taboo to break. However, courts are now making rulings on the root causes of climate change, showing various forms of evidence to demonstrate how the boundaries of inequality run across generations and interest groups. The transformation of objects into subjects, such as non-human actors, animals, forests and rivers as legal entities, is now legitimized.

We are at a turning point. Modern history has given us enough evidence to realize how uncertain it is whether the direction of our thinking can be changed, or when a shift to a radical practice is really necessary. For an industry fixated with standardization, modern technologies require a reorientation towards the individualization and specification of materials, processes, and methods. As a matter of making sense of these emerging sets of conditions, we have often relied on the idea, as suggested before, that 'you do not have to live in the city anymore to live in urban life, but you can live in a city today without any urban qualities'. It is time to push this idea further. Urbanity, in its essence, is part of something bigger than cities, also encompassing ecologies of various kinds in an overarching environment.

In short, while the triumph and irresistible attraction of cities have been driving forces for this urban age, what people often find are not cities, but various forms of urbanization, many of them in great need of attention. Such urbanization processes, as well as the accompanying phenomenon of de-urbanization, are not trends, but part of a larger reality. Today, the environmental crisis can be seen as a crisis of this model. Cities themselves will not fix modern civilization.

What can we do? Urbanization needs to safeguard diversity. That also means encouraging people to understand the actual costs of growth and inequality on Earth. Extreme poverty and insecurity are among the largest obstacles to reaching sustainability, as urgency often calls the long-term importance of our actions into question. It will take greater unity in diversity and cooperation in solving issues of dwelling, nurturing, and mobilizing in non-violent ways. The question of co-existence is connected to every aspect of this Earth-wide urbanization project.

We need a utopian view of the future once again (Figure 4). Only in 50 or 100 years will we see what our current actions will lead to; until then, imagination will be our aid in understanding how cities might exist in alternative forms. Within the aspirations of our communities and the urbanization of every aspect of life, we

need to imagine a space for nature and wilderness that is not contradiction, but part of the diversity that resists and challenges our capacities to regenerate Earth through our future urbanization.



Figure 4. Illustration of the Urban Parangolé Exhibition Model. Source: (Urban-Think Tank 2017), used with permission.

All the contributions in this volume have one thing in common: they convey often inconvenient insights that many have not seen, others would prefer not to see, and others actively suppress. They address individuals across the Earth and beyond, from the Sierra Nevada de Santa Marta in Colombia, to the International Space Station currently floating beyond the reaches of the Blue Marble, with a common intention: to tear down the inner walls within which we grew up and were socialized. On this basis, we aim to see what lies beyond the SDG 11.

Funding: This research received no external funding.

Acknowledgments: The authors acknowledge the support of the institution of their employment, the Swiss Federal Institute of Technology in Zurich (ETHZ).

Conflicts of Interest: The authors declare no conflicts of interest.

References

- Alexander, Harriet. 2010. Colombia's Antanas Mockus Hopes His Super Citizen Past Will Help Make Him President. *The Telegraph*, May 23. Available online: <https://www.telegraph.co.uk/news/worldnews/southamerica/colombia/7754170/Colombias-Antanas-Mockus-hopes-his-Super-Citizen-past-will-help-make-him-president.html> (accessed on 23 January 2023).
- Annan, Kofi. 2005. *UN Reform*. New York: UN.
- Asimov, Isaac. 1991. *Foundation*. New York: Bantam.
- Brundtland, Gro Harlem. 1987. *Our Common Future: Report of the World Commission on Environment and Development*. UN-Dokument A/42/427. Geneva: UN.
- Burckhardt, Lucius. 1980. *Design ist unsichtbar: Entwurf, Gesellschaft & Pädagogik*. Berlin: Martin Schmitz Verlag.
- Clos, Joan. 2017. *RIBA Goodbye Lecture of Sustainable Projects*. Remarks Made in London.
- Corburn, Jason, Marisa Ruiz Asari, Jorge Pérez Jamarillo, and Aníbal Gaviria. 2020. The transformation of Medellín into a 'City for Life:' insights for healthy cities. *Cities & Health* 4: 13–24. [CrossRef]
- Crutzen, P. J. 2006. The "Anthropocene". In *Earth System Science in the Anthropocene*. Edited by E. Ehlers and T. Krafft. Berlin/Heidelberg: Springer.
- Latouche, Serge. 2011. De-growth, Inequality and Poverty. In *Sustainable Development Policies for Minor Deprived Urban Communities*. Milano: McGraw-Hill.
- Lefebvre, Henri. 1970. *La révolution urbaine*. Paris: Gallimard.
- Le Guin, Ursula K. 1974. *The Dispossessed: An Ambiguous Utopia*, 1st ed. New York: Harper & Row.
- NASA. n.d. Blue Marble—Image of the Earth from Apollo 17. Available online: <https://www.nasa.gov/image-article/blue-marble-image-of-earth-from-apollo-17/> (accessed on 23 January 2024).
- UN Climate Action Report. n.d. Generation Power/Cities and Pollution. Available online: <https://www.un.org/en/climatechange/climate-solutions/cities-pollution> (accessed on 20 December 2023).
- UN Department of Economic and Social Affairs Report. n.d. 68% of the World Population Projected to Live in Urban Areas by 2050, Says UN. Available online: <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html> (accessed on 20 December 2023).
- Urban-Think Tank, 2017. Parangole, Circular '100 Ideas' Exhibition Model. Zurich: Department of Architecture, ETH Zurich.