Rachel Carson Center
Perspectives

How to cite:

Barak, Nir. “The Limits of Techno-management in Transitioning to Green Cities.” In: “Green City: Explorations and Visions of Urban Sustainability,” edited by Simone M. Müller and Annika Mattissek, *RCC Perspectives: Transformations in Environment and Society* 2018, no. 1, 47–52. doi.org/10.5282/rcc/8466.

Rachel Carson Center for Environment and Society
Leopoldstrasse 11a, 80802 Munich, GERMANY

ISSN (print) 2190-5088
ISSN (online) 2190-8087

SPONSORED BY THE

Federal Ministry of Education and Research

Deutsches Museum

LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

Nir Barak

The Limits of Techno-management in Transitioning to Green Cities

Introduction

The challenge of creating a green city is enormous. But often, the complex social and political processes that are involved in making a city green are reduced to techno-managerial efforts. These depoliticize a highly political process, often upholding contemporary socio-environmental inequalities that are at the heart of the environmental crisis—and usually an outcome of unsustainable urban patterns. What's more, this depoliticization tends to limit our acknowledgement of urban environmental ethics in the transition to green cities. Technical and managerial solutions are highly significant, yes, but they do not encompass all the political aspects involved in such a transition. Since a city is primarily a political entity, and not solely a "physical container" that needs improved management, how it transitions to sustainable patterns should also focus on the way that environmental issues are socially and politically framed, and on the values that drive the city's policies. In addition, a public-civic discussion should assess the city's contemporary political, social, economic, and cultural practices that may lie behind unsustainable urban patterns or, conversely, be more conducive to environmentally friendly policies.

Cities and the Limits of Techno-management

Since the late 1980s, international and supranational organizations have identified cities as key actors for sustainable development. Since then, dozens of city-based alliances and organizations have taken the lead[1] based on a shared conviction that cities have the ability to "get things done" (possibly indicating disappointment with previous state-based initiatives). A recent example is the commitment to adopt, honor, and uphold

1 The establishment of ICLEI (International Council for Local Environmental Initiatives) in 1990 marks the initiation of various regional and supranational city-based agreements and networks. For example, the UN Earth Summit (1992) advised that Agenda 21 be implemented by local authorities; this inspired the European-based Aalborg Charter (1994); the United States Conference of Mayors of 2005 initiated the Climate Protection Agreement, which "strives to meet or exceed Kyoto Protocol targets"; C40 (2005) is a network of the world's megacities taking action to reduce Greenhouse Gas (GHG) emissions; The Covenant of Mayors for Climate & Energy (2008), an EU-based initiative, aims to support the EU's objective of 20 percent CO_2 reduction by 2020; The Compact of Mayors (2014) is another global coalition of mayors that have pledged to reduce GHG emissions.

Illustration of New York. Image by Sara Cwynar.

the goals of the Paris Climate Accord by more than four hundred American cities, despite the fact that the federal government decided to withdraw from the agreement. In this regard, it is important to assess Barber's argument that in comparison to *dysfunctional* nation states, cities are better suited to tackle global problems ranging from the trafficking of guns and people, to climate change and terrorism. This argument is justified by appealing to the nonideological aspects of city politics and by emphasizing the "preference (of mayors) for pragmatism and problem-solving over ideology and principled grandstanding . . ." (2013, 90). And indeed, many cities throughout the world are making an effort to respond to global environmental issues, striving for greater energy efficiency of buildings and infrastructure; improved water quality and management; more environmentally friendly waste treatment practices; better and "smarter" transportation solutions to clogged and polluted cities; and projects aimed at providing open spaces and parks. All these, and more, are utilized to foster safer, healthier, resilient, sustainable, and more efficient cities.

However, we should be wary of any simplistic notion of "problem solving" since it frames the complex process of transitioning to a "green" city as one comprising mere technical and managerial efforts. While techno-managerial strategies are important, they often rely on the assumption that environmental considerations, such as those mentioned above, are independent of social and political relations. This is highly problematic, given that such a perception may uphold and perpetuate socioenvironmental inequalities and further limit considerations of urban environmental ethics, as I show in my analysis below. In addition, a techno-managerial approach often rests on the misleading assumption that we all understand environmental problems (and their causes) in the same manner, and that we all agree on how to solve them. As this edited volume indicates, however, the range of views, interests, and visions for the sustainable city is multifaceted, varied, and highly contested.

Lastly, a techno-managerial approach reduces cities to "physical containers" or "built environments" that require improved management. Rather, the city is a complex economic, social, cultural, and political system; as such, its most important characteristic is that it embodies a political community. Despite its social diversity, a city is not an aggregation of individuals, but rather a "demos" that shares a particular form of urban pride, identity, and ethos, which differs from place to place (Bell and de Shalit 2011). Cities "behave" differently in the way they interpret social and political matters, and in the policy measures they take to address these issues (Löw 2012). In this way, the city—with its place-based attachments, public spaces, and civic memory—is not simply an administrative sub-unit of the state, or just a "built environment." Rather, it constitutes a thick political community with certain shared values, norms, and forms of conduct, of which sustainable/unsustainable urban patterns are an integral part. In short, there's something about being a Münchner, a Londoner, or a New Yorker that is more than a symbolic identity. Context influences the way in which individuals understand themselves and the way they approach public-political matters including matters of urban sustainability.

Beyond Techno-management: Social and Political Considerations of Urban Sustainability

Though techno-managerial approaches and strategies are valuable in the transition to green cities, they lack the scope and ability to address two vital issues: socioenvironmental considerations and environmental ethics, and socioeconomic injustices.

While in previous years creating green cities (or, "green urbanism") was somewhat limited to designated places of "urban nature" (e.g., parks, restoration projects), contemporary technologies today have allowed us to move beyond such confines: for instance, with green roofs and living walls. This gives rise to planning approaches that include ecological restoration, and the replenishment and nurturing of natural processes that are inherent in cities—or rather, processes that have been interrupted by the production of cities, such as flows of rivers, or natural purification of air and waste.

These environmental policies are valuable because they not only instrumentally benefit ecosystem services, but also call into question the city's socioenvironmental norms and values. This form of green urbanism challenges our erroneous intuition that when we

are in the city, we are no longer in nature, heightening our awareness that the built environment is embedded in a natural environment and nature permeates the city. This implies that "respect for nature" and environmental values in general are integral to a city's urban culture and are not just limited to landscapes beyond the city's boundaries. Recognition of these values also places emphasis on and repositions the issue of environmental ethics—championed primarily by Aldo Leopold and Rachel Carson—as an emerging urban concern.

Fostering environmental awareness and literacy is often considered a nonurban practice and when conducted in the city, it often relates to "patches of nature." But such practices should be extended to the "damaged and blemished" urban areas, which are just as much a part of a city's "nature" as parks or gardens are. If, as Leopold (1986, 292) argues, "the weed in a city lot conveys the same lesson as the redwoods," then enhancing city-nature interrelatedness requires learning that "same lesson" as a civic community, and applying this knowledge in our interactions with the city. This type of collective introspection is not limited to greenways, parks, sidewalks, and central plazas, but embraces the city's civic culture and socioenvironmental norms (Barak 2017). Green urbanization, however, is frequently narrowed either to the aesthetic dimension of desirability of an urban greenery or simply short-circuited by applying cost-benefit analyses and by appealing to "best practice" policies learned from other cities. This is at the expense of engaging in a critical public discussion regarding the desired socioenvironmental values and practices within a city's community.

This urban environmental ethics agenda, however, cannot be held independently of the city's socioeconomic and political realities. Impoverished and disadvantaged areas of cities are frequently more susceptible to environmental harms, such as exposure to toxic waste, degraded environmental conditions, and a lack of environmental amenities. In such areas, urban development and greening policies that are implemented can have a twofold consequence: though the environmental harms are alleviated, they are frequently followed by social consequences that may be summarized as a pattern of "green gentrification." For instance, a neighborhood or district that has undergone green retrofits, such as urban parks, bike lanes, and access to public transport—or a city that subscribes to environmental sustainability—may lead to increased demand for property, higher housing and living costs, and eventually to the displacement of disempowered and disadvantaged populations. While public policy can adequately

address this matter by implementing rent control, public housing, and more equitable development policies, these factors are often excluded from the planning process as a result of the uneven political and economic power of private investors, real estate firms, and economic elites in comparison with the local populations (Gould and Lewis 2016). Thus, any apolitical account of urban sustainability founded on supposedly value-neutral techno-management is misleading and may serve to produce and perpetuate existing inequalities.

These problems cannot, and never were intended to, be addressed by techno-management. Acknowledging that environmental considerations are intertwined in the social processes of the city would mean that conflating techno-managerialism with sustainable urbanism is at best insufficient to address the full range of environmental and societal issues facing cities, and at worst intentionally misleading and blinding. More explicitly, trying to disassociate social and political issues from the practice and general orientation of urban sustainability empties environmentalism of its political goals such as equality, democracy, and the protection of human rights. Achieving the sustainable city cannot and ought not be limited to blind faith in "problem solving"; we need to engage the city's community in a public discussion about the city's social equity, and the political values embedded in environmental policies, and then use political action to remedy its undesired consequences.

Towards a City-Based Green Vision

In summary, the problems outlined above indicate that a city's political, social, and economic institutions and the values guiding them correlate with the degree of sustainability of urban practice. The first issue highlights mostly the city's culture and its socioenvironmental values, while the second highlights socioenvironmental injustices in cities and the political values embedded within. There are no simple answers or objectively "correct" responses to these issues. As indicated above, the city is not simply a physical container but rather has its distinct social, political, and cultural life to which (at least) some sustainable/unsustainable urban practices are integral. Therefore, although there are common challenges and universal concerns, the challenges of urban sustainability can best be addressed by establishing new arenas for city-based deliberation. These deliberations will not yield a unified global vision of the sustainable city, but will enable the

city's community to better address the particular causes behind unsustainable patterns, to shape solutions accordingly, and to foster new patterns of ecological citizenship in cities.

The ability of cities to "get things done" indeed marks them as leaders in the global transition to sustainable patterns. This should not be limited to technical problem solving but should extend to a more profound form of urban politics of sustainability.

References

Barak, Nir. 2017. "Hundertwasser—Inspiration for Environmental Ethics: Reformulating the Ecological Self." *Environmental Values* 26 (3): 317–42. doi:10.3197/096327117X14913285800689.

Barber, Benjamin R. 2013. *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities.* New Haven, CT: Yale University Press.

Bell, Daniel A., and Avner de Shalit. 2011. *The Spirit of Cities: Why the Identity of a City Matters in a Global Age*. Princeton, NJ: Princeton University Press.

Gould, Kenneth A., and Tammy L. Lewis. 2017. *Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice.* New York, Routledge.

Leopold, Aldo. 1986. *A Sand County Almanac: With Essays on Conservation from Round River.* Reprint, New York: Ballantine Books.

Löw, Martina. 2012. "The Intrinsic Logic of Cities: Towards a New Theory on Urbanism." *Urban Research & Practice* 5 (3): 303–15.