

## Infrastructures of the Global: Adding a Third Dimension to Urban Sustainability Discourses

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## 1. A More Sustainable City

<sup>1</sup> Hopes for cities to solve the social, environmental, and economic problems of the early 21<sup>st</sup> century loom large over discourses on sustainability in the United States. On a rapidly urbanizing planet, it is often argued, the global challenge of creating a more sustainable kind of living can best be tackled in cities and by urban actors. Besides the widespread notion of an emerging urban era, this focus on cities can be explained by the common assumption that these are the points of origin of environmental destruction and climate change as well as the best-suited locales for their potential contestation. Unsustainable processes of industrialization, congestion, and sprawling spatial living arrangements are associated with processes of urbanization—as are the seemingly more sustainable counterstrategies: downtown revitalization, green urbanism, and smart city projects.

<sup>2</sup> In this dynamic debate about sustainable cities, two broader paradigms are dominant. One camp emphasizes the need for technological improvements to design better

and more efficient cities. Adherents of this school of thought assume that urban competition and commercial exchange foster scientific innovation and technological progress which, in turn, will help reduce greenhouse emissions and increase efficiency. Others, by contrast, highlight that cities need to build better spaces for human interaction. Planning greener, more dense, and more livable cities will contribute to a better social life—one that happens to also be more sustainable. As I argue in this article, both these views—which I call the *triumphant city* and the *beautiful city* lines of argumentation—are short-sighted. As I will show, both debates have historical precedents that do not bode well for an actually more sustainable urban future.

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Definitions of sustainability commonly consist of an environmental, a social, and an economic component. Sustainable development is seen as that overlapping political space, where these three elements are in equilibrium. This implies more generally that the objective of environmental friendliness needs to be complemented by concerns for social justice and economic growth. Even measured against its own principles, this mainstream normative horizon is not accounted for in current discussions about urban sustainability.

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This article formulates an immanent critique of existing discourses on urban sustainability, and provides a third analytical perspective that seeks to shed light on problematic blind spots in these debates. As I detail throughout this paper, whereas urban planners and designers in the United States put their hopes for a sustainable city in technological innovation and a renewal of the public realm, these approaches are based on a two-dimensional account of sustainability that either ignores social relations altogether or shrinks them down to immediate face-to-face interactions in the city. Instead, I propose to address questions of urban sustainability through the lens of infrastructure, thereby shifting the focus to social relations that transcend, but at the same time, are necessary to sustain urban agglomerations.

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I will make this argument in three steps. In the two subsequent sections, I will present and critique the logic of existing urban sustainability discourses identified above. In

so doing I also point out historical parallels to the early-20<sup>th</sup> century city-beautiful and city-efficient movements, which worked along similar argumentative lines and which came with similar pitfalls and shortcomings. Most notably, the focus on efficiency and aesthetics largely ignores social questions, which is equally true for today's sustainable city debates. In a third step, I will add a third dimension to sustainability discourses. In taking an infrastructural perspective that transcends aesthetic and technological concerns, we can shed light on the benefits and costs of sustainable urban development and repoliticize debates about urban sustainability.

## 2. The Triumphant City: Making the City More Efficient

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One school of commentators in today's debates on urban sustainability expects cities to be the loci for progressive change because of their potential for innovation and efficiency increases. As is argued in this debate—which I call the *triumphant city* debate in reference to what is perhaps the most well-known publication in this context, Edward Glaeser's book *Triumph of the City* (2011)—one of the key features of cities are agglomeration effects. Cities are sites where politicians, entrepreneurs, and researchers meet and closely interact. For that reason, cities are seen as the sites where innovations are made; innovations that are supposed to help us lead more efficient and productive lives and render our societies more sustainable, or so the argument goes.

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This line of argumentation is not at all as new as it might seem at first glance. Its *locus classicus* is Adam Smith's oft-cited book *The Wealth of Nations*. For Smith, too, spatial proximity and close interaction were the keys to social progress. In *The Wealth of Nations*, Smith argues that the division of labor, the "extent of the market," determined the degree of labor specialization and thereby the advancement of society. In cities, where transportation and communication is safe and cheap, markets can extend, labor can specialize, and productivity is increased (21-22). Commercial exchange, in turn, also produces "improvements of art and industry" and "cultivation" (23). In short, in facilitating interaction between merchants—the predecessors of today's entrepreneur, that Smith saw as the

real agents of wealth and economic growth (Blyth 107)—cities are the nodal points of social progress.

<sup>8</sup> This 18<sup>th</sup> century view of urban progress was, of course, embedded in the thought and rhetoric of the enlightenment era, and part of a larger political argument for markets and for “capitalism before its triumph” (Hirschman). It was expounded and repeated by liberal commentators in the course of the 19<sup>th</sup> century in order to legitimate the expansion of markets into all spheres of life and, more precisely, to give sense to the social upheavals produced by the industrial revolution. Indeed, US cities at the time provided a perfect illustration of what Karl Polanyi later described as the dangers of “disembedded” markets: Commodifying the environment, labor, and capital—thereby turning them into “fictitious commodities”—undermined social cohesion and endangered social reproduction.

<sup>9</sup> The reactions that the multiple urban crises ensued anticipate some of today’s arguments a hundred years before the concept of the “sustainable city” became fashionable. It is important to note, in this context, that cities in the United States were somewhat distinct from their European counterparts because of the significance of market-centered growth regimes in the 19<sup>th</sup> century. The central goal of state and civil society actors was to increase the competitiveness of their city—with little consideration for its social effects. This pronounced orientation toward the market and a lack of regulatory institutions on the local scale boosted urban growth with drastic social and environmental effects. In addition to rampant inequalities, freewheeling market rule led to severe environmental degradation. Moreover, the unprecedented expansion of urban populations across existing jurisdictional boundaries led to a mismatch between political capacities and responsibilities (Brenner “Decoding”). At the beginning of the 20<sup>th</sup> century it became obvious that the institutional apparatus to guide growth was severely lacking. Cities and municipal institutions needed to be reorganized and reformed.

<sup>10</sup> Between 1900 and 1930, economic elites of Chicago’s and New York City’s metropolitan region—most affected by labor’s crisis of reproduction—attempted to develop growth plans for the entire metropolitan region. The Plan of

Chicago (1909) and the “Regional Plan of New York and its Environs” (1929) bear witness to these attempts of creating more efficient cities by modernizing infrastructures and taking new approaches to urban growth on a regional scale (Fishman). While Smith’s argument had been one for the extension of markets to foster progress and improvement, the city-efficient movement was an attempt to hold on to this rationale in the light of a radically successful market—one so radically successful that it undermined its own conditions of possibility.

<sup>11</sup>

The city-efficient movement of the early 20<sup>th</sup> century, a precursor of the *triumphant city* argument, then, can be regarded as part of a “double movement”—to stick with Polanyi’s terminology—to try and cope with the negative outgrowths of unfettered industrialization processes. Urban economic and political elites in the two leading US cities of the time, New York City and Chicago, argued for more efficient uses of resources. Based on Taylorist forms of scientific management, the adherents of the city-efficient movement called upon specialized technocrats and experts to guide economic growth and to do away with inefficient and wasteful practices.<sup>1</sup> In developing the right types of technology and design, they argued, and in creating leaner public governance structures, urbanization processes could be optimized in a way to foster business and render cities even more competitive and productive.

<sup>12</sup>

Today’s debates about sustainability mobilize similar tropes of the *efficient city*. Again, these propositions are made against the backdrop of multiple crises. Over the course of the past thirty years, given a drastic expansion of markets in all arenas of social life, inequalities have steadily increased, the environmental crisis has turned global, and jurisdictional problems are no longer limited to the boundaries of the city but extend to the regional, and, as we will see, even to the planetary scale. And again economic and political elites see cities not just as the sites where these crises unfold, but also where they can be tackled.

<sup>13</sup>

The contemporary rendition of the *triumphant city* discourse is powerful; it is a strong discourse that is reflected in strategy papers and reports of institutions such as UN Habitat or the World Bank, in newspaper articles and more conversational pieces by urban economists and

publicists. Its general arguments as to why cities will make us healthier, greener, and more productive are hence not limited to specialized academic discourse but reach a mass audience and have a strong impact on political decision-making.

<sup>14</sup>

Echoing Adam Smith's thesis that cities were the hubs of civilizing progress, contemporary proponents of the *triumphant city* believe that exchange between elite actors and decision-makers will benefit from their physical proximity and urban dynamism—from the possibility of matching research with capital and business-friendly policies—to come up with and implement smart technology and share best practice models through inter-city networks and thereby find solutions to render cities more sustainable. In this vein, Bruce J. Katz and Jennifer Bradley believe that a “metropolitan revolution” will lead to the technological innovations necessary to meet the environmental challenges of the 21<sup>st</sup> century. Like them, Edward Glaeser believes that cities are—and have been since at least their renaissance—sites of “innovation explosions” (8). Letting the free market and innovative entrepreneurs take over urban development, this is the subtext of this argument, will create a more efficient and thereby more sustainable city.

<sup>15</sup>

This hope is coupled with a firm belief in technological progress. Notably, big data analyses are supposed to improve resource allocation and diminish congestion in cities. Smart technology and a more accurate calculation of flows of humans and cargo are seen as a way to facilitate better land utilization and a more efficient use of scarce resources. Corporations such as Siemens or IBM, for instance, have pioneered the developments of telematics technologies to optimize urban processes.<sup>2</sup> Others emphasize the role of architecture and the built environment in creating a more efficient city. Architectural innovations are seen as bearing enormous potential for future urban living since they allow for a more efficient use of space. Technological innovations in interior design promise feasible solutions for adaptable, multipurpose homes and shared use accommodations which will render cities denser and will enable urban residents to use their private spaces in multiple ways (e.g., Larson).

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Agglomeration effects, the market mechanism, and technological improvement are the three hopes of the *triumphantcity* debate—but the salutary role of technology is central to all of them. Evgeny Morozov has coined the term “technological solutionism” to describe the credulous outlook with which many discourses on social progress approach the potential of technological innovation. What he emphasizes is that “technological solutionism” offers solutions for problems that had not existed before their cure. But there is a more dangerous aspect to the technophile approach as well and we see it most prominently in the *triumphant city* debate: “technological solutionism” obscures social relations and depoliticizes debates about social development. Similar to the city-efficient movement in the early 20<sup>th</sup> century, this type of discourse relegates technical questions to specialized experts and technocrats, thereby impoverishing public debate. Its moot point is its obsession with more efficient technologies that leaves more deep-seated causes of unsustainable development such as economic and political inequalities or tendencies of urban splintering and the more indirect effects of globalization on urban development unaddressed.

### 3. The *Beautiful City*: Hopes for a New Public Sphere

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If the city-efficient movement was one reaction to the crisis of reproduction in US cities of the early 20<sup>th</sup> century, it was not the only one. Its sole focus on efficiency and its lack of a reform perspective was indeed criticized by a second movement that gathered momentum at around the same time: the city-beautiful movement. Proponents of this movement equally sought to attenuate the miserable conditions of the urban labor force and to address the environmental crisis in the cities. They were inspired by the reform movement of the late 19<sup>th</sup> century and the garden city movement and sought both smaller scale urban arrangements under a regional institutional umbrella and the beautification of cities through the construction of parks, esplanades, and monumental buildings (Wilson).

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Advocates of the city-beautiful movement held that this type of reform also had a political dimension. The



beautification of cities would restore social peace and result in a more harmonious social order that would increase the quality of life for urban residents. Arguably, one reason why this movement was able to leave an imprint on political decision-making—also on the above-mentioned plans for Chicago and New York City—was that it resonated with the interests of urban business elites. They, too, sought for strategies to reproduce the labor force and to pacify social relations. But it was precisely this convergence that made the potential political thrust of the city-beautiful movement vulnerable for cooptation. This is why both the city-efficient movement and the city-beautiful movement have come under attack for ignoring questions of actual social reform (Schönig).

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A similar argument can be made for today's version of the city-beautiful movement. The paradigmatic site to make such an argument about depoliticized aesthetic development strategies in US cities is the post-industrial waterfront. In the US context, owing to historical patterns of colonial expansion along the rivers and coasts, waterfront revitalization has been more extensive than elsewhere (Tunbridge 88). By the 1990s, waterfront redevelopments had become a "seemingly ubiquitous process in urban North America" (Sieber 120), granting it the status of a new planning paradigm. Like the city-beautiful movement, architects and urban planners who pushed for waterfront redevelopments over the course of the past three decades have sold it as a countermovement to the negative outgrowths of industrialization. Indeed, this type of real-estate development is until today even understood by many as the complete reversal of industrialization: where once manufacturing industries and shipyards soiled the ground and polluted air and water, today livable waterfront parks and esplanades seam the shorelines of New York City, Chicago, and Los Angeles (Vormann *Global Port Cities*).<sup>3</sup>

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Waterfront developments have become a global tool to secure capital investments in inner-city neighborhoods and to attract a new clientele of residents and visitors to these formerly "abandoned" and "unsavoury, run-down and neglected areas" (Hoyle 14). As in the early 20<sup>th</sup> century, the hope is that revitalized parkland will lead to civic virtues—and even to a new public sphere. "These sites,

being adjacent to water, now offer us unique opportunities,” argues Richard Marshall, former professor of Urban Design at the Harvard Design School in an essay about urban space-making on the water’s edge (7). Concurring with Marshall’s assessment, and with the assessments of many other city planners and landscape architects, President of the Friends of Hudson River Park, Albert K. Butzel concludes that “[a]fter one hundred fifty years, the waterfront has become the public’s domain again—and an extraordinary one” (5-6). In addition to being more visible and more representative of the city, Raymond Gastil even maintains that the post-industrial waterfront, as the “paradigmatic site for the future of public life,” forestalls developments to come; they are an integral part of the “history of the future” (19, 192).

<sup>21</sup>

But these discourses, like their early 20<sup>th</sup> century antecedents, are incomplete and flawed. To be certain, one can validly argue that industrial waterfronts were highly polluted, that hiring practices on the docks of the 1950s and 1960s were corrupt, and that corruption on these sites had a tendency to breed crime (Vormann *Global Port Cities* ).<sup>4</sup> Yet, if we think that contemporary American global cities are more sustainable, less corrupt and less dangerous—or, put differently, that the pathologies of the industrial city have been overcome—we fall victim to a fallacy. Put provocatively, even if the post-industrial waterfront were not only commercially successful, but also sustainable, equitable, and open, a perspective limited to the post-industrial waterfront as a litmus test for the social development of the entire city (as which it is often presented in the urban sustainability debate), is still inadequate. We have to move beyond and beneath existing sustainability discourses in order to grasp wider material processes that facilitate urban development.

<sup>22</sup>

Debates on the so-called open city are a first step in the direction of a more socially just city, but they display some of the same weaknesses of the beautiful city ideology. The notion of the open city, which stands in the tradition of Jane Jacobs, is one of a “system in unstable evolution” (Sennett 2006). This emphasis on the becoming and on the processual nature of cities constitutes an attempt to overcome urban planning traditions dominated by over-determined forms and closed systems. As Richard Sennett,

this position's most articulate proponent, argues, "the closed system has paralyzed urbanism, while the open system might free it" (2008). Closed systems that serve only one specific function, in this logic, need to be opened up into multifunctional systems so as to unleash the potential for interaction, spontaneity, and the democratic use of public spaces.<sup>5</sup> Open cities, in this sense, might be sustainable in a different way, as Sennett goes on to argue:

Buildings left incomplete, partially unprogrammed are structures which can truly be sustainable in time; the flexible building would help end the current wasteful cycle which marries construction and demolition. Asserting the value of incomplete built forms is a political act because it confronts the desire for fixity; it asserts, in steel, glass, and fiber-optic cable that the public realm is a process.  
(n.p.)

<sup>23</sup>

This valid critique of dominant sustainability discourses highlights the process-character of cities.<sup>6</sup> In contrast to *triumphant city* discourses, it shifts the focus from technology to questions of social justice and the public realm. Conceding more importance to social relations, proponents of the open city seek to uncover the conditions of possibility for spatial change to yield more emancipatory social outcomes. Nonetheless, however, the open city debate has elective affinities with the *beautiful city* paradigm. Ultimately, like the *beautiful city* paradigm, it focuses on individual spaces and changes in the built environment as a reform strategy—and thereby tends to neglect social relations that transcend the immediately local all the while buttressing it.

<sup>24</sup>

Whereas the notion of the open city constitutes a much-needed corrective for mainstream "technological solutionism" in that it critiques the inner contradictions of sustainability discourses, then, the focus on individual sites and projects similarly tends to limit the view from broader social relations that are much less sustainable. Moreover, I see a fundamental problem in the convergent notions of the open, evolutionary system, and the market as a tool for resource allocation. The open city can easily be co-opted into market-led approaches, because it is mostly directed against central planning. Its critique of rigidity resonates with a plea for marketization. Consequently, the openness that such a regime would grant is not one of individuals on equal footing, meeting in a non-hegemonic space, but essentially skewed long before these individuals enter the public realm. Finally, and perhaps most problematically in

the context of urban sustainability debates, the notion of an open system defers all political decision-making: to value the incomplete nature of urban processes opens up spaces for participation, but if taken at face value it also bears the risk of relegating all questions political to the future or to other orders.

#### 4. Beneath and Beyond: The Infrastructural City

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Cities are not algorithms. Urban sustainability debates are steeped in social relations and cannot be fully captured or improved by mathematical models. Neither will societies become more sustainable in the full sense of the term, if individual sites are beautified. So far, I have argued that both the *triumphant city* and the *beautiful city* debate miss the point. These lines of argumentation are mobilized in today's dominant urban sustainability debates as though they were innovations. But, as I have tried to show, they have historical antecedents and, like them, they neglect an important dimension of sustainable development. By focusing on technological efficiency, urban design, and market-led private entrepreneurialism, these approaches lack a social dimension. The open city debate provides us with a helpful critique of dominant sustainability discourses but has its limitations. Nonetheless, the open city debate has been productive in another way. It resonates with ongoing attempts to open up the debate of what a city really is and what, in turn, urban sustainability can mean. This can be the starting point for a new discussion that we already see forming in different contexts. As I would like to argue before concluding, this new debate needs to go *beyond* and *beneath* existing urban sustainability discourses.

26

I am certainly not the first one to argue that cities are more than a dense agglomeration of people in one place. Saskia Sassen, for instance, builds on the process-based understanding of the open city to criticize "an 'urban focus' limited to individuals and households" and tendencies to "leave out global economic and ecological systems that are deeply involved, yet cannot be addressed at the level of households or many individual firms" (251). Her ensuing call for multi-scalar governance frameworks to address the ecological crisis through a "global regime centered in

cities” (239) is warranted, because it mobilizes urban capabilities beyond parochial local concerns. Sassen’s perspective echoes recently emerging research paradigms in urban political economy that generalize this concern. Hillary Angelo and David Wachsmuth (2014), for example, have very convincingly criticized the perspectival shortcomings of methodological city-ism; that is, of limiting our urban (sustainability) analyses to the city-level only. In an era where urbanization processes are no longer oriented toward the horizon of the city, but to the regional (Soja 679) and the planetary<sup>7</sup> we need new analytical tools. The same applies to our understanding of urban sustainability. The fact that cities are nodes of different types of flows—on which the city depends and which are facilitated in it—implies that we have to extend our notion of what a city is in order to conceptualize it as more than just a bounded entity. Debates on urban sustainability need to take these flows and metabolisms that go beyond the jurisdictional boundaries of the city into account.

<sup>27</sup>

What I am proposing here is in line with this recent debate on *planetary urbanization*. Urban sustainability debates need a dimension that transcends local immediacy—a dimension which both *triumphantcity* and *beautiful city* debates lack. In this respect, I am very sympathetic to the idea of “blasting open” the container of the city as an analytical framework (Brenner 2011). But I see a methodological problem in doing so if this theoretical move is not qualified. The danger of reframing “urbanization” as all processes related to the maintenance of cities, is that this concept becomes indistinguishable from the old-fashioned notion of “civilization.” To be fair, the moment of explosion—to use Henri Lefebvre’s term—is related to a moment of implosion: cities and flows are not arbitrary but function according to specific spatial and social logics which stand in a dialectical relationship. But to harness the potential of this insight and to capture the precise social logics which determine the dynamics of these moments, we need to be more specific. A debate on urban sustainability worthy of that name needs to go not just *beyond* but also *beneath* the city. What I am suggesting then, is that a perspective that turns our attention to the structures that enable social relations can help us link the two “moments”—of agglomeration and flow, of implosion and

explosion—while at the same time raising questions of social justice.

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It might seem curious and perhaps overly specific to point our attention to infrastructures as an analytical solution to the methodological city-ism of dominant sustainability debates. But these structures are literally “the underlying foundation” and “basic framework” of social systems.<sup>8</sup> Infrastructures are physical, durable structures that create social patterns and that enable and constrain social processes. Infrastructures are crystallized social relations, already incurred, sunk costs, that create certain path dependencies for how cities and societies develop (Angelo and Calhoun). As such, they are not just neutral technological assemblages, but both their emergence and their effects are political. In them are inscribed certain social power relations—and, in turn, they reproduce these relations. Two brief examples that address the *beautiful city* and the *triumphant city*’s main tenets from an infrastructural perspective should help clarify the type of research program that I have in mind.

29

To be sure, post-industrial waterfronts in the United States might seem to validate the assumptions of the *beautiful city* proponents. If we restrict our field of vision to these spaces—as the *beautiful city* paradigm does—it is true that they are more environmentally sustainable today than they had been only three or four decades ago. But this perspective ignores wider social processes that have made the post-industrial waterfront possible in the first place and that we can only grasp by shifting our view from the superficial spaces to their underlying infrastructures. The post-industrial waterfront has arisen as a utopian site from rearrangements in global production networks: containerization and related technological and political innovations led to a spatial rearrangement of US cities in which derelict old harbor sites could be redeveloped as utopian sites of a post-industrial era. At the same time that the post-industrial waterfront made its ascent as “paradigmatic site for the future of public life” (Gastil 19), then, the social and environmental costs of the new, post-Fordist goods-moving economy—shipping pollution from container vessels, diesel fumes from outdated port trucks, flexible working conditions for supply chain workers and other industries, to name but a few—have been imposed on



the public. On the post-industrial waterfront “the postmodern façade of cultural redevelopment” has become a veritable “carnival mask which covers the decline of everything else” (Featherstone 107). The new infrastructural fix that enables production and consumption on a global scale is neither sustainable nor socially just (as I argue in more detail elsewhere<sup>9</sup>) but it is the socio-technological pillar on which the *beautiful city* rests.

<sup>30</sup>

An infrastructural perspective helps us understand how urban beautification is not only a question of making some places greener and more sustainable than others: these places are part of a larger infrastructural fix in which costs are externalized and spatially relocated. A second example addresses a question which remains perhaps more implicit in the context of global logistics infrastructures. If we aim for more efficient flows to allocate resources within the city, we need to question the finality of that optimization: Efficiency, for what and for whom? An infrastructural perspective, again, helps us to address related questions with a view to social relations.

<sup>31</sup>

Urban infrastructures are object to political struggle, although their technocratic appearance might suggest otherwise. What we tend to ignore, if we only address questions of efficiency, is that technological innovations and infrastructural changes through the market mechanism “enroll some people and some places to premium status” and, more than that, these restructurings “often simultaneously work systematically to marginalize and exclude others from access to even basic services” (Graham and Marvin 288). For instance, high-speed rail connections between exurban airports and revitalized downtowns provide certain segments of the global middle-classes with seamless transportation, but exclude poorer populations in neighborhoods along the tracks from access. Stephen Graham and Simon Marvin’s work on splintering urbanism illustrates how the privatization of urban transportation infrastructure creates such “premium network spaces” that allow better off populations seamless mobility at the detriment of other marginalized and segregated segments of society. “Such ‘disfigured urban spaces’ thus tend to remain excluded and largely invisible within the contemporary metropolis, beyond the secured, well designed and carefully networked premium ... spaces”

(287). This means that we cannot simply argue, as the *triumphant city* discourse does, that entrepreneurial innovations in the market place will help us make cities more efficient and thereby more sustainable, without specifying who benefits and who loses. Efficiency alone does not address questions of social justice.

<sup>32</sup>

Whereas the *triumphant city* debate focuses only on technological efficiency gains and agglomeration economies, and the *beautiful city* planners call for greener urban design, both these lines of thinking narrow our perspective on urban sustainability to individual sites. To take an infrastructural perspective means to shed light on how social processes are linked over different scales and spatial distances. By examining the infrastructures that are necessary for the production of (isolated) post-industrial and seemingly more sustainable places in US cities, we can see how social and environmental costs are shifted to other places and externalized through mechanisms that cannot be captured by a mono-scalar and uni-spatial urban analysis. Ultimately, what this means is that what we tend to call a sustainable city today rests on systemic costs that are much less sustainable than refurbished industrial parks, remediated brown fields, and green waterfronts esplanades might suggest.

## 5. Re-politicizing Urban Sustainability Debates

<sup>33</sup>

I have argued that two dominant lines of argumentation in debates about urban sustainability—the *triumphant city* and the *beautiful city* discourses—have problematic blind spots and are analytically skewed. These discourses, reproduced by powerful political actors and institutions, seem to offer new solutions to our global challenges of the 21<sup>st</sup> century. But they are not as new as they suggest. Like their historical antecedents, the city-beautiful and the city-efficient movement, these discourses are limited. If sustainability has an environmental, a social, and an economic component, current urban sustainability discourses fail to address these dimensions. They put too much hope in technological solutions for social problems, they focus on aesthetic questions without questioning underlying social relations, and they limit their analytical scope to the immediately local.



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Advocates of the open city and planetary urbanization, per contra, offer us ways to get beyond methodological city-ism and use an analytical framework that is more appropriate to capture urbanization processes in the current conjuncture. This article has argued that an infrastructural perspective extends our analytical grip, and offers us a new perspective that goes beyond and beneath existing debates on urban sustainability. This infrastructural perspective reveals the systemic conditions that defer costs from one set of places to other, less visible ones. The relocation of social and environmental costs is very much a political project, emanating from political decisions on various scales—and not, as current planning and design discourses tend to emphasize, the consequence of inexorable economic processes. In this sense, a more holistic approach to sustainable urban development is equally a political endeavor that cannot fully fall back on technological and architectural improvement.

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Not only were the city-efficient and city-beautiful movements of the early 20<sup>th</sup> century not particularly successful: They also depoliticized debates about urban development, leaving urban change to technocrats and experts, while at the same time distancing political decision-making from urban constituencies. Moreover, the exclusive focus on the built form and the immediately local to create a better society—either through more efficiency or more beautiful spaces—did not and does not address larger social contexts. An infrastructural perspective re-politicizes debates about urban sustainability. Using infrastructure as an analytical lens helps us to overcome the fetish of the immediate and to pose the central question: who benefits and who loses from sustainable urban restructuring?

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## NOTES

1. I would like to thank Margit Mayer and Stefan Höhne for their helpful comments on earlier versions of this essay and the reviewers and editors for their support and feedback during the publication process.

Frederick Winslow Taylor's *The Principles of Scientific Management* starts out with a reference to President Roosevelt, arguing for increased efficiency to improve environmental conservation. I thank James Dorson for calling my attention to this point.

2. IBM's globally visible "Let's build a smarter planet"-campaign aims at "collecting and analyzing the extensive data generated every second of every day." In so doing, IBM's tools are supposed to "coordinate and share data in a single view creating the big picture for the decision makers and responders who support the smarter city" (2014).
  3. See in particular Chapter 5.
  4. Ibid. Chapters 3 and 4.
  5. It is helpful to quote this passage at some length in order to drive home the central contradiction: "We might imagine a sustainable environment to be harmoniously balanced and for all its parts to fit together efficiently; we would thus define sustainability in terms of equilibrium and integration. In the use of natural resources like petrol and water these seem only sensible standards. But in social systems they are not. [...] Equilibrium in a social order can sacrifice dissent for the sake of harmony. [...] both the values of harmony and integration can become instruments of repression. Seen in this light, balance and integration are the correlates of over-determined form; rigid rules and structures promise to deliver them" (Sennett 2008).
  6. On the important distinction between spatial and process-based (urban) utopias and their limitations see David Harvey's lecture on "possible urban worlds" (2000).
  7. Neil Brenner (2013) argues that "the geographies of urbanization, which have long been understood with reference to the densely concentrated populations and built environments of cities, are assuming new, increasingly large-scale morphologies that perforate, crosscut, and ultimately explode the erstwhile urban/rural divide" (87). Therefore his interest lies not on 'regional' but on "planetary urbanization."
  8. Merriam-Webster definition of "Infrastructure," <<http://www.merriam-webster.com/dictionary/infrastructure>>.
  9. For the cases of Vancouver and New York City see Vormann 2014 and 2015 ("Toward an Infrastructural Critique") respectively.
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## INDEX

**Keywords:** City-beautiful Movement, City-efficient Movement, Infrastructure, Open city, Planetary Urbanization, Sustainability

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