

Elements for a New Epistemology of the Urban¹

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A new concept is animating debates on the urban question: planetary urbanization. What was only a few years ago no more than a preliminary hypothesis, significantly inspired by Henri Lefebvre's (2003 [1970]) conception of a worldwide 'urban revolution,' has now become a vibrant theoretical approach that is being applied across divergent terrains of urban research around the world. It is also provoking some intense, sometimes polemical debates on the appropriate conceptualization, methodology, site, scale and focal point for urban research today..

The guiding thread of our own efforts to theorize planetary urbanization is the exploration of an apparently simple but highly consequential question: To what degree do inherited conceptualizations, epistemologies and cartographies of the urban provide an adequate basis for grasping emergent patterns and pathways of urbanization? For reasons we have elaborated in our previous writings, we believe that a significant reframing of the urban question is today required in order more effectively to decipher, and to influence, the urban transformations and urbanization processes that are currently reshaping the planet. Specifically, we have questioned inherited, city-centric approaches, in both their mainstream and critical/radical variants (a) for reducing the urban to a nodal agglomeration or a territorially bounded settlement type and (b) for contrasting the latter to a putatively non-urban (rural, countryside, wilderness) 'outside' (Brenner and Schmid 2015, 2014, 2011). From our point of view, these long-entrenched metageographical assumptions regarding the urban are not a productive basis for deciphering the variegated patterns and pathways of contemporary urbanization, and their massive consequences for planetary-scale socio-spatial relations. Several patterns and pathways of urban restructuring of the post-1980s period have seriously destabilized such assumptions:

- *The creation of new scales of urbanization.* Extensively urbanized interdependencies are being consolidated within extremely large, polynucleated metropolitan regions to create sprawling urban

galaxies that stretch far beyond any single metropolitan region and often traverse multiple national boundaries. Such mega-scaled urban constellations have been recognized for over a century within the field of urban studies. In recent decades, however, such urbanized megaregions have been developing with unprecedented speed; they are also now more tightly interlinked across territories, scales and worldwide interspatial networks.

- *The blurring and rearticulation of the urban fabric.* The fabric of urban space is being at once expanded and blurred, as urban fragments are distributed extensively, if unevenly, across large-scale territories. Formerly central city functions, such as shopping facilities, corporate headquarters, multi-modal logistics hubs, research institutions, cultural venues, as well as spectacular architectural forms, dense settlement patterns and other major infrastructural arrangements, are now being dispersed outward from historic central city cores, into erstwhile suburbanized spaces and hinterlands, among expansive catchments of small- and medium-sized towns and along major transportation corridors such as superhighways and rail lines.
- *The reterritorialization of the hinterland.* The long entrenched image of an urban region surrounded by a territorially contiguous hinterland serving the city core with food, water, energy and materials, and processing its waste, has today become obsolete. The erstwhile hinterlands of major metropolitan regions and national territories are increasingly being operationalized to serve specific functions within worldwide spatial divisions of labor – whether as back office and warehousing locations, global sweatshops, agro-industrial land-use systems, data storage facilities, energy generation grids, resource extraction zones, fuel depots, waste disposal areas, recreational areas or corridors of connectivity. Meanwhile, the metabolic supply and processing zones of the global urban system are becoming more industrialized, infrastructuralized and spatially distanced from the metropolitan areas they support. In effect, the planet's most industrially specialized hinterlands are no longer staging grounds for specific urban regions or even national urban hierarchies, but have come to serve as metabolic supports for the global metropolitan network as a whole.
- *New corridors of urbanization.* Accelerated by the unprecedented densification of inter-metropolitan networks, new logistical geographies are being established across major global regions, especially in East and Southeast Asia and Latin America, as well as in strategic corridors of Central Asia, Central America and Sub-Saharan Africa. These extended zones of logistical infrastructure require colossally scaled investments, including highways, canals, railways, waterways and pipelines, as well as nodal points such as seaports, airports, rail stations and intermodal logistics hubs, which are in turn coordinated via the undersea cables and satellite fleets of the Internet age. Here too, transport-based urban development patterns have long been recognized by urban theorists, but their planetary-scale consolidation, thickening and impact in the current period are historically unprecedented, as is their role in generating new infrastructural geographies of urban life.
- *The end of the wilderness.* Erstwhile 'wilderness' spaces are being transformed and often degraded through the cumulative socio-ecological consequences of unfettered worldwide urbanization or are otherwise being converted into bio-enclaves offering 'ecosystem services' to offset destructive environmental impacts generated elsewhere. In this way, the world's oceans, alpine regions, the equatorial rainforests, major deserts, the arctic and polar zones, and even the earth's atmosphere itself, are being more tightly intermeshed with the rhythms of planetary urbanization at every geographical scale.

The aforementioned trends and transformations obviously overlap and reinforce one another, albeit in place-, territory- and scale-specific ways. They are also, of course, always mediated through contextually specific regulatory–institutional arrangements, state and corporate strategies and everyday socio-political struggles. But their cumulative result has been to generate radically transformed planetary geographies of urbanization and urban restructuring that can only be bluntly deciphered on the basis of the traditional, singular vision of 'the' city as a nodal, bounded, singular and thus universally replicable

settlement type (Brenner and Schmid 2014). Paradoxically, much contemporary debate on our putative ‘urban age’ continues to embrace such city-centric metageographical framings, even as they are being superseded in practice through the forward motion of socio-spatial and socio-ecological creative destruction that animates the contemporary formation of capitalist urbanization. It is for this reason that we have devoted extensive attention, in our previous writings, to the critique of contemporary urban ideologies, which at once express and obscure some of the key urban transformations of our time (Brenner 2016, 2014a, 2014b; Brenner and Schmid 2014; Schmid 2015, 2012). Unless we are able to acquire some critical distance from such omnipresent city-centric, and often city-triumphalist, urban ideologies, our collective capacities to decipher, and thus to influence, emergent urbanization patterns will be seriously compromised.

Our argument is not that cities, or metropolitan agglomerations, no longer exist, or are no longer central sites and expressions of urbanization processes – of course they do; and of course they are. Our proposal, rather, is that approaches to urban theory that focus exclusively on agglomeration processes and/or intercity relations cannot adequately grasp their connections to a wide range of non-city conditions, processes and transformations that are increasingly essential to the spatiotemporal dynamics and metabolic circuitry of capitalist urbanization on a planetary scale. From our point of view, contemporary urban transformations encompass a much broader, if massively uneven, terrain of sites, territories and landscapes, including many that may contain relatively small or minimal populations, but where colossal infrastructural and socio-environmental metamorphoses are underway precisely in support of the everyday socio-economic activities, metabolic operations and growth imperatives of often-distant agglomerations. Such developments, we argue, require a much broader conceptualization of the urban that includes not only dense agglomerations, their jagged, dispersed perimeters, their proximate hinterlands and their long-distance networks of connectivity, but also the vast, increasingly planetary operational landscapes of energy, labor, food, water, infrastructure and waste – in short, of worldwide socio-metabolic transformation – that support what Chicago School urban sociologist Ernest Burgess (1967 [1925]) once laconically described as ‘the growth of the city.’

It is against this background, then, that we frame our core question in this chapter: If the urban is no longer coherently contained within or anchored to ‘the’ city – or, for that matter, to any other bounded settlement type – then how can a scholarly field devoted to its investigation continue to exist? Or, to pose the same question as a challenge of intellectual reconstruction: Is there – *could* there be – a new epistemology of the urban that might illuminate the emergent conditions, processes and transformations associated with a world of generalized urbanization?

To confront this *problématique*, this chapter presents a series of seven epistemological theses, which are intended to offer a conceptual basis for deciphering emergent urban transformations. These theses are closely connected to our earlier critique of contemporary urban ideologies and to our developing theorization of planetary urbanization, but they are not intended to elaborate those analyses in any detail. Instead, our proposals are meant to demarcate some relatively broad epistemological parameters within which a multiplicity of reflexive approaches to critical urban theory might be pursued. We aim here, then, not to advance a specific, substantive theory of the urban, but to present a general epistemological framework through which this elusive, yet seemingly omnipresent condition of the contemporary world might be analytically deciphered, even as it continues to evolve and mutate before our eyes.

This chapter is thus intended as a *meta*-theoretical exercise. Rather than attempting to ‘nail down’ a fixed definition of the essential properties of the urban phenomenon, it involves developing a reflexive epistemological framework that may help bring into focus and render intelligible the ongoing reconstitution of that phenomenon in relation to the simultaneous evolution of the very concepts and methods being used to study it.

THESIS 1: THE URBAN AND URBANIZATION ARE THEORETICAL CATEGORIES, NOT EMPIRICAL OBJECTS

In most mainstream traditions, the urban is treated as an empirically self-evident, universal category corresponding to a particular type of bounded settlement space, the ‘city.’ While such empiricist, universalistic understandings continue to underpin important strands of urban research and policy, including contemporary mainstream discourses on global urbanism, we argue that the urban, and the closely associated concept of urbanization, must be understood as theoretical abstractions; they can only be defined through the labor of conceptualization. The urban is thus a theoretical category, not an empirical object: its demarcation as a zone of thought, representation, imagination or action can only occur through a process of theoretical abstraction.

Even the most descriptively nuanced, quantitatively sophisticated or geospatially enhanced strands of urban research necessarily presuppose any number of pre-empirical assumptions regarding the nature of the putatively ‘urban’ condition, zone or transformation that is under analysis (Brenner and Katsikis 2014). Such assumptions are not mere background conditions or incidental framing devices, but constitute the very interpretive lens through which urban research becomes intelligible as such. For this reason, the ‘urban question’ famously posed by Manuel Castells (1977 [1972]) cannot be understood as a theoretical detour, or as a mere intellectual diversion for those interested in concept formation, or in the field’s historical evolution. Rather, engagement with the urban question is a constitutive moment of theoretical abstraction within all approaches to urban research and practice, whether or not they reflexively conceptualize it as such (Brenner 2013).

Since the early twentieth century, the evolution of urban studies as a research field has been animated by intense debates regarding the appropriate conceptualization of the urban – its geographical parameters, its historical pathways and its key social, economic, cultural or institutional dimensions (Saunders 1986; Hartmann, Hitz, Schmid and Wolff 1986). In each framing, the urban has been equated with divergent properties, practices, conditions, experiences, institutions and geographies, which have in turn defined the basic horizons for research, representation and practice. Such demarcations have entailed not only diverse, often incompatible, ways of understanding cities and agglomeration, but also a range of interpretive methods, analytical strategies and cartographic techniques through which those conditions are distinguished from a putatively ‘non-urban’ outside – the suburban, the rural, the natural or otherwise. In this sense, rather than developing through a simple accretion of concrete investigations on a pre-given social condition or spatial arrangement, the field of urban studies has evolved through ongoing theoretical debates regarding the appropriate demarcation, interpretation and mapping of the urban itself.

The urban is, then, an essentially contested concept and has been subject to frequent reinvention in relation to the challenges engendered by research, practice and struggle. While some approaches to the urban have asserted, or aspired to, universal validity, and thus claimed context-independent applicability, every attempt to frame the urban in analytical, geographical and normative–political terms has in fact been strongly mediated through the specific historical–geographical formation(s) in which it emerged – for example, Manchester, Paris and classically industrial models of urbanization in the mid-nineteenth century; Chicago, Berlin, London and rapidly metropolitanizing landscapes of imperial–capitalist urbanization in the early twentieth century; and Los Angeles, Shanghai, Dubai, Singapore and neoliberalizing models of globally networked urbanization in the last three decades. More recently, following some major postcolonial interventions (Robinson 2006; Roy 2009; Sheppard, Leitner and Maringanti 2013), many more urban territories have become starting points for urban concepts and theory building.

This circumstance means that all engagements with urban theory, whether Euro-American, postcolonial or otherwise, are in some sense ‘provincial,’ or context-dependent, because they are mediated through concrete experiences of time and space within particular places. Just as crucially, though, conditions within local and regional contexts under modern capitalism have long been tightly interdependent with one another, and have been profoundly shaped by broader patterns of capitalist industrialization, regulation and uneven socio-spatial development. The recognition of context-dependency – the need to ‘provincialize’ urban theory – thus stands in tension with an equally persistent need to understand the historically evolving totality of inter-contextual patterns, developmental pathways and systemic transformations in which such contexts are embedded, whether at national, supranational or worldwide scales.

In all cases, therefore, theoretical definitions of the urban and the historical–geographical contexts of their emergence are tightly intertwined. This proposition applies whether the urban is delineated as a local formation or as a global condition; the contexts of theory production must likewise be understood in both situated *and* inter-contextual terms. Any reflexive approach to the urban question must make explicit the venue of its own research practice (be it a specific place, an urbanizing territory or a broader socio-economic network) and consider the implications of the latter for its own epistemological and representational framework.

Such definitional debates and theoretical controversies are not only derived from specific contexts of urbanization; they also powerfully impact those contexts insofar as they help clarify, construct, legitimate, disseminate and naturalize particular visions of socio-spatial organization that privilege certain elements of the urban process while neglecting or excluding others. These often-contradictory framing visions, interpretations and cartographies of the urban (as site, territory, ecology and experience) mediate urban design, planning, policy and practice, with powerful consequences for ongoing strategies and struggles, in and outside of major institutions, to shape and reshape urbanized landscapes. It is essential, therefore, to connect debates on the urban question to assessments of their practical and political implications, institutional expressions and everyday consequences in specific contexts of urban restructuring. Such a task may only be accomplished, however, if the underlying assumptions associated with framing conceptualizations of the urban are made explicit, subjected to critical scrutiny and revised continually in relation to evolving research questions, normative–political orientations and practical concerns.

THESIS 2: THE URBAN IS A PROCESS, NOT A UNIVERSAL FORM, SETTLEMENT TYPE OR BOUNDED UNIT

Across significant strands of the social sciences and the design disciplines, the urban has been treated as a fixed, unchanging entity – the city, or an upscaled territorial variant thereof, such as the city-region or the metropolitan region. However, even though the phrase ‘the city’ persists as an ideological framing in mainstream policy discourse and everyday life (Wachsmuth 2014), it is no longer possible to understand the urban phenomenon as a singular condition derived from the serial replication of a specific socio-spatial condition (for instance, agglomeration) or settlement type (for instance, places with large, dense and/or heterogeneous populations) across the territory. By contrast, following Lefebvre’s (2003 [1970]) methodological injunction, we interpret the urban as a multiscalar *process* of socio-spatial transformation. The study of specific urban forms, types or units must thus be superseded by investigations of the relentless ‘churning’ or creative destruction of urban configurations at all spatial scales. This apparently simple proposal entails a series of far-reaching consequences for many of the core epistemological operations of urban theory and research.

First, the urban can no longer be understood as a fixed, universal *form*. Apparently stabilized urban sites are merely temporary materializations of ongoing socio-spatial transformations. Such transformative processes do not simply unfold within fixed or stable urban ‘containers,’ but actively produce, unsettle and rework them, and thus constantly engender new urban configurations. As such, the urban is dynamic, historically evolving and variegated. It is materialized within built environments and socio-spatial arrangements at all scales; and yet it also continually transforms the latter to produce new patterns of socio-spatial organization (Harvey 1985). There is thus no singular morphology of the urban; there are, rather, many processes of urban transformation that crystallize across the world at various spatial scales, with wide-ranging, often unpredictable consequences for inherited socio-spatial arrangements.

Second, the urban can no longer be understood as a specific settlement *type*. The field of urban studies has long been preoccupied with the task of classifying particular socio-spatial conditions within putatively distinct types of settlement space (city, town, suburb, metropolis and various sub-classifications thereof). Today, however, such typologies of urban settlement have outlived their usefulness; processes of socio-spatial transformation, which crisscross and constantly rework diverse places, territories and scales, must instead be moved to the foreground of our epistemological framework. In such a conceptualization, urban configurations must be conceived not as discrete settlement types, but as dynamic, relationally evolving force fields of socio-spatial restructuring (Massey 2005; Allen, Massey and Cochrane 1998). As such, urban configurations represent, simultaneously, the territorial inheritance of earlier rounds of restructuring and the socio-spatial frameworks in and through which future urban pathways and potentials are produced. The typological classification of static urban units is thus considerably less productive, in both analytical and political terms, than explorations of the various processes of socio-spatial creative destruction through which urban configurations are produced, contested and transformed.

Third, the urban can no longer be understood as a *bounded* spatial unit. Since the origins of modern approaches to urban theory in the late nineteenth century, the urban has been conceptualized with reference to the growth of cities, conceived as relatively

circumscribed, if constantly expanding, socio-spatial units. Such assumptions have long pervaded mainstream urban research, and they are today powerfully embodied in the discourses on global urbanism promoted by the United Nations, the World Bank and other major international organizations. In light of the above considerations, however, our analyses of urban configurations must be systematically disentangled from inherited understandings of cityness, which obfuscate the processes of ‘implosion–explosion’ that underpin the production and continual restructuring of socio-spatial organization under modern capitalism. It is misleading to equate the urban with any singular, bounded spatial unit (city, agglomeration, metropolitan region, or otherwise); nor can its territorial contours be coherently delineated relative to some postulated non-urban ‘outside’ (suburban, rural, natural, wilderness, or otherwise). Conceptualizations of the urban as a bounded spatial unit must thus be superseded by approaches that investigate how urban configurations are churned and remade across the uneven landscapes of worldwide capitalist development.

In sum, the process-based approach to the urban proposed here requires a fundamental reorientation of urban research. No longer conceived as a form, type or bounded unit, the urban must now be re-theorized as a process that, even while continually reinscribing patterns of agglomeration across the earth’s terrestrial landscape, simultaneously transgresses, explodes and reworks inherited geographies (of social interaction, settlement, land use, circulation and socio-metabolic organization), both within and beyond large-scale metropolitan centers.

THESIS 3: URBANIZATION INVOLVES THREE MUTUALLY CONSTITUTIVE MOMENTS – CONCENTRATED URBANIZATION, EXTENDED URBANIZATION AND DIFFERENTIAL URBANIZATION

Inherited understandings of urbanization are seriously limited by their pervasive focus on the classic of ‘the growth of the city’ (Burgess 1967 [1925]). This is not merely a matter of empirical emphasis, but flows from a fundamental epistemological commitment – namely, the conceptualization of urbanization with exclusive reference to the condition of agglomeration, the spatial concentration of population, means of production, infrastructure and investment within a more or less clearly delineated spatial zone.

Without denying the essential importance of such spatial clusters to urbanization processes, we argue that a more multifaceted conceptualization is today required which illuminates the interplay between three mutually constitutive moments: (i) concentrated urbanization, (ii) extended urbanization and (iii) differential urbanization (Figure 4.1). These three moments are dialectically interconnected and mutually constitutive; they are analytically distinguished here simply to offer an epistemological basis for a reinvented conceptualization that transcends the limitations and blind spots of mainstream models.

Since Friedrich Engels famously analyzed the explosive growth of industrial Manchester in the mid-nineteenth century, the power of agglomeration has been a key focal point for urban research. Although its appropriate interpretation remains a topic of intense debate, the moment of *concentrated urbanization* is thus quite familiar from inherited approaches to urban economic geography, which aim to illuminate the agglomeration processes through which firms, people and infrastructure cluster together in space during

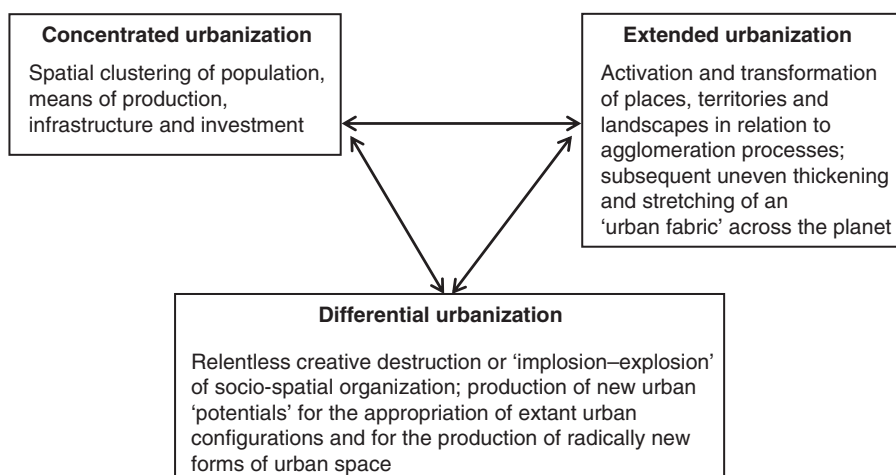


Figure 4.1 The three 'moments' of urbanization

successive cycles of capitalist industrial development (Scott 1988; Veltz 1996; Storper 1996; Krätke 2014). Obviously, large agglomerations remain central arenas and engines of massive urban transformations, and thus clearly merit sustained investigation, not least under early twenty-first-century capitalism. However, we reject the widespread assumption within both mainstream and critical traditions of urban studies that agglomerations represent the privileged or even exclusive terrain of urban development. In contrast, we propose that the historical and contemporary geographies of urban transformation encompass much broader, if massively uneven, territories and landscapes, including many that may contain relatively small, dispersed or minimal populations, but where major socio-economic, infrastructural and socio-metabolic metamorphoses have occurred precisely in support of, or as a consequence of, the everyday operations and growth imperatives of often-distant agglomerations. For this reason, the moment of concentrated urbanization is inextricably connected to that of *extended urbanization*.

Extended urbanization involves, first, the operationalization of places, territories and landscapes, often located far beyond the dense population centers, to support the everyday activities and socio-economic dynamics of urban life. The production of such operational landscapes results from the most basic socio-metabolic imperatives associated with urban growth: the procurement and circulation of food, water, energy and construction materials; the processing and management of waste and pollution; and the mobilization of labor power in support of these various processes of extraction, production, circulation and management. Second, the process of extended urbanization entails the ongoing construction and reorganization of relatively fixed and immobile infrastructures (in particular, for transportation and communication) in support of these operations, and consequently the uneven thickening and stretching of an 'urban fabric' (Lefebvre 2003 [1970]) across progressively larger zones, and ultimately, around much of the entire planet (see Thesis 5 below). Third, the process of extended urbanization frequently involves the enclosure of land from established social uses in favor of privatized, exclusionary and profit-oriented modes of appropriation, whether for resource extraction, agro-business, logistics functions or otherwise. In this sense, extended urbanization is intimately intertwined with

the violence of accumulation by dispossession (often animated and enforced by state institutions) through which non-commodified modes of social life are destabilized and articulated to global spatial divisions of labor and systems of exchange (Sevilla-Buitrago 2014).

The moment of extended urbanization has been partially illuminated in classic accounts of city–hinterland relations, which have explored not only the making of operational landscapes to support population centers, but the ways in which the very process of metropolitan development has hinged upon massive, highly regularized inputs (of labor, materials, food, water, energy, commodities, information and so forth) procured from agglomerations as well as various types of non-city spaces, both proximate and remote (Harris and Ullman 1945; Jacobs 1970; Cronon 1991; for discussion see Katsikis 2015). More recently, accounts of extended urbanization have emphasized the progressive enclosure, operationalization and industrialization of such landscapes around the world – including rainforests, tundra, alpine zones, oceans, deserts and even the atmosphere itself – to fuel the rapid intensification of metropolitan growth in recent decades (Monte-Mór 2014a, 2014b; Schmid 2006; Brenner 2014a, 2014b; Soja and Kanai 2014 [2006]).

Throughout the *longue durée* history of capitalist industrialization, the geographies of extended urbanization have been essential to the consolidation, growth and restructuring of urban centers. Rather than being relegated to a non-urban ‘outside,’ therefore, the moment of extended urbanization must be viewed as an integral terrain of the urbanization process as a whole. Thus, without abandoning the long-standing concern of urbanists to understand agglomeration processes, we propose to connect that familiar *problématique* to a wide-ranging set of socio-spatial transformations that have not typically been viewed as being connected to urbanization.

Concentrated and extended urbanization are inextricably intertwined with the process of *differential urbanization*, in which inherited socio-spatial configurations are recurrently creatively destroyed in relation to the broader developmental dynamics and crisis tendencies of modern capitalism. Lefebvre (2003 [1970]) captured this distinctive tendency within capitalist forms of urbanization through the vivid metaphor of ‘implosion–explosion,’ a formulation that has been appropriated in diverse ways in recent years by critical urban thinkers (Brenner 2014a, 2014b; Schmid, Stanek and Moravánszky 2014). For our purposes here, rather than equate ‘implosion’ exclusively with concentrated urbanization and ‘explosion’ with extended urbanization, the metaphor offers a useful basis for demarcating a third, differential moment of urbanization based upon the perpetual drive to restructure socio-spatial organization under modern capitalism, not only within metropolitan agglomerations but across broader landscapes of extended urbanization.

Consistent with the process-based conceptualization of the urban presented in Thesis 2, the differential moment of urbanization puts into relief the intense, perpetual dynamism of capitalist forms of urbanization, in which socio-spatial configurations are tendentially established, only to be rendered obsolete and eventually superseded through the relentless forward motion of the accumulation process and industrial development (Harvey 1985). Just as crucially, differential urbanization is also the result of various forms of urban struggle and expresses the powerful potentials for radical social and political transformation that are unleashed, but often suppressed, through capitalist industrial development. In this sense, the term differential urbanization underscores the double-edged character of urban transformation: it radically and often violently transforms existing socio-spatial configurations, but it meanwhile may open up new options for the creation of differences, and thus for the further creative transformation of socio-spatial

relations (Lefebvre 1991 [1974] 2003 [1970]). These urban potentials are usually seen as being produced and contained within large, globally networked metropolitan centers. However, with the intensification of extended urbanization, as defined above, this potential is now also being distributed to other places and territories, often in unpredictable, unexpected ways that are also radically reworking the politics of space that underpin and animate the planetary urban fabric (see Thesis 7 below).

We reiterate that these three moments of urbanization under capitalism refer not to distinct morphological conditions, geographical sites or temporal stages, but to mutually constitutive, dialectically intertwined elements of an historically specific process of socio-spatial transformation. Just as distant flows of material, energy and labor underpin the everyday dynamics of large metropolitan agglomerations, so too do the growth imperatives and consumption demands of the latter directly mediate the construction of large-scale infrastructural projects, land-use reorganization and socio-cultural transformations in apparently 'remote' operational landscapes. As the urban fabric is progressively, if unevenly, stretched, thickened, rewoven and creatively destroyed, new centers of agglomeration (from mining and farming towns and tourist enclaves to logistics hubs and growth poles) may emerge within zones that previously served mainly as operational hinterlands (Arboleda 2015). The urban fabric of modern capitalism is thus best conceived as a dynamically evolving force field in which the three moments of urbanization continually interact to produce historically specific forms of socio-spatial organization and uneven development. A framework that reflexively connects the three moments of urbanization demarcated here may thus offer productive new interpretive perspectives not only on the historical and contemporary geographies of capitalist industrial development, but also on some of the socio-ecological conditions that are today commonly thought to be associated with the age of the 'anthropocene' (Crutzen 2002; for a critical discussion see Chakrabarty 2008; Malm and Hornborg 2014).

THESES 4: THE FABRIC OF URBANIZATION IS MULTI-DIMENSIONAL

The epistemology of urbanization proposed above explodes inherited assumptions regarding the geographies of this process: they are no longer expressed simply through the city, the metropolitan region or interurban networks, and nor are they bounded neatly and distinguished from a putatively non-urban 'outside.' But this systematic analytical delinking of urbanization from trends related exclusively to city growth entails a further epistemological consequence – the abandonment of several major sociological, demographic, economic or cultural definitions of urbanization that are directly derived from that assumption. Thus, with the deconstruction of mono-dimensional, city-centric epistemologies, urbanization can no longer be considered synonymous with such commonly invoked developments as: rural-to-urban migration; expanding population levels in big cities; the concentration of investments and economic capacities within dense population centers; the diffusion of urbanism as a socio-cultural form into small- and medium-sized towns and villages; or the spreading of similar, 'city-like' services, amenities, technologies, infrastructures or built environments across the territory. Any among the latter trends *may*, under specific conditions, be connected to distinctive patterns and pathways of urbanization. However, in the epistemological framework proposed here, their

analytical demarcation as such no longer hinges upon the definitionally fixed assumption either (a) that they necessarily originate within specific settlement units (generally, big cities), or (b) that they necessarily result from the replication of formally identical urban settlement types, infrastructural arrangements or cultural forms across the entire territory.

What is required, instead, is a multi-dimensional understanding of urbanization that can illuminate the historically specific patterns and pathways through which the variegated, uneven geographies of this process, in each of its three constitutive moments, are articulated during successive cycles of worldwide capitalist development. To facilitate such an analysis, building upon Lefebvre's three-dimensional conceptualization of the production of space (Lefebvre 1991 [1974]; Schmid 2005, 2008, 2014a), we distinguish three further *dimensions* of urbanization: spatial practices, territorial regulation and everyday life (Figure 4.2). These dimensions of urbanization co-constitute the three moments of urbanization demarcated in Thesis 3, and together produce the unevenly woven, restlessly mutating urban fabric of the contemporary world.

First, urbanization involves distinctive *spatial practices* through which land use is intensified, connectivity infrastructures are thickened and socio-metabolic transformations are accelerated to facilitate processes of industrialization. Such spatial practices underpin the production of built environments within major cities as well as a wide range of socio-spatial transformations in near and distant zones in relation to the latter.

Second, urbanization is always mediated through specific forms of *territorial regulation* that (a) impose collectively binding rules regarding the appropriation of labor, land, food, water, energy and material resources; (b) mobilize formal and informal planning procedures to govern investment patterns into the built environment; and (c) manage patterns of territorial development with regard to processes of production and social reproduction, major aspects of logistics infrastructure and commodity circulation, as well as emergent crisis tendencies embedded within inherited spatial arrangements (Brenner 2004; Schmid 2003).

Finally, urbanization is always deeply embedded in *everyday life*. Whether within dense population centers or in more remote locations embedded within the broader urban fabric, urban space is defined by the people who use, appropriate and transform it through their daily routines and practices, which frequently involve struggles regarding the very form and content of the urban itself, at once as a site and stake of social experience. In this context, questions of social reproduction, ways of life and livelihoods also play crucial roles in the production of urban space. The qualities of urban space, across diverse locations, are thus mediated and reproduced through lived experiences, which in turn crystallize longer-term processes of socialization that are materialized within built environments and territorial arrangements.

Clearly, this is a broad conceptualization of urbanization: it involves a wide-ranging, contradictory constellation of material, social, institutional, environmental and everyday transformations associated with capitalist industrialization, the circulation of capital and the management of territorial development at various spatial scales. We would insist, however, on distinguishing urbanization from the more general processes of capitalist industrialization and world market expansion that have been investigated by economic historians and historical sociologists of capitalist development (see, for instance, Arrighi 1994). As understood here, urbanization is indeed linked to these processes, but its specificity lies precisely in materializing the latter within places, territories and landscapes, and

D I M E N S I O N S		
M O M E N T S	SPATIAL PRACTICES	TERRITORIAL REGULATION
	CONCENTRATED URBANIZATION	The production of built environments and socio-spatial configurations to harness the power of agglomeration
	EXTENDED URBANIZATION	The activation of places, territories and landscapes in relation to agglomerations; the subsequent creation, thickening and stretching of an 'urban fabric' connecting agglomerations to the diverse sites of socio-metabolic and socio-economic transformation upon which they depend
	DIFFERENTIAL URBANIZATION	Recurrent pressures to creatively destroy inherited geographies of agglomeration and associated operational landscapes
		EVERYDAYLIFE
		The production of social routines, everyday practices and forms of life associated with the power of agglomeration
		The social routines, everyday practices and forms of life that emerge (a) as diverse places, territories and landscapes are operationalized in relation to agglomerations, and (b) as a broader urban fabric is thickened and stretched across territories and scales
		The reorganization of social routines, everyday practices and forms of life in conjunction with the creative destruction of built environments and the urban fabric at any spatial scale

Figure 4.2 Moments and dimensions of urbanization

in embedding them within concrete, temporarily stabilized configurations of everyday life, socio-economic organization and modes of territorial regulation. Capitalist industrial development does not engender urban growth and restructuring on an untouched terrestrial surface; rather, it constantly collides with, and reorganizes, inherited socio-spatial configurations. Urbanization is precisely the medium and expression of this collision, and every configuration of urban life is powerfully shaped by the diverse social, political and institutional forces that mediate it.

THESIS 5: URBANIZATION HAS BECOME PLANETARY

Since the first wave of large-scale capitalist industrialization in the nineteenth century, the functional borders, catchment areas and immediate hinterlands of urban regions have been extended outward to create ever-larger regional units. Just as importantly, however, this dramatic process of metropolitan expansion has long been premised upon the intensive activation and transformation of progressively broader landscapes of extended urbanization that supply agglomerations with their most basic socio-economic and socio-metabolic requirements. In contrast to inherited periodizations, which focus almost exclusively on cities and urban form, the framework proposed here would permit the dynamics of city growth during each period to be analyzed in direct relation to the production and reconstitution of historically and geographically specific operational landscapes (mediated through empire, colonialism, neocolonialism and various forms of enclosure and accumulation by dispossession) that supported the latter.

For present purposes, we focus on the contemporary formation of urbanization. In our view, a genuinely planetary formation of capitalist urbanization began to emerge following the long 1980s, the transitional period of crisis-induced global economic restructuring that began with the deconstruction of Fordist–Keynesian and national–developmentalist regimes of accumulation in the early 1970s and continued until the withering away of state socialism and the collapse of the Soviet Union in the late 1980s and early 1990s. These developments established some of the basic preconditions for the subsequent planetary extension of the urban fabric during the last two decades: the deregulation of the global financial system and of various national regulatory systems; the neoliberalization of global, national and local economic governance; the worldwide digital revolution; the flexibilization of production processes and the generalization of global production networks; and the creation of new forms of market-oriented territorial regulation at supranational, national and subnational scales. These realignments have created a new regulatory framework encouraging speculative urban investment, not only within the property markets and built environments of the world's major cities, but also through the construction of vastly expanded urban networks and infrastructures of resource extraction, agro-industrial cultivation and logistical circulation, all of which have massively contributed to the accelerated enclosure of landscapes around the world to permit intensified, accelerated capital circulation (Harvey 2010).

Aside from the reconstitution and thickening of networked connectivities among the world's major metropolitan regions, which have received extensive attention within the global urban studies literature (Taylor 2004), several additional waves of socio-economic and socio-metabolic transformation of the post-1980s period have significantly rewoven

the inherited fabric of urbanization, while also extending it into new realms that were previously relatively insulated from its wide-ranging imprints. These include: (a) a major expansion in agro-industrial export zones, with associated large-scale infrastructural investments and land-use transformations to produce and circulate food and biofuels for world markets (McMichael 2013); (b) a massive expansion in investments related to mineral and oil extraction, in large part due to the post-2003 commodity boom manifested in dramatic increases in global prices for raw materials, especially metals and fuels (Arboleda 2015); and (c) the accelerated consolidation and extension of long-distance transportation and communications infrastructures designed to reduce the transaction costs associated with the production and circulation of capital (Hesse 2013). Under these conditions, erstwhile 'rural' zones around the world are being profoundly transformed: various forms of agro-industrial consolidation and land enclosure are undermining small- and medium-sized forms of food production; new forms of export-oriented industrial extraction are destabilizing established models of land-use and social reproduction, as well as environmental security; and newly consolidated inter-regional migration networks and communications infrastructures are dramatically rearticulating the interdependencies between villages, small towns and larger, often-distant urban centers, contributing in turn to the production of new forms of everyday experience that transcend the confines of specific places.

Amid these far-reaching socio-spatial transformations, the fabric of extended urbanization is meanwhile also being woven ever more densely, if still quite unevenly, across many relatively depopulated and erstwhile 'wilderness' landscapes, from the Arctic, the European Alps and the Amazon to Patagonia, the Himalayas, the Sahara, Siberia and the Gobi Desert, as well as through major zones of the world's seas and oceans (Diener, Herzog, Meili, de Meuron and Schmid 2006; Gugger, Couling and Blanchard 2012; Urban Theory Lab 2015). While the ecology and topography of these landscapes may still appear relatively pristine or untouched by the footprint of industrial capitalism, such impressions are misleading. In fact, for several decades now, strategic places, grids, corridors and concession zones within such territories have been aggressively enclosed and operationalized, usually by transnational corporations under the legal protection of neoliberal and/or authoritarian national states and various kinds of intergovernmental organizations, to facilitate new forms of resource extraction, energy and agro-industrial production, an unprecedented expansion of logistics infrastructures, as well as various additional forms of land-use intensification and environmental plunder intended to support the relentless growth and consumption imperatives of the world's major cities.

Under contemporary conditions, then, traditional models of metropolis and hinterland, center and periphery, city and countryside, have been exploded. The urban/rural opposition, which has long served as an epistemological anchor for the most basic research operations of urban studies, has today become an increasingly obfuscatory basis for deciphering emergent patterns and pathways of socio-spatial restructuring around the world. The geographies of uneven spatial development are today being articulated as an interweaving of new developmental patterns and potentials *within* a thickening, if deeply polarized, fabric of planetary urbanization. The urban is thus no longer defined in opposition to an ontological Other located beyond or 'outside' it, but has instead become the very tissue of human life itself, at once the framework and the basis for the many forms of socio-spatial differentiation that continue to proliferate under contemporary capitalist conditions. Nor can the rural be understood any longer as a perpetually present

‘elsewhere,’ ghost acreage or ‘constitutive outside’ that permits the urban to be demarcated as a stable, coherent and discrete terrain. Instead, this supposedly non-urban realm has now been thoroughly engulfed within the variegated patterns and pathways of a planetary formation of urbanization. In effect, it has been internalized into the very core of the urbanization process.

This proposition may prove controversial, especially if it is misunderstood as a generalization that ignores the continued differences, whether in social, institutional, infrastructural or environmental terms, between large metropolitan centers and zones characterized, for instance, by low or dispersed population, minimal or degraded built environments and/or relatively poor communications and transportation connectivity. Our claim here, however, is not that ‘rural’ zones and ways of life have disappeared; on the contrary, such spaces still exist and may even play decisive roles in the social, political and economic life of many regions.. However, conditions within so-called ‘rural’ zones should not be taken for granted; they require careful, contextually specific and theoretically reflexive investigations that may be seriously impeded through the unreflexive use of generic spatial taxonomies that predetermine their patterns and pathways of development and their form and degree of connection to other places, regions and territories. Indeed, contemporary research on putatively rural regions has shown that many such areas are being transformed through and embedded within urbanization processes, precisely through the kinds of accumulation strategies, infrastructural projects and socio-metabolic linkages we theorize under the rubric of extended urbanization (see, for example, Diener et al. 2006; Monte-Mór 2014a, 2014b; Woods 2009; Cloke 2006; Wilson 2014). Such studies strongly reinforce our contention that the inherited urban/rural distinction has come to obscure much more than it reveals regarding the entities, processes and transformations being classified on either side of the divide it purports to demarcate.

Precisely against this background, the concept of planetary urbanization may offer a useful epistemological reorientation. Obviously, it cannot substitute for concrete research on specific zones of socio-spatial transformation. But it does open up an epistemological pathway through which the latter may be pursued in relation to broader questions regarding the increasingly worldwide, if deeply polarized and uneven, geographies in which even the most apparently ‘remote’ places, regions and territories are now inextricably interwoven.

THESIS 6: URBANIZATION UNFOLDS THROUGH VARIEGATED PATTERNS AND PATHWAYS OF UNEVEN SPATIAL DEVELOPMENT

The emergence of a planetary formation of urbanization does not entail a homogenization of socio-spatial landscapes; it is not expressed through the ‘globalization’ of a uniform condition of cityness (or urban ‘sprawl’) across the entire planet; and it does not involve the transformation of the earth as a whole into a single world-city, akin to the Death Star in George Lucas’s *Star Wars* films or the planet Trantor in Isaac Asimov’s science fiction series, *Foundation*. On the contrary, as conceived here, urbanization under capitalism is always an historically and geographically variegated process: it is mediated through historically and geographically specific institutions, representations, strategies and struggles that are, in turn, conflictually articulated to the cyclical rhythms of worldwide capital

accumulation and their associated social, political and environmental contradictions. Rather than being analyzed through mono-dimensional or formalistic interpretive frames, capitalist urbanization must be understood as a polymorphic, multiscalar and emergent dynamic of socio-spatial transformation: it hinges upon and continuously produces differentiated, unevenly developed socio-spatial configurations at all scales. The task for any contemporary urban epistemology is therefore to develop an analytical and cartographic orientation through which to decipher its uneven, restlessly mutating crystallizations.

Capitalist urbanization might best be conceived as a process of constant, if contested, *innovation* in the production of socio-spatial arrangements – albeit one that always simultaneously collides with, and thereby transforms, inherited formations of spatial practice, regulatory coordination and everyday life (Schmid 2013). Under capitalism, urbanization is always articulated in contextually embedded socio-spatial formations, since it is precisely in relation to, and through collisions with, inherited structures of uneven spatial development that its specific patterns and pathways are forged and fought out. In this way, the abstract, universalizing processes of capitalist industrialization are materialized in historically and geographically specific urban configurations, which are in turn relentlessly transformed through the interplay of accumulation strategies, regulatory projects and socio-political struggles at various spatial scales.

The consolidation of a planetary configuration of urban development since the 1980s is thus only the most recent expression of this intense variegation, differentiation and continual reorganization of landscapes. On the one hand, planetary urbanization is the cumulative product of the earlier *longue durée* cycles of urbanization that have forged, differentiated and continually reshaped the worldwide geographies of capitalism since the mid-nineteenth century. At the same time, this latest formation of urbanization has emerged in the wake of the post-1980s wave of global neoliberalization, financial speculation and accumulation by dispossession that has at once accelerated and intensified the process of commodification and, by consequence, the uneven extension of industrial infrastructures around much of the planet (Thesis 5). But, despite abundant evidence of accelerating urbanization and unprecedented worldwide interconnectivity, the production of planetary urban landscapes during the last three decades has not entailed a simple homogenization of socio-spatial conditions. Rather, the dawn of planetary urbanization appears to have markedly accentuated and rewoven the differentiations and polarizations that have long been both precondition and product of the urbanization process under capitalism, albeit in qualitatively new configurations whose contours remain extremely difficult to decipher.

In an attempt to analyze these developments, contemporary urban thinkers have introduced dozens of new concepts intended to designate various putatively ‘new’ urban phenomena (Taylor and Lang 2004). While these endeavors productively underscore the changing geographies of the urban in contemporary global society, most have been focused too rigidly upon emergent urban forms that appear to have ruptured inherited socio-spatial arrangements. These include, for instance, purportedly new kinds of cities (global cities, megacities, edge cities, in-between cities, airport cities, informal cities and the like), regions (global city regions, megacity regions, polycentric metropolitan regions and so forth) as well as interurban networks, corridors and the like. However, within the epistemological framework proposed here, the constant search for such ‘new’ urban forms is an intellectual trap: it yields only relatively superficial insights into the

modalities and consequences of the wide-ranging transformations that are unleashed through the urbanization process. Creative destruction is the *modus operandi* of capitalist forms of urban development; new urban geographies are thus constantly being produced through the dynamics of differential urbanization, whether within large urban centers or across extended operational landscapes. The essential task, therefore, is less to distinguish new urban forms that are putatively superseding earlier spatial morphologies than to investigate the historically and geographically specific dynamics of creative destruction that underpin the patterns and pathways of urbanization, both historically and in the contemporary epoch.

Much work remains to be done to confront this challenge. A new vocabulary of urbanization is urgently required that would help us, both analytically and cartographically, to decipher the differentiated and rapidly mutating landscapes of urbanization that are today being produced across the planet (Schmid 2014 [2012]). While the shifting geographies of agglomeration must obviously remain a primary focus in such an endeavor, patterns of extended urbanization must now likewise be positioned centrally in any sustained effort to elaborate new concepts and methods for deciphering this emergent, volatile and still largely unfamiliar worldwide urban fabric.

THESIS 7: THE URBAN IS A COLLECTIVE PROJECT IN WHICH THE POTENTIALS GENERATED THROUGH URBANIZATION ARE APPROPRIATED AND CONTESTED

The preceding theses have attempted to clarify in analytical terms some of the foundations for a new epistemology of the urban that could more productively illuminate both historical and contemporary geographies of capitalist urbanization than inherited frameworks. We conclude with a final thesis that underscores the essentially political character of such epistemological considerations. Here we build upon our previous discussion of differential urbanization (Thesis 3), which emphasized the relentless drive toward creative destruction under capitalism and the powerful potentials for radical socio-spatial transformation associated with it. Such potentials are an essential product and stake of urbanization: they are generated through the productive force of agglomeration and associated operational landscapes; they are often instrumentalized through capital and state institutions to facilitate historically specific forms of industrialization and political regulation, but they are also reappropriated, redistributed and continually remade through the everyday use and contestation of urban space.

The urban can be productively understood as a *transformative potential* that is constantly generated through processes of urbanization. As both Georg Simmel and Henri Lefebvre paradigmatically recognized in different moments of twentieth-century capitalist development, this transformative potential inheres in the social, economic and cultural differentiations that are produced through urbanization, which connect diverse populations, institutions, activities, interactions and experiments in specific socio-spatial configurations (Schmid 2015b). The harnessing of such potentials is of central importance in the process of capital accumulation and in technologies of political regulation. At the same time, social movements struggle to appropriate such potentials for everyday use, social reproduction and cultural experimentation. In precisely this sense, the urban cannot be completely subsumed under the abstract logics of capitalist industrialization or

state domination: it is always co-produced and transformed through its users, who may strive to appropriate its actualized or unrealized potentials toward collective social uses, to create new forms of experience, connection and experimentation – in short, to produce a different form of life (Lefebvre 1991 [1974], 2003 [1970]). The definition of the urban is thus not an exclusively theoretical question, it is ultimately a practical one: it is necessarily articulated through debates, controversies, struggles, uprisings and revolts, and it is ultimately realized in the pleasures, routines and dramas of everyday life.

In recent years, many radical urban theorists have wrestled with this constellation of issues through explorations of Lefebvre's (1996 [1968]) classic concept of the 'right to the city' (Marcuse 2012). Originally elaborated in the context of the political uprisings of the late 1960s in Paris, this slogan subsequently became an important rallying cry for political mobilizations, which have sought to connect diverse struggles that were related in some way to the urban question (for instance, regarding rights to housing, transportation, education, public health, recreational infrastructures or environmental safety). Since the long 1980s, the demand for the right to the city has become even more widespread around the world, and its political content has meanwhile been differentiated to encompass a variety of normative and ideological positions, policy proposals, movement demands and popular constituencies in diverse local and national contexts across the world (Schmid 2012; Mayer 2012).

Given our arguments and proposals above, however, struggles over the right to the city must be fundamentally reframed – for, as David Harvey (2012: xv) notes, 'to claim the right to the city is, in effect, to claim a right to something that no longer exists' (for an analogous discussion, see Merrifield 2013). Clearly, struggles over access to urban resources in large cities – and over the collective power to produce and transform them – remain as fundamental as ever, and will continue to shape ongoing processes of urbanization around the world. However, under contemporary conditions of planetary urbanization, the classical city (and its metropolitan and regional variants) can no longer serve as the exclusive reference point for urban struggles or for visions of 'possible urban worlds' (Harvey 1996). Instead, a wide range of new urban practices and discourses are being produced in diverse places, territories and landscapes, often in zones that are geographically removed from large cities, but where new forms of collective insurgency are emerging in response to the patterns of industrial restructuring, territorial enclosure and landscape reorganization sketched above. From Nigeria, South Africa, India and China to Brazil and North America, new political strategies are being constructed by peasants, workers, indigenous peoples and other displaced populations to oppose the infrastructuralization and enclosure of their everyday social spaces and the destruction of their established forms of livelihood (Wilson 2014; Arboleda 2015).

The politics of anti-gentrification movements and resistance to corporate megaprojects in dense city cores can thereby be connected, both analytically and politically, to mobilizations against land enclosure, large-scale infrastructures (dams, highways, pipelines, industrial corridors, mines) and displacement in seemingly 'remote' regions (on which, see Merrifield's (2014) analysis of 'neo-Haussmannization'). Rather than rejecting urban life, such mobilizations are often demanding a more socially equitable, democratically managed and environmentally sane form of urbanization than that being imposed by the forces of neoliberal capitalism.

The concept of planetary urbanization proposed here offers no more than an epistemological orientation through which to begin to decipher such struggles, their interconnections across places, territories and landscapes, and the urban potentials they are claiming,

articulating and constantly transforming. Such an investigation remains to be undertaken, but the epistemological perspective proposed here requires that it be framed in a manner that attempts to overcome the compartmentalization and fragmentation not only of urban spaces, but of urban struggles themselves, no matter where they are situated. Just as crucially, rather than being based upon inherited concepts and representations of the urban, such an inquiry would need to illuminate the manifold ways in which the users of urbanizing spaces produce and transform their own urban worlds through everyday practices, discourses and struggles, leading to the formation not only of new urban spatial configurations, but of new visions of the potentials being produced and claimed through their activities (INURA 1998).

The urban is a collective project – it is produced through collective action, negotiation, imagination, experimentation and struggle. The urban society is thus never an achieved condition, but offers an open horizon in relation to which concrete struggles over the urban are waged. It is through such struggles, ultimately, that any viable new urban epistemology will be forged.

Note

- 1 This chapter is a substantially shortened and revised version of Neil Brenner and Christian Schmid, 'Towards a new epistemology of the urban?', *CITY*, 19, 2–3 (2015): 151–182. © Neil Brenner and Christian Schmid.

REFERENCES

- Allen, J., Massey, D. and Cochrane, A. (1998) *Rethinking the Region*. London: Routledge.
- Arboleda, M. (2015) 'Spaces of extraction, metropolitan explosions: planetary urbanization and the commodity boom in Latin America,' *International Journal of Urban and Regional Research*, 40, 1, 96–112.
- Arrighi, G. (1994) *The Long Twentieth Century*. London: Verso.
- Brenner, N. (2016) *Critique of Urbanization: Selected Essays*. Basel: Bauwelt Fundamente/Birkhäuser Verlag.
- Brenner, N. ed. (2014a) *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis.
- Brenner, N. (2014b) 'Introduction: urban theory without an outside,' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 14–35.
- Brenner, N. (2013) 'Theses on urbanization,' *Public Culture*, 25, 1, 85–114.
- Brenner, N. (2004) *New State Spaces: Urban Governance and the Rescaling of Statehood*. New York: Oxford University Press.
- Brenner, N. and Katsikis, N. (2014) 'Is the Mediterranean urban?' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 428–459.
- Brenner, N. and Schmid, C. (2015) 'Towards a new epistemology of the urban?' *City*, 19, 2–3, 151–182.
- Brenner, N. and Schmid, C. (2014) 'The "urban age" in question,' *International Journal of Urban and Regional Research*, 38, 3, 731–755.
- Brenner, N. and Schmid, C. (2011) 'Planetary urbanization,' in M. Gandy ed. *Urban constellations*. Berlin: Jovis, 10–13.
- Burgess, E. (1967 [1925]) 'The growth of the city: an introduction to a research project,' in R. Park and E. Burgess, *The City*. Chicago: University of Chicago Press, 47–62.
- Castells, M. (1977 [1972]) *The Urban Question: A Marxist Approach*. Cambridge, MA: MIT Press.
- Chakrabarty, D. (2008) 'The climate of history: four theses,' *Critical Inquiry*, 35, 197–222.
- Cloke, P. (2006) 'Conceptualizing rurality,' in P. Cloke, T. Marsden and P. Mooney eds. *Handbook of Rural Studies*. London: Sage, 18–28.
- Cronon, W. (1991) *Nature's Metropolis: Chicago and the Great West*. New York: Norton.
- Crutzen, P. J. (2002) 'Geology of mankind: the anthropocene,' *Nature*, 415, 23.

- Diener, R., Herzog, J., Meili, M., de Meuron, P. and Schmid, C. (2006) *Switzerland: an Urban Portrait*. Vols 1–4. ETH Studio Basel/Zurich: Birkhäuser.
- Gugger, H., Couling, N. and Blanchard, A. (2012) *Barens Lessons*. Lausanne: EPFL/Park Books.
- Harris, C. and Ullman, E. (1945) 'The nature of cities,' *Annals of the American Academy of Political and Social Science*, 242, 7–17.
- Hartmann, R., Hitz, H., Schmid, C. and Wolff, R. (1986) *Theorien zur Stadtentwicklung*. Oldenburg: Geographische Hochschulmanuskripte 12.
- Harvey, D. (2012) *Rebel Cities*. London: Verso.
- Harvey, D. (2010) *The Enigma of Capital*. New York: Oxford University Press.
- Harvey, D. (1996) *Justice, Nature and the Geography of Difference*. Oxford: Blackwell.
- Harvey, D. (1985) 'The geopolitics of capitalism,' in D. Gregory and J. Urry eds. *Social Relations and Spatial Structures*. London: Macmillan, 128–163.
- Hesse, M. (2013) 'Cities and flows: re-asserting a relationship as fundamental as it is delicate,' *Journal of Transport Geography*, 29, 33–42.
- INURA (1998) *Possible Urban Worlds: Urban Strategies at the End of the 20th Century*. Basel: Birkhäuser Verlag.
- Jacobs, J. (1970) *The Economy of Cities*. New York: Vintage.
- Katsikis, N. (2015) 'From hinterland to hinterworld: territorial organization beyond agglomeration,' Doctoral Dissertation, Harvard University.
- Krätke, S. (2014) 'Cities in contemporary capitalism,' *International Journal of Urban and Regional Research*, 38, 5, 1660–1677.
- Lefebvre, H. (2003 [1970]) *The Urban Revolution*. Trans. R. Bonnono. Minneapolis, MN: University of Minnesota Press.
- Lefebvre, H. (1968) 1996. 'The right to the city.' In E. Kofman and E. Lebas eds. *Writings on Cities*. Oxford: Blackwell, 63–182.
- Lefebvre, H. (1991 [1974]) *The Production of Space*. Trans. D. Nicholson-Smith. Cambridge, MA: Blackwell.
- Malm, A. and Hornborg, A. (2014) 'The geology of mankind? A critique of the anthropocene narrative,' *The Anthropocene Review*, 1, 1, 62–69.
- Marcuse, P. (2012) 'Whose right to what city?,' in N. Brenner, P. Marcuse and M. Mayer eds. *Cities for People, Not for Profit: Critical Urban Theory and the Right to the City*. New York: Routledge, 24–41.
- Massey, D. (2005) *For Space*. London: Sage.
- Mayer, M. (2012) 'The "right to the city" in urban social movements,' in N. Brenner, M. Mayer and P. Marcuse eds. *Cities for People, Not for Profit: Critical Urban Theory and the Right to the City*. New York: Routledge, 63–85.
- McMichael, P. (2013) 'Land grabbing as security mercantilism in international relations,' *Globalizations*, 10, 1, 47–64.
- Merrifield, A. (2014) *The New Urban Question*. London: Pluto.
- Merrifield, A. (2013) *The Politics of the Encounter: Urban Theory and Protest under Planetary Urbanization*. Athens, GA: University of Georgia Press.
- Monte-Mór, R. L. M. (2014a) 'What is the urban in the contemporary world?' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 260–267.
- Monte-Mór, R. L. M. (2014b) 'Extended urbanization and settlement patterns: an environmental approach,' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 109–120.
- Robinson, J. (2006) *Ordinary Cities*. London: Routledge.
- Roy, A. (2009) 'The 21st century metropolis: new geographies of theory,' *Regional Studies*, 43, 6, 819–830.
- Saunders, P. (1986) *Social Theory and the Urban Question*. Second Edition. New York: Holmes & Meier.
- Schmid, C. (2015) 'Specificity and urbanization—a theoretical outlook,' in ETH Studio Basel ed. *The Inevitable Specificity of Cities*. Zurich: Lars Müller, 287–307.
- Schmid, C. (2014a) 'The trouble with Henri: urban research and the theory of the production of space,' in Ł. Stanek, C. Schmid and Á. Moravánsky eds. *Urban Revolution Now: Henri Lefebvre in Social Research and Architecture*. Farnham: Ashgate, 27–48.
- Schmid, C. (2014b [2012]) 'Patterns and pathways of global urbanization: towards comparative analysis,' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 203–217.
- Schmid, C. (2013) 'Afterword: urbanization as an open process,' in Urban Think Tank ed. *Torre David – Informal Vertical Communities*. Zurich: Lars Müller, 384–387.
- Schmid, C. (2012) 'Henri Lefebvre, the right to the city and the new metropolitan mainstream,' in N. Brenner, P. Marcuse and M. Mayer eds. *Cities for People, Not for Profit: Critical Urban Theory and the Right to the City*. New York: Routledge, 42–62.
- Schmid, C. (2008) 'Henri Lefebvre's theory of the production of space: towards a three-dimensional dialectic,' in K. Goonewardena, S. Kipfer, R. Milgrom and C. Schmid eds. *Space, Difference, Everyday Life: Reading Henri Lefebvre*. London: Routledge, 27–45.

- Schmid, C. (2006) 'Theory,' in R. Diener, J. Herzog, M. Meili, P. de Meuron and C. Schmid, *Switzerland: An Urban Portrait*. Vol. 1. Zurich: ETH Studio Basel/Birkhäuser, 163–224.
- Schmid, C. (2005) *Stadt, Raum und Gesellschaft: Henri Lefebvre und die Theorie der Produktion des Raumes*. Stuttgart: Franz Steiner Verlag.
- Schmid, C. (2003) 'Raum und Regulation: Henri Lefebvre und der Regulationsansatz,' in U. Brand and W. Raza eds. *Fit für den Postfordismus? Theoretisch-politische Perspektiven des Regulationsansatzes*. Münster: Westfälisches Dampfboot, 217–242.
- Schmid, C., Stanek, Ł. and Moravánszky, A. (2014) 'Theory, not method – thinking with Lefebvre,' in Ł. Stanek, C. Schmid and Á. Moravánszky eds. *Urban Revolution Now: Henri Lefebvre in Social Research and Architecture*. Farnham: Ashgate, 1–24.
- Scott, A. J. (1988) *New Industrial Spaces*. London: Pion.
- Sevilla-Buitrago, A. (2014) 'Urbs in rure: historical enclosure and extended urbanization in the countryside,' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 236–259.
- Sheppard, E., Leitner, H. and Maringanti, A. (2013) 'Provincializing global urbanism: a manifesto,' *Urban Geography*, 34, 7, 893–900.
- Soja, E. and Kanai, J. (2014 [2006]) 'The urbanization of the world,' in N. Brenner ed. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 142–159.
- Storper, M. (1996) *The Regional World*. New York: Guilford.
- Taylor, P. J. (2004) *World City Network*. New York: Routledge.
- Taylor, P. J. and Lang, R. E. (2004) 'The shock of the new: 100 concepts describing recent urban change,' *Environment and Planning A*, 36, 951–958.
- Urban Theory Lab (2015) *Extreme Territories of Urbanization*. Research report. Cambridge, MA: Urban Theory Lab, Graduate School of Design, Harvard University (urbantheorylab.net).
- Veltz, P. (1996) *Mondialisation, villes et territoires: L'économie d'archipel*. Paris: Presses Universitaires de France.
- Wachsmuth, D. (2014) 'City as ideology: reconciling the explosion of the city form with the tenacity of the city concept,' *Environment and Planning D: Society and Space*, 32, 1, 75–90.
- Wilson, J. (2014) 'Plan Puebla Panama: the violence of abstract space,' in Ł. Stanek, C. Schmid and Á. Moravánszky eds. *Urban Revolution Now: Henri Lefebvre in Social Research and Architecture*. Farnham: Ashgate, 113–130.
- Woods, M. (2009) 'Rural geography: blurring boundaries and making connections,' *Progress in Human Geography*, 33, 6, 849–858.

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PART II

Hierarchy: Elites and Evictions



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Johannesburg, 2006, Jennifer Bruce