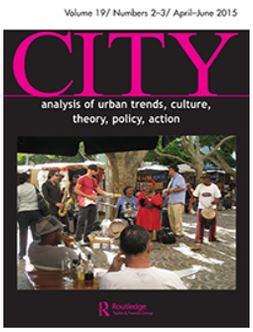

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Towards a new epistemology of the urban?

Neil Brenner and Christian Schmid

New forms of urbanization are unfolding around the world that challenge inherited conceptions of the urban as a fixed, bounded and universally generalizable settlement type. Meanwhile, debates on the urban question continue to proliferate and intensify within the social sciences, the planning and design disciplines, and in everyday political struggles. Against this background, this paper revisits the question of the epistemology of the urban: through what categories, methods and cartographies should urban life be understood? After surveying some of the major contemporary mainstream and critical responses to this question, we argue for a radical rethinking of inherited epistemological assumptions regarding the urban and urbanization. Building upon reflexive approaches to critical social theory and our own ongoing research on planetary urbanization, we present a new epistemology of the urban in a series of seven theses. This epistemological framework is intended to clarify the intellectual and political stakes of contemporary debates on the urban question and to offer an analytical basis for deciphering the rapidly changing geographies of urbanization and urban struggle under early 21st-century capitalism. Our arguments are intended to ignite and advance further debate on the epistemological foundations for critical urban theory and practice today.

Key words: urbanization, urban age, postcolonial urbanism, planetary urbanization, extended urbanization, reflexivity, critical urban theory, rural

Introduction: a crisis of urban epistemologies

A dramatic wave of urban restructuring has been unfolding across the planet since the long 1980s. Following the crisis of national-developmentalist models of territorial development, the collapse of state socialism and the subsequent intensification of global economic integration, a variety of contradictory urban transformations has been under way. The causes, contours, contexts, interconnections and implications of such transformations are widely debated, and remain extremely confusing in the wake of the global financial and economic crises of the late 2000s and early 2010s. However, even as contextually specific patterns of urbanization endure and proliferate, at least three macro-trends appear to be consolidating, each of which challenges long-entrenched assumptions regarding the nature of the urban:

(1) New geographies of uneven spatial development have been emerging through a contradictory interplay between rapid, explosive processes of urbanization and various forms of stagnation, shrinkage and marginalization, often in close proximity to one another.

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In contrast to the geographies of territorial inequality associated with previous cycles of industrialization, this new mosaic of spatial unevenness cannot be captured adequately through areal models, with their typological differentiation of space between urban/rural, metropole/colony, First/Second/Third World, North/South, East/West and so forth (see also Merrifield 2013; Robinson 2014). Today, divergent conditions of wealth and poverty, growth and decline, inclusion and exclusion, centrality and marginality, mutually produce one another at all spatial scales, from the neighborhood to the planetary. Under these conditions, new approaches to understanding and influencing processes of uneven spatial development under capitalism are urgently needed (Peck 2015a).

(2) The basic nature of urban realities—long understood under the singular, encompassing rubric of 'cityness'—has become more differentiated, polymorphic, variegated and multiscalar than in previous cycles of capitalist urbanization. Even though the phrase, 'the city', persists as an ideological framing in mainstream policy discourse and everyday life (Wachsmuth 2014), the contemporary urban phenomenon cannot be understood as a singular condition derived from the serial replication of a specific sociospatial condition (e.g. agglomeration) or settlement type (e.g. places with large, dense and/or heterogeneous populations) across the territory. Indeed, rather than witnessing the worldwide proliferation of a singular urban form, 'the' city, we are instead confronted with new processes of urbanization that are bringing forth diverse socioeconomic conditions, territorial formations and socio-metabolic transformations across the planet. Their morphologies, geographies and institutional frames have become so variegated that the traditional vision of the city as a bounded, universally replicable settlement type now appears as no more than a quaint remnant of a widely superseded formation of capitalist spatial development (Brenner and Schmid 2014).

As we have argued elsewhere (Brenner and Schmid 2011), the formation of large-scale megacities and polynucleated metropolitan regions is only one important expression of this ongoing reconstitution of urbanizing landscapes (see also Soja and Kanai [2006] 2014). Its other key expressions include, among others: (a) the unprecedented densification of inter-metropolitan networks, requiring colossally scaled infrastructural investments (from highways, canals, railways, container ports, airports and hydroelectric dams to undersea cables, tunnels, pipelines and satellite fleets) stretching across territories and continents as well as oceanic and atmospheric environments; (b) the restructuring and repositioning of traditional 'hinterlands' through the installation of new export processing zones, global sweatshop regions, back office locations, data processing facilities and intermodal logistics terminals; (c) the remaking and spatial extension of large-scale land-use systems devoted to resource extraction, the production and circulation of energy (including fossil fuels), and water and waste management; (d) the profound social and environmental transformation of vast, erstwhile 'rural' areas through the expansion of large-scale industrial agriculture, the extension of global agrobusiness networks, and the imposition of associated forms of land grabbing and territorial enclosure; and (e) the operationalization of erstwhile 'wilderness' spaces, including the rainforests, deserts, alpine regions, polar zones, the oceans and even the atmosphere

itself, to serve the relentless growth imperatives of an accelerating, increasingly planetary formation of capitalist urbanization.

(3) Closely intertwined with the aforementioned trends, the regulatory geographies of capitalist urbanization have likewise been undergoing profound, rapid mutations. Since the accelerated expansion of industrialization in the 19th century, the urban process has been largely subsumed within and regulated through the hierarchical institutional frameworks of consolidating national states and nationally coordinated imperial systems. Since that period, including within major empires and colonial regimes, national states instrumentalized major urban regions in relation to the broader project of establishing territorially integrated markets and creating relatively uniform, standardized frameworks of national territorial organization within which industrial development could unfold. However, the tumultuous transformations of recent decades decisively shattered this entrenched national-developmentalist model of urban and territorial regulation, leading to a significant reconstitution of inherited geographies of urban governance (Brenner 2004; Schmid 2003).

Although some of its elements have longer historical lineages, including within mercantile capitalism and the colonial empires of high industrial capitalism, the contemporary period has seen the proliferation of new geographies of urban governance that are no longer neatly subsumed within a singular, encompassing territorial framework of state power at any spatial scale, national or otherwise. Instead, an intensely variegated, polarized, multiscalar and relatively uncoordinated landscape of territorial and networked governance has emerged through (a) the consolidation of neoliberalized, market-oriented transnational rule-regimes; (b) the proliferation of national state projects of deregulation, liberalization, privatization and austerity; (c) the worldwide diffusion of place-marketing campaigns and locational policies intended to attract inward capital investment into subnational zones; (d) the establishment of a 'new metropolitan mainstream' in which local and regional governments increasingly prioritize economic growth, property-led investment in flagship mega-projects, urban renewal and gentrification over job creation, social redistribution, equity and participation (Schmid 2012); (e) the construction of new forms of inter-local networking and policy transfer to disseminate putative 'best practices' in response to persistent social, economic and environmental crises within urban regions (Peck and Theodore 2015); and (f) the ongoing explosion of political struggles over access to the basic resources of social reproduction such as housing, water, food, education, health care and security. Under these conditions, diverse regulatory agencies, coalitions, movements and actors struggle not only to influence the production of places, but to reshape the broader institutional and territorial frameworks through which urbanization processes are being managed at every spatial scale.

The terrain of the urban has thus been subjected to a high-intensity, high-impact earthquake through the worldwide social, economic, regulatory and environmental transformations of the post-1980s period. Not surprisingly, in conjunction with ongoing efforts to decipher these wide-ranging transformations, the field of urban studies has also been experiencing considerable turbulence and fragmentation. In an apparent parallel to the field-transforming

epistemological crises of the late 1960s and early 1970s, which fundamentally challenged the entrenched orthodoxies of mainstream urban sociology, positivist urban policy research and quantitative urban geography, the intellectual foundations of urban studies are today being profoundly destabilized.

Since its origins in the early 20th century, the field of urban studies has been regularly animated by foundational debates regarding the nature of the urban question, often in quite generative ways. The intensification of such debates in recent times could thus be plausibly interpreted as a sign of creative renaissance rather than of intellectual crisis. Today, however, the intense fragmentation, disorientation and downright confusion that permeate the field of urban studies are not merely the result of methodological disagreements (which of course persist) or due to the obsolescence of a particular research paradigm (Marxism, regulation theory, global city theory or otherwise). Instead, as the national-developmentalist configuration of postwar world capitalism recedes rapidly into historical memory, and as the politico-institutional, spatial and environmental impacts of various neoliberalized and authoritarian forms of urban restructuring radiate and ricochet across the planet, a more intellectually far-reaching structural crisis of urban studies appears to be under way.

In the late 1960s and early 1970s, the epistemic crises of urban studies involved foundational debates regarding the appropriate categories and methods through which to understand a sociospatial terrain whose basic contours and parameters were a matter of broad consensus. Simply put, that consensus involved the equation of the urban with a specific *spatial unit* or *settlement type*—the city, or an upscaled territorial variant thereof, such as the metropolis, the conurbation, the metropolitan region, the megalopolis, the megacity, the megacity-region and so forth. Even though radical critics such as Manuel Castells fiercely criticized established ways of understanding this 'unit', and offered an alternative, substantially reinvigorated interpretive framework through which to investigate its production, evolution and contestation, they persisted in viewing the unit in question—the urban region or agglomeration—as the basic focal point of debates on the 'urban question' (Castells [1972] 1977; see also Katznelson 1992). Across otherwise deep methodological and political divides and successive epistemological realignments, this largely uninterrogated presupposition has underpinned the major intellectual traditions in 20th-century urban studies. Indeed, it has long been considered so self-evident that it did not require acknowledgment, much less justification.

Today, this entrenched set of assumptions—along with a broad constellation of closely associated epistemological frameworks for confronting and mapping the urban question—is being severely destabilized in the wake of a new round of worldwide sociospatial restructuring. Of course, the 'power of agglomeration' remains as fundamental as ever to the dynamics of industrialization; the spatial concentration of the means of production, population and infrastructure is a potent generative force that continues to ignite waves of capital accumulation and to reshape places, territories and landscapes at all spatial scales (Soja 2000; Krätke 2014; Scott and Storper 2014). Despite this, however, the erstwhile boundaries of the city—along with those of larger, metropolitan units of agglomeration—are being exploded and reconstituted as new forms of urbanization reshape inherited patterns of territorial organization, and increasingly crosscut the urban/non-urban divide itself (Schmid 2006, [2012] 2014; Brenner 2013, 2014a, 2014b; Brenner and Schmid 2014).

The contemporary crisis of urban studies is thus not only an expression of epistemic perplexity (though the latter is still abundantly evident). From our point of view, rather, it stems from an increasing awareness of fundamental uncertainties regarding the very sites, objects and focal points of urban theory and research under contemporary capitalism. In a world of neatly circumscribed, relatively

bounded cities or urban 'units', whose core properties were a matter of generalized scholarly agreement, urban researchers could burrow into the myriad tasks associated with understanding their underlying social, economic and cultural dynamics, historical trajectories, inter-contextual variations and the various forms of regulation, conflict and struggle that emerged within them (Saunders 1986). However, under contemporary circumstances, these basic conditions of possibility for urban research appear to have been relativized, if not superseded.

For this reason, we argue, the question of the epistemology of the urban—specifically: *through what categories, methods and cartographies should urban life be understood?*—must once again become a central focal point for urban theory, research and action. 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?

Urban ideologies, old and new

Some four decades ago, Lefebvre ([1970] 2003, 191, n. 3) argued not only that a new understanding of the urban was required, but that the urban was itself becoming the *episteme* of our time, the condition of possibility for understanding major aspects of contemporary global economic, social and political life: 'We can say that the urban [...] rises above the horizon, slowly occupies an epistemological field, and becomes the episteme of an epoch' (for further discussion, see also Prigge 2008). In this sense, Lefebvre suggested, the reconceptualization of the urban was becoming an essential epistemological and political precondition for understanding the nature of society itself. This proposition appears more apt than ever today. Whether in academic discourse or in the public sphere, the urban has become a privileged lens through which to interpret, to map and, indeed, to attempt to influence contemporary social, economic, political and environmental trends.

Paradoxically, however, rather than directly confronting the radically transformed conditions for urban theory and research, the mainstream of contemporary discourses on global urbanism has embraced a strong, even triumphalist, reassertion of a traditional, universal, totalizing and largely empiricist concept of 'the city'. Within this mainstream framework, the nature of contemporary urban restructuring is narrated simply as an increasing importance of cities to worldwide social, economic, political and ecological processes. The question of what 'cities' and the 'urban' are, and how their constitutive properties and geographies may be changing in qualitative terms, is thereby effectively 'black-boxed'.

The most influential contemporary metanarrative of the global urban condition is surely the notion of an 'urban age', which was first introduced several decades ago by United Nations (UN) demographers, and which has more recently been popularized in public and scholarly discourses on the growth of urban settlements and associated social, regulatory and environmental hazards (Burdett and Sudjic 2006; Davis 2006; UN-Habitat 2007). According to this city-centric perspective, for the first time in human history, more than half the world's population now lives within cities. With the putative crossing of this 'threshold' or 'milestone' in 2007, the city is said to have been generalized into the universal form of human settlement; it is now thought to represent the most elemental spatial unit for humanity's future. Across otherwise diverse discursive, ideological and institutional contexts, the urban age thesis has become a form of doxic common sense framing

contemporary discussions of the global urban condition. It is repeated incessantly, mantra-like, in scholarly papers, research reports and grant proposals, as well as in the public sphere of urban, environmental and architectural journalism. In effect, the assertion that we have crossed the 'fifty per cent urban threshold' has become the most quoted, but therefore also among the most banal, formulations in contemporary urban studies (for historical contextualization and detailed critique, see Brenner and Schmid 2014).

As has been noted by many researchers, the demographic data on which the urban age hypothesis hinges are deeply inadequate; they are derived from nationally specific census agencies which define the city and the urban using a myriad of inconsistent, unreliable and incompatible indicators (Satterthwaite 2010). Moreover, within the major strands of urban age discourse, the city is defined with reference to an arbitrarily fixed population size, density threshold or administrative classification, which is in turn taken as the main indicator demarcating the presumed boundary between urban and non-urban areas. Even when these indicators are further elaborated, for instance, with reference to commuting patterns, catchment areas and economic activities, the notion of cityness used within this discourse is still fundamentally empiricist. It presupposes that the city can be defined through (some combination of) statistically measurable variables describing conditions (coded as either 'urban' or 'non-urban') within a bounded administrative zone. With a few exceptions (i.e. Angel 2011), the coherent bounding of the zone in question is simply presupposed based upon extant administrative jurisdictions; the diverse economic, political and environmental processes that are reworking the 'structured coherence' (Harvey 1989) of inherited urban formations are not acknowledged or analyzed (Brenner and Katsikis 2014). Additionally, through its contention that 'the city' has become the universally dominant, endlessly replicable form of global human settlement, urban age discourse drastically homogenizes the variegated patterns and pathways of urbanization that have been emerging in recent decades across the world economy (Schmid [2012] 2014). Just as problematically, by equating the urban exclusively with large and/or dense population centers, urban age discourse renders invisible the intimate, wide-ranging and dynamically evolving connections between contemporary shifts in city-building processes and the equally far-reaching transformations of putatively non-urban landscapes and spatial divisions of labor alluded to above.

Several parallel or derivative metanarratives of the contemporary global urban condition have been popularized in close connection to the overarching ideology of the urban age (for a critical overview, see Gleeson 2014). These variations on urban age discourse involve a variety of normative, methodological, strategic and substantive concerns; they include, among others, the following main streams:

- *Urban triumphalism*. Several recent, popular books have presented cities as the engines of innovation, civilization, prosperity and democracy, across historical and regional contexts (see, e.g. Brugmann 2010; Glaeser 2011). According to these triumphalist perspectives, contemporary cities represent the latest expressions of a time-tested sociospatial formula that has enabled the progressive historical development of human society, technology and governance. This set of arguments represents an important extension of urban age discourse because it connects the UN's basic demographic propositions to broader, qualitatively elaborated arguments concerning the role of cities in unleashing humanity's economic, social and cultural potentials.
- *Technoscientific urbanism*. There has also recently been an outpouring of influential new approaches that mobilize the tools of natural science, mathematics and 'big data' analysis to analyze, and often to predict, inter- and intra-urban spatial

arrangements (Bettencourt and West 2010; Batty 2013). Such neo-positivist, neo-naturalist approaches represent a revival of important strands of postwar systems thinking in geography, planning and design discourse, which had been closely aligned with national state projects of urban social engineering and territorial control. Contemporary discussions of 'smart cities' represent an important parallel strand of technoscientific urbanism, in which information technology corporations are aggressively marketing new modes of spatial monitoring, information processing and data visualization to embattled municipal and metropolitan governments around the world as a technical 'fix' for intractable governance problems (Greenfield 2013; Townsend 2013). In the current context, technoscientific aspirations to reveal law-like regularities within and among the world's major cities often serve to naturalize the forms of socio-spatial disorder, enclosure and displacement that have been induced through the last several decades of neoliberal regulatory restructuring and recurrent geoeconomic crisis (Gleeson 2014). Despite their more elaborate methodological apparatus and their capacity to process huge data assemblages, these technoscientific urbanisms replicate, and indeed reinforce, the basic urban age understanding of cities as universally replicable, coherently bounded settlement units. The law-bound understanding of urbanization it embraces is used not only for epistemological purposes, to justify a universalizing, naturalistic research agenda, but as part of a broader technoscientific ideology that aims to depoliticize urban life and thus 'to assist the cause of sound management' (Gleeson 2014, 348).

- *Debates on urban sustainability*. An additional metanarrative of the contemporary global urban condition focuses on the key role of cities in the deepening planetary ecological crisis. Here, cities are viewed at once as the 'front lines' where environmental crises are most dramatically experienced, and as techno-social arenas in which potential responses are being pioneered (for critical review, see Satterthwaite 2004). Discussions of urban sustainability are often linked to the two aforementioned strands of contemporary urban discourse insofar as they celebrate cities as the most ecologically viable arrangements for human settlement (Girardet 2004; Meyer 2013) and/or propose new technoscientific 'solutions' for re-engineering urban metabolic processes, often through architectural and design interventions under the rubric of an 'ecological urbanism' (Mostafavi and Doherty 2011). In many cases, the proposed visions of a future urban ecological order entail the construction of 'premium ecological enclaves' (Hodson and Marvin 2010) that are substantially delinked from extant infrastructural systems, and thus intensify inherited patterns of territorial exclusion. Emergent strategies to enhance urban 'resilience' in the face of climate change and associated socio-natural disasters contain similar hazards insofar as they normalize contemporary forms of market-oriented governance and associated processes of territorial stigmatization (Fainstein 2014; Slater 2014). Research on urban sustainability remains heterogeneous in methodological, thematic and political terms, and several scholars have recently made important critical interventions that link this *problematique* to uneven spatial development, neoliberalization and struggles for environmental justice (Rees and Wackernagel 1996; Atkinson 2007, 2009; Elmqvist 2014). However, the main thrust of recent debates on urban sustainability has been to promote a vision of cities as bounded, technologically controlled islands of eco-rationality that are largely delinked from the broader territorial formations in which they are currently embedded. In this way, urban age discourse is translated into a city-centric techno-environmentalism that often justifies and even celebrates

the enclavization of settlement space as the optimal means to ensure human survival under conditions of deepening planetary ecological crisis.

- *Debates on megacities*. One additional substream of urban age discourse has involved discussions of megacities, generally understood as a specific settlement type that has been consolidated across the 'Third World' or the 'global South' under conditions of rapid urbanization, hypercongestion and resource scarcity (UN-Habitat 2007). The megacities discussion partially tempers the universalizing thrust of urban age discourse by emphasizing the specificity of urban settlements in poorer countries, whether due to colonial legacies, earlier strategies of import-substitution industrialization, the impacts of contemporary forms of structural adjustment policy or, most prominently, the proliferation of 'informal' settlement patterns within dense city cores and around metropolitan fringes. However, in many ways, urban age approaches articulate directly to, and reinforce, discussions of mega-cities: the latter, with their pervasive crises of employment, housing, public health and environment, are commonly represented as the unplanned, and possibly unplannable, spatial units in which the contemporary 'urban transition' is unfolding; they are thus the most elementary units of the contemporary 'planet of slums' (Davis 2006; for a strong counterpoint, see Roy 2005). Therefore, even if discussions of megacities emphasize the distinctiveness of such spaces relative to Euro-American or Northern urbanisms and the worldwide system of global cities, they preserve the basic emphasis on the city as a bounded settlement type that underpins each of the major strands of urban age discourse.

These various versions of urban age discourse must be understood as a powerful series of ideological interventions into rapidly churning, fragmenting fields of urban restructuring. Precisely under conditions in which the very foundations of urban life are being radically reconstituted, such mainstream discourses on global urbanism strongly reassert a universalizing, totalizing and often naturalistic epistemological outlook that subsumes all dimensions of the urban process under the encompassing lens of cityness, understood as a transcendental settlement form that has now been generalized worldwide. Across the diverse politico-institutional and geographical contexts in which these discourses are mobilized, their 'common wrapping is a bright universalism' (Gleeson 2014, 351) that masks the proliferating crisis-tendencies and contradictions of contemporary capitalism.

In a striking parallel to the long-discredited modernization theories of the postwar period, the various strands of this metanarrative are now being used as discursive frames to legitimate a wide range of neoliberalizing proposals to transform inherited urban built environments. The simple message that the city has assumed unprecedented planetary importance has thus come to serve as an all-purpose, largely depoliticized ideological rubric around which, in diverse contexts, aggressively market-oriented and/or authoritarian contemporary projects and prescriptions of urban transformation are being narrated, justified and naturalized. At once in the public sphere, in planning and design discourse, and in scholarly arenas, such universalizing, totalizing and city-centric ideologies serve to reassert the viability of all-too-familiar urban epistemologies even as their historical and sociospatial conditions of possibility are being superseded in practice (for further reflection on this apparent paradox, see Wachsmuth 2014).

Reflexive epistemological openings

In contrast to the unapologetically self-assured universalism of urban age ideologies, the core agendas of critical urban social science have become rather disjointed in

recent years. Writing at the turn of the millennium, Soja (2000, xii) observed:

> '[T]he field of urban studies has never been so robust, so expansive in the number of subject areas and scholarly disciplines involved with the study of cities, so permeated by new ideas and approaches, so attuned to the major political and economic events of our times, and so theoretically and methodologically unsettled. It may be the best of times and the worst of times to be studying cities, for while there is so much that is new and challenging to respond to, there is much less agreement than ever before as to how best to make sense, practically and theoretically, of the new urban worlds being created.'

Nearly 15 years later, this statement remains an apt characterization of the intellectual landscape of critical urban studies: it is still filled with creative, energetic and eclectic responses to dynamically changing conditions, but it is also still quite fragmented among diverse epistemological frameworks and a wide range of ontological assumptions.

Although this situation of intellectual fragmentation results from some productive forms of epistemological, conceptual and methodological experimentation, it is also problematic insofar as it limits the field's collective capacity to offer convincing, accessible alternatives to the dominant urban ideologies of our time. Particularly in light of the broad appeal of simplistic urban age reasoning to scholars, designers and policymakers, and its continued instrumentalization in the service of neoliberalizing and/or authoritarian forms of urban governance and environmental engineering, the development of such critical counterpositions is a matter of increasing urgency for all those committed to developing more adequate ways of interpreting—and, ultimately, of influencing—the patterns and pathways of contemporary urbanization.

One of the hallmarks of any form of critical social theory, including critical urban theory, is epistemological reflexivity (Horkheimer [1968] 1972; Bourdieu 1990; Postone 1993; see also Brenner 2009). This entails an insistence on the situatedness of all forms of knowledge, and a relentless drive to reinvent key categories of analysis in relation to ongoing processes of historical change. Rather than presupposing a rigid separation between subject (knower) and object (the site or context under investigation), reflexive approaches emphasize their mutual constitution and ongoing transformation through social practices and political struggles, including in the realm of interpretation and ideology. In Archer's (2007, 72) more general formulation, a reflexive approach to social theory involves 'a subject considering an object in relation to itself, bending that object back upon itself in a process which includes the self being able to consider itself as its own object'.

In the context of critical urban studies, this philosophical requirement involves not only the constant interrogation of changing urban realities, but the equally vigilant analysis and revision of the very conceptual and methodological frameworks being used to investigate the urban process. For any reflexive approach to urban theory, therefore, the categories and methods of urban analysis are important focal points of inquiry: understanding their conditions of emergence and intelligibility, as well as the possibility of their destabilization or obsolescence, represent essential, ongoing and potentially transformative research tasks. Simply put, reflexive approaches to urban theory must constantly subject their own categories and methods to critical interrogation, even as the latter are being mobilized in ongoing research endeavors.

During the last decade, amidst the deepening intellectual fragmentation of urban studies outlined above, a notably reflexive strand of critical urban scholarship has been consolidated under the rubric of postcolonial urban studies. In a wide-ranging series of interventions, the main protagonists of this tradition of urban research have revealed the ways in which inherited urban epistemologies have been implicitly derived from

the Euro-American experience of capitalist urbanization. This, they argue, has been used unreflexively as a normalizing template for (mis)interpreting processes of urban development across the 'global South'. The very recognition of such normalizing Euro-American or 'metrocentric' assumptions requires their 'provincialization' (Bunnell and Maringanti 2010; Parnell and Robinson 2012; Sheppard, Leitner, and Maringanti 2013) and underscores the urgency of elaborating alternative categories for understanding the contextually specific patterns and pathways of urbanization that have emerged, for example, in East and Southeast Asia, Latin America, Africa or the Middle East.

In general, postcolonial urban theorists present their work as a critique of the naturalized Euro-American epistemologies associated with the major traditions of academic urban social science extending from the early 20th-century Chicago School of urban sociology to the Los Angeles School of urban geography and the global city theories of the late 20th century. However, insofar as they call into question any model of urban theory that claims universal validity, the reconceptualizations proposed in this tradition also offer a theoretically reflexive counterpoint to the ideological totalizations of urban age discourse. Rather than adopting a singular ontological position regarding the underlying essence of cityness or the urban, postcolonial urbanisms have embraced a broadly nominalist approach to producing 'new geographies of theoriz*ing*' (Roy 2009; Robinson 2014) under early 21st-century conditions. Its main orientations and commitments include: (a) skepticism regarding authoritative, universalizing knowledge claims about any aspect of the urban experience; (b) attention to contextual particularities and local experiences within places; (c) an analysis of the inter-place relations or 'worlding' processes that constitute sociospatial configurations, whether within cities or at larger spatial scales; and (d) an exploration of the diverse lines of influence through which local, apparently parochial urbanisms (whether relating to spatial organization, design, planning or policy) circulate beyond their contexts of emergence and are thereby transformed into 'prototypes' that are at once implemented and reconstituted elsewhere (see, e.g. Robinson 2006; Roy 2009; Parnell and Robinson 2012; Roy and Ong 2012; Mabin 2014; Parnell and Oldfield 2014).

Since the publication of Jennifer Robinson's (2006) forceful intervention in her now-classic book *Ordinary Cities*, the core intellectual frameworks of postcolonial urbanism have been undergoing a period of maturation and consolidation. It would probably be premature, however, to suggest that this approach has now established a fully fledged urban epistemology or a new research paradigm because, as with most other emergent frameworks within critical urban studies, it contains many distinct strands of theory-building, methodological experimentation and substantive research, as well as several competing epistemological orientations (see, e.g. Simone 2009; Kipfer and Goonewardena 2013). Nonetheless, especially in light of the pervasively fragmented character of contemporary critical urban theory, the time is ripe for the theoretically reflexive interventions and theory-driven research forays that have recently been elaborated by postcolonial urbanists. Particularly in the last few years, in a series of provocative manifestos and agenda-setting theoretical articles, several postcolonial urban thinkers have pursued the goal of systematically reinventing the epistemological basis for grappling with urban questions (see, especially, Roy 2011, 2014; Robinson 2011, 2014; Sheppard, Leitner, and Maringanti 2013). In this way, they respond directly to the question posed above: under contemporary conditions, can there be a new epistemology of the urban?

Our own developing investigations of planetary urbanization partially overlap with the substantive research foci of postcolonial urbanism. Our work is likewise animated by an overarching concern to develop new

ways of understanding emergent urban conditions and ongoing urban transformations. Similarly, and in stark contrast to some contemporary approaches that pursue ontological or quasi-metaphysical speculations regarding the nature of the urban, we endorse a nominalist approach that permits an open-ended interplay between critique (of inherited traditions of urban theory and contemporary urban ideologies), epistemological experimentation (leading to the elaboration of new concepts and methods) and concrete research (on specific contexts, struggles and transformations). It is thus in a spirit of comradely dialogue that we offer below our own set of critical reflections on the possible foundations for a new epistemology of the urban under 21st-century conditions. However, despite our shared commitment to epistemological reflexivity and conceptual reinvention, several of the theses presented here stand in some measure of tension with certain methodological tendencies within postcolonial urban studies.

First, because of its concern to 'provincialize' the universalizing, (over)generalizing thrust of 'northern' theory, much of postcolonial urban studies has emphasized the specificity, distinctiveness or even uniqueness of cities beyond the West. Although several scholars (e.g. Roy 2009, 2014; Robinson 2011, 2014) have recently introduced productively relational concepts designed to illuminate inter-place transformations, the trope of contextual specificity pervades much of contemporary postcolonial urban research, in part due to the influence of parallel arguments in the fields of subaltern historical studies and postcolonial cultural theory (Chibber 2013). The appropriately deconstructive concern to 'speak back against, thereby contesting, mainstream global urbanism' (Sheppard, Leitner, and Maringanti 2013, 896) thus often translates into a methodological injunction to reveal the distinctiveness of particular places within the 'global South', often in rhetorical contrast to a putatively overgeneralized 'northern' model, such as that of the global or neoliberal city (see, e.g. Seekings 2013; for critical discussion, see Peck 2015b). Many of those accounts present thick descriptions—for instance, of everyday life and subaltern struggle—as theoretically self-evident counterpoints to the apparent totalizations of Euro-American frameworks (for a critical discussion, see Mabin 2014; see also Brenner, Madden, and Wachsmuth 2011).

Clearly, such 'strategic essentialisms' (Roy 2009) have been generative in both methodological and empirical terms, especially as a reflexive counterpoint to mainstream global urban ideologies. However, they also contain certain intellectual hazards, not the least of which is the risk of prematurely retreating from essential conceptual tools, such as those of geopolitical economy, state theory and regulation theory, as outdated vestiges of 'northern' epistemologies (see also Mabin 2014). The idea of specificity is logically intelligible only in relation to an encompassing notion of generality against which it is defined; it is thus best understood as a relational, dialectical concept, one that presupposes a broader totality, rather than as a demarcation of ontological singularity (Schmid 2015a). In a capitalist world system that continues to be shaped profoundly by the drive towards endless capital accumulation, by neoliberalizing and/or authoritarian forms of global and national regulatory restructuring, by neo-imperial military strategies, and by various interconnected forms of exploitation, dispossession and socio-environmental destruction, contextual specificity is enmeshed within, and mediated through, broader configurations of capitalist uneven spatial development and geopolitical power. This 'context of context' (Brenner, Peck, and Theodore 2010; Peck 2015b) is not merely a background condition for urban development, but represents a constitutive formation—a self-forming, internally contradictory and constantly evolving whole—in and through which the 'geo-positionality' of local places is inscribed and mediated (Sheppard 2009). Theorizing the production of such multilayered spatial configurations—not only

contexts, but the context(s) *of* those contexts—in processual, multiscalar terms thus remains an urgent task for contemporary critical urban theorists.

For these reasons, rather than equating the project of postcolonial urbanism simply with a commitment to concrete, regionally situated or place-based studies derived from a 'southern' positionality, it may be most productive, as Robinson (2014, 61) has recently proposed, to understand such methodological positions as 'interim moves' anticipating 'more sustained formulations for building global urban analyses' (see also Roy 2014). The theses presented below are intended to contribute to that collective project, which would connect the deconstructive epistemological critiques and conceptual innovations of postcolonial urban theory to the equally urgent task of deciphering the evolving, and increasingly planetary, 'context of context' in which contemporary forms of neoliberal capitalist urbanization are unfolding across the North/South divide.

This point connects to a second methodological tendency in postcolonial urban theory from which our own epistemological orientations significantly diverge—namely, its tendency to treat 'the city' as the privileged terrain for urban research. To be sure, in contrast to the totalizing, empiricist settlement fetishism of urban age ideology and other mainstream discourses of global urbanism, postcolonial urban studies embraces a reflexively relational approach to the construction of cityness. Rather than reifying the city as a generic, universal settlement type, this approach is productively attuned to the multiple sociospatial configurations in which agglomerations are crystallizing under contemporary capitalism, as well as to the transnational, inter-scalar and often extra-territorial webs through which their developmental pathways are mediated or 'worlded' (see, e.g. Roy 2009, 2014). And yet, despite its sophisticated methodological foundations, the bulk of postcolonial urban research and theory-building has, in practice, focused on cities, *tout court*.

In effect, even though a 'southern' lens is being mobilized within this literature to reconceptualize the geographies of the urban, its concrete sites of investigation have remained relatively familiar local or metropolitan units—the great population centers of Latin America, sub-Saharan Africa, South and Southeast Asia, East Asia and the Middle East. In a form of stubbornly persistent 'methodological cityism' (Angelo and Wachsmuth 2014), major strands of postcolonial urban studies still demarcate their research terrain with the same conditions—large, dense and heterogeneous settlements—upon which the inherited field of Euro-American urban studies has long focused its analytical gaze. The broader landscapes of urbanization, which extend far beyond the megacities, metropolitan regions and peri-urban zones of the postcolonial world, are not completely ignored within this literature (as illustrated, for example, in its concern with the geographies of migration). But nor, however, are they brought into explicit or reflexive focus when postcolonial urbanists frame their research agendas and conceptual cartographies (for further elaborations, see Robinson 2014). We argue below that such landscapes of 'extended urbanization'—understood as fundamental conditions of possibility for the production of historically and geographically specific forms of 'cityness'—must be analyzed and theorized centrally within any updated epistemology of the urban for the 21st century. Today, such zones can no longer be understood as elements of a 'rural' outside that impacts the city and is in turn effected by it; rather, they are now increasingly internalized within world-encompassing, if deeply variegated, processes of planetary urbanization.

The epistemological orientations presented below are intended to contribute to the collective project of illuminating the great variety of urbanization processes that are presently reshaping the planet. These theses are closely connected to our developing theorization of planetary urbanization, but they

are not intended to elaborate that analysis 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 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, thereby changing yet again the epistemic foundations for its future interpretation. This discussion is thus intended as a *meta*-theoretical exercise: instead of attempting to nail down a fixed definition of the essential properties of the urban phenomenon 'once and for all', 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. Any rigorously reflexive account of the urban requires this meta-theoretical moment.

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 Castells ([1972] 1977) 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.

Since the early 20th 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 et al. 1986; Katznelson 1992). These debates have underpinned and animated the succession of research paradigms on urban questions across the social and historical sciences, and they have also been closely articulated to broader developments, controversies and paradigm shifts within the major traditions of social theory, planning and design. In each framing, depending on the underlying epistemological perspective, conceptual grammar, cartographic apparatus and normative-political orientation, the urban has been equated with quite 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 '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-19th century; Chicago, Berlin, London and rapidly metropolitanizing landscapes of imperial–capitalist urbanization in the early 20th century; and Los Angeles, Shanghai, Dubai, Singapore and neoliberalizing models of globally networked urbanization in the last three decades. As Gieryn (2006, 6) explains, the city is both 'the subject and the venue of study—scholars in urban studies constitute the city both as the empirical referent of analysis and the physical site where investigation takes place'.

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 sociospatial 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 socioeconomic 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 sociospatial 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 is treated as a fixed, unchanging entity–as a universal form, settlement type or bounded spatial unit ('the' city) that is being replicated across the globe. By contrast, following Lefebvre's ([1970] 2003) methodological injunction, we interpret the urban as a multiscalar *process* of sociospatial transformation. The study of specific urban forms, types or units must thus be superseded by investigations of the relentless 'churning' 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 universal *form*. Apparently stabilized urban sites are in fact merely temporary materializations of ongoing sociospatial transformations. Such processes of creative destruction (see Thesis 3 below) do not simply unfold within fixed or stable urban 'containers', but actively produce, unsettle and rework them, and thus constantly engender new urban configurations. Simply put, the urban is not a (fixed) form but a process; as such, it is dynamic, historically evolving and variegated. It is materialized within built environments and sociospatial arrangements at all scales; and yet it also continually creatively destroys the latter to produce new patterns of sociospatial 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 sociospatial arrangements.

Second, the urban can no longer be understood as a settlement *type*. The field of urban studies has long been preoccupied with the task of classifying particular sociospatial 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 sociospatial 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 sociospatial restructuring (Allen, Cochrane, and Massey 1998; Massey 2005). As such, urban configurations represent, simultaneously, the territorial inheritance of earlier rounds of restructuring and the sociospatial 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 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 19th century, the urban has been conceptualized with reference to the growth of cities, conceived as relatively circumscribed, if constantly expanding, sociospatial units. Such assumptions have

long pervaded mainstream urban research, and they are today powerfully embodied in the discourses on global urbanism promoted by the UN, 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 sociospatial 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 retheorized 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

If the urban is no longer to be conceived as a universal form, as a specific settlement type or as a bounded unit, inherited understandings of urbanization must likewise be completely reinvented, for they are largely derived from or intertwined with precisely this triad of naturalized epistemological assumptions. The notion of urbanization may initially appear to resonate productively with the processual epistemological orientation emphasized in Thesis 2. In practice, however, all major theories of urbanization are seriously limited by their exclusive focus on what Burgess ([1925] 1967) classically described as 'the growth of the city'. 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 importance of 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. 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-19th 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, workers and infrastructure cluster together in space during successive cycles of capitalist industrial development (Veltz 1996; Storper 1996;

Scott 1988; Krätke 2014). Obviously, large agglomerations remain central arenas and engines of massive urban transformations, and thus clearly merit sustained investigation, not least under early 21st-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 (Scott and Storper 2014). 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 socioeconomic 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 [1970] 2003) 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 (Ajl 2014; 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 (Schmid 2006; Brenner 2014a, 2014b; Soja and Kanai [2006] 2014; Monte-Mór 2014a, 2014b).

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 *problematique* to a wide-ranging set of sociospatial 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 sociospatial configurations are continually creatively destroyed in relation to the broader developmental dynamics and crisis-tendencies of modern capitalism. Lefebvre ([1970] 2003) 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 2015). 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 sociospatial 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 sociospatial 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; Storper and Walker 1989). Just as crucially, as we suggest below (Thesis 7), 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 (see Lefebvre [1974] 1991 on differential space; and Lefebvre 2009 on the 'politics of space').

The creative destruction of sociospatial arrangements within large urban centers has long been recognized in radical approaches to the periodization of urban development (Gordon 1978; Harvey 1989). In such approaches, successive configurations of the urban built environment are thought temporarily to internalize the underlying contradictions of capitalism associated, for instance, with class struggle, property relations, overaccumulation and the political control of surplus value. To the degree that inherited built environments can no longer effectively manage the struggles and conflicts engendered through such contradictions, it is argued, they are radically remade, or creatively destroyed, until a new formation of the urban is produced. In this sense, despite major disagreements regarding the underlying causes of crisis-induced urban restructuring, radical theories of the capitalist city have already developed a relatively elaborate account of the interplay between concentrated and differential urbanization since around 1850 (Soja 2000).

By contrast, we currently have only a limited grasp of how—via what mechanisms, struggles, patterns and pathways—the landscapes of extended urbanization have been creatively destroyed during the history of capitalist development, whether in relation to waves of concentrated urbanization or, more generally, in relation to broader regimes of capital accumulation and modes of territorial regulation. The cycles of urban development explored by radical scholars under the rubric, for instance, of the mercantile, industrial, Fordist-Keynesian and neoliberal city (Harvey 1989) have only rarely been connected, either empirically or analytically, to the sociospatial dynamics and crisis-tendencies within the broader landscapes of extended urbanization (for some suggestive openings, however, see Jones 1997; Bayat

and Denis 2000; Thompson, Bunnell, and Parthasarathy 2013; McGee [1991] 2014). However, it can be argued that the geographies of extended urbanization have likewise been undergoing intensive processes of creative destruction throughout the history of capitalist industrial development, generally in relation to major waves of crisis-induced restructuring and political struggle within urban centers and the broader territorial economies in which the latter are embedded (Moore 2008, 2011). Such transformations have been intensifying, deepening and broadening around the world since the long 1980s, with far-reaching social, environmental and political consequences for the future of capitalism, and indeed, humanity as a whole (Luke 2003).

Figure 1 offers a stylized summary of the three core moments of urbanization under capitalism. We reiterate that these 'moments' refer not to distinct morphological conditions, geographical sites or temporal stages, but to mutually constitutive, dialectically intertwined elements of a historically specific process of sociospatial 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 sociocultural transformations in apparently 'remote' operational landscapes. As the fabric of urbanization 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 (Storper and Walker 1989). 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 sociospatial organization and uneven development. A framework that reflexively connects the three moments of urbanization demarcated here may thus offer some 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 2009; Malm and Hornborg 2014).

Thesis 4: the fabric of urbanization is multidimensional

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 inter-urban 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 monodimensional, 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 sociocultural 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

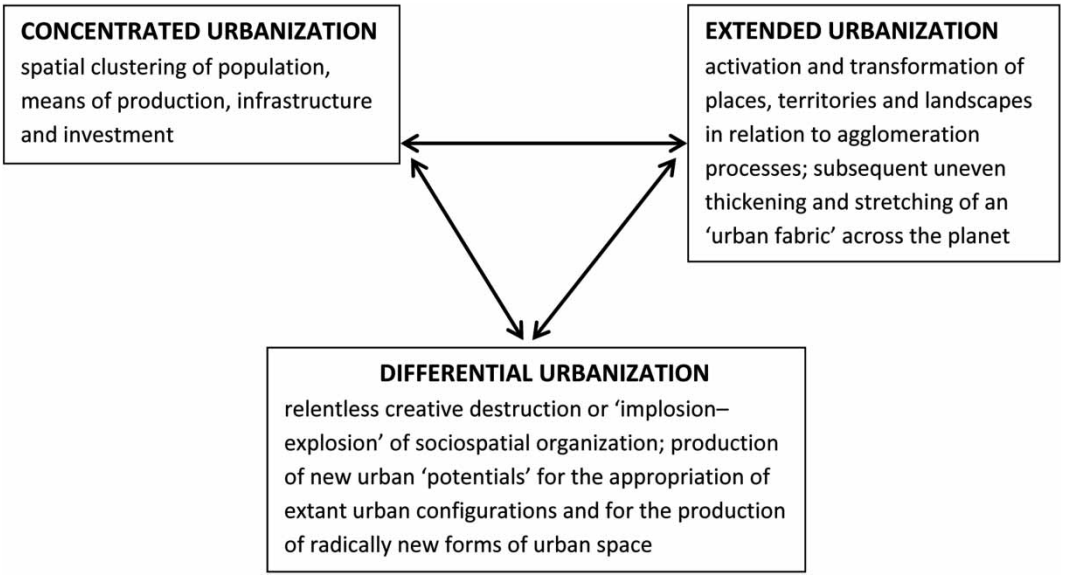

Figure 1 The three 'moments' of urbanization.

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 multidimensional 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 space (Lefebvre [1974] 1991; Schmid 2005, 2008, 2015b), we distinguish three further *dimensions* of urbanization—spatial practices, territorial regulation and everyday life. These dimensions of urbanization co-constitute the three moments demarcated in the previous thesis, and together produce the unevenly woven, restlessly mutating urban fabric of the contemporary world (Figure 2).

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 capitalist industrialization. Such spatial practices underpin the production of built environments within major cities as well as a wide range of sociospatial 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 within and among places and territories; (b) mobilize formal and informal planning procedures to govern investment patterns and financial flows into the built environment and infrastructural networks at various spatial scales; 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

		DIMENSIONS		
		SPATIAL PRACTICES	**TERRITORIAL REGULATION**	**EVERYDAY LIFE**
MOMENTS	**CONCENTRATED URBANIZATION**	The production of built environments and sociospatial configurations to harness the power of agglomeration	Rule-regimes and planning systems governing socioeconomic and environmental conditions associated with the power of agglomeration	The production of social routines, everyday practices and forms of life associated with 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 socioeconomic transformation upon which they depend.	Governance systems oriented towards the sociometabolic and socioeconomic processes that support major urban centers and facilitate the thickening and stretching of an urban fabric across territories.	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
	DIFFERENTIAL URBANIZATION	Recurrent pressures to creatively destroy inherited geographies of agglomeration and associated operational landscapes	Mobilization of state institutions and other regulatory instruments to promote, manage, accelerate or otherwise influence the ongoing reorganization of urban agglomerations and the broader fabric of extended urbanization	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 2 Moments and dimensions of urbanization

spatial arrangements (Brenner 2004; Schmid 2003).

Finally, urbanization mediates and transforms *everyday life*. Whether within dense population centers or in more dispersed 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. The qualities of urban space, across diverse locations, are thus also embedded within and reproduced through everyday 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 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 (e.g. Wallerstein 1974; Braudel 1984; 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 in embedding them within concrete, temporarily stabilized configurations of socioeconomic life, socio-environmental organization and regulatory management. Capitalist industrial development does not engender urban growth and restructuring on an untouched terrestrial surface; rather, it constantly collides with, and reorganizes, inherited sociospatial configurations, including those produced directly through the social relations and political forms of capitalism. Urbanization is precisely the medium and expression of this collision/transformation, 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 capitalist industrialization in the 19th century, the functional borders, catchment areas and immediate hinterlands of urban regions have been extended outwards 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 which supply agglomerations with their most basic socioeconomic and socio-metabolic requirements. The patterns and pathways of sociospatial restructuring that crystallized around the world during the long, violent and intensely contested transition from industrial and metropolitan to territorial formations of urbanization, roughly from the 1830s to the 1970s, require further investigation and interpretation. 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, neo-colonialism 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 urbanization began to emerge following the long 1980s, the transitional period of crisis-induced global 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 conditions 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; Merrifield 2014).

In the early 1970s, Lefebvre ([1970] 2003) anticipated this situation, advancing the radical hypothesis of the complete urbanization of society. For Lefebvre, this was an emergent tendency that might be realized in the future, but he did not speculate as to when or how it might actually occur, and with what consequences. Today, it is increasingly evident that the urban has indeed become a worldwide condition in which all aspects of social, economic, political and environmental relations are enmeshed, across places, territories and scales, crosscutting any number of long-entrenched geographical divisions (urban/rural, city/countryside, society/nature, North/South, East/West). The dawn of planetary urbanization is being expressed through several intertwined tendencies that have only just begun to come into analytical focus during the early 21st century, but which urgently require the scrutiny of critical urban thinkers.

Perhaps most prominent among these is the remarkable territorial expansion of urban agglomerations, vividly captured through Sudjic's (1993) notion of '100-mile cities', which has blurred and even begun to dissolve the boundaries between many major cities and their surrounding territories or erstwhile 'hinterlands' (Soja and Kanai [2006] 2014). Today, urban agglomerations can no longer be understood simply as nodal concentrations organized around and oriented towards a single urban core. Instead, they must be reconceptualized as dense force fields of nearly continuous interaction among the various processes associated with concentrated, extended and differential urbanization (Topalovic, Knüsel, and Jäggi 2013).

Equally important, in this context, are several additional waves of socioeconomic and socio-metabolic transformation of the post-1980s period that have significantly rewoven the inherited fabric of urbanization while 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 (including networks such as roads, canals, railways, waterways and pipelines; and nodal points such as seaports, airports and intermodal logistics hubs) designed to reduce the transaction costs associated with the production and circulation of capital (Notteboom and Rodrigue 2005; Hein 2011; 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.

Amidst these far-reaching sociospatial 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 et al. 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 deeply 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 sociospatial restructuring around the world. On the one hand, 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 worldwide 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 sociospatial differentiation that continue to proliferate under contemporary capitalist conditions. Nor can the rural be understood any longer as a perpetually present 'elsewhere' 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 totalizing 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 (for discussion and debate of this issue, see Catterall 2014; Catterall and Wilson 2014; Scott and Storper 2014). Our claim here, however, is not that 'rural' or non-urban zones have totally disappeared; on the contrary, such spaces still exist and may even play decisive roles in the social, political and economic life of certain regions, for instance, in parts of Africa, Southeast Asia or Latin America (see, e.g. Scott 2009). However, the 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 labels that predetermine their patterns and pathways of development and their form and degree of connection to other places,

regions and territories. Indeed, much 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 propose to theorize under the rubric of extended urbanization (see, e.g. Cloke 2006; Diener et al. 2006; Woods 2009; Alton 2014; Wilson 2014; Monte-Mór 2014a, 2014b). 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 aspires 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 sociospatial transformation anywhere in the world. But it does open up an epistemological path 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 sociospatial 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' *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 a 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 monodimensional or formalistic interpretive frames, capitalist urbanization must be understood as a polymorphic, multiscalar and emergent dynamic of sociospatial transformation: it hinges upon and continuously produces differentiated, unevenly developed sociospatial 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 sociospatial 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 sociospatial 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 sociopolitical 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-19th 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). However, 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 sociospatial 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; Wolfrum, Nerdinger, and Schaubeck 2008). 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 sociospatial 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 inter-urban 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. 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 towards creative destruction under capitalism and the powerful potentials for radical sociospatial transformation associated with it. Such potentials are, we argue, 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 20th-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 sociospatial configurations (Schmid 2015a). 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 uses, 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 coproduced and transformed through its users, who may strive to appropriate its actualized or unrealized potentials towards collective social uses, to create new forms of experience, connection and experimentation—in short, to produce a different form of life (Lefebvre [1974] 1991, [1970] 2003). 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 ([1968] 1996) 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 (i.e. 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 (Mayer 2012; Schmid 2012).

Given our arguments and proposals above, however, struggles over the right to the city must be fundamentally reframed—for, as 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 primary 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, Mexico and northern Canada, 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 (see, e.g. Alton 2014; Wilson 2014; Arboleda 2015; and the documentary film, *Millions Can Walk*, Schaub and Musale 2014). The politics of anti-gentrification movements and resistance to corporate mega-projects 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.

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