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Towards a paradigm of Southern urbanism

Seth Schindler

In this paper I argue that cities in the global South constitute a distinctive ‘type’ of human settlement. I begin by critiquing Brenner and Schmid’s concept of planetary urbanization which erases difference among cities and locates the essence of urbanity in the global North. I echo their criticism of postcolonial urbanism, however, which has struggled to articulate precisely how Southern cities differ from their Northern counterparts. I then propose three tendencies that, when taken together, serve as the basis of an emergent paradigm of Southern urbanism. First, I assert that cities in the South tend to exhibit a persistent disconnect between capital and labor. Second, I demonstrate that their metabolic configurations are discontinuous, dynamic and contested. Finally, I argue that political economy is not the overriding context within which urban processes unfold, but rather it is always already co-constituted with the materiality of Southern cities. This is not meant to be a comprehensive list of characteristics exhibited uniformly by all cities in the global South. Instead, I hope that it serves as a starting point for city-centric scholarship that can account for very real differences between/among cities without constructing cities in the South as pathological and in need of development interventions.

Key words: planetary urbanization, postcolonial urbanism, global South, critical urban theory, urban metabolism

In 2005, I visited Swaziland’s two largest settlements, Mbabane and Manzini. The former is the seat of power with almost 100,000 inhabitants. The latter is the former administrative capital and slightly smaller, but it remains a commercial center. The differences between the two—which happen to be 37 km apart—are not entirely noteworthy to the non-initiated. Indeed, my memories from these cities are a singular blur of mini-bus ranks, shopping arcades and markets. Nevertheless, I subsequently visited a nature reserve and a conversation with one of the staff members has been firmly rooted in my memory ever since. She explained that she was born and raised in Manzini and moved to Mbabane with her husband

shortly after their wedding. I asked which city she preferred and the question provoked a thoughtful silence. Finally, she explained that Manzini is a peaceful place whose residents enjoy a laid-back lifestyle, far from the maddening crowds of Mbabane. On the other hand, she said, Mbabane is more exciting because there are always church services to attend. It was ultimately too difficult to say which was nicer, but if she had to choose, she said she may opt for Manzini only because she missed her parents and siblings.

I relate this woman’s thoughtful rendering of Swaziland’s two largest cities as an entry point for critiquing Brenner and Schmid’s (2014, 2015) assertion that we have entered an age of planetary urbanization in which

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cities draw distant territories into their orbits in ways that erase traditionally understood boundaries of urban and rural. As such, they argue for the development of a new epistemology of urbanization—rather than the city—based on seven theses. I understand these theses as answers to urgent questions that have arisen from contemporary urban trends, and I commend the authors for attempting to expand our geographical imaginations and grapple with some of the most pressing issues of our age rather than plod along in a business-as-usual fashion. And while I find the questions they are asking appropriate, I take issue with the answers they propose. Most importantly, the shift from researching cities to theorizing ‘the urban’ may make sense to scholars familiar with the theoretical zigzags that have unfolded within academic circles over the course of the last five decades, but it is completely out of touch with the lived experience of city residents. As the above anecdote makes clear, Mbabane and Manzini remain bounded and distinctive cities according to their residents, and they are unlikely to meld into a supra-Swazi planetary urban agglomeration anytime soon. The claim that we are in an age of planetary urbanization may indeed be sustained through the nimble theoretical maneuvering one expects from Brenner and Schmid, but in its attempt to offer an epistemology without geographical or conceptual limits, planetary urbanization obfuscates difference. Not only does it erase difference between Mbabane and Manzini, but it risks reducing them to nondescript zones in an urban fabric dominated by privileged cities. In other words, the epistemology of planetary urbanization risks re-centering the essence of urbanity to the North Atlantic. If urbanity is all-pervasive, it can be studied in one’s backyard, so why bother researching it in Swaziland?

The intervention made by Brenner and Schmid is driven by their attempt to answer the urgent question: ‘*[T]hrough what categories, methods and cartographies should urban life be understood?*’ While I disagree

with the answers they offer, I concur that this question should guide contemporary urban research. This question has animated postcolonial urban scholarship, which Brenner and Schmid (2015) critique for failing to cohere into ‘a fully fledged urban epistemology or a new research paradigm’ (160). I agree that although postcolonial urban scholarship has done a great deal to challenge urban studies’ longstanding Northern-centrism its potential remains unfulfilled for two main reasons, one methodological and the other theoretical. First, a number of scholars heeded Roy’s (2009, 820) forceful entreaty ‘to blast open theoretical geographies, to produce a new set of concepts in the crucible of a new repertoire of cities’, but unfortunately the creativity that has been applied to theorizing Southern cities has not been matched by the development of rigorous empirical methods to actually research them. Indeed, there is scant discussion of methods in this scholarship and while a range of theoretical concepts purportedly capture various aspects of Southern urbanism they are largely informed by micro-oriented qualitative methods that generate case studies. Second, the adjective ‘postcolonial’ is used to modify place names by scholars seeking to draw attention to aspects of urbanity that remain obscured if global capitalism is the primary reference point (see Derickson 2014). In other words, the use of the term signals that the author acknowledges that urbanization is more than an expression of global capitalism, but ‘postcolonial’ remains an empty signifier disconnected from particular processes or phenomena.

In this paper, I argue that some of the very aspects that make Southern cities distinctive have remained illegible to urban scholars and this has fueled considerable confusion over the extent to which cities in the South constitute a ‘type’ of human settlement. It is my contention that cities in the global South are fundamentally different from their Northern counterparts in a number of ways, and in this paper I offer three tendencies of Southern urbanism. My objective is not to

offer a totalizing epistemology by which we can know ‘the’ Southern city, but to draw attention to three aspects of urbanity that characterize many Southern cities—albeit in varying combinations and manifestations—and inform a paradigm of Southern urbanism.

From planetary urbanization to Southern urbanism

According to Brenner and Schmid (2015), macro-trends have propelled urban processes into the fast lane, and the territorially bounded city has been eclipsed by urbanization whose uneven development is so entangled, scope so expansive and morphology so complex and variegated, that it is nothing other than planetary. Indeed, the city seems a quaint ideological fetish from an age of innocence in comparison to the overwhelming nature and immediacy of planetary urbanization. Brenner and Schmid (2015) argue that the urban is a theoretical category that signifies ‘a multiscalar process of sociospatial transformation’ (165) that does not necessarily result in agglomeration. On the contrary, they argue that it is a complex ‘interplay between three constitutive moments—(i) concentrated urbanization, (ii) extended urbanization and (iii) differential urbanization’ (166). Thus, in addition to the concentration that results in the expansion of agglomerations, there are countervailing pressures in distant places ‘to support the everyday activities and socioeconomic dynamics of urban life’ (167). The authors claim that the relations between concentrated and extended urban processes are complicated by the perpetual creative destruction and reworking of sociospatial organization. This dynamism forges an ‘unevenly woven, restlessly mutating urban fabric of the contemporary world’ (170) that is planetary in scope and has internalized hitherto non-urban areas. This process is highly contested, and the authors posit planetary urbanization is ‘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’ (178).

Many of the observations made by Brenner and Schmid regarding contemporary urban processes resonate with my own research on cities from Delhi to Detroit. However, I take issue with the way that they package these observations as an epistemology that is both new and planetary. At what moment did we go from cities-in-the-world to planetary urbanization? While Brenner and Schmid (2015, 175) assert—rightly in my opinion—that ‘the task for any contemporary urban epistemology is... to develop an analytical and cartographic orientation through which to decipher its uneven, restlessly mutating crystallizations’, the lens through which they look zooms out so far that the life and death issues that animate sociality and contestations in many cities around the world are rendered illegible. The struggles I refer to are renewed on a daily basis for many urbanites, who must constantly seek new ways to ‘connect’ with the city in order to obtain drinking water and locate safe places to defecate. By obscuring the lived reality of real people in actual cities the groundwork is laid for asserting that the ‘classical city... can no longer serve as the primary reference point for urban struggles’ (177). Since the city remains the scale at which many people understand their place in the world and situate their struggles for space, water, toilets and so on, the concept should not be jettisoned simply because new patterns of urbanization are observable.

The recognition of new patterns of urbanization has been seized upon and expanded in the application of planetary urbanization. For example, Arboleda (2015, 3 & 11) ‘interrogates the political economy of the current commodity boom’ and shows that it has had ‘dramatic impacts over hundreds of places, communities and ecosystems, rendering a splintered pattern of landscapes of

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extraction with their rhizomes of highways, pipelines, satellite towns, power lines and heavy machinery'. Similarly, Kanai (2014, 1071) uses planetary urbanization as a starting point to examine 'multiple scales of peripheralization that entrepreneurial efforts to upgrade the Manaus metropolitan economy have produced in the region'. However, as an all-encompassing epistemology, planetary urbanization risks re-centering the essence of urbanity to the global North. If urbanism is everywhere then it is likely to be studied most often in the backyards of urban scholars, most of whom—with notable exceptions—live and work in cities in the global North (see Parnell and Robinson 2012). Thus, there is a false inclusivity at work here, as planetary urbanism promises to incorporate urban trends across the planet but it fails to see everyday concerns of residents in Mbabane and Manzini. These cities are displaced to the periphery of an abstract planetary urban fabric, and subordinated to metonymic cities whose essence is none other than planetary urbanization itself. Just as 'development' and 'modernity' historically served as tropes through which cities in the global South were understood to be lacking and abnormal (see Robinson 2006), planetary urbanization becomes a reference point for cities around the world but it is unlikely that ordinary cities in the global South will ever be primary reference points upon which its *epistemological* scaffolding will rest.

In my reading the epistemology of planetary urbanization is inspired by the body of critical urban theory that emerged in response to urban processes in the global North in a period of industrialization and global domination. According to Brenner (2009, 204)

'the process of capitalist urbanization continues its forward-movement of creative destruction on a world scale, the meanings and modalities of critique can never be held constant; they must, on the contrary be continually reinvented *in relation to the unevenly evolving political-economic*

geographies of this process and the diverse conflicts it engenders'. (emphasis added)

It follows that the key to understanding cities is to focus on their figurative 'place' within circuits of global capital. However, when critical urban theory is applied in cities in the global South a significant residual remains unexplained. Southern cities dwarf their European counterparts in size but lag behind in terms of industrialization and ability to project power, and global capitalism is far from the only force shaping Southern cities and the lives of their inhabitants. Simone (2004, 2010, 2014) captures the rhythms and undercurrents of urbanity in cities from Jakarta to Dakar, where fleeting associations characterize everyday life and reverberate throughout cities in unexpected ways. Simone's work confirms the persistent doubt among urban scholars who research Southern cities that significant aspects of urbanity escape their analyses, and this residual is indeed exasperating for it is difficult to represent theoretically let alone study empirically. Furthermore, Simone (2001, 17–18) demonstrates that urban residents themselves 'appear increasingly uncertain as to how to spatialize an assessment of their life chances—that is, where will they secure livelihood, where can they feel protected and looked after, where will they acquire the critical skills and capacities?' Uncertainty characterizes Southern cities and the lifeworlds of many urban residents, and modes and strategies for knowing the city evolve that are incongruent with existing scholarly theoretical models (see Trovalla and Trovalla 2015). Perhaps Pieterse (2011, 20; 2008, 77) goes the furthest in recognizing the inability of existing theoretical models and methods to capture 'unknowable' aspects of African urbanity which remains an 'elusive mirage clouded by limited data and inadequate theoretical approaches'.

The impetus for the development of post-colonial urbanism has been to better understand the residual that critical urban theory cannot incorporate.¹ Robinson (2006, 169) calls for postcolonizing urban studies by

developing theory that can ‘travel widely, tracking the diverse circulations that shape cities and thinking across both similarities and differences amongst cities, in search of understandings of the many different ways of urban life’. This has informed her long-standing engagement with comparative urban research (Robinson 2014), which expands the sites of scholarly inquiry to ordinary cities and tacks back and forth from South to North. Similarly, Roy and Ong (2011) propose the concept of *worlding* as a means of understanding the dynamic and contested efforts to transform Asian cities in a global age. They explicitly reject the logic of a singular and universal global capitalism, and in contrast Roy (2011a, 308) embraces postcolonialism ‘as a critical, deconstructive methodology’. These scholars have been at the forefront of the proliferation of scholarship on cities in the South, and in recent years this scholarship has produced a veritable lexicon that identifies and describes phenomena in Southern cities.² Much postcolonial urban scholarship is driven by the same question that Brenner and Schmid (2015, 155) seek to address with their conceptualization of planetary urbanization: *through what categories, methods and cartographies should urban life be understood?* Brenner and Schmid assert that postcolonial urbanism fails to provide a coherent answer to this question and their criticism turns on two main points. First, they argue that this scholarship tends toward thick descriptions that ignore the context of global capitalism in which urban processes unfold. Second, they question its epistemological foundations given the fact that most postcolonial urban scholarship is city-centric with the intent of identifying the exceptional nature of particular cities (see Peck 2015). Both of these criticisms have merit, but I argue that the primary limitation of postcolonial urbanism is more fundamental.

Postcolonialism most certainly offered a set of answers in a time that witnessed anti-imperialist struggles and liberation movements, and after the widespread collapse of

European empires postcolonial theory shifted to the terrain of representation (see Said 1978). Scott (2004) masterfully argues that the relevance of postcolonial theory has waned with the changing of the times. Scott highlights how postcolonial narrative was originally infused with romantic notions of revolution that promised to advance history ‘from bondage to freedom, from despair to triumph’ (166), and this galvanized grassroots movements in the twilight of colonialism. He asserts that theory should be situated within the ‘problem-space’ of the present and offer answers for the future, yet we currently occupy a problem-space in which ‘the bankruptcy of postcolonial regimes is palpable in the extreme’ as ‘anticolonial utopias have gradually withered into postcolonial nightmares’ (1 & 2). This may explain the shift from revolutionary politics to the focus on representation in the field of postcolonial studies (see Chibber 2013 for a very critical narration of postcolonialism’s evolution). In any case, the point is that postcolonial thought is no longer forward-looking yet it continues to cast a long shadow over the field of urban studies. For example, Robinson (2006) issues a welcome call to expand the sites of knowledge production to ordinary and Southern cities, yet it remains unclear what value is explicitly added by postcolonial theory. Roy (2011a) proposes the concept of ‘worlding’ as the cornerstone of postcolonial urbanism, but much of her writing on worlding cities is indistinguishable from critical urban scholarship. For example, she states that ‘worlding is a practice of centering, of generating and harnessing global regimes of value’ (312), she identifies ‘the limits of the circulatory capacity of urban models and of global capital’ (313) and in the case of Dubai she notes that ‘petro-capital, it seems, is more durable than property capital’ (322). My intent is not to challenge the veracity of these statements, but rather to advance the assertion that when used as an adjective to modify a place name, ‘postcolonial’ fails to signify a phenomenon or condition (as in, say, postcolonial Algiers). What the

postcolonial label does, however, is draw attention to the limitations of critical urban theory by highlighting the residual aspects of urbanism in the global South that remain ‘unknowable’ (Pieterse 2011).

It is clear that postcolonialism cannot address the contemporary urban problem-space in the global South, but it is crucial that we resist the temptation to explain urbanization as a straightforward manifestation of global capitalism. This is how I understand the scathing attack leveled at postcolonial theory by Chibber (2013). He argues that the appeal of postcolonial theory is its supposed rejection of Eurocentrism, but it exoticizes the East/South by failing to grasp the universal tendencies of capitalism’s unrelenting expansion and hence ‘ends up resurrecting [Eurocentrism] with ferocious intensity’ (291). Thus, Chibber rejects postcolonial theory and then argues that in its absence the only option for social scientists is to focus unwaveringly on the expansion of global capitalism. This is precisely where David Scott’s conceptualization of a ‘problem-space’ is most instructive. Following Scott’s line of reasoning, I argue that neither planetary urbanization nor postcolonialism provide answers to the problem-space in which cities in the global South are situated. Rather than liberation from bondage which can occasionally be achieved in a single cataclysmic event (i.e. revolution), Southern cities face a long and arduous task of making ‘just transitions’ (Swilling and Annecke 2012) while they relentlessly expand; in order to be livable in the 21st century most Southern cities must address increasing inequality, improve infrastructure and services, and reduce their environmental impacts. This must be done in the context of paradigmatic urban conditions which I outline in the following section.

Three tendencies of Southern urbanism

The Independent Commission on International Development Issues (1980) met for the first time in 1977 to discuss global

inequality. The Commission was chaired by Willy Brandt, the former Chancellor of West Germany, and the so-called ‘Brandt Report’ acknowledged that ‘[t]here are obvious objections to a simplified view of the world as being divided into two camps’ (31). Nevertheless, it maintained that ‘in general terms, and although neither is a permanent grouping, “North” and “South” are broadly synonymous with “rich” and “poor”, “developed” and “developing”’. The tension between representing complexity while recognizing extreme inequality and difference still resonates. Indeed, the lines between North and South are likely even blurrier today, and this has led some scholars to trouble the North–South dichotomy (see Simone 2014; Hentschel 2015; Peck 2015), while a series of sub-categories have been proposed such as African (Myers 2011; Pieterse 2011), Asian (Ren and Luger 2015), Chinese (Shiqiao 2014) and Indian (Nair 2013) urbanism. I acknowledge the blurry boundaries between North and South, yet paradigmatic Southern urbanism proposed in the remainder of this section rests on an assertion that Southern cities differ in fundamental ways from their Northern counterparts. This does not mean that they are necessarily ‘beyond compare’ (Peck 2015), and furthermore, in line with the authors cited above it is certainly possible to make more precise classifications. Nevertheless, Southern cities exhibit the following three tendencies, and they are evolving in the context of a different problem-space from Northern cities.

Tendency 1: Southern urbanism is characterized by a persistent disconnect between capital and labor, which gives rise to urban governance regimes geared toward the transformation of territory rather than the ‘improvement’ of populations

The cities whose expansion serves as the basis for much of mainstream urban theory experienced rapid industrialization that was fueled

by the absorption of wage laborers. Marx (1990, Part Eight) eloquently narrates the forceful removal of peasants from land that they had traditionally cultivated as it was transformed into pasture. Divorced from their means of subsistence the dispossessed had no choice but to sell their labor power for a wage. Cities such as Manchester, Newcastle and Liverpool became manufacturing powerhouses as peasants arrived from rural areas and gradually evolved—and were transformed—into a disciplined industrial proletariat. Marx (1990, 896) notes that this was not a straightforward process, as ‘these men, suddenly dragged from their accustomed mode of life, could not immediately adapt themselves to the discipline of their new condition. They were turned in massive quantities into beggars, robbers and vagabonds.’ Marx then outlines some of the ‘bloody legislation’ that was imposed to counter the rise in vagabondage, and in much of this legislation we recognize Foucauldian discipline replete with its capacity to produce populations.

The transformation of the peasantry into a productive and disciplined industrial proletariat whose labor power could easily be imbricated with capital on the factory floor was not only a preoccupation of bureaucrats in Europe during the Industrial Revolution but it was the very *raison d’être* of the state. Foucault (2007, 69) explains that at the dawn of industrialization a shift takes place in which governments hitherto concerned with managing and protecting territory came to understand a country’s population as ‘the source and root... of the state’s power and wealth’. States set about developing elaborate bureaucracies whose mission was to act upon ‘human multiplicities’ (Foucault [1979] 1995, 218) in order to produce ordered and fixed populations and correct their abnormalities. People were acted upon in ways that ranged from subtle attempts to instill a sense of ‘appropriate’ conduct, to highly coercive measures aimed at stamping out deviance. The overarching objective was to produce an efficient and disciplined labor force.

Nowhere was discipline as invasive and coercive than in Europe’s colonies (Mitchell 1988; Stoler 1995; Perelman 2000; Simon 2015). For example, Guha (1997, 28) notes that in India the colonial state ‘was allowed to intrude again and again into many such areas of the life of the people as would have been firmly kept out of bounds in metropolitan Britain’. After the demise and break-up of colonial empires, the governments of newly decolonized nation-states maintained the disciplinary regimes that had been imposed by colonial rulers. Rather than enrich a colonial power, postcolonial regimes were motivated by the altruistic desire to grow and protect infant industries, and a central challenge was to fortuitously manage the imbrication of labor and capital in the context of scarcity (see Munslow and Finch 1984). Lewis (1954) argued that ‘unlimited supplies of labor’ existed in rural areas, and the primary implication of this assertion was that the majority of peasants could be relocated to cities without affecting the overall agricultural output. By the 1980s, efforts to tap into the ‘unlimited supplies of labor’ were superseded by policies whose main aim was to attract foreign direct investment. Thus, states pursued different strategies to affect what Foucault (2007, 97) refers to as the ‘intrication of men and things’, occasionally prioritizing the augmentation of industrial labor reserves, while elsewhere the focus was on attracting capital. In all of these cases the overarching framework of governance was geared toward managing the relationship between capital and labor in cities.

Many cities in the global South are in a very different problem-space at present, and the imbrication of capital and labor is no longer the top priority of municipal governance regimes. Many cities in the global South have accumulated more capital and labor than at any time in their respective histories, yet they remain intractably disconnected. The formal economy is unable to absorb the vast numbers of people ‘hurled onto the labor-market’ (Marx 1990, 878) after being

violently dispossessed from their means of subsistence. Sanyal (2007) narrates how primitive accumulation in rural areas in India is alive and well, but the transformation from peasantry into proletariat is permanently suspended in many Southern cities (see Murray Li 2010). The inability of the formal sector to absorb even a fraction of those willing to sell their labor power is at least tacitly acknowledged by the many governments that have implemented basic income grant schemes (Ferguson 2015). While industry has shifted from its postwar centers in the North to so-called ‘emerging economies’ in the South (Fröbel, Heinrichs, and Kreye 1980), it remains heavily concentrated and the rapid expansion of South–South trade has posed serious challenges to infant industries in the South (Horner 2015). This explains why public and private capital tends to be invested in infrastructure and real estate, rather than production, and this is profoundly transforming cityscapes.

My objective is not to portray Southern cities as abnormal in comparison to Northern cities that have advanced down a universal itinerary of development. On the contrary, my aim is to examine cities in the South as a ‘type’ of settlement and hence better understand the contemporary problem-spaces they occupy. The persistent disconnect between capital and labor explains why the production of populations is no longer the primary objective of many municipal governance regimes. There is indeed little reason to produce an industrial proletariat if it is likely to remain idle. Given the fact that this goal was historically central to the state’s mission, relinquishing it requires municipal authorities to redirect their energy and attention. While national governments may continue to develop policy aimed at spurring domestic industry (India’s ‘Make in India’ campaign is illustrative), many municipal governments in Southern cities have shifted their emphasis from producing populations to transforming territory (Schindler 2015). In some cases this involves exerting sovereignty over space that was previously rather

autonomous, while elsewhere we are witnessing the production of entirely new cities. The territorially focused urban governance regimes that are emerging discipline people who interfere with the transformation of cityspace, but the intent is not to transform them into an industrious workforce through classification, enumeration and ultimate ‘improvement’. In most cases the grandiose visions informing urban transformation will never be fully realized (see Watson 2014) but the pursuit of these visions explains the hyper-transformation of many cities in the South.

Tendency 2: The metabolic configurations of Southern cities are discontinuous, dynamic and contested

All cities are sustained by energy and resources that are drawn from other places, and whose consumption produces waste which is either absorbed by the city or transferred elsewhere. In its contemporary avatar, urban metabolism research dates back to the mid-1960s (see Wolman 1965), and the metabolic configuration of Southern cities differs tremendously from that of Northern cities in a number of important ways. First, as a result of the ambitious designs to transform cityspace outlined in Thesis 1, many Southern cities exhibit remarkably dynamic metabolisms whose flows are endlessly expanded, reworked, rerouted, blocked and above all contested. Residents of Southern cities connect with metabolisms in a range of ways; while a number of residents—often-times a minority—formally connect with public utilities and service systems, many more access urban infrastructure informally. Others augment their access to resources and services through links with formal-and/or informal-sector entrepreneurs. Thus, unlike Northern cities where there is nearly universal access to metabolic flows such as water and electricity, residents of Southern cities are imbricated in individualized constellations of flows—some life-affirming

(e.g. water) others life-negating (e.g. waste)—and their access/exposure is characterized by differing levels of security/intensity. These individualized constellations contribute to the production of subjectivity, and a shared relationship with the materiality of the city animates sociality and commonly serves as the basis of collective action. For example, individuals or communities whose access to water is precarious and intermittent may act collectively to pressure local officials into installing public taps, while those with secure access may seek to block others from accessing the public water network (see Graham, Desai, and McFarlane 2013). Meanwhile, communities may construct their own infrastructure systems and defend them against demolition if necessary (Silver 2014). These negotiations, contestations and constructions influence the overall configuration of a city's metabolism.

There has recently been a 'virtual explosion' (Fischer-Kowalski 1998, 62) of research on metabolisms. However, Fernández (2014, 598) points out that 'the urban metabolism of cities of the south has been relatively neglected', and this is due to the fact that there is a dearth of data on metabolic flows in Southern cities. While urban political ecologists have embraced the metabolism metaphor in their attempts to 're-nature urban theory' (Heynen, Kaika, and Swyngedouw 2006, 2), in much of this literature the concept remains an imprecisely defined heuristic device meant to foster a deeper understanding and critique of capitalism. As a result, the potential of the metabolism metaphor remains unfulfilled in urban studies, and I argue that as a standalone concept it can inform our understanding of subjectivity, sociality and contestation in Southern cities. This is similar to the reasoning advanced by McFarlane (2013, 500), who advocates looking through a 'metabolic lens' because it 'multiplies the potential sites of intervention, from water pipes, drains and power stations to laws, policies and officials, widening the objects of analysis and the epistemology of social change'. McFarlane's (2013,

500) metabolic lens is kaleidoscopic in the sense that it traces 'process geographies ... wherever they lead', oftentimes illuminating relations and contestations that determine how resources and waste crisscross and circulate through splintered urban landscapes. McFarlane's intervention undoubtedly has the potential to lead scholars in some very fruitful directions, yet his metabolic lens is high-powered and zoomed in for a close-up view of the micro-scale. As such, it generates micro-level case studies and is ill-equipped to inform our understanding of citywide metabolisms. This stands in stark contrast with methods employed by ecological economists and industrial ecologists who typically establish a bounded territory as a research object and quantify material inputs and outputs (see Fischer-Kowalski 1998, 1999; Daniels and Moore 2001; Fischer-Kowalski et al. 2011; Castan Broto, Allen, and Rapoport 2012; Giampietro, Mayumi, and Sorman 2012).

Currently the diverse field of scholarship on urban metabolisms is extraordinarily fragmented (Newell and Cousins 2014), and there is a virtual absence of dialogue between urban scholars who conduct qualitative research at the micro-scale and those who use quantitative methods to measure citywide flows. The latter have focused almost exclusively on the metabolisms of Northern cities where reliable datasets are at hand (see Ferrão and Fernández 2013, whose recent volume on sustainable urban metabolisms only includes Southern cities in the final chapter, seemingly as an afterthought). The absence of citywide data in Southern cities regarding basic metabolic flows such as water and waste is truly remarkable, yet the measurement of such flows is difficult because of the diversity of ways in which people connect with metabolisms. For example, von Schnitzler (2013) has shown how residents of former townships in South African cities circumvent their household electricity meters, and the fact that people commonly use resources surreptitiously poses obvious challenges for a material flow analysis. Given the difficulty

of measuring metabolic flows in Southern cities most attempts to do so simply ignore informal-sector actors, and hence, their measurements are simply not meaningful. For example, the International Organization for Standardization's attempt to develop a set of metrics that will render urban sustainability comparable (ISO 37120) has generated data that beggars belief. Jerven (2013) demonstrated the poor quality of national-level economic data, and these city-level indicators are perhaps even less accurate. The World Council on City Data³ provides data on cities that have used ISO 37120 and it states that 0% of Amman, Haiphong and Makkah's solid waste is recycled. In this case the parameters are standardized but the methods of data collection are not, and cities can employ any method to measure flows of waste. What is clearly at stake is the acknowledgement of the very existence of informal-sector waste workers, and more generally, the ability to meaningfully understand cities that do not conform to an imagined archetypal Northern urbanity.

The next major breakthrough in Southern urban research will be made by the reconciliation of micro-level qualitative case studies with quantitative citywide analyses. One quantitative method that can be adapted to Southern cities is MuSIASEM (see Giampietro, Mayumi, and Sorman 2012), which calculates metabolic flows in instances where datasets are incomplete. It does this by measuring flows at key points, and then filling in the gaps with educated guesswork, somewhat like a Sudoku puzzle. In Southern cities this method is only feasible if it is complemented by McFarlane's zoomed-in view that can identify the pinch points at which materials or energy flow through narrowed circuits. To return to the example of electricity consumption in South African townships (von Schnitzler 2013), the practice of circumventing meters could easily be overlooked in the absence of in-depth qualitative research given its surreptitious nature. Simply put, without an understanding of everyday practices that can only be gained through

painstaking qualitative-oriented fieldwork, any attempt to quantitatively measure metabolic flows would fail to 'see' key pinch points and nodes where flows are coopted, redirected or subverted. Competing interest groups often vie for control over these key points in urban metabolisms, as they are, for example, quietly encroached upon and incrementally constructed by communities (Bayat 2000; Silver 2014). These dynamics are part and parcel of everyday life in many Southern cities and their immediacy is apparent as people constantly seek to rework their connection with metabolic flows. But to understand these dynamics fully they must be contextualized as part of citywide metabolic configurations. In other words, qualitative research should not be subordinated to quantitative methods, but together they can bring the city into view holistically and explain why contestations unfold when and where they do.

Tendency 3: Political economy and materiality are always already co-constituted in Southern cities, so neither can be reduced to structure or context

There has been a proliferation of scholarship on the materiality of cities in the South, but its relationship with critical urban theory is ambiguous at best and oftentimes antagonistic. I argue that these approaches are mutually enriching, because it is impossible to identify an original 'Garden of Eden moment' in which either political economy or materiality serve as structure or context and determine urban processes in Southern cities. Instead, materiality and political economy are always already co-constituted.

Scholarship on the materiality of cities has a complex genealogy that draws extensively on the work of Deleuze and Guattari (1987) and/or actor-network theory (ANT) (see Latour 2005). Neither is a theory that seeks to explain how the world works; the former is best described as a way of thinking while the latter is a method of inquiry. Deleuze

and Guattari (1987) reject dualistic and dialectical reasoning, and instead they embrace a messiness in which a multiplicity of disparate entities—both human and non-human—are interconnected. These assemblages are rhizomatic in nature, meaning they are inherently unstable and they change as the connections expand or contract, and as entities dis-/re-connect. ANT begins by rejecting ‘the social’ as context or a ‘domain of reality’ (Latour 2005, 64) that preconditions associations. Latour (2005, 75–76) argues that the division between ‘the social’ and ‘the material’ ‘is a complete artefact’ which privileges human actors as the sole repository of agency. He understands humans and objects as actants that mediate complex associations of varying durability. Practitioners of ANT conduct inductive research that identifies actants and demonstrates how they are enrolled in durable actor networks.

Much of the scholarship that has foregrounded the material in urban processes has remained heterogeneous, and while I find urban metabolism the most useful framework for understanding the materiality of cities, my intention is not to outline a single theoretical or philosophical approach for grasping the ontology of Southern cities. Instead, scholarly inquiry should be driven by the case at hand. At times it may be appropriate to focus on a single object or flow because of the supposed key role it plays in mediating relations among humans and non-humans within and between cities, such as a PowerPoint presentation, cement or traffic (McFarlane 2011a; Abourahme 2014; Lee 2015). Elsewhere it may be more appropriate to focus on how particular urban systems—such as transportation, electricity or sewerage systems (Bennett 2010; Harris 2013; Ranganathan 2015)—enlist human and non-human entities into durable networks whose functioning is part and parcel of everyday city life. Finally, in some instances it may be useful to view the city itself as a series of heterogeneous and interconnected networks whose unbounded nature is characterized

by indeterminacy (Farias and Bender 2010; McFarlane 2011b). The essence and role of things is also up for debate, but perhaps the most profitable approach has focused on the ways in which objects mediate relations among humans in ways that foreclose or open up avenues of human action (Collier 2011; Coward 2012; Lancione 2013). Scholarship focused on materiality that is situated in the global South has largely focused on urban infrastructure because it

‘demarcates both literally and figuratively which points in urban contexts can and should be connected, and which should not, the kinds of people and goods that can and should circulate easily, and which should stay put, and who can and should be integrated within the city, and who should be left outside of it’. (Rogers and O’Neill 2012, 402; see also McFarlane 2008; McFarlane and Rutherford 2008; Larkin 2013; Meth 2013; Fredericks 2014; Silver 2014; Criqui 2015; Trovalla and Trovalla 2015; Lee 2015).

Scholarship on the materiality of cities has provoked strident criticism among critical urban theorists. Its detractors charge that the concept ‘assemblage’ is indeterminate (i.e. is it a research object, methodology or ontological starting point?), and that it often amounts to naive objectivism that tends to be overly descriptive and fails to inform a broader understanding of cities (Brenner, Madden, and Wachsmuth 2011; Scott and Storper 2015). Furthermore, thick descriptions risk losing sight of the context in which urban processes unfold—i.e. global capitalism—and hence the power relations which determine material outcomes (Wachsmuth, Madden, and Brenner 2011). According to Brenner (2009, 204), critical urban theory must remain unflinchingly focused on urban processes under capitalism in order to identify contradictions, develop critiques and ultimately ‘excavate possibilities for alternative, radically emancipatory forms of urbanism’. This tradition has undeniably generated forceful critiques of entrepreneurially

oriented urbanism over the course of the past three decades (Harvey 1989, 2005; Peck and Tickell 2002; Smith 2002; Brenner, Peck, and Theodore 2010), and in order to contribute to this tradition of scholarship Wachsmuth, Madden, and Brenner (2011, 744) argue that materialist approaches would have to be 'linked more explicitly to the analytical apparatus of urban political economy'. They conclude, however, that 'it is logically impossible... to simultaneously endorse a strong, ontologically inflected version of assemblage analysis and a robust version of geopolitical economy' (745). This is the crucial point at which these literatures diverge; many scholars who embrace materialist approaches do so with the objective of understanding individual cities rather than global capitalism (see Farias 2011; Derickson 2014).

The relationship between materiality and political economy in Northern cities may oftentimes be conditioned by the latter. Rather than embracing an a priori assumption that capitalism structures or provides context for urban processes in Southern cities, however, scholarship should focus on the ways in which the materiality of Southern cities and political economy are interrelated. The key point is that there is no original moment in which political economy or materiality sets the stage for their evolving dialectical relationship, and the complexity of metabolic configurations is missed if this co-constitution is obscured. The best way to illustrate their co-constituted nature is by way of example. Over the course of the past decade the material composition of waste has changed in many Southern cities so that a higher percentage is recyclable, while its overall volume and density have increased (for density, see D'Alisa, Di Nola, and Giampietro 2012). This has caught the attention of international investors who eagerly anticipate lucrative profits for formal waste management enterprises (Bank of America Merrill Lynch 2013). Furthermore, a recent change in the composition of waste in many cities means that its calorific value has increased,

and as a result incineration is now a viable option. On the one hand, the material characteristics of waste have resulted in investment/privatization and the introduction of new technology. On the other hand, an explanation for the material transformation of waste is the growth of middle classes whose consumption patterns tend to generate high volumes of particular types of waste. Thus, in the case of waste in many Southern cities materiality and political economy are dialectically related and neither can be considered an 'original' cause or effect (Demaria and Schindler 2015). Instead, it is their relationship that determines a city's actually existing metabolic configuration.

Defining the contemporary problem-space of Southern urbanism

Kapuściński ([1978] 2006, 97) recounts that Ethiopian Emperor Haile Selassie explained to his underlings that:

[P]eople never revolt just because they have to carry a heavy load, or because of exploitation. They don't know life without exploitation, they don't even know that such a life exists. How can they desire what they cannot imagine? The people will revolt only when, in a single movement, someone tries to throw a second burden, a second heavy bag, onto their backs.'

With its romantic tropes of freedom and emancipation postcolonialism provided inspiration in an era of freedom struggles when oppressed peoples sought to cast off this proverbial 'second bag'. While I certainly do not want to imply that we have entered an era of non-exploitative power relations—Gaza City and the West Bank are examples of ongoing military occupation—it is my contention that at least in the way it is currently mobilized, postcolonialism does not contribute to our understanding of urbanization in the global South. Many Southern cities exhibit extremely high levels of inequality and are teetering on the edge of becoming

uninhabitable, and it is impossible to imagine a singular event in which power relations, inequality and ecological degradation could be reversed. Indeed, people in Southern cities are saddled with more ‘bags’ than ever before but it is anyone’s guess how this burden can be shed. It is equally difficult to imagine how air quality in Delhi or Beijing could either deteriorate any further or improve significantly.

Swilling and Annecke (2012, xvii) note that ‘whereas the European discussion is largely about low-carbon transition as an alternative to preserving the status quo, in many other parts of the world . . . the alternative to transition may well be collapse’. Thus, rather than emancipation from oppression, cities in the global South are faced with the daunting prospect of making ‘just transitions’ (Swilling and Annecke 2012), and this poses socio-cultural, economic, ecological, technological and political challenges. The multifaceted nature of this ‘problem-space’ must be addressed in an uncertain world in which ecological/economic crises as well as geopolitical reorientation appear inevitable. Uncertainty is the context in which urban processes are taking place. For example, how will Southern cities be affected by the unevenly distributed impacts of global warming? Will the global economy be reoriented toward East Asia and if so how will Southern cities be impacted? China is at the forefront of urban development across Africa and parts of Asia, and the integration of cities into Sino-centric global production networks portends significant changes. What are we to make of Pakistani and Tanzanian cities—such as Gwadar and Bagamoyo—with Chinese characteristics, and how will the mobility of planning policy and knowledge from China affect cityscapes and the everyday lives of their residents? Southern urbanism must be forward looking and offer answers to these urgent questions in the context of uncertainty for cities whose futures are unrecognizable from their pasts as well as the pasts of Euro-American cities.

Taken together the three tendencies presented in the previous section provide a

vantage point from which cities in the South are recognized as a ‘type’ of settlement, with an explicit focus on their contemporary problem-space. I argued that cities in the global South tend to exhibit an intractable disconnect between capital and labor. This explains the emergence of territorially based governance regimes whose interventions transform their metabolic configurations. In the context of urban transformation, the diversity of ways in which people in Southern cities connect with metabolic flows and infrastructure on an everyday basis contributes to the production of subjectivity and animates sociality. The sites of potential contestation are multitudinous as people often seek to intensify their connection with life-affirming flows and insulate themselves from life-negating flows. These relations and contestations unfold at multiple scales and are of life and death importance for many people, while they also influence citywide metabolic configurations.

My aim has been to offer the contours of an emergent paradigm that accounts for the heterogeneity of cities in the South—e.g. their situated metabolic configurations—while acknowledging that they tend to exhibit characteristics that distinguish them from cities in the North. This list of tendencies is by no means exhaustive. Ghertner (2015) recently argued that gentrification theory fails in much of the world because it works through rent gaps which emerge when land use is determined by markets. He notes, however, that ‘non-privatized lands (which just so happen to be concentrated in the South) represent obstacles that cannot be overcome without special efforts: namely, the application of extra-economic force’ (553). Similarly, Gillespie (2016) identifies a logic of accumulation by dispossession at work in Accra whose aim is not to divorce the poor from means of subsistence and force them to sell their labor power for a wage. The existence—and resilience in some cases—of non-market land-tenure systems and the emergence of alternative logics of dispossession could also be considered

tendencies that obtain in Southern cities and there are surely more.

I anticipate critics will seize on my use of the term ‘global South’ as an ill-defined territorial entity that sets up a false dichotomy of Northern and Southern cities. They will point out that cities across the crisis-scape of Southern Europe or in the USA’s so-called ‘Rust Belt’ may exhibit some of the very same characteristics that I have outlined here as ‘Southern’ (see Dalakoglou and Kallianos 2014; Hadjimichalis 2014; Schindler 2014b). In many ways I am sympathetic to this criticism; ‘the South’ is a construction just like locale, region or planetary. There is little consensus with regard to its boundaries, there is widespread agreement that it is not a homogenous geographic entity and there are places that defy classification as North or South. Furthermore, cities are always being re-made. Capital and labor may not be indefinitely disconnected in Lagos, and the metabolic configuration of Addis Ababa may become predominantly formal. Nevertheless, the three tendencies I outlined characterize many cities beyond the North Atlantic and Northeast Asia, and to ignore these important differences inhibits our understanding of contemporary urbanization. Furthermore, the paradigm I presented accounts for urbanization beyond Euro-American and Northeast Asian cities while it ‘transcends the stereotype of the global south city as a “pathological” space in need of salvation at the hands of Western experts’ (Kanna 2012, 360). The heterogeneity of cities can be accounted for with multi-scalar mixed methods research, which will allow for the three tendencies I presented to be adapted in individual cities that exhibit more or less inequality, situated political ecologies (Lawhon, Ernston, and Silver 2014), unique imbrications of capital and labor, and city-specific metabolic configurations which impact the everyday lives of their residents in particular ways. Rather than serve as timeless truths that underpin an epistemology, it is my hope that the tendencies I have presented will serve as an

adaptable starting point for city-centric research that speaks to the problem-spaces of actual Southern cities like Mbabane and Manzini.

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Notes

- 1 It is important to note that not all research on Southern cities embraces postcolonialism. Derickson (2014, 7) groups postcolonial urbanism together with a number of cognate approaches that have in common an interest

‘in the ways in which the lived experience of difference, marginalization or subalterneity are productive of subjectivities, and how those various subjectivities might coalesce in ways that undermine and disrupt ways of knowing, governing and being that reproduce a given power structure’.

- There are a number of other post-isms that have been employed in an effort to understand cities in the global South. See Simon (1998) for a discussion of the relationship between postcolonialism and postmodernism, and Ziai (2015) for a thorough representation of debates surrounding post-development.
- 2 This list is by no means exclusive, but concepts include: quiet encroachment of the ordinary (Bayat

2000), conflicting rationalities (Watson 2003), urban informality (Roy and Alsayyad 2004), political society (Chatterjee 2004), ordinary cities (Robinson 2006), pirate towns (Simone 2006), occupancy urbanism (Benjamin 2008), insurgent citizenship (Holston 2008), radical incrementalism (Pieterse 2008), gray space (Yiftachel 2009), aesthetic governmentality (Ghertner 2010), speculative urbanism (Goldman 2011), subaltern urbanism (Roy 2011b), worlding (Roy and Ong 2011), telescopic urbanism (Amin 2013), rogue urbanism (Pieterse and Simone 2013), multiplicities of governance regimes (Schindler 2014a), the near-South (Simone 2014) and entangled urbanism (Srivastava 2014).

3 <http://www.dataforcities.org/>

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