# **Provincialising Urban Political Ecology:**

# Towards a Situated UPE through African Urbanism

## **Mary Lawhon**

Department of Geography, Geoinformatics, and Meteorology, University of Pretoria, Pretoria, South Africa marylawhon@gmail.com

#### **Henrik Ernstson**

African Centre for Cities, University of Cape Town, Cape Town, South Africa;

Department of History, Stanford University, USA

#### Jonathan Silver

Department of Geography, Durham University, Durham, UK

**Abstract:** Urban political ecology (UPE) has provided critical insights into the sociomaterial construction of urban environments, their unequal distribution of resources, and contestation over power and resources. Most of this work is rooted in Marxist urban geographical theory, typically beginning with a structuralist theory of power, then examining particular artifacts and infrastructure to provide a critique of society. We demonstrate how UPE can integrate insights in urban geography from Southern theory. Recognizing differences across cities and urban theory in the South, we focus on possible contributions from African urbanism to UPE as but one means for expansion. We begin suggesting what a situated UPE might entail: starting with everyday practices, examining diffuse forms of power, and opening the scope for radical incrementalism. Rooting research in a broader definition of political ecology and starting from theory and empirics in cities of the South can provide new theory and grounds for radical change.

**Keywords:** urban political ecology, African urbanism, everyday practice, Southern theory, urban theory

#### Introduction

Political ecology has made numerous contributions to our understanding of human-environment geography, introducing key concepts from social theory and developing new ways of

understanding and problemetizing our ideas about society and nature. The field is characterized by its critical analysis of power in human-environment interactions, rooted in and across structuralist and post-structuralist analytical frameworks. The geographical scope of political ecology includes studies in the North and South and in urban and rural areas, with a paucity of urban work in the global South that studies everyday practices using ethnographic methods. While the challenges and 'solutions' of sustainable development are increasingly oriented towards the city, work in the global South remains managerial, technocratic, and generally apolitical (Myers 2005; 2008). Critical lenses such as urban political ecology (UPE) provide means to evaluate these approaches, raising questions of inequality, justice and poverty to seek and encourage the production of more just urban environments.

We believe however that new developments in Southern urbanism provides the theoretical scope for wider and more relevant analyses than what UPE is capable of today. We will argue that UPE tends to overlook situated understandings of the environment, knowledge and power which form the core of other political ecological understandings as well as recent work in Southern urbanism. UPE also applies the same kinds of questions and theoretical notions in cities of the North and South, a point increasingly problematized by Southern urbanists inspired by postcolonial insights (cf. Robinson 2006; Roy 2009).

As we will demonstrate, UPE works tend to develop their argument using three elements: a structuralist notion of power derived from Marxist analysis of capital accumulation; a focus on artifacts (in particular networked infrastructures) as objects of analysis to examine the material

flows and processes that shape the city; and to aim towards a structural critique of capitalism, commodification, modernity, and/or neoliberalism. The risk is, we argue, that this does not sufficiently allow for the many forms of power and urban experiences that shape cities and socio-ecologies in the global South (and North). Our contribution lies in setting UPE in communication with work on Southern urbanism in an effort to "provincialize" UPE, calling for a more situated UPE which creates the possibility for a broader range of urban experiences to inform theory on how urban environments are shaped, politicized and contested.

In the next section, we review the lineage of political ecology and then provide a critical overview of UPE, its theoretical framings and key findings. After that we show how African urbanist literature helps to draw attention to additional themes—identity, knowledge, everyday practices—which emerge from our intention of developing UPE. We argue that the examination of power, mobility/infrastructure and structural critique that informs most UPE ought to be expanded—not replaced by—to include distributed power, people as infrastructure, and an involvement with postcolonial and poststructural critique of knowledge and practice. Such a situated UPE, we suggest, opens space for understanding and developing a radical incrementalism based on, connected to, and drawn from particular socio-environmental conditions and situated ways of knowing.

# **Key Trends in Political Ecological Research**

Political ecology is seen to have developed from research in rural contexts in the global South in the 1980s. Later and quite separately, a lineage of 'urban political ecology' developed. A salient

example of the former is the Special Issue in Economic Geography edited by Peet and Watts (1993), later turned into *Liberation Ecologies* (1996). Rocheleau et al.'s (1996) edited *Feminist Political Ecology* may be the first, under-cited example of urban Northern case studies explicitly labeled political ecology. McCarthy's (2002) later call for a "First World Political Ecology" was followed by other Northern case studies (cf. Walker, 2003; Schroeder et al. 2006; see Robbins 2002; Schroeder 2005). Similarly, the explicit emergence of UPE is dated later—and somewhat disconnected to—Rocheleau et al.'s volume, notably including Swyngedouw's seminal study of water and urbanization in Guayaquil (Swyngedouw 1997; 2004), Keil's reviews (2003; 2005), and the edited volume *In the Nature of Cities* by Heynen, Kaika and Swyngedouw's (2006).

Political ecological research has thus grown to include a diverse range of topics, sites, and theories, but remained its critical focus on power in human-environment interactions (Robbins 2012).- Theoretically, historical reviews of the field often note a divergence between Marxist and post-structuralist approaches (and a case can be made for critical realist framings, e.g. Leach and Mearns (1996) and Forsyth (2003)). Accounts of the lineage generally suggest that early political ecologists drew on structuralist accounts, most notably Blaikie (1985), Blaikie and Brookfield (1987) and more forcefully articulated in Peet and Watt's second edition of *Liberation Ecologies* (2004). Chapters which seek to expand political economic approaches to include considerations of gender and discourse can be found in the special edition noted above, including Moore's (1993, p. 397) call to recognize the "simultaneity of symbolic and material struggles." Escobar (1996) insisted on a clearer articulation of such differences, and not long after indigenous knowledges, feminist approaches, and diffuse understandings of power became core concepts in

political ecology, a shift not yet witnessed clearly in UPE.

Accounts often then suggest a recent convergence. Paulson et al. (2005, p. 24) describe the "polarized antagonism between those who privileged material explanations and those who privileged symbolic meaning and social explanation" as a largely historical phenomenon which political ecologists sought to resolve in the 1990s "through creative cross-fertilization [... and] the interrogation of assumptions in intellectual traditions" (2005, p. 25). While foundational epistemological differences remain, in practice many works blur and distort the structuralist/poststructuralist divide, reflecting wider work in the global South such as subaltern studies. It appears an eclecticism have emerged from a weariness with epistemological purity, but attempts to merge critical insights of both traditions exist (cf Gidwani 2004; Jones 2008; Sayer 2001).

Despite cross fertilization and although individual scholars draw from various repertoires, we see merit in articulating the difference between two main approaches that has developed in the study of political ecology. One approach is still largely Marxist, defined by primary attention to structures of power, dialectical reasoning and historical materialist approaches, prevalent in the study of urbanization and what we above referred to as urban political ecology (UPE). The second may be more difficult to label, but attends to diffuse forms of power, use ethnographic approaches and postcolonial and feminist critiques of knowledge production, which can loosely be called 'poststructuralist insights' in political ecology. This delineation helps to recognize the dominant threads in specific works, to reflect on consistency between theory and practical

recommendations, and identify gaps in the literature.

#### **Urban Political Ecology**

UPE is concerned with the processes of the urbanisation of nature, or the social, cultural, and political relations through which material and biophysical entities becomes transformed in the making of often unequal cities.- It seeks to explain how power operates by examining processes of capital accumulation as socio-natural transformation, and the contestations and conflicts over these and it has largely evolved from Marxist urban geography and drawn less on established insights from political ecology (Zimmer 2010).

Through importantly resurrecting Marx's interest in nature, in particular how technology and human labour is dialectically part in constituting, or producing nature, UPE has gained an historicized and politicized nature (Harvey 1996; Loftus 2012; Smith 1984; Swyngedouw 2004). 'The city' is merely a socionatural artifact produced through the metabolization of nature—water, cement, copper, asphalt and other stuff is brought through a process of urbanization into the making and remaking of the city. The social relations of class, gender, and race that informs the process of urbanization comes to codify the unjust geographies of cities in general—producing healthy environments for some, while others live close to hazards and with less access to resources like water, or Internet. Using a dialectical and "process-based episteme" (Swyngedouw 2004: location 387), UPE scholars do not believe in fixed 'structures', but physical landscape patterns of streets, industries, trees and water pipes, including social identities of class, gender, race, and cultural discourses of the 'good city' are outcomes of generative

processes.

The structuralist component of Marxist reasoning lies in the notion that it is capital accumulation—as a basic but multifaceted generative process of how flows of (use and exchange) value is accrued—which drives spatiohistorical processes to form 'structures' (more recently referred to as quasi-objects, hybrids, cyborgs, assemblages or socio-nature (Swyngedouw 2004, p. 2009), or 'permanences' (Harvey 1996)). By 'excavating' these spatiohistorical processes, the operation of capitalist power can be unpacked to understand how it shapes physical conditions, thereby also making these processes contestable and changeable, informing environmental justice struggles. Building on this understanding of UPE, we here describe more fully the three key elements of the typical UPE argument highlighted above: i) a structuralist notion of power; ii) a focus on artifacts as object of analysis, in particular networked infrastructure; and iii) a structuralist critique of capitalism, modernity, and/or neoliberalism.

## Structuralist Notions of Power

The social production of nature to meet the requirements of capitalism is thus understood as a historical process of capital accumulation that produces distinct socio-natural landscapes, i.e. cities (Castree 2001; Smith 1984; Swyngedouw 2004). Capital accumulation is understood as the primary underlying and therefore structural force for organizing the city, influencing cultural and social formations. To understand urbanization (as process) and the city (as 'the thing'), the UPE analyst moves through a series of dialectical moments and analyze how material practices, beliefs, rituals, and institutions are interconnected to shape the city (Harvey 1996; Swyngedouw

One specific strategy for tracing the operation of power is through unpacking the many factors involved in controlling material flows of resources, which has lead to a focus on infrastructures that provide the conduit to a range of urban services. Beyond the technology itself, this involves critical analysis of for instance the cultivation of engineering skills, the development of water and electricity tariffs, the historical availability of capital, the concession of property by the state to private companies, the role of resistance and social struggle, and in particular the class relations that govern who can influence this process of infrastructure investment (Heynen et al. 2006; Swyngedouw and Heynen, 2003; Swyngedouw 2004). Capitalist power is conceptualized as enacted through urban materialities, giving precedence to class relations.

While this structuralist, historical materialist interpretation of the city and its formation has formed the basis for UPE, our review shows engagement with various poststructural and posthumanist scholars, notably Foucault's conceptualization of governmentality and Latour's work on non-human actants. Such entanglements entail the incorporation of poststructuralist 'tools' while (controversially) leaving the underlying epistemology of capital accumulation as the generative process intact. In contrast however, whereas traditional political economic approaches analyzed the process of urbanization as constituted primarily through labour relations, modes of production, and elite projects, UPE has incorporated aspects of poststructuralism to better describe *how* capitalism mobilizes a multitude of things, discourses, and people—into hybrids, assemblages or quasi-objects—to stabilize infrastructures, modes of

governing, and problem definition (Castree 2001; Demeritt 2001).

This selective incorporation can be understood through the relationship of Marxist urban geography with actor-network theory, or ANT. Castree and MacMillan (2001) distinguish between 'weak ANT' and 'strong ANT' where the former operates as a methodological tool for tracing the making of socio-natures and infrastructures, whilst rooted within a notion that it is capitalist power—understood dialectically—that shapes these socio-natures. On the contrary, 'strong ANT' holds that the nature of power is different—composed, distributed and shaped by all entities enrolled into action to shape socio-natures, emphasizing that there is no 'underlying' level to reality, no ideology or structural form of power (such as capital accumulation) that can be revealed (Murdoch, 2006).- By choosing to apply 'weak ANT', UPE can consider the agency of materials and non-humans, while maintaining that power originates from traceable capitalist relations. ANT thus helps UPE to better describe how material historical relations are formed over time and space through the fluid, dialectical relationship between and across human and non-human actants, materialities and discourses (Swyngedouw 2004). This is done without disturbing the fundamental underlying epistemology of UPE, although some have argued that even this weak ANT uptake detracts from central tenants of Marxist geography (Brenner et al. 2011).

Object of Analysis: Metabolism and Circulation of Artifacts and Infrastructure

Given the focus on the material as an expression of structural power, UPE looks to processes through which power redirects material flows, including metabolism and circulation

(Swyngedouw 2006). Metabolic processes constitute the material (re)production of the city and is intimately connected with the project to domesticate nature to produce commodities with use values and exchange values (for capital accumulation). Material metabolism is therefore connected to social relations of production and with capital flows that range from the local to transnational. Nothing lies outside of these transformations and the city is a part of huge networks that span across the local through to the global, incorporating humans and non-humans alike.

In line with this thinking, Gandy (2005), Swyngedouw (2004) and others use the work of Haraway (1991) to conceptualise this metabolic city as a cyborg; part social, part natural with no delimitations in between. This theoretical maneuver incorporates post-structural notions whilst remaining rooted in historical materialism. Gandy (2005, p. 35) claims the cyborg is consistent "with neo-Marxian conceptions of relations between material and abstract space since the cyborg is at root both a materialist concept and an idealist construct that eschews a purely phenomenological or fragmentary worldview through its recognition of multiple and interconnected collectivities of agency." This focus on metabolism and circulation has turned UPE scholars toward the infrastructures of the city and positioned networked systems as central to understanding the political ecology of urbanization. As Gandy (2006, p. 67) argues, "the production of urban nature is inseparable, for example, from the development of urban technological networks which served to bind the modern city into a more integrated spatial form."

This lens suggests why water has become such a common point of departure for UPE (Ferguson and Derman 1999; Bakker 2004; Debanné and Keil 2004; Gandy 2004; Kaika 2005; Loftus 2006; Oliver 2006; Smith and Ruiters 2006). Similar approaches have been taken to study food (Heynen 2006), and fats (Marvin and Medd 2006). While many other works place less emphasis on circulation and flows, they retain an interest in examining how power operates through artifacts. Heynen's work on trees (2003) and Robbins and Sharp (2006; Robbins 2007) on lawns use biophysical objects as their point of departure through which to understand how power operates. Robbins and Sharp (2006) are clear in attributing power to the objects of analysis, rather than viewing the objects as means through which structural power is exerted. Whether this shift supports a materialist view or requires new understandings of the meaning of structuralism remains unclear, as well as the implications of the shift on the preeminence of class as the dominant structuring relation.

From Theory to Practice: Structural Critique and Systemic Change

The normative project of Marxism leads UPE scholars to move beyond simply drawing attention to the operation of capital through the city, towards a larger critique. Swyngedouw (2011) clarifies in a filmed talk at the STEPS Centre in Sussex, UK, that "I am really not interested in water... but in social power and emancipatory democratic politics." Water is not studied for its own sake, but as an analytical entry point to examine the operation of power through urban ecology—the city is made into a location of structural critique. This complements and builds on Marxist critiques of production, 'class struggle' and the working place.

The particular focus of critique taken by different authors varies, but can be generally summarized as capitalism, neoliberalism and/or modernity. For example, Gandy (2006) focuses on the need to elucidate the ideology which underlies our understanding of capitalist urbanization. In accord with Marxist framings, his goal is to make this hidden insight clear, and suggests that this unveiling can lead to developing new discourses in the public realm. Keil and Boudreau (2006) similarly seek to expose ideology in their study of Toronto. They build on the notion of the 'sustainability fix' (While et al. 2004) to show how capitalists use environmentalism as a strategy through which to overcome (in the short term) its contradictions.

However, our assessment of the literature suggests that the impetus for broader critique also provides fractures in the coherence of the UPE framing. While most works are quite clear in using Marxist theory to expose ideology and provide a critique, particular recommendations largely fail to respond to this radical provocation. Castree (2001, p. 203) claims that the implications of the Marxist production of nature thesis is that there is no space for "a Marxist politics wherein one 'tinkers' with capitalism in order to yield a more socially and ecologically just economic system. Rather, Marxists... argue that capitalism is incapable of producing nature in progressive ways because the pursuit of profit is its overriding objective." The Marxist thesis therefore requires more than suggestions for revision of or just distribution within the capitalist system; it requires systemic change.

UPE has, however largely failed so far to provide critiques which do more than point to the need for change, and instead, often conclude with non-systemic suggestions for change. For instance,

while clearly exposing the ideology of capital in their work, Keil and Boudreau (2006) conclude that a "tender peace" exists between various types of environmentalists and capitals in Toronto. The work questions whether a series of engagements between diverse stakeholders actually leads towards greater "actual sustainability", democracy and social justice. However, if neoliberal roll out environmentalism really is merely a "fix" to capitalism, the answers to such questions should be apparent. Robbins and Sharp (2006; Robbins 2007) seek to expose the ideology underlying the ordinary North American lawn. While the common perception is that the desire for lawns is largely cultural, they show the political and economic forces which create this desire. This includes how the fertilizer industry created new customers (to save their profits), and how the lawn itself "produces turfgrass subjects" believing that fertilizers are continuously needed. Robbins' book provides some recommendations for specific users for how to change this relationship, but these recommendations are largely specific to lawn care rather than systemic changes in the means of production.

Heynen's (2006) work on the urbanisation of hunger in Milwaukee is more explicit in suggesting that UPE needs an accompanying activist agenda. His work similarly seeks to understand contradictions that produce hunger and he urges attention to action to end these contradictions. The action-oriented aspects of his piece, however, focus on school feeding schemes. This point is particularly ironic given his quotation of a Brazilian archbishop that giving out food is saintly while questioning why people do not have food makes one a Communist. Heynen's work may be calling attention to structural inequality through his suggestion that capitalism exacerbates environmental vulnerabilities in meeting food needs, but (despite more attention to systemic

change in his other works) his only suggested response much more closely adheres to saintly actions.

Loftus (2006) and Smith and Ruiters (2006) use the lens of water to call attention to the failures of privatization of water in South Africa and the weaknesses of capitalism (see Bakker (2004) on water in the UK, and Ferguson and Derman (1999) in Zimbabwe). Smith and Reuiters (2006, p. 203) point to the agency of the poor in "forcing the partial decommodification of services." This work most clearly seems to adhere to Marxist framings in arguing for the need for the poor to unify their opposition, although the strategies lauded here are largely rooted in liberal understandings of rights-based demands from the state. Pellow's (2006) work similarly calls attention to successes and may be the most optimistic in pointing towards the possibilities for opposing unjust practices. His work on e-waste highlights the possibility for global social movements to effect change through international pressure, using the example of the Electronics TakeBack Campaign to show how pressure in the US and Europe had positive impacts in the global South where e-waste dumping was occurring. It, like the work of Smith and Reuters, suggests the possibilities for reigning in capitalism. In a different line of reasoning, but following closely the theoretical notion that cities are made through spatio-historical process, Swyngedouw (2009, page 604), draws on political philosophy (from Ranciére, Badiou, Agamben, and Žižek) to search for systemic change. The aim is to "enhance the democratic content of socioenvironmental construction" (Swyngedouw 2004: location 419) and he argues with Kaika for "revisiting the meaning and politics of a *common* urban environment" that can challenge the prevailing 'post-political' and managerialist institutional environment that keeps the political

content of producing the city away from democratic arenas.

Our review demonstrates that UPE has provided extensive insight and accounts into how power operates in the urban context and how infrastructures, shaped by power relations, reinforce capitalist relations. However, as Truelove suggests, (2011, p. 143), "such studies have been more inclined towards analyzing the production of class and distributional dimensions of inequality on a city-wide scale rather than illuminating how multiple social differences are (re)produced in and through everyday... practices". The dominance of structuralist approaches in UPE is in some ways surprising given influence of poststructuralism on the broader field of political ecology, as well as the early feminist UPE works in Rocheleau et al. (1996). The apparent hesitancy of (non-urban) political ecologists to 'move into the city' might be that urban residents have been seen to lack the indigenous knowledge and/or attachment to place which is the object of analysis of much poststructural political ecological work. And yet, as contemporary urban studies of cities in the South have shown, the situatedness and subjectivity of knowledge and everyday practices clearly matter in the shaping of these cities (Bayat 1997; Pieterse 2008; Simone 2011).

Two important pieces which seek, in different ways, to draw attention to the everyday urban political ecology are Truelove (2011), and Loftus's (2012) recent contribution. As with much of the work in Rocheleau et al (1996), Truelove shows how gender shapes urban political ecologies and calls for more attention to the everyday as a means for understanding the practice of resource access. Loftus (2012) book *Everyday Environmentalism* is steeped in Marxist scholarship which includes chapters on Smith, Gramsci and Lefebvre, through which he makes a case for why

attention to the everyday is important. We return to his work below.

We recognize some necessary oversimplifications in the above but our aims is to draw attention to the broad narrative being developed through multiple cases, while not denying the existence of works that incorporate diverse theoretical insights.

### Situating UPE through African Urbanism

In this section, we first briefly articulate the arguments behind Southern urbanism. We then focus on African urbanists, making links where possible to show how their theoretical developments can inform the formation of urban socio-ecologies. We show how these insights have been used in a growing number of empirical case studies to begin providing a basis for a situated UPE. Our empirical case studies are, importantly, not perfect illustrations of our argument but instead suggest some preliminary ideas regarding what such work might entail and what contributions it might make. Further, our intention is not to suggest that this theoretical framework is brand new; indeed, it has extensive epistemological overlap with political ecology and African urbanism and there are intellectual parallels in the way that UPE has already incorporated key insights from some poststructuralist and posthumanist authors. Instead, our goals are to explicitly articulate the theoretical foundations for such work, to show its utility and call for more empirical work to provide a wider basis for UPE theory.

Southern Theory and African Urbanism

Southern theory draws on postcolonial scholarship which seeks to reorient theory away from its

basis in concepts of the global North. Southern theory as articulated by Connell (2007) is not based on the premise that Northern theory has no relevance, or that theory developed in the South is only relevant here, nor does it seek to establish a dichotomy between Northern and Southern theory. Instead, the goal is to widen the range of sites that are allowed to speak to theory not just as inexplicable or failed examples, but as particular forms of diverse conditions. Indeed, Comaroff and Comaroff (2011) argue that there is much to learn from the South of great relevance to the North. We draw on Chakrabarty's (2007 [2000]) term "provincializing" which is not about rejecting European thought so much as to recognize that "thought is related to place" and that universalist notions of modernity, like justice, democracy and citizenship, "encounter pre-existing concepts, categories, institutions and practices through which they get translated and configured differently" (Chakrabarty 2007 [2000]: location 114). To provincialize urban political ecology is to work out a repertoire more attentive to place, which can question taken-for-granted ideas and broaden the scope for theorizing with more urban experiences in mind. We refer to the outcome of this provincialization as a situated UPE.

Gidwani's (2004) critique of Harvey's (2006 [1982]) *Limits to Capital* through Chakrabarty's work (in particular *Provincializing Europe*) provides a useful example of the postcolonial critique of Marxist geography. He shows how Chakrabarty's understanding of the diversity of history and experience challenges the "political and ethical consequences of always rendering difference in a relationship of actual or prospective assimilation to capital" (2004, p. 528). In sum, difference is not just subjective, nor ought it necessarily be transcended in search of the universal, and Northern accounts cannot simply be extrapolated to the South. However, this does

not entail a rejection of Marxism so much as a need to provincialize it.

Building on these insights, Southern urbanists have challenged the notion common in urban studies that Southern cities are exceptions to theoretical expectations and norms—and therefore are failed cities. Instead, these authors seek to establish a new frame through which to understand urbanism (Roy 2009; Robinson 2006; Robinson 2011). In addition to different historical contexts, current conditions, and the situatedness and subjectivity of knowledge, different regions have developed different intellectual traditions, theoretical lenses and topics of analysis regarding urban theory, referred to as 'conceptual vectors' by Roy (2009). These differences are important, and can help build a diversified urban theory that can help us generalize without being dominated by Northern experience.

Importantly, we suggest that much of the broad field of political ecology may be considered part of this theoretical movement towards challenging established notions of knowledge and power. Political ecology emerged from the need to rethink science in Southern contexts and our critique here is not of political ecology as a whole. Instead, we are responding to the limitations of how this political ecology is being applied in the urban context and seek to articulate some possibilities for future research directions. Certainly one could also make a compelling case for developing an UPE which shows the limitations of applying Northern environmentalism (see Lawhon in press b), drawing more explicitly on the wider traditions in political ecology instead of African urbanism. One could also argue for how UPE could usefully materialize African urbanism. We would see such effort as useful complements to our own.

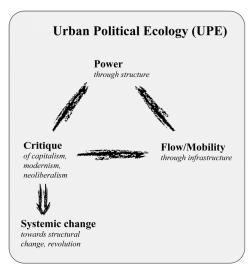
Similarly, we see Loftus's (2012) work as starting from a different point—Northern theory—but largely arriving at a similar conclusion to where African urbanists have been writing for a decade: the importance of everyday practices. This point is much in line with that of Comaroff and Comaroff's (2011) suggestion that issues raised in the South are increasingly being seen as relevant to the North—and further, much of Loftus's insights are based on his empirical work in Durban. Much of what we seek to do here is to draw on a wider range of case studies and Africanist understandings of the city to give more shape to the conditions of possibility Loftus is searching for. Like him, we argue that a better understanding of the possible arises when everyday practices are taken as focus to understand how the city is thought and acted upon in new, creative ways, as this brings situated, and 'sensuous' ways of knowing to the centre of attention and theorization. To provide focus in this paper, we draw out the possible contributions of African urbanism as one means through which to begin revising urban environmental theory. We suggest that this contribution will help UPE to be more representative of the theoretical diversity of political ecology and its roots in case studies in the South.

For these reasons, we have drawn on concepts from African urbanism in an effort to not homogenize or conflate the conceptual vectors emerging from different parts of the global South. We recognize wide variation in the histories, cultures and materialities of different African cities, but nonetheless follow Myers (2011) and Roy (2009) in suggesting there remains theoretical utility of considering African cities as a loosely bounded theoretical construct. We believe that contributions from other areas may well also be critical to provincializing UPE, but that such

contributions are beyond the scope of this paper and would require to work with those skilled in the burgeoning literature on particular global South urbanisms.

Finally, again, our aim is not to reject theory developed in the North. Instead, as evident in the case studies described below, we seek to reorient our gaze, draw more widely and carefully on theory. Additionally, we do not intend to dismiss the use of quantitative data or analysis of structural constraints, but instead to shift the gaze towards the everyday as a sociomaterial location through which the city is made, and which hosts a sphere of possibilities.- We seek to draw upon this framing to illustrate some of the strengths of recent themes in African urban research, and show how provincializing UPE requires expanding and reordering the key elements of UPE described above.

Achieving the development of theory from the South is of course no small task, but African urbanists have widely agreed on the need to first build an ethnographic understanding of ordinary cities (Simone 2004a; 2004b; 2011; Robinson 2006; Pieterse 2008). This kind of work is based on a willingness to situate research in context, describe before explaining, and avoiding the tendency to jump to policy recommendations. It requires starting with examining everyday practices of African cities rather than starting with a theory of urbanization, reordering the sequence of the argument described in the section above (Figure 1).



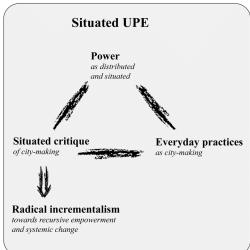


Figure 1. A simplified overview of Urban Political Ecology as currently practiced (left side) and a situated UPE (right side)

#### Object of Analysis: Everyday Practices

Taking a closer look at how particular African urbanists have utilized everyday practices for theory-making can help illustrate how to use this as starting point in a situated UPE. We focus on the specific way in which key African urbanists have approached everyday practices so as to provide a focused contribution based on a conceptual vector from a specific region and not conflate various uses. Marxist UPE has used the notions of metabolism, flow and socionatural artifacts to analyze power, expose ideology and critique the structure of society. To use infrastructure as a lens in regions where modernist urbanization was strong—as in the global North since the 1940's—may well serve as a useful entry point from which to theorize urban socio-ecologies. Here the historical project of establishing infrastructure—water, sewage, electricity, transport, housing, and broadband—held the promise of universal access (Graham and Marvin, 2001). However, African urban history largely challenges such framings. As Gandy (2005, p 389) suggests for Lagos, in a comment more widely relevant in Africa and the South:

The modernist ideal in Lagos was in any case little more than a chimera that characterised sketches, plans and isolated developments, but never constituted the majority experience [...] [U]nder the classic model of Western urbanisation, flows of capital were fixed in space through a combination of financial and institutional mechanisms ranging from municipal bonds to legislative interventions in the urban land market. In Lagos, by contrast, the colonial state apparatus and its post-colonial successors never succeeded in building a fully functional metropolis through investment in the built environment or the construction of integrated technological networks.

In African cities we also see the limitations of colonial impulses towards control, and there are recurrent examples of the inability of state and capital to structure African residents and their cities. As Robinson and Parnell (2011) argue, neoliberalism, despite its reputed ubiquity, has serious limitations as a descriptive discourse in Africa. Instead, there is "a variety of logics, intentionality and assemblages that fractions within local states, and elites are caught up in navigating the routine dynamics of city administration, management, symbolic articulation and constant ideological recalibration of highly media-driven publics" (Pieterse 2012, p. 20). This is complemented by an equal variety of logics, intentionality and assemblages of the non-state, non-elite majority. Further, given the relative paucity of formal infrastructure in Africa, the examination of infrastructure provides only for a partial understanding of the city and how it operates.

Pieterse (2008) argues that the failings of existing theory to explain and provide the scope for

radical change can partly be attributed to 'text-book' models of the city that inform much research and practice. A study of everyday practices provides a conceptual inversion; by exploring the city "from the bottom-up" one can build theoretical understanding "through the eyes of the majority of poor denizens who appropriate the city for their own ends" (Pieterse 2008, p. 209). Similarly, Simone (2004) argues for a shift away from the technological to understanding people as infrastructure—reformulating our (Northern) understanding of the major forces which shape flows towards the everyday practices of ordinary urban denizens. In such a framing, people become the central means through which materials flow through the cities. In making this argument Simone is not arguing for just a semantic shift or to "hide" African failings. Instead, he seeks epistemological reorientation in order to open up the city differently. Rather than flows, the base for theorization is the practices of residents of city-making, including questions of how the city is made to work and how people scale themselves through their networks to access resources and opportunities (Simone, 2004a; 2011).

The focus on everyday practices means paying attention to how relations are formed and stabilized, and made to work in order to mobilize and secure livelihoods and identities. It seeks to capture the texture and intricate details of everyday reproduction. The belief is that this type of work will reorient theory-making and stabilize a different image of the city—what it is (ontological difference), how it works (epistemological difference), whom it is for (moral), and how it can be changed (political project).

This epistemological and methodological move towards the 'everyday' emphasizes another

strong current—to search for new ways to register the African city. Indeed, the emphasis of finding new registers sits at the heart of the intellectual movement to write the African city anew, against a 'target' for developmentalism or overly structural explanatory schemes. The result of this call has been to place the sharpest observers of African cities on the street, among shacks and street traders, trusting old ethnographic methods of observation and participation from anthropology. Simone (2004a; 2011) with his close attention to detail and poetic style strives to fundamentally critique not only the image of African cities (not doomed—but alive), but also how the images of these cities have been scripted and made to circulate in academic text, and popular culture. De Boeck and Plissart (2005) combine essays and photography to render Kinshasa's multiple socio-materialities, and a video documentary (de Boeck 2010) engages the political ecology of a cemetery. In this vein, Pieterse (2008) and Myers (2011) incorporate the work of novelists alongside artists, poets and film makers as important resources for understanding representation. Pieterse (2008, p. 9) argues that these "registers are most attuned to the intimate textures of socialities forged in the midst of very difficult and painful circumstances." This re-sensitization undermines top-down policies of developmentalist frameworks (Pieterse 2008; Robinson and Parnell 2011).

An example of what this may look like in a situated UPE is Lawhon's (in press a) examination of alcohol in Cape Town. While alcohol has yet to be the study of political ecological research, starting with everyday practices in Cape Town suggests the need to understand alcohol and how it shapes the city, its form and its residents. While our understanding of how alcohol flows in cities in the North may be so sufficiently straight-forward that it does not attract our attention,

the limited formal infrastructure through which alcohol flows in many parts of Cape Town forces new understandings of its flows. While consumed widely in both formal and informal areas, these flows differ substantially. In informal areas, alcohol moves largely through the everyday actions of individuals. In the absence of delivery trucks who cannot legally distribute to illegal drinking places—and often roads in inadequate for trucks anyway—sellers "make a plan" using, amongst other strategies, private small trucks or wheelbarrows to move alcohol through the city. In the face of illegality and threat of confiscation, owners of drinking spaces may store their stock with neighbors.

In this case, the common UPE question of access becomes much more controversial. While increasing access and consumption of water is clearly seen as the more just outcome in UPE studies of water, access to alcohol may well increase overall social harm. South Africa has been widely deemed a neoliberal state, but the main thrust of recent policies is to restrict the flow of alcohol access. Finally, although the formal sector manufacturers play some role in shaping what consumers drink, respondents clearly described drinking practices as rooted in sociability; drinking and its impacts are highly subject to identity. Class was described to impact what is drank rather than whether or how much one drinks. Women and children typically bear the brunt of alcohol related harm, including violence and the often cited consequent lack of household income. Thus political economy provides a radically limited view into the operation of power by the state, industry, in the drinking spaces and in the household. A political economic argument may suggest that unemployment, often cited as a key reason for drinking, forms a reasonable starting point, but such an analysis fails to then explain the actual problems, the corresponding

negative impacts, or provide scope for change.

Power as Diffuse and Relational

Starting with the everyday practices of African cities requires us to reformulate our understanding of how power operates. It calls attention to the limitations of understanding power as created and operating primarily through the process of capital accumulation and class relations in structuring the city. That capital accumulation has been critical in some cities may well be the case, however, our experiences in and reading of the literature on African cities suggests that it is pivotal to be more attentive to how power operates through many different relations, including but not primarily economic. In the text below, we suggest the need to expand this understanding of power to include, besides class, other forms of identity (such as race and gender), discursive power and knowledge claims, and to reformulate our understanding of power as relationally constructed and enacted. While some UPE authors have called attention to the importance of other forms of identity such as race, gender and location (cf Birkenholtz 2010; Njeru 2006; Truelove 2009) there is a need to more carefully theorize the implications of examining these aspects of identity and their implications for practice.

African urban research suggests that capitalism is important, but not all encompassing in its shaping of urban ecologies. While colonization can be read as driven by capital (Simon 1992), in many contexts race, racism, and the desire for the modern became the main drivers through which urban form was shaped (Banks 2011). This racism shaped the broad form of cities, even at times to the detriment of capitalist class accumulation (Bond 2000, p. 225). Here we have called

attention to the relevance of race as a salient form of identity, but this argument can also be expanded to suggest that identities, and the processes that stabilize identities, matters more generally in shaping urban ecologies. Despite its Marxist underpinnings, we read Loftus's (2006) account of water privatization in South Africa to suggest the primacy of racial explanations. The creation of a third party water board to take control of local water provision from the municipality is described as politically motivated. The motivation for the separation of water control systems described by Loftus was the legitimation of the racist apartheid government. Thus the first moves towards privatization of water in Loftus' case were racially motivated, not primarily based on increasing private profits. Current efforts to respond to the urban fragmentation are forced to grapple with ongoing racial politics despite the postapartheid unification of urban governance. Similarly, racial politics form a primary lens for Njeru's (2006) work on plastic bags in Nairobi. Understanding the politics around their regulation, he suggests, requires understanding the conflated race and class positionality of Asian-Kenyans and their relationships to political leadership.

And yet, even race and racism must be understood as situated and individually interpreted and enacted. As such, African urbanists have sought to complicate "easy simplifications of... [the] workings of power, by addressing human emotions and experiences of [colonial] rule" (Myers 2003, p. xiii). The forms of African cities can only be understood through consideration of these historical impulses, their remainder expressed both in the built environment and current practices and relations, and the everyday ways in which residents "work with, subvert, ignore or transform" them (ibid). Starting with African cities thus draws our attention to the need to

understand power as operating not just through capital and class, but through other forms of identity, and enacted through a multitude of locations and agents. African urban political ecologies must be understood also as a product of the subjective understanding of race, even as we recognize that race is largely understood as a social construct with material manifestations. While political ecology has grappled with such subjectivities (Anderson 2001), they have been largely left out of urban political ecology.

Following postcolonial, poststructuralist and feminist critiques, in this revised framing we suggest power is understood as diffuse, residing nowhere but enacted everywhere. Pieterse (2008, p. 9) draws on Moore, Butler and Foucault in emphasizing the practices through which power operates, and the symbolic and material effects power produces. Rather than external (structural), power is enacted through 'performativity' (from Butler), "implicated in that which one opposes, this turning of power against itself to reproduce alternative modalities of power, to establish a kind of political contestation that is not a 'pure' opposition, a 'transcendence' of contemporary relations of power, but a difficult labor of forging a future from resources inevitably impure."

One example through which to better understand different kinds of power is Banks (2011) exploration of explanations of fire in an informal settlement in East London, South Africa (for comparison, see Davis (2000) on fire in Los Angeles). Fire is largely interpreted as an outcome of local sorcery, a manifestation of ill will. This framing of fire empowers and disempowers, creating accusations and suspicion. Further, given the undocumented informality of such

settlements, fire creates the opportunity for new residents to establish claims to the space created through fire. Identity matters in terms of claims to space, as older male residents are often able to lay claims to new spaces against the claims of younger or female headed households who may have previously resided there. To understand housing patterns and their shifting dynamics in informal settlements, therefore, one must be willing to engage with questions of metaphysics and diverse forms of identity within a single class.

Likewise, Ernstson (2012) uses ANT to understand the politicization of 'biodiversity', a concept constructed within the discipline of nature conservation since the 1980's. Ernstson works with residents from Grassy Park in Cape Town to demonstrate how the historical circuits of claiming expertise about urban ecology—through Cartesian practices like the construction of nature reserves, 'biodiversity maps' and 'ecosystem services'—have shaped the urban form, but also how such claims can be contested. When 'endangered' vegetation is planted by those previously oppressed in spaces outside of nature reserves, plants are loaded with an history of oppression. Through this re-signification of what 'nature' means, a change in expertise can follow into which new voices can speak. The work suggests—through carefully tracing how relations are stabilized between plants, people, and physical spaces—ways to construct a more-than-human collective action and undermine and contest an established practice of power. This shows how discursive shifts can introduce a slow re-shaping of urban form and the patterns of infrastructure, and who can produce and appropriate resources from urban socio-ecologies (see also, Ernstson and Sörlin, 2013).

Lawhon (2012a; 2012b) also frames power as diffuse and relational in her study of the establishment of new systems of e-waste management in South Africa. Two different associations, both largely dominated by industry, sought to establish different systems which will have different outcomes for individual stakeholders, particularly small businesses and the informal sector. Knowledge claims, control of information, certification and relationships to government became essential means through which the organizations establish and contest legitimacy. Power is exerted relationally by centralizing the flow of knowledge through the organizations and selectively responding to the suggestions of participants. Resistance also occurs relationally, as participants threaten to delegitimize processes through disengagement and/or to offer support to the alternative organization. In this case, it is likely that whatever new system that emerges, it will likely benefit e-waste recyclers, empowering some while disempowering other stakeholders.

From Theory to Practice: Radical Incrementalism

Beginning with everyday practices and the subsequent reformulation of power also has implications for practice. Urban political ecologists use the theoretical framing described in Section 3 for analysis and to subsequently derive a critique of the structure of society in the form of capitalism, neoliberalism and/or modernity. And yet, such works largely leave progressive scholars either depressed at the lack of revolutionary options, or supporting strategies which largely serve as 'fixes'—minor changes to the system which may appease or co-opt radical opposition (Pieterse, 2008; Keil and Bourdeau 2006).

An alternative framing which begins with the complexities of everyday practices rather than only examining capital accumulation and structure gives us more hope. Although this should certainly not be the motivating factor for reforming our epistemology, it does give us a wider range of points through which to advocate for social change. Looking at the urban everyday and understanding diffuse kinds of power opens up new spaces through which to derive alternatives for understanding and creating change. Most African urbanist work is understandably hesitant to draw extensive, detailed prescriptions. This is not because practical implications are not a goal, but because there is a sense in which there is a need for more careful research and reflection before drawing conclusions and developing visions. Nonetheless, some emerging reflections suggest new possibilities for progressive change pragmatically rooted in the realities and possibilities of everyday urban practices.

Everyday practices, therefore, are not an outcome of capital accumulation but a mode through which to appropriate power and shift it towards a different use. The everyday provides a pragmatic site through which to actively participate in the (re-)production of a different order of things, a different culture and society. Pieterse (2008, p. 131), pessimistic about the possibilities for "a full-scale urban revolution in our generation" given the entrenched and adaptive nature of current systems of power, suggests that recognizing everyday practices shifts our attention towards the "infinite array of opportunities to refuse, undermine, subvert, frustrate and erode that power" (ibid). Such indirect confrontation may well be responses to the failures of direct attempts to overturn power and a sense that small perturbations may have greater impact than visible rebellions which are quickly quelled. Such acts may also symbolize playful, alternative,

surreptitious understandings of radicalism and resistance which attract a wider range of revolutionaries than more traditional formulations.

The examination of diverse forms of power opens up spaces for taking a hold of power in incremental steps. To be effective, such steps must be part of a larger project of recursive empowerment, for these actions "only begin to matter if one can effectively institutionalize such efforts" (Pieterse 2008, p. 131). This reframing allows for a reinterpretation of individualist practices, including the 'quiet encroachment' of the urban poor (Bayat 2000), and the 'performance of citizenship' (Scott 1985). At the same time, it calls for a critical consideration of when, how and under what circumstances such actions can be drawn into wider processes of resistance and empowerment. The process of turning these everyday moments into a radical incrementalism that supports recursive empowerment, as theorized by Pieterse (2008), forms a key lens of African urban analysis and is critical for understanding spaces of possibility and hope that can multiply instead of evaporate or be placed within a centralized 'state'. Radical incrementalism thus is a platform for engagement, a situated, unfolding process which differs over time and across space. It can be viewed as phrased by Ernstson (2012, p. 24), as the practice of stabilizing networks that "avoid the totalizing logic of the centre" from which resources and legitimacy originated (the state, a donor, an NGO, a corporation), and use such resources to "stabilize an actor-network that embodies and strengthens an alternative way of knowing and being, securing a certain autonomy" from which to build further practices.

One arena in which such conjoined incrementalism may occur—and in many parts of cities is

occurring—is in developing infrastructure. As evident in Gandy (2005), Myer (2011) and Loftus (2012), providing for urban infrastructure in alternative forms to formal modernist infrastructure requires coordinated actions of individuals across the city; or alternatively as in Simone (2004b; 2011), to recognize that service delivery is emergent from the localized actions of a multitude of individuals trying to survive, or make a buck, creating through their changing practices and strategies a networked and always localized form of service delivery. Understanding these forms of service delivery as viable modes of urban life is a first step towards validating research into how, why and when such alternative systems are established. While Lawhon (in press a) provides some understanding of the infrastructure required for the morally controversial flow of alcohol and Ernstson (2012) suggests a localized and socio-ecological mode of organizing alternative ways of knowing and gaining access to symbolic and material resources, they provide but limited insight into how these networks operate. And while Lawhon (2012a) identifies modes of resistance, these largely served to disrupt change rather than create more progressive changes. Further studies are needed into the everyday modes through which ordinary residents of African cities link together to provide for their urban lives and the limitations they face.

The aim of explicating networked, radical incrementalism is, importantly, not to valorize it in any form. Through being rooted in empirical engagement, the critical project must continue question the possibilities of radical incrementalism. We suggest that the goal of such work is to understand how power operates and what makes for more successful cooperation and coordination—and what success could mean for those involved—so as to identify points for intervention and develop platforms of engagement. Indeed, if such shifts and re-appropriation is

done through a series of interlinked events and places, linked through culturally legible narratives then a 'radical incrementalism' might be possible.

#### Conclusion

We have argued for the need to provincialize UPE, and in so doing, to expand the range of critical urban ecological studies. Our provincialization of UPE suggests that combining the insights of poststructuralist political ecology and African urbanism requires expanding the core elements of UPE to provide a more situated UPE. From the examination of capital accumulation, metabolism, circulation and artifacts, we expand and move UPE towards an inclusion of everyday practices and diffuse forms of power. Specifically, we drew on various African urban works which have demonstrated the limitations of structuralist explanations of African urbanism, showing how starting with everyday practices as the object of analysis has led African urbanists to an understanding of power which draws on but is not identical to that developed by Northern theory. This new form of power is diffuse, complicating research and analysis. And yet, we suggest that this reformulation opens up critical new spaces for understanding power. This is not just an attempt to create conditions for hope, but instead we suggest that our efforts towards explicating and engaging with resistance can be reoriented in new and possibly more successful ways. We suggest that this requires concentration on particular, situated explanations as these ground us in contextual, experiential knowledge from which to begin articulating general concepts. Such re-theorization has relevance not just in the South however. As has been argued for urban theory more generally, there is much that can be learned about cities in the North from research done in the South. We have drawn on a limited number of case studies which begin

providing some empirical groundings from which to begin theoretical postulations on which to develop these notions, but recognize that there is a need for more careful, extensive and intensive research before new theories can be developed.

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[To be placed here after final review is done.]

#### **Endnotes**

- <sup>1</sup> Despite this range of case studies, work in this volume on the global South is rural, and the urban case studies are in the global North.
- <sup>2</sup> In this section, we charter the landscape of political ecological work to identify themes and gaps where work is needed. We here rely on categories—North/South, urban/rural—that human geographers and political ecologists have shown the limitations of (Whatmore 2002). Nonetheless, with the aim of highlighting gaps in the literature we find these categories useful as scaffolding since such categories are not just about different spaces, but entail different histories and multiplicities that take on theoretical significance.
- <sup>3</sup> We define this field more narrowly than Keil (2003; 2005), instead aligning it with work that is clearly linked to critical geography and largely self-identifies as UPE.
- <sup>4</sup> Furthermore, and building on Karl Marx, Raymond Williams, Neil Smith and David Harvey, the separation of nature and society, country and city are viewed as false dichotomies, part of an ideology that limits critical analysis since it brings support to "the crudest stereotypes and hierarchies: race, nation, gender and power [can be appropriated as] authentic expressions of what nature intended" (Loftus, 2012: location 293).
- <sup>5</sup> This selective incorporation parallels that of Harvey (1989).
- <sup>6</sup> In 'strong ANT', or more normally just ANT (Latour, 2005), the logic of power needs to be sought *within* the particular actor-network being traced (inherited partly from Foucault (Murdoch 2006). This distributes agency—and power—to all things mobilized, and shifts the analyst's attention to the many negotiations involved in creating a sufficiently stable network to carry out action. See Ernstson (2012) for a situated UPE account that follows this.
- <sup>7</sup> At the same time, UPE brings an interest in exploring the materiality of the world, something that African urbanists to large extent have not fully exploited as a theoretical possibility.

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