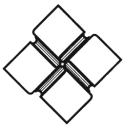
Metabolic Urbanization of Waste in Ankara: A Governance Perspective

Gül Tuçaltan



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1. Introduction: Municipal Solid Waste Governance and Urban Political Ecology

Municipal solid waste (hereinafter waste) has, until recently, been considered a concern in terms of safe disposal, sanitation or hygiene, or as a stigmatizing phenomenon for the affected communities living in the vicinity of or on it. Today, waste is not only a raw material for many industries and production processes but also an input for energy production. With the advancement of technologies, earlier solutions of (sanitary) landfilling and (safe) disposal have given way to the prevention, minimization, recycling and reuse of waste as key policy priority areas. Several studies show that waste has climbed up international institutional agendas: the EU Waste Framework Directive, with updates since the 1990s and gaining momentum in the 2000s; the World Bank Report "What a Waste" (2012); the United Nations Environmental Program (UNEP) Report "Municipal Solid Waste: Is it garbage or gold?" (2013), and the UNEP's (2015) "Global Waste Management Outlook" as a follow-up of waste governance discussions at the Rio 20+ Summit, to name but a few.

Despite the introduction of respective technologies and becoming a global policy agenda item, simple projections show that waste remains an open question. By 2025, meaning in less than 10 years, waste generated at the global level is expected to increase by 0.9 billion tons and reach 2.2 billion tons per year (World Bank 2012). Such a drastic increase signals the inevitable challenge ahead for the 21st-century cities – be they in the North, South, East or West – in the necessary transition toward a new logic of waste management, and the governance of this transition. To realistically undertake such an economically, socially, politically and ecologically significant transition, understanding the nature of current waste governance and management practices is of great importance. This research project aims to place itself within the broader scope of this exploratory task.

1.1 Theories on Waste Governance

Waste is dominantly considered a problem of engineering and effective management. Research focusing on functional technologies and their

implementation within the scope of technocratic notions of decision-making have long distanced waste from society at large (Hawkins 2005) and failed to grasp the political nature of waste. However, within the last two decades, a rapidly growing body of research on waste governance signals a rupture from such reductionist understandings of waste governance and management. This body of research has been actively contributing to the understanding of waste-related decision making processes with not only rich empirical insights from various geographical contexts but also significant theoretical perspectives. Network analysis (Fagan 2002, 2004), institutionalist accounts (Parto 2005), neo-Foucauldian perspectives on governing (Bulkeley et al. 2007), geography-informed global governance (Davies 2008, 2009, 2013), state rescaling (Davoudi 2009), ecological modernization (Scheinberg and Mol 2010), and splintering urbanism (van Horen 2004) are the pioneering theoretical frameworks utilized in explaining waste governance and management processes.

Like pieces of an overall puzzle, each approach provides us with important insights concerning the scope and constitutive components of waste governance. The literature clearly highlights that understanding waste governance requires an inquiry beyond the state and the dominant discourses of "sustainability" and "competitiveness" that it adopts (Fagan 2002, 2004). Waste governance is a practice that transcends the policy-implementation duality (Bulkeley et. al. 2005). It unfolds through a multitude of relations between and within institutions at all scales (Parto 2005), state and non-state actors (including the so-called informal sector) (van Horen 2009), alongside the resistances and tactics that are formed around it (Fagan 2004). It is synchronously shaped under the changes in policy regimes (Davoudi 2009), the specific agendas and goals of governing bodies (Bulkeley et al. 2007), and the historical, economic, political, environmental, and cultural characteristics of the geographic context in which it takes place (Davies 2008). Depending on the context, waste governance can unfold as an institutional response that functions as a distributive mechanism for environmental bads (Davoudi 2009), fragmentation of service delivery as an effect of privatization (van Horen 2009), or unheralded mixtures of new and existing socio-technical and institutional arrangements (Scheinberg and Mol 2010). Therefore, technology-oriented analyses are nowhere near sufficient enough in grasping the nature of waste governance (Davies 2008).

While accumulating a diverse array of approaches and empirical analyses from a multiplicity of geographical contexts for over two decades, the current line of research on (urban) governance of waste is lacking in a number of ways. Firstly, in most of the studies, the discussion and analysis mainly focus on current policy and planning processes and their immediate effects. In doing so, the literature successfully addresses the question of how governing takes place (Bulkeley et al. 2007). However, it does not provide sufficient interrelated accounts of power mechanisms, along with the historical, political, economic and socio-spatial contexts and material and technological processes through which they are produced and reproduced. The studies have, for the most part, neglected the complex set of relations that shape waste governance. Secondly, studies focusing on the grounded practices of waste governance and management neglect how waste governance unfolds within and through a variety of locally embedded socio-technical solutions. In order to explore the nature of waste governance, it is crucial to understand how social relations of power between various state and non-state actors influence these practices. Another neglected dimension of waste governance is how various actors position themselves with respect to waste. Despite labeling waste as an environmental bad (Davoudi 2009) or a governable object (Bulkeley et al. 2007, Davies 2008), the majority of the studies fail to address various meanings attributed to, and claims over, waste by various actors. Nor do they address how and why these meanings change over time and shape waste governance; that is, the social construction of waste materialities. Lastly, the literature discusses the role of urbanization in a limited manner, as the cause of rising populations and of increasing volumes of waste production.

The urgency for a method of inquiry that situates waste governance within the broader framework of multi-scale social, material, discursive, political, economic and environmental relations through which it is fabricated and simultaneously gives shape to. This urgency points at a newly emerging body of research: urban political ecology (UPE) of waste. Rather than studying individual domains, such as institutions, actors, materialities, modes of production, or historical change, as Swyngedouw and Heynen (2003: 914) states, urban political ecology

> provides an integrated and relational approach that helps untangle the interconnected economic, political, social and ecological processes that together go to form highly uneven urban landscapes. Because the power-laden

> socio-ecological relations that go into the formation of urban environments constantly shift between groups of actors and scales, historical-geographical insights into these ever-changing urban configurations are necessary for the sake of considering the future evolution of urban environment (ibid: 2003: 914).

Therefore, in its simplest terms, UPE is a study of interrelations. Such a relational understanding allows UPE of waste to provide a rather far-reaching account of waste and its governance when compared to the previous waste governance literature.

1.2 Situating Waste and its Governance: Urban Political Ecology as a Study of Interrelations

"Political ecology is what happens when scientific questions become contaminated by politics," write Bridge, McCarthy and Perreault (2015: 5) in their introduction to a recent comprehensive handbook on political ecology that they call "an epistemological project, which set out to shatter comfortable and simplistic 'truths' about the relationship between society and its natural environment". In its fight against the mainstream understandings of nature and society, political ecology renounces the ontological divide and places societal relations, specifically relations of power, at the heart of the relationship between humans and the environment. This means that the material existence of nature and its transformation cannot be understood independently from the social relations by which it is shaped, and which it simultaneously shapes. Respectively, in its understanding of social relations, political ecology seeks to present a politicized alternative to apolitical ecology (Forsyth 2008). Yet, political ecology applies research as a political project seeking emancipatory potentials and socio-ecological justice for the vulnerable groups such as the poor, women and minorities (Bridge et al. 2015: 8).

Sharing common theoretical and political premises, UPE emerged within political ecology as a critique against its reticence in reflecting on the socio-natural, material and socio-ecological grounds of urbanization processes (Heynen et al. 2006). Accordingly, UPE introduced the rejection of Cartesian understandings of nature and society within urban theory. In doing so, UPE has redefined urbanization as a "particular socio-spatial process of metabolizing nature, of urbanizing the environment" (Swyngedouw

2004: 8), and utilized the concept of "urban metabolism" to overcome the dualistic conceptions of nature-society relations and to point at circulatory nature of the socio-material relations underlying urbanization. Thus, urban metabolism is understood "as a dynamic process by which new socio-spatial formations, intertwinings of materials, and collaborative enmeshing of social nature emerge and present themselves and are explicitly created through human labor and non-human processes simultaneously" (Heynen 2013: 599). With this perspective on urban metabolism, urbanization itself becomes a multi-scaled (Swyngedouw and Heynen 2003) consubstantiation of socio-ecological flows—thus a metabolic, circulatory and transformative process through which nature is urbanized (Swyngedouw and Kaika 2014).

The entry of waste as a lens for political ecology research goes back to Boyle's (2002, 2003) study on the re-scaling of waste policy in Ireland, Myers' (2005) study on environmental governance in a number of African cities, and Njeru's (2006) research on the UPE of plastic waste. Despite the under-representation of the topic in the field, there are a number of recent studies on situated UPEs of waste (Bjerkli 2013, 2015; Demaria and Schindler 2016; Cornea et al. 2016) that paved the way for the development of an advanced body of research on urban political ecologies of waste, along with its governance and management.

UPEs of waste research share common concerns with waste governance perspectives, such as the role of the introduction of new socio-technical arrangements (Bjerkli 2013, 2015; Demaria and Schindler 2016; Cornea et al. 2016), and the changes in policy regimes in shaping institutional and actor responses (Myers 2005). Nonetheless, UPE perspectives diverge from waste governance approaches by paying attention to the material aspects in relation to the political and economic context and social relations that shape waste governance and management. UPE studies provide us with additional analytical and theoretical tools in terms of understanding the relations between political economy and waste materialities (Boyle 2002, 2003), and how these relations take part in constructing urban metabolism (Demaria and Schindler 2016). They point to the roles of various political and cultural constructions of waste (Myers 2005), and how these carry political potential for transforming social relations between actors engaged in waste governance (Boyle 2002, 2003). They also reveal how social relations of power (Bjerkli 2013, Cornea et al. 2016) as well as class and race (Njeru 2006) shape and operate within waste governance. Therefore, in UPE approaches,

waste governance becomes a process driven by a multitude of forces that shape the various waste-society relations.

Despite the theoretical and conceptual insights offered by UPE perspectives on waste, it is necessary to narrow the critical lenses for the purposes of understanding contexts in which diverse (official-unofficial, formal-informal, authorized-unauthorized) forms of labor, decision-making and socio-technical solutions coexist. Nonetheless, existing research (Myers 2005, Njeru 2006, Bjerkli 2013, 2015; Demaria and Schindler 2016; Cornea et al. 2016) remains rather limited in a number of ways with respect to understanding the terms of such coexistence, its relation to urbanization, and what it means for urban governance and management of waste.

First of all, these studies discuss the respective diversity by referring to alliances and conflicts between various actors such as central and local governments, private and so-called informal sectors. As such, the studies adeptly address the social relations of power between the actors. However, they consider unrecognized and recognized actors separately, and fail to address the instances when they relate to and are articulated with each other in terms of service delivery. How do various forms of waste-related decision-making processes and socio-technical solutions take form, transform and co-exist, and why? What is the role of social relations of power in shaping these diverse authorized and unauthorized socio-technical solutions, especially with respect to the relations between central and local governments, private and so-called informal sectors? How and why do various power geometries between these actors emerge and transform? How and why do diverse set of actors relate to (or disregard) each other, and how do these relations manifest themselves as modes of waste governance? What are the contextual and structural relations underlying these relations and practices?

Secondly, the "urban" is typically considered to be the only site that informs the respective socio-material practices and the place-based socio-technical change. In this respect, the studies fail to engage in a possibly richer discussion; a more elaborate conceptualization of urbanization as a process that is informed by multiple geographies, sites and scales with respect to the circulation of materials, labor, capital, and ideas (see Brenner 2013, Brenner and Schmidt 2011, 2013, 2015, Harvey 1978, Keil 2003, Keil and Graham 1998, Keil 2011, Swyngedouw 2004). How can UPEs of waste benefit from the vivid definitions of urbanization of nature? How does urbanization of