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'Mafias' in the Waterscape: Urban Informality and Everyday Public Authority in Bangalore

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ABSTRACT: This article investigates the phenomenon of Bangalore's urban 'water mafias', operators who extract and deliver groundwater to scores of informal residential areas in Indian cities. The term 'mafia' here is treated as a semantic area of situated meanings and cultural interpretations that needs to be historicised and prised open in order to better understand how the urban waterscape is produced and inhabited. It situates the provenance and workings of mafias within wider debates on urban informality, state formation, and urban infrastructure and space. Rather than seeing mafias as filling a gap where government water supply has failed, as mainstream narratives suggest, the paper argues that mafias must be seen as formative of the post-colonial state. It further suggests that the specific form of public authority exercised by water mafias explains the production of informality in Bangalore's waterscape. Based on ethnographic research in 2007-2009, the paper characterises the everyday authority wielded by mafias along three main registers: (i) the ability of mafias to make and break discursive and material boundaries between the formal and informal, public and private, and state and society, (ii) the varied nature of mafias' political practices, ranging from exploitation to electoral lobbying to social protection to the provision of welfare, and iii) mafias' complicity in both water and land regimes in a neo-liberalised urban political economy.

KEYWORDS: Post-colonial cities, informal sovereigns, state formation, municipal water politics, urban periphery, India

INTRODUCTION

> *'Water mafia' was recently coined, but it is a term that Bangalore's residents recognize all too well. In many parts of the city where government water supply has failed, or a scarcity has been deliberately created, a merry coalition of thugs, local politicians, and even some water department employees run a parallel and private water supply network that borders on the extortionist… In Bangalore, private water supply to water-thirsty neighborhoods is controlled by water tanker operators backed by the local corporator,[1] the legislator, or a powerful politician. In some cases, political patronage is open. In others, patrons operate in the shadows. The mafia has strictly demarcated territories (Rai, 2012).*

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[1] Elected representative at the ward (sub-city) level in India.

In the summer of 2008, I found myself deep in conversation with Santosh, the owner of a local water tanker business at the northernmost peripheries of Bangalore.[2] Ubiquitous in this and most Indian cities are tanker businesses, which extract and deliver groundwater via trucks or tractors at a negotiated price to scores of residential neighbourhoods in the city, many of which are informal or 'unauthorised' (the term used in Indian urban planning law to refer to areas not officially sanctioned by the state). As we sat in his small office, Santosh spoke to me about the civic woes of this unauthorised peripheral area – its lack of piped water, roads and sanitation, for instance, and the ineptitude of its municipal officials – as well as his efforts to improve things through what he called his 'social work'. At one point in the conversation, he leaned forward, lowered his voice, and said gravely to me using the third person "the water mafia is active here". I blinked at the poster on the wall behind his desk advertising his tanker business and then back at him wondering to myself if Santosh was not part of the water mafia. As the *Indian Express* quote suggests, most tanker businesses were popularly dubbed part of Bangalore's 'water mafia'. If so, how was it that Santosh identified himself as a social activist? What exactly, then, is the 'water mafia' and how does an ethnographic exploration of mafias in the waterscape help us to arrive at a more robust understanding of urban water politics in the Global South?

This article is an ethnographic investigation into the phenomenon of – and mythology surrounding – water mafias in Bangalore. It situates their provenance and workings within wider debates on urban informality, state formation, and infrastructure and space in the post-colonial city. The term 'mafia' is treated as an empirical question, a semantic terrain of situated meanings and cultural interpretations that needs to be historicised and prised open in order to better understand how the informal city is produced and inhabited. While it is true that most water mafias can be construed, as the quote above puts it, as a "merry coalition of thugs, local politicians, and even some water department employees", what is less clear is how mafia authority is enacted and maintained and, in particular, the relationship mafias share with 'the state'. This article seeks to grasp the shape of mafias, their specific form of authority, and their role in urban informality.

Following the tone set by the introduction of this special issue, I define informality as the flexible and uneven suspension of regulation and law in the production of urban space and materiality. Rather than seeing informality as a specific 'sector' opposed to the formal, I see it as a negotiated process – one that reveals more about the logic of rule and authority shaping particular urban practices than the specificities of the practices themselves (Ahlers et al., 2013). It is precisely the logic of rule and form of authority exercised by water mafias that interest me here.

The paper argues that mafias must be seen as formative of the post-colonial state rather than existing apart from it. Ethnographic studies of post-colonial state formation have been invaluable in denaturalising 'the state' as a unitary, cohesive, free-standing entity, exposing it instead as a deeply fractured, heterogeneous and contradictory disaggregation (e.g. Fuller and Harriss, 2000; Hansen and Stepputat, 2001; Gupta, 2012). Meanwhile, critical theorisations of urban informality have argued that the state itself is an informalised entity, one that deploys informality in the pursuit of accumulation and authority and upon which differentiated notions of citizenship are negotiated (e.g. Roy, 2009; Anjaria, 2011). Starting with these two critical premises, the paper adds ethnographic texture to the form of *public authority* exercised by mafias and implicated in urban informality. Following Lund (2006), by public authority, I mean a form of authority – a sovereign power to act over or control others – that is not in the exclusive domain of government institutions, but that nonetheless is inseparable from what is imagined as 'the state'. In other words, public authority implies 'stateness' but it does not rest solely with formal state institutions. To emphasise everyday forms of public authority, as I do in this article, is

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[2] While Bengaluru is the official name of the city, I choose to retain the anglicized version Bangalore in my writing because the latter is most often used colloquially by a significant proportion of the city's population (water operators, local activists, residents, and government officials alike) as well as by the English-language news.

to focus on routine and mundane encounters in the execution of public goals and provision of public services, yet to do so by moving beyond a singular preoccupation with 'the state'. My use of the term 'everyday' derives from literature on the anthropology of the state, which reminds us that the quotidian encounters with bureaucrats, intermediaries, and politicians comprise the "stuff out of which meanings of the state are constituted" (Gupta, 2005: 28). Crucially, I argue that the specific form of everyday public authority exercised by water mafias has three main characteristics.

First, mafias strategically blur the boundaries between state and society, the formal and informal, and public and private. Just as social scientists have underscored the porosity of the state despite the constant enactment of seemingly firm state-society separations (e.g. Fuller and Harriss, 2000; Gupta, 2005, 2012), my ethnographic findings reveal that mafias strategically negotiate these neat discursive borders.

Second, I argue that the actions of mafias must be understood beyond the profit- and rent-seeking behaviours normally associated with private tanker operators in the policy literature. Social protection, the provision of welfare, electoral lobbying, and the facilitation of 'unauthorised' land sales to lower middle class buyers are all part of a repertoire of mafia political activities. While many mafia strategies are indeed illegible and tend to be glossed over as 'extortion' or 'corruption' by the mainstream media and urban policy experts, at times mafia members also deploy surprisingly legible and civilised means to encounter and discipline predatory municipal officials. Mafias thus confound state-society and civil society-political society divisions (Chatterjee, 2004), and provide an invaluable lens into deciphering the variegated nature of public authority in the post-colonial city.

Third and finally, I argue that key to the success of mafias is their complicity in both water *and* land regimes in the current neo-liberal political-economic moment. With the consolidation of Bangalore's particular variant of urban neo-liberalism since the early 1990s, the deregulation of land has fostered crony capitalism in the real estate sector, and has provided ample opportunity for speculative and exploitative land deals, often abetted by state institutions and the land development mafia (Goldman, 2011). This has further bolstered the authority of water mafias. We must, therefore, develop a fuller appreciation of how informal land politics intersect with informal water politics if we are to reveal the "spatialities of statecraft" (Fontein, 2008: 751) in the water arena and the "power geometries that choreograph access to and exclusion from water" (Swyngedouw, 2009: 59).

The practical relevance of this analysis is that it problematises dominant characterisations of informal water supply as the so-called 'other' private sector (Solo, 1999). The 'other' private sector has been described as an independent, entrepreneurial, small-scale private water sector (e.g. as seen by the *aguateros* in Latin America) that can clearly be distinguished from the large-scale private or public utility sector. While it is useful to pay heed to the fact that the private sector itself is heterogeneous and not restricted to multinational corporations as Bakker (2003) has compellingly shown, a close look at the workings of water mafias reveals that they do not comprise only of independent, small-scale entrepreneurs operating outside of the state. In reality, the grassroots tentacles of large-scale (public *and* private) utility companies too operate through the water mafia and mafia-like strategies. From a policy perspective, it is thus crucial that we avoid compartmentalising water delivery into stand-alone 'sectors' and instead view the many practices that animate water delivery across typologies, sectors, and delivery technologies. We must, therefore, adopt a politicised and relational view of water governance.

In a related vein, the paper also interrogates prevailing policy assumptions about the unbridled lack of transparency and corruption among informal providers. 'Mafia' tends to be a colloquial term for a wide range of habits and institutional configurations that, while collusive and exploitative, are also protective and welfare-providing. We will see that residents maintain checks and balances on the rent-seeking habits of tanker operators, and that the stiff competition between tanker businesses within a service area acts to dampen price gouging, forcing prices to remain predictable for loyal customers.

Data for this study were gathered through open-ended and semi-structured interviews with tanker business owners, tanker drivers, 'valve men' (the 'last mile' providers in the service delivery chain who physically enable and shut off access to households), local- and state-level politicians, municipal administrators, and residents in two peripheral zones of Bangalore: Bommanahalli and Byatarayanapura. Kannada[3] and English television and print media reports on mafias were also collected in order to triangulate interview findings. In addition, I spent much of my time in peripheral neighbourhoods and local offices carefully observing how residents interact with local officials and mafia operators over complaints about tanker and utility water delivery. In the rest of the paper, I first expand on the theoretical framework of public authority. I explain why this concept helps us to understand the workings of post-colonial state power at Bangalore's unauthorised peripheries. I next situate Bangalore's water mafias in this context by discussing their historical origins and the empirical details of their business model. Following this section, I examine three components of mafia power: the ability of mafias to make and break boundaries or what I call the 'mafia effect', the variegated nature of their political practices, and their complicity in both informal water and land regimes. I end by drawing some broader implications of this study for urban informality.

EVERYDAY PUBLIC AUTHORITY AND THE PRODUCTION OF URBAN INFORMALITIES

There now exists a substantial literature dedicated to unpacking what post-colonial states actually *do* and how they *work* in practice. Moving away from a legacy of Western political science scholarship that appraised the state as a distinct and coherent organisational system standing apart from other organisational systems like civil society, ethnographic contributions have emphasised the post-colonial state as a multi-layered artefact with porous boundaries. Ethnographers of the state have focused on how images and representations of the state, including how the state represents itself as cohesive and free standing, are culturally constructed. That the state *appears* as unitary and distinct from society, and possessing of a vertical hierarchical orientation in which all other institutional forms are controlled and encompassed, should itself be seen as an effect of power rather than simply a preordained condition (Ferguson and Gupta, 2002; Mitchell, 2006 [1999]). In reality, the state is disaggregated into heterogeneous forms in which with rival "states within the state" (Jessop, 1990: 9) "pull in different directions" (Gupta, 2012: 46). A key contribution of ethnographic and, in particular, post-structural analyses, is to denaturalise the state as the ultimate seat of power and sovereignty, and to instead examine the dispersed individuals, networks and practices through which rule is orchestrated and consolidated in practice (Foucault, 1991; Sharma and Gupta, 2006).

Two useful ways to think about the fragmented and heterogeneous nodes of state authority are Hansen and Stepputat's (2006) notion of 'informal sovereigns' and Lund's (2006) formulation of 'public authority'. Abandoning a notion of sovereignty as expressed in law or legitimate rule, Hansen and Stepputat (2006) argue for a view of sovereignty as emergent and constantly performed in order to generate fear, loyalty and legitimacy. Rather than seeing sovereignty as singular, they argue that multiple and segmented sovereignties have always been the reality for much of the post-colonial world. At the fault lines of the post-colonial state exist a wide range of 'informal sovereigns' – local strongmen, vigilantes, political fixers and other brokers – who participate in the implementation of public goals, albeit with a fair amount of private gain (Hansen and Stepputat, 2006). Colonial indirect rule throughout Africa, Latin America and Asia sought to extend control over populations via local strongmen, despots and chieftains, relying on these intermediaries to enforce brutal labour, taxation and penal regimes. These informal rulers often had more influence in the everyday lives of native subjects than the colonial rulers themselves (Mamdani, 1996). With a long legacy of racialised bio-

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[3] The language most widely spoken in Karnataka, the state in which Bangalore is located.

political interventions in water and sanitation (Legg, 2007; Gandy, 2008; McFarlane, 2008; Kooy and Bakker, 2008a,b), for instance, post-colonial cities have been an important stage for the development of segmented sovereignties and shadow states mediating parallel access to land and infrastructure, particularly for the poor (Gooptu, 2001; Hosagrahar, 2006; Gandy, 2008). At times, these local sovereigns were incorporated into the formal state apparatus, and at others they were shunned and banished by the state.

Today, such informal sovereigns persist in the form of slum-lords in metropolitan squatter settlements in Lagos, para-transit operators in post-socialist economies (Hansen and Stepputat, 2005, 2006), or as this article shows, water mafias in a range of Indian cities. While informal sovereigns represent the state and can fulfil state functions – often through tacit sanction by official state authorities working in collusion with them – they can also transgress the law and operate in zones of exception and violence. Occupying strategic positions between state institutions and citizens, between public and private spheres, they are involved in both helping and abusing people, and they employ both patronage and predatory practices. In effect, informal sovereigns can be a law unto themselves.

While the concept of informal sovereigns is useful in conceptualising the diversity of actors that deploy sovereign power within and beyond the state, it is Lund's emphasis on 'public authority' that captures how this power operates in a *relational* manner. For Lund (2006: 686), public authority is the "amalgamated result of the exercise of power by a variety of local institutions…conjugated with the *idea* of the state" (emphasis in original). The notion of public authority thus draws attention to the relationships between informal sovereigns, lower-level bureaucrats, and party workers who enable the exercise of state-like power. These relationships are often formed in conspicuous opposition to, or as an alternative to, an imagined formal and unified 'state' (in many parts of India, this so-called unified state is simply referred to as *sarkar* or 'government'). For instance, local vigilantes can work with political strongmen to maintain public security and safety in a neighbourhood, but can also express a disdain of regular police forces that represent 'the state'. As Lund (2006) finds in his research on Niger, vigilante groups both vindicate their non-state status and yet do so in the formal language of the state. Similarly, as I found on multiple occasions, water tanker owners can collude with valve men employed by the official water utility to siphon off or supply water to an area, but simultaneously rebuke the official water utility for being corrupt and inefficient. As we will see below, Santosh described himself as 'no different' from politicians, yet he articulated a distinct antipathy for other actors within the local government. By definition, then, everyday public authority is forged through highly contradictory yet indispensable relational positions vis-à-vis 'the state' – it involves the art of continuous boundary making and breaking. In Lund's (2006: 689) words: "public authority seems to manifest itself in an ambiguous process of being and opposing the state (…) The practical form of public authority is, as a result, composite and chimerical". Such boundary negotiation is essential for public authority to maintain credibility and legitimacy and reveals how internally fragmented and heterogeneous 'the state' actually is.

Practically speaking, the exercise of public authority by networks of informal sovereigns and state actors can involve the imitation of bureaucratic practices, such as the use of official rubber stamps, official stationery, or the circulation of official documents procured through public transparency laws. It can also involve the enactment of state spectacles, such as neighbourhood inspection tours, ceremonial 'meet the candidates' political events, or strident speeches in which state-like promises are evoked or displayed on garish banners. These are precisely the practices that Foucault (1991: 103) meant when he spoke about the 'governmentalisation' of state and society, or the increasing use of bureaucratic rationalities, modes of calculating population statistics, and discourses of reform and welfare within the state and wider nodes of state authority. The political practices of everyday public authority can, on the other hand, also resemble the darker sides of state rule: extortion, violence, and bribery are all tactics that networks of informal sovereigns and their associates deploy.

The discussion on informal sovereigns and everyday public authority so far can be encapsulated as

follows. First, rule in post-colonial societies has historically proceeded through multiplicitous and fragmented forms of sovereignty. Today, informal sovereigns include local strongmen, political fixers, and other intermediaries who continue to structure the everyday lives of most people. Second, informal sovereigns maintain ambiguously defined but vital relationships with official state actors. These relationships, germane to the exercise of public authority, are constantly being negotiated and reproduced; they are thus as likely to coalesce around particular social issues, as they are to dissolve. Third, the exercise of public authority can involve both a mimicking of formal governmental rationalities, technologies and discourses, or the use of bribery and other exploitative tactics to get the job done.

How does this discussion help us to understand the production of urban informalities? The study of informality has a long and important lineage, and has been influenced, in particular, by debates on the nature of informal labour and housing in Latin America in the late 1980s (De Soto, 1989; Portes et al., 1989; Rakowski, 1994). Early critiques focused on the internal heterogeneity of the informal labour sector and the strong inter-linkages between informal and formal sectors. As Kudva (2009) points out, however, urban space was rarely broached in these early studies. Recent contributions on informality and urban space have not only troubled the assumption that informality exists outside the purview of state regulation and control, but have further argued against seeing informality as a stand-alone 'sector' (Roy, 2003, 2005, 2009; AlSayyad and Roy, 2004). Ananya Roy, for instance, has argued that it is more useful to view informality as a mode of metropolitan transformation, facilitated by flexible and interpretable land regulations and strategies of territorial 'unmapping'. An array of conflicting and constantly shifting territorial strategies at the urban frontier, for instance, make possible the proliferation of informal land sales and housing deals. In this reading, informality is a result of *intentional* state actions catering to multiple social hierarchies, including the middle class and wealthy – indeed, it is integral to the very "territorial practices of state power" (Roy, 2009: 84).

It is for this reason that informality is as likely to be found in elite-gated complexes and high-end real estate projects sanctioned by 'the state' as it is in the ubiquitous 'unauthorised' settlements (Weinstein, 2008; Ghertner, 2010; Goldman, 2011). In both cases, land may have been occupied through the flexible, yet purposeful suspension of zoning laws, strategic alliances between private and state actors, bribes processed by various levels of the bureaucracy and the manufacturing of fraudulent documents. In both cases, networks of informal sovereigns, politicians, gangsters and planning agency bureaucrats may have been involved in exercising public authority and thereby sanctioning settlement. Ultimately, what is classified as 'illegal' as opposed to 'legal' and marked for discipline or removal is the result of differentiated protections and legitimacy offered by public authorities. This type of 'grey spacing', or the purposeful positioning of populations in a nebulous zone between legality and illegality is, as Yiftachel (2009) has argued, core to state formation. This is why informality is better understood in terms of the form of authority and social power relations underlying and legitimating the practice, rather than the outward specificities of the practice.

This is as true for housing and land as it is for municipal service delivery. Recent literature within and beyond an urban political-ecological framework has shed light on the uneven ways in which state actors, working in concert with an array of informal institutions, mediate informal water provision in South Asia (Coelho, 2005; Gopakumar, 2010; Anand, 2011; Hossain, 2011; Bawa, 2013). In Mumbai, for example, frontline engineers of the state-owned water department engage in a dense set of political negotiations with slum dwellers about the conditions surrounding their settlement and on "tacit ways in which [department policies] can be circumvented" (Anand, 2011: 543). Yet, as Anand (2011) shows, not all slums are treated equally. Settlements with Muslims and other marginalised minorities are not able to exert a sufficient amount of 'pressure' – even on the informalised state – to claim access to municipal water. In Dhaka, Hossain (2011: 284) argues that informal water access is "neither opposite to, nor organized outside of, the statutory sphere". On the contrary, the 'statutory sphere' – marked, in turn, by "the back-screen interests of actors which the state authority needs to consider for its survival"

(ibid) – is very much involved in an array of discriminatory practices directed at policing particular illegal connections, but not others. In sum, the critical literatures on housing and municipal service provision in the Global South have powerfully shown the complicity of the state and informal sovereigns in reproducing informality in highly uneven and internally differentiated ways. Across these studies, insight into the particular form of public authority exercised is far more important for grasping the contours of informality than the mere descriptive details of the informal practice in question.

INFORMAL SETTLEMENTS IN BANGALORE

Critical perspectives on state formation and informality detailed above are useful for theorising informality in Bangalore. Any understanding of informality in the city must begin with an understanding of the city's land politics. Over the past three decades, and particularly since liberalisation in the 1990s, the outskirts of Bangalore have been radically transformed from agricultural land into a sprawling expanse of globally connected technology parks and high-end real estate projects located along major radial highways. Simultaneously, scores of informal settlements and informal businesses ancillary to the software industry have proliferated off the major highways in poorly serviced 'unauthorised' areas.

Whereas 'authorised' areas found in the core part of Bangalore and some relatively privileged areas of the periphery are known as Bangalore Development Authority (BDA) layouts, (or 'BDA-approved layouts'), 'unauthorised', informal areas are known in official planning language as 'revenue layouts' following the designation of agricultural areas as 'revenue land' by colonial census makers. Following a system of 'improvement' inherited from the colonial era, the land for BDA layouts is acquired through land acquisition laws or eminent domain, built according to sanitary planning norms, and equipped with utility connections upfront. Prospective residents secure plots here after paying significant fees to the BDA (and often after being on a waiting list for a number of years). They then recruit a developer to build a house (or, in the case of an apartment building, find a real estate project in progress), and finally move in, benefitting from pre-serviced utility connections arranged by the BDA. In revenue layouts, by contrast, prospective buyers work through a variety of informal sovereigns – brokers, landowners, or even mafias as we will see below – and lower-level government officials to secure a parcel of agricultural land, build houses and move in without utility connections (Benjamin, 2004, 2008).

Approximately 90% of residential settlements at Bangalore's periphery – an expanse of around 500 km^2 and with a population of two million – is developed precisely in this way and considered 'unauthorised'. This means that these areas are not recognised by the official parastatal planning agency, BDA; residents here did not secure the requisite approvals, nor did they formally convert the agricultural land they purchased into residential land-use. Fluid and conflicting jurisdictional arrangements at the periphery are exploited by residents, informal sovereigns and officials alike (Ranganathan, 2013).

It is important to keep in mind in this discussion that there is no simple binary between BDA layouts and revenue layouts, or between so-called 'authorised' and 'unauthorised' settlements. In reality, all settlements exhibit varying shades of legality and tenure security, depending on the sanctioning authority. In fact, even so-called formal BDA layouts possess varying shades of legality. BDA itself has been involved in fraudulent land acquisition schemes as Nair's (2005) rich historical work shows resulting in a number of so-called authorised settlements with legally questionable statuses. The key point here is that over time, some residential layouts acquire greater legitimacy than others through the exercise of public authority – the acceptance of property taxes paid by informal residents by the local government, tacit sanction from an urban authority, investment in roads or water supply by a local politician, or protection offered through networks of political actors. As we will see in the following section, it is in such fluid and open-ended conditions that water tanker mafias have been able to flourish and service the majority of peripheral settlers.

SITUATING BANGALORE'S WATER MAFIAS

Located approximately 3000 ft above sea level with no proximate water of its own, Bangalore has always been haunted by water supply constraints. The cost of transporting water from the Cauvery River located 100 km away, and downhill from the city (the surface water source tapped from the latter half of the 20th century after all proximate sources were exhausted), and the fact that Bangalore has a limited share of Karnataka's total allocation of the Cauvery, have historically limited the total quantity of surface water supply to the city.

Not surprisingly, the limited quantum of utility water in Bangalore is highly unevenly distributed or 'splintered' across the urban landscape (Graham and Marvin, 2001). This cannot be traced solely to contemporary neo-liberal reforms in water or to macroeconomic shifts. Rather it can be traced to a much longer legacy of colonial and post-colonial interventions into public health and the built environment, as has been discussed in other contexts in the urban political ecology literature (Coutard, 2008; McFarlane, 2008; Kooy and Bakker, 2008a,b). While in the so-called 'authorised' areas of the city, the Bangalore Water Supply and Sewerage Board (BWSSB) services approximately half a million domestic connections with 900 million litres a day of treated water from the Cauvery River (although it should be noted that even in these areas, demand must be supplemented by tanker water), only 10-30% of households at the unauthorised periphery have access to BWSSB's water. At the periphery, most depend almost entirely on groundwater sourced from household bore wells, municipal or village bore wells, and water tanker mafias to meet their domestic needs. Not only are groundwater sources dwindling in many areas, but peripheral residents must also pay high capital contributions for grid expansion and wait several years for bulk supply to be augmented on the Cauvery River (Ranganathan, 2011).

The unevenness of access and absence of groundwater regulation have encouraged households, apartment complexes, commercial establishments, and water tanker businesses to tap the aquifer quite indiscriminately. It is estimated that over 600 million litres of groundwater are consumed per day in Bangalore, which is approximately equal to BWSSB's surface supplies if grid distribution losses are accounted for (Suresh, 2001; Vishwanath, 2012a). Very few academic studies are available on groundwater extraction, and even fewer delve into the political-economic aspects and historic origins of this city's booming groundwater business. My archival research shows that groundwater pumps became popular in the 1960s, as seen by a spurt in advertisements in local newspapers at the time (e.g. Deccan Herald, 1968). These early pumps could penetrate to a depth of only 130 ft – sufficient to tap Bangalore's aquifer at the time – but would intensify in pumping capacity by over ten times over the next 40 years as the city's water table fell below 1000 ft, and in some areas, below 1500 ft (Vishwanath, 2009). T.S. Suresh (2001), a geologist at the Bangalore University, suggests that in recent years, there has been a surge in the conversion of agricultural wells on the outskirts of Bangalore to supply urban consumers because agriculture is less profitable than selling water and businesses can profit from the subsidised electricity afforded to rural landowners that is needed to pump the groundwater for urban markets.

While there is some information in the public domain about the number of domestic bore wells, data on where tanker businesses source their groundwater from, how much they earn per day, and how many customers they service per day are largely anecdotal. A gross (and likely conservative) estimate by the BWSSB suggests that there are around 200 private water tanker businesses in the city, each operating two to three tankers.[4]

Between 2007 and 2009, I interviewed various members of water tanker businesses, including business owners, truck/tractor drivers and valve men. My interviews found that tanker businesses work

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[4] Interview with BWSSB engineer, August 2, 2008.

round the clock, making deliveries to 15-20 houses per day (Figure 1). Tractors are often used to transport tankers and ease navigation on the unpaved, potholed roads of informal settlements. A typical tanker load contains approximately 4000 litres of groundwater (Figure 2) and costs the customer around Rs250-350 (US$5-7), which translates to roughly Rs60-80 per 1000 litres, or approximately US$1-2 per 1000 litres.[5] This price works out to around five times the cost of BWSSB's water, given the various volumetric and fixed charges added by the utility (Ranganathan et al., 2009). A household of five usually requires one to two tanker loads a week depending on whether they also have their own bore well. Most lower-middle class to middle class households I interviewed spent around Rs1000-1500 ($25-30) per month on average on procuring water. Tankers also sell water by the pot to residents who are too poor to own houses with water storage facilities (e.g. a sump and overhead tank).

Figure 1. Tanker water being delivered to a house in south Bangalore. Photograph by author.

Figure 2. A tanker load is around 4000 litres (left) and is typically hauled by a tractor or truck (right). Photographs by author.

Running a tanker business can be a lucrative venture. The inputs are virtually free. On a typical day, a tanker owner operating in a densely populated residential area can make around Rs8000-12,000 ($160-

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[5] At the time the research was being conducted, the exchange rate was $1 = Rs.50

240) depending on how many tankers he owns (for comparison purposes, a typical lower-middle class household in the area may earn around US$5-10 per day). If the business is able to pump groundwater through subsidised electricity or diesel-powered generators, the only cost is the diesel required to fuel trucks or tractors for toing and froing between trips. Since diesel is also subsidised, profit margins can be quite substantial. However, it is important to keep in mind that competition can be stiff. While businesses agree to operate in demarcated territories, in reality multiple operators compete for customers within a particular area. This is why, as we will see below, it is important for tanker operators to cultivate a strong rapport with their customers and cut them deals in order to foster loyalty. Prices also vary depending on location. Those businesses operating at the more far-flung ruralised edges of the city charge less because of lower demand and a poorer clientele (Vishwanath, 2012b). On the other hand, tanker businesses operating in posh residential areas on the inner outskirts often charge their customers much higher prices.

To conclude this section, the materiality of urban water supply in Bangalore – the fact that it is in short supply and surface water is expensive to transport to the city – and the rapid informal urbanisation of its peri-urban interface have created ripe conditions for water tanker mafias to flourish. While, undoubtedly, the per unit price of groundwater charged by tanker businesses is heftier than BWSSB water, and tanker businesses do profit from free inputs, there is also a good deal of variation in their business models across wealthy and poorer customers, old and new customers and more urban and more rural customers. It is to the various facets that explain mafia power beyond their profit-seeking business models that I turn next.

EXPLAINING MAFIA AUTHORITY

Boundary making and breaking: The mafia effect

> *There's no difference between a politician and people like us (Water mafia, Interview on August 19, 2008).*

As discussed above, informal sovereigns can be simultaneously antithetical towards as well as in favour of the state; they can express both outright opposition to, as well as collusion with, the state. I found that this boundary negotiation process was central to the endurance of mafias. In this section, I examine situations in which water mafias are engaged in boundary making and breaking, and suggest why the mafia effect – the ability of mafias to both divorce themselves from, and be conjugated with the idea of, the state – is so crucial to the extension of mafia power.

Santosh, the water tanker operator from Byatarayanapura I mentioned above had described himself as a 'social worker' much to my surprise. He used this term to explain the work he carried out beyond his tanker business operations to improve the civic conditions of the revenue layout he lived in and to demand accountability from, in his eyes, venal municipal officials who had "made people the victims of illegal development". Importantly, he used the term 'social work' to differentiate his honest, hard work from the money-guzzling habits of bureaucrats in the local Greater Bangalore City Corporation. "Most of the bureaucrats here are very uneducated", he declared to me, using one of the worst insults you can hurl at someone in India. To call someone 'uneducated' is to do more than simply refer to their lack of academic training; it is to fundamentally question their sense of morality and to debase their social standing. Yet, Santosh's stance towards bureaucrats was far from consistent. In another context, he described the 'DCP' (Deputy Commissioner of Police) of the area as a 'friend' of his, someone who provided him with support and whom he could trust to sniff out vandalism committed by 'rowdies' prowling the neighbourhood.

As a water tanker operator, Santosh had to fiercely guard his turf and equipment from other tanker operators. In his area, the biggest rival he faced was another tanker business owner by the name of

Ravi. Both Santosh and Ravi competed for customers and colluded with other local sovereigns and government officials to variously exploit and service their customers. According to a valve man who worked for both these operators:

> Here, there are two big honchos that always fight for a hold on this area. They are Mr. Santosh and Mr. Ravi. Both are maintaining their own gangs that control water. When people are desperate for water, these two will come into the picture to lobby with the authorities (Interview on August 19, 2008).

When I pressed the valve man further to understand what "lobbying with the authorities" meant, he described this practice in terms of the collusive activities that water mafias and lower-level government officials engage in. At times, municipal water supply is purposely restricted to make substitutes – i.e. tanker supply – more attractive to desperate consumers. Meanwhile, the extra rents extracted from consumers are shared among local officials and the water mafia. For instance, a few weeks after I had spoken to Santosh, a newspaper article ran a story on the water mafia in his area in northern Bangalore:

> Unlike in many parts of Bangalore, the residents of [North Bangalore locality] get uninterrupted water supply. Yet, for the past 13 years they have not paid their water bills [to the municipal government]. No, it's not because they are enjoying a freebie. Instead they dole out a constantly varying monthly amount to a shadowy mafia, widely believed to enjoy political patronage (Soni, 2008).

Figure 3. Cartoonist's depiction of water mafia in North Bangalore.

Source: Soni, in The Bangalore Mirror (2008).

The article also printed a cartoonist's depiction of what the water mafia might be imagined as: with sunglasses, a giant moustache, and a gleaming white *kurta-pyjama* [Indian shirt-pant outfit]*,* the over-sized antagonist was a caricature of the stereotypical Indian *goonda* (gangster)-cum-politician (Figure 3). What the quote that accompanied the cartoon implies is that mafias in the area had colluded with the local municipal government over several years to stop municipal water supply and divert customers' (higher) payments to water tanker businesses, since tankers were allowed to charge relatively more for water than the municipality. In sum, while Santosh did not admit it, he was involved in the very same collusive mafia activities as his rival. While he had distanced himself from local bureaucrats, by other accounts, he appeared to be engaging in the same corrupt and collusive practices

that he accused them of. Moreover, while he was intensely critical of some officials, he was far less critical of the police and politicians since he enjoyed their protection and patronage. Indeed Santosh and Ravi not only benefitted from the support of locally elected representatives and government officials, but also seemed to meld into those very figures in the public eye as the cartoon depicts. Boundaries between the state and society seemed to entirely evaporate.

In Santosh's own words, there was "no difference between a politician and people like us" because politicians had figured out the money-power equation, a task Santosh had also been attempting through a combination of his water business and his political activism: "[o]nce you have money, you can get power and become something, and once you have power you can get more money. Power is very necessary. Today I have some power!" What we learn from these narratives is that boundary making and breaking are central to the operations of mafias and to the public authority they wield. At times they divorce themselves from bureaucrats and politicians, and at others, they appear to be mimicking those very agents. Although wealth generation is a key motivation underlying the extension of mafia power, other political goals both reinforce and transcend these profit-seeking motives.

All about the money? Multiple political goals and strategies

It is difficult to tease apart the collusive profit-seeking activities described above from the broader political practices of mafias. Yet, it is important to recognise that mafias engage in far more activities than in money making. This fact helps to shed light on the nature of public authority underlying the production of informality and post-colonial cities more generally. For instance, what precisely did Santosh's 'social work' consist of and what other types of political practices more generally were mafias engage in? Santosh came from modest agricultural roots and had lived in the northern rural hinterlands of Bangalore all his life, so he was intimately familiar with the area and its people. Reflecting on his life story, he said to me:

> I was born and brought up in this area, but I never thought I'd get into social work or politics. We were the people who had a small piece of land, only around one or two acres. My parents were not well versed in the system. They didn't know where to go or who to approach. I know the Internet today, and I know the law, but at that time, they didn't know. People ask me "why do you do all this activism?" But now if I don't do it, we will be in a mess.

He went on to explain that by 'social work', he was referring to the fact that since he had strong contacts in the local government, he could 'pressurise' them to fix roads and streetlights and even threaten lower rung officials if necessary. He had sought to increase transparency in local government by leveraging the newly passed Right to Information Act. He showed me the various Right to Information applications he had filed and the budgetary records that he had collected through it. He pointed out where funds had ostensibly been spent, but no civic improvements had transpired. Finally, he shared with me his monthly 'news bulletin' – a small black and white publication in which he documented the information he had collected through the Right to Information Act about local government expenditures. He was proud to be able to circulate this bulletin for free to his neighbours and constituents.

Paradoxically, this particular set of practices stands in stark contrast to the more collusive and exploitative tactics described above. By filing Right to Information petitions, circulating the information gleaned to his neighbours, and leveraging the Internet and transparency measures, Santosh was mimicking the now-popular 'good governance' rhetoric prevalent in the governance reforms agenda in India. As I have discussed elsewhere (Ranganathan, 2012), the use of e-governance and performance indicators are a centrepiece of the new accountability agenda in India's cities. Santosh was merely echoing a discourse that had become commonplace in civic circles. As a respected (and somewhat feared) 'activist', Santosh felt that his work prevented his area from spiraling into 'a mess', a morass of bureaucratic corruption and civic woes.

Another key arena of mafia organising is elections, particularly, as I described above, since mafias enjoy patronage from local politicians. Several politicians work with water tanker operators around the time of elections to provide tanker water for free to their constituents. As one valve man described it to me: "[t]o obtain a vote bank where they take part in elections, these tanker guys supply water free of cost whenever required". Similarly, in a neighbourhood in south Bangalore, a locally elected representative had advertised on every tanker plying the area that he was responsible for providing free water to the area in the hope of capturing the attention (and votes) of all residents. In situations where water is not provided entirely free of cost, mafia operators reward customer loyalty, particularly customers belonging to castes and linguistic backgrounds that are similar to them. In fact, strong caste-based allegiances are formed between water mafias and customers, reinforcing a highly differentiated geography, even within the sphere of informal water access in the city. A customer who remains with a particular tanker operator for over a year is rewarded with a decrease in price by Rs50 (US$1) per tanker load. While this still makes the price of tanker water higher than municipality water, it maintains the tanker price at a relatively stable level over time. Rarely, in fact, do tanker businesses raise prices on long-term lower-income customers, suggesting that maintaining loyalty (and, perhaps by implication, votes) is of paramount importance.

Intertwined water and land regimes

Finally, a third aspect of mafia authority gathered from my research is the involvement of mafias not only in water delivery but also in the proliferation of informal land markets. When India initiated liberalisation reforms in the early 1990s, urban land markets experienced multiple direct and indirect shocks. A direct effect of reforms was to encourage real estate speculation by removing checks on land conversions and providing an "invitation to predatory capitalism" to invest in irregular projects (Nair, 1996: 252). Indirectly, Bangalore's particular variant of neo-liberal urban development has involved a shift in the role of parastatals from developing land for housing to developing projects in the name of "world city accumulation" as Goldman (2011: 557) puts it. This means that the construction of elevated highways, information technology corridors, the new international airport, and other high-end infrastructure have increasingly occupied state agencies rather than the construction of housing layouts – a shift that has exacerbated a dearth of affordable 'formal' housing in the city.

This dearth of affordable housing has, in turn, bolstered the activities of land mafias – those involved in both high-end speculative projects as the investigative journalist Scott Carney's (2008) work on violent land mafias in Bangalore uncovers, and securing more modest parcels of land for middle and lower-middle income residents who have little other recourse. The rise of land mafias in the context of Bangalore's economic change echoes trends in other cities. As Weinstein's (2008) research on the land mafias of Mumbai argues, the entrance of criminal groups into high-end property markets is a product of liberalisation and globalisation, including the increasingly global reach of Mumbai's organised crime networks, and efforts to brand the city as a global financial hub.

Although Bangalore certainly has its share of high-end land mafia organisations involved in real estate speculation and criminal activity, the vast majority of opaque transactions around land occur at the level of the everyday, catering largely to groups whom I have elsewhere referred to as the 'peripheralised middle class' (Ranganathan, 2013). It is the more petty land mafias that facilitate informal settlement for the majority that I have focused on here. As described above, Bangalore's informal residential layouts were developed through opaque negotiations and transactions between urban buyers, brokers, real estate developers, and lower-level officials. Crucially, I found that real estate developers and brokers are often *also* engaged in the water tanker business. This makes sense if we consider that to extract groundwater, one must have access to the land containing it; the greater the access to land, therefore, the greater the likelihood of being able to access and sell groundwater. Santosh hinted as much when he described his family's encounters with the so-called 'land mafia'.

According to his story, his grandfather, a farmer, had transacted with the land mafia under the fear of having his land acquired by the government.

I realized during the course of my discussions that by his 'business', Santosh was referring to his involvement in informal markets in *both* water and land. He had learned from an early age that the workings of the land mafia are remarkably similar to those of the water mafia. Collusions between government officials, politicians and brokers result in quick and cheap deals made with farmers because farmers fear that an agency like the BDA will notify their parcel of land for acquisition and offer a lower compensation rate than the mafia. Santosh learned that in order to protect his family's interests, he would have to learn to work and eventually 'join the system'. Transacting in both water and land is a way for water mafias to maintain strong ties to local landed politicians in the area while also increasing their sphere of influence among residents of a similar cultural and class background.

CONCLUSION

Policy perspectives on urban water provision in the Global South have tended to fall into two main camps. On the one hand, corruption, largely attributed to the lower rungs of the water utility or to informal providers, has provided the major target of 'good governance' reforms promoted by international agencies and central governments. On the other hand, informal providers are heralded as the promising 'other' private sector (Solo, 1999) – entrepreneurial, resourceful, and flexible to the needs of poor urban dwellers.

This article has tried to complicate this dualistic reading, to make clear that there are multiple story angles associated with informal 'water mafias' – a term used colloquially to describe informal sovereigns who work in collusion with local state agents to exploit and provide water and land to poor and middle class households in Indian cities. Detailed ethnographic analysis is useful to grasp both the actually existing nature of water access for the majority of city dwellers, and the shape of public authority deployed in making urban materialities. In line with one of the central contributions of this special issue, this article argued that informality in the urban waterscape is better defined by the form of public authority mediating and legitimating the practice, rather than the specificities of the practice in question.

I focused on the specific form of authority exercised by water mafias and suggested that while they do not fall within the official realm of government institutions and it is difficult to ascribe their authority to 'the state' as a coherent institution, mafias nonetheless wield a type of everyday public authority that can be conjugated with the idiom of the state. While mafias may attempt to distance themselves from the formal state apparatus, they also engage in distinctly state-like behaviour, including electoral lobbying, exploitation, social protection, and the provision of welfare to constituents. As this article showed, the extension of mafia power can be explained not only by the negotiation of boundaries between state and society, public and private, and formal and informal, but also by multiple political strategies mafias deploy ranging from the coercive to the civic – not unlike what we call 'the state'.

An acknowledgement of the centrality of public authority in the production of informality in the urban waterscape yields two important implications beyond this case. First, the fact that informal water providers excel at making and breaking boundaries between the state and society should give us reason to rethink 'the state' as it dwells in 'the urban' and to develop new conceptual tools for theorising the relationship between the state, public authority and urban informality. The contention that the state is complicit in the production of informality – that informality must be understood in relation to the state and not outside of it – is an important starting point, but we must also go beyond this to understand how informality gets refracted through the heterogeneous terrain of the state. In other words, there is a strong need to pluralise our understandings of both the state and informality. One way of doing this is to grasp how multiple forms of public authority beyond what we call 'the state' co-produce informality. Second, as this article has shown, the water mafia may also be the land mafia. Informal water and land

regimes are often interconnected through particular forms of authority. Critical research would do well to explore how water and land are central to the politics of authority, thus contributing to a richer sense of the spaces of state formation in the post-colonial city.

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