3 Infrastructural becoming

Sanitation, cosmopolitics, and the (un)making of urban life at the margins

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INTRODUCTION

How is urban life made on the margins? How are bodies, infrastructures, and urban geographical processes brought together – and pulled apart – in the constitution of everyday life? How do vulnerable groups cope with and react to urban conditions that make for them precarious, unreliable possibilities? While these questions are growing concerns for urban research (Amin 2014, Bayat 2010, De Boek 2012, Fabricius 2003, McFarlane et al. 2014, McFarlane 2011, Lancione 2014a, Neuwirth 2006, Pieterse 2008, Satterthwaite and Mitlin 2014, Simone 2009, 2014), we lack conceptualizations of the ways in which bodies, senses, infrastructures, and spaces are brought together and cast asunder in the rhythms of everyday urbanism, and the consequences for the possibility of urban life. One useful resource toward this end is the literature on urban assemblages, which sits at the intersection of Deleuzo-Guattarian thinking and Actor-Network approaches (Anderson and McFarlane 2011, Jacobs 2012, McFarlane 2011). Assemblage approaches propose an ontological take on the city that 'does not presuppose essential and enduring identities' (Escobar 2007: 107) but understands the urban as 'a multiplicity of processes of becoming, affixing socio-technical networks, hybrid collectivities and alternative topologies' (Farías and Bender 2010: 2). We argue that approaching the margins by focusing on processes of becoming through assemblages not only allows one to grasp *how* life is put together and re-constituted at the margins, but points to ways of imagining a renovated politics for marginalized urbanites (Lancione 2016).

What has come to be known as 'assemblage thinking' is a short hand for tracing immanent relations, everyday calculations and events, actualized and potential power and affections. This attention to the immanent locates explanation less in pre-given claims on the fate of the poor or macrological frameworks into which their conditions are inserted, but instead focuses on practices through which humans and non-humans are brought together or cast apart. The 'political' in assemblage is not something already there, established through some *a priori* moral norms or values, but is instead constituted through the labour of human and non-humans that become territorialized, deterritorialized, and reterritorialized in different kinds of ways through different forms of power, resource, and contingency (Allen 2003).

It is here that we see a connection between what Deleuze and Guattari call the 'micro-politics of the social field', where such constant immanent labour occurs, and Stengers' call for a renewed understanding of the *cosmos*. In our reading, Stengers' notion of the cosmos is not above – or beyond – the micro-politics of the social field, the day-to-day operations of urban assemblages. For Deleuze and Guattari (1987), multiple and rhizomatic cosmos are constituted through the everyday micro-politics of the social, a social marked by an irreducible production of difference, subjects, and machines. Stengers (2010) echoes a non-reductionist understanding of these cosmos by emphasizing an ecology.

For Stengers (2005: 995), the cosmos is not something that encompasses everything else, but is 'the unknown constituted by these multiple, divergent worlds and to the articulations of which they could eventually be capable'. There are two aspects of this claim worth highlighting. First, understanding the 'cosmos' requires recognizing multiplicity without reducing it, in order to write and imagine a new politics of the margins – and this means a cautious view of what generalizing truth and assumptions might set apart. Second, to understand the cosmos is also to bring attention to what these worlds 'could eventually be capable' of: It is about potential, de-structurations, re-articulations and lines-of-flight (Massumi 1992). This is what makes Stengers' call for the cosmos political. It is a call to recognize the immanent political charge of the multi-worlds in which we live. One has to acknowledge the productive nature of the *cosmos* – to hear their explicit and implicit 'fright', as Stengers (2005: 1003) puts it, and to articulate the cosmos in terms of 'equality' and not of 'equivalence'. Politics, in this sense, is 'to be present in the mode that makes the decision as difficult as possible, that precludes any shortcut or simplification, any differentiation *a priori* between that which counts and that which does not' (ibid).

If Strengers' 'equality' is a kind of political enactment of a Deleuzian-Guattarian call to multiplicity, our focus is more on disclosing cosmpolitical life at the margins as a basis for understanding the making of urban life and the political implications that flow from that approach: cosmopolitics is 'a commitment to opening worlds to practices or beings that seem otherwise inexplicable' (Watson 2014: 89). In the marginal cosmos of our cities life is assembled, as much as politics, through various and precarious more-than-human machineries. It is via tracing these entanglements that life can be rethought in non-reductive terms and through which canonical politics, usually framed around *a priori* notions of the 'good' (Stengers 2005), can be challenged. Following this ethos, in this chapter we examine how vulnerable and impoverished urbanites constitute urbanism. We focus on the cosmopolitical multiplicities that revolve around infrastructure and how it is assembled – or, as we put it here, how infrastructure variously operates as a process of becoming. This includes the practices that co-constitute infrastructure or which take the place of absent infrastructure, and find in the making of life clues to other ways of seeing the urban political and how it might be made otherwise. The cosmopolitical – a diverse realm of assemblages that unfold in sometimes unpredictable and often hidden ways – owes a great deal to the infrastructural, i.e. to the conditions of possibility that make urban life itself possible.

Our empirical focus is a largely neglected cosmopolitical realm: urban sanitation practices. Sanitation has long remained on the margins of research on the urban everyday, and yet it is vital to the constitution and possibilities of urban life. We draw upon our respective research on marginalized urban lives, including homeless groups in European cities and informal settlement residents in Indian cities. Our purpose is to conceptualize the making and unmaking of life at the margins of the city, by examining the corporeal, sensory, and socio-material relations that are central to the possibilities available to vulnerable urbanites. It is indeed within these entanglements that common grounds of struggle, but also of potentiality, can be found and traced as matter of heterogeneous and provisional encounters of human and non-human machines, power and affects (Bonta and Protevi 2004).

INFRASTRUCTURAL BECOMING

To actualize our take on the urban assemblage that constitute cosmopolitics, we frame our intervention around the idea of *infrastructural becoming,* which can be apprehended through a grounded understanding of body-sensory-infrastructural relations. What we want to convey with this idea is that struggling to *become* clean and to avoid being dirty is a matter of complex and provisional entanglements between the self and the mechanosphere of the city (Amin and Thrift 2002), where active and passive relations are made and un-made between subjects and side-walks, shelters, soup kitchens (in the case of homeless people) or subjects and provisional water supplies, inadequate dwelling, and shared toilets (in the case of residents in informal settlers). The struggle for sanitation is thus not only understood as a conscious fight to cope with the lack of adequate facilities, but as a more-than-human endeavour of bodies and matter through which urban cosmos are produced in the form of practices and subjects usually unaccounted for by normative discourse and policy (and see also, in this volume, Bister, Klausner and Niewöhner on 'urban niching').

Central to our argument is an understanding of urban environments and infrastructures as lived and embodied. An emerging literature is fostering such an understanding in ways that reveal, as Ash Amin puts it, that 'infrastructures – visible and invisible, grand and prosaic – are implicated in the human experience of the city and in shaping social identities' (Amin 2014: 139). Similarly, Brian Larkin (2013) argues that infrastructure can create a sense of the presence – or absence – of modernity (and of 'normality') that is apprehended not just through the mind or the social, but through the body. Embodied experience can be 'governed by the ways infrastructures produce the ambient conditions of everyday life . . . Softness, hardness, the noise of a city, its brightness, the feeling of being hot or cold are all sensorial experiences regulated by infrastructures' (ibid, 2013: 336). As central to the practical correlates of everyday life, infrastructure not only shapes but is also put to work in different sorts of ways – it is in this sense a 'language to be learned, a way of tuning into the desire and sense of possibility expressed in the very materials of infrastructure' (ibid. 2013: 337).

The embodied and lively nature of infrastructure is often more visible when they collapse or do not work properly (Graham 2010, Piertese and Hyman 2014). But

such a view of infrastructure also runs the risk of imposing a Western-centric conceptualization, given that for many urbanites infrastructures rarely 'work' in reliable expected ways, and may be absent or denied entirely. Here, though, we need to be attentive to the other kinds of infrastructures that people nonetheless do help weave, often from fragments of half-delivered or once-operational or accessible infrastructures, because they co-produce the becoming of lives at the margin. This is clearer still if we consider how, as AbdouMaliq Simone has influentially argued, people act to become infrastructure through their networks, unspoken rituals, tactical manoeuvres, frictions and affiliations that co-produce life in the city (Simone 2004: 408). Both 'people' and 'matter' are therefore engaged in forms of *infrastructural becoming:* a process and an achievement – less a background or stage upon which urban life takes place, more a domain through which relations are made.

Our ethnographic work reveals the micro-politics that lie behind the struggle for sanitation at the margins in ways that call for a re-imagining of urban infrastructure. There are two implications for thinking the cosmopolitical here. First, and in tune with Latour's reading of Stengers, our arguments underline the more-than-human ways through which politics is assembled. For Latour, the presence of cosmos in cosmopolitics resists the tendency to reduce politics to the give-and-take of an exclusively 'human club [and] [t]he presence of politics in cosmopolitics resists the tendency of cosmos to mean a finite list of entities that must be taken into account' (Latour 2005: 454). Sanitation practices cannot be understood without taking into account their more-than-human assemblage, but at the same time an alternative politics cannot be forged without imagining a way of politicizing infrastructure that emerges in relation to the struggles of everyday life in the city. Second, the infrastructural becoming that we investigate highlights the contextual yet translocal nature of sanitation-cosmos and their politics. The struggle to be clean, the plight of being dirty, the effort to alleviate the machines of the city in such a way to allow proper personal hygiene – these, notwithstanding their cultural and political economic specificities, are in fact global challenges. A cosmos needs to be heard in its 'fright' without being reduced or simplified to an *a priori* idea of what is universally 'good' (Stengers 2005). We say this while remaining resolutely committed to the particularity of context in forging cosmopolitical configurations. As Swati Chattopadhyay has put it, urban infrastructure is matter of contextualized transformative appropriation through which the urban is made and possibly also re-imagined: 'When infrastructure is appropriated for purposes it was not intended to support, we find a transformation in the formal vocabulary that gives rise to new city topographies' (Chattopadhyay 2012: 245). In what follows we present evidence on the translocal and contextual nature of infrastructural becoming at the margins, to then discuss the cosmopolitics at stake in the conclusion.

HOMELESS PEOPLE AND THE STRUGGLE FOR SANITATION

Homeless people have long been portrayed as being dirty, unhealthy, bearers of illnesses and deviant from what is considered to be 'appropriate' when it comes to

personal appearances and health (Gowan 2010, Ruddick 1990). This paradigm has been fostered both by punitive legislative measures – think of UK's 1824 Vagrancy Act, defining and condemning a vagrant as a person 'wandering abroad [. . .] and not giving a *good account* of himself or herself'[1] – as well as by contemporary popular vernacular of homelessness, like the redemption story portrait by many US movies, where the end of one's own homelessness is typified by a clean suit and a freshly shaved face (e.g. Will Smith in the *Pursuit of Happiness*). These and other characterizations define *a priori* what should be considered abnormal (Goffman 1963), pathological (Canguilhem 1989), or simply strange (Amin 2012), expressing a virulent stigmatizing power translated at the level of the body; the stranger is black, the deviant is sick, the homeless body is dirty (Saldanha 2012, Swanton 2010). In order to counter-balance the power expressed by these normative depictions and to understand *how* sanitation is lived for homeless people, one has to go back to the infrastructural becoming of bodies, materialities, physical infrastructures, environmental conditions, and other urban dispositions that make up heterogeneous bodily experiences of homelessness. At a first, basic level, there is the lack of adequate dwelling. But at a second and more substantial level there are heterogeneous assemblages – of body and machines – which are brought forward by homeless people and services to arrange sanitation at the margins. At this second level infrastructures are re-appropriated, carved out from the social and material fabric of the city in order to achieve the basic ends of sanitary care.

Although it may appear obvious, it is important to stress from the beginning that if the home has become 'a complex exoskeleton for the human body with its provision of water, warmth, light, and other essential needs' (Gandy 2005: 28), home*less* people find themselves deprived of this exoskeleton. What replaces it is life in the street, which essentially means engaging with spaces that have been thought, designed, and constructed all but to dwell. The impact that these have upon the subject is *violent*: there are no doors to close in the public spaces of the city, no warmth, no toilet to flush, no towels to dry with after a shower . . . and no shower either. Becoming dirty is therefore unavoidable. Here we understand 'dirtiness' not only as a matter of aesthetic appearance and lack of cleanliness, but as a process of infrastructural and metabolic becoming with heterogeneous urban matters that changes one's own appearance, self-esteem, perceived personal hygiene, desire to be 'normal', and personal life path. This is what the American anthropologist Robert Desjarlais has called 'the experience of homelessness', where 'experience' is not conceived 'as a universal, natural, and supremely authentic entity [. . .] but as a process built sharply out of cultural, historical, political and pragmatical forces' (1997: 10). There are essentially two sets of spaces where this experience take place.

The first set includes spaces that are usually frequented by homeless people at the beginning of their street lives, like night shelters, soup kitchens, and drop-ins. There are some differences around these geographically – for instance between the US model, where shelters accommodate a consistently higher number of people per night than their European counterparts – but broadly cast these are

spaces characterized by the standardization in the service provided, an 'emergency' logic of provision, a low staff/client ratio, an heterogeneous composition in population (in terms of gender, ethnic background, personal experiences), and by the lack of private space (for the US see, Lyon-Callo 2000, for the EU, Johnsen, Cloke, and May 2005). Although these spaces are not usually designed to provide specific sanitary services to homeless people, they nonetheless offer one of the few enclosed contexts where the latter can wash, use a toilet, and take care of their personal hygiene. These practices do however take place through permanent negotiation for the use of shared toilets, constant queueing, and unavoidable exposure to others' bodily smells, fluids, and noises. In these spaces homeless people are forced close one to the other: there is simply no room, not enough facilities, and not enough time, to properly take care of oneself.

Besides these spaces, it is the encounter with the bare materiality of the urban that plays a pivotal role in becoming dirty. The city is made up of a polyrhythm of matter – cars, pollution, people passing by, rubbish, dust, raw materials, and wind, snow, rain, etc., and homeless people perform, experience, and feel all these things in ways no one else does. A filthy garbage bin is not a thing to ignore, but something that may contain objects to be re-sold, or food that might be salvaged. The empty space under a bench, surrounded by animal excrement, could become a wardrobe. The sidewalk ceases to be just a piece of concrete to walk-on, but it becomes a bed, a begging place, a rest-room, and so on. Public spaces become toilets. Without the provision of publicly available restrooms, which are steadily declining in every western city, homeless people are forced to urinate, defecate, and change their underwear in public parks, alleys or, in the best of cases, in fast-food restaurants or train stations. It should suffice to say that in the whole city of London there are only ten automatic and eight attended public toilets, none of which is free (50p is the minimum charge).[2] Homeless people touch dirty things, inhabit dirty spaces, walk for miles and days with the same clothes on, sleep in hard, cold, unsafe places, and unavoidably become dirty. This a process of subject-formation moulded by human and non-human agencies alike. They assemble and define an infrastructural becoming that is also a 'categorizing moment' (Larkin 2013: 330), because it leads to what we canonically perceive as 'the homeless': a 'dirty' wo/man under a bridge, on a sidewalk, in a queue outside a soup kitchen, and so on.

None of this means, of course, that homeless people somehow do not care about their personal hygiene. In each subjective experience and contextual entanglement with the urban mechanosphere there will be always a tension between the inevitability of becoming 'dirty' and the desire to remain 'clean'. Indeed, looking, feeling and being perceived as 'normal' are primary concerns for people that have just begun their street life. Like in a theatre piece, people who find themselves homeless are suddenly brought on stage – in the night shelter, in the soup kitchen, begging on a sidewalk – with the same old 'clothes' they were using off-stage, but with a new characterization defining them. And the majority of homeless people will distance themselves from the canonical depiction that is given of them as dirty, unwilling, and unable (on the specificity of this linguistic struggle, which

includes also 'taking distance' from peers perceived as 'real' homeless people, see Snow and Anderson 1987). If the city does not generally allow for such practices, it is important to notice that the struggle – and the cosmos – continues in those cases where specific services are provided. To exemplify this we turn our attention to Turin, a northern-Italian city where one of the authors has undertaken extensive fieldwork (Lancione 2014a, 2014b). We take the case of Turin as emblematic of many other European and North-American cities, where the provisioning of services devoted to one's own care cannot be a-critically assumed as 'good', but must be investigated 'cosmopolitically' (namely, from its capacity to produce alternative worlds, infrastructures, subjects).

The city of Turin provides a number of public baths, where everyone is allowed to take a shower and use bathroom facilities (soap and towels are provided as well). However, in order to access these services homeless people need to obtain specific 'access cards', which are nominative and allow access to the bathrooms only once (Figure 3.1). In order to obtain these cards, people have to queue in specific centres and undertake counselling sessions where, among other things, they are granted access. The effort and emotional stress involved in such endeavours discourages many homeless people from even trying, especially when they are living in the street for a long time and have perhaps become more accustomed to the ecologies of street life. The question of time is central in the latter process. Despite the popular vernacular, which depicts homeless people as having lots of

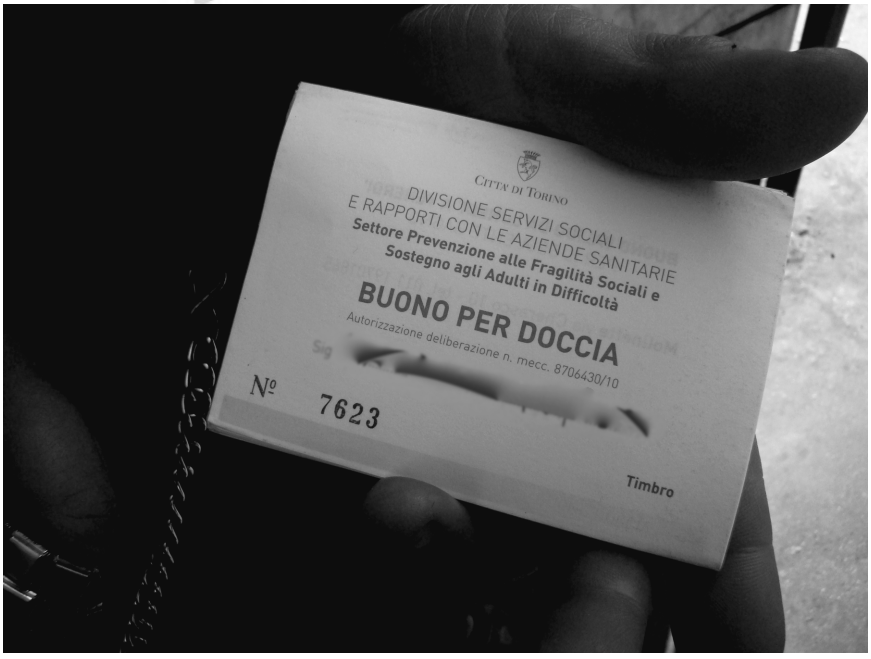

Figure 3.1 Ticket to access public baths in Turin, 2010 (Photo Lancione)

free time at hand, the opposite is often the case and especially at the beginning of street life when people struggle to find the appropriate time and resources to do everything. If one does live in a shelter, having to commute to the other side of the city to eat in a soup kitchen, and in-between look for a job while also taking care of counselling meetings and other forms of help (like the collection of second-hand clothes), means that the day quickly passes by and suddenly it is time to queue for the night shelter again. The struggle to access a public bath and maintain proper personal hygiene is thus deeply rooted in the social and material infrastructure of the city (Cloke, May and Johnsen 2010), and the more one entangles one's life with this assemblage the less energy people often have for the struggle to become 'clean' and 'normal' (Snow and Anderson 1993).

Similar struggles also take place in relation to clothing, a pivotal element of one's own appearance and personal hygiene. In contemporary western cities washing clothes for free is almost impossible, therefore the only way of obtaining clean underwear is either buying or collecting them in centres where the distribution of second-hand clothes is provided free of charge. In Turin, and in most cities in Italy and Europe, such services are mainly provided by Faith-based organizations. In the provision of such services small details matter (see Allahyari 2000 and Lancione 2014b). For instance in Turin the 'Company of the Daughters of Charity of Saint Vincent de Paul' (a society of apostolic life for women within the Roman Catholic Church) provides brand new underwear to its clients, two times per week. People appreciated that the provided underwear was new. However, they also complained that underwear were given to them already unpacked, deprived of their original packaging. Removing the packages was, for the nuns distributing these goods, a strategy to avoid homeless people selling those on the black market. However, *infrastructures* (such as the nun's provision of help) bear also particular affectivities: breaking a brand new package of underwear, as many homeless people related, produces a glimmer of joy, fleeting though it may be, related to a liminal feeling of self-sustenance and preservation. In the economy of homeless people's life – punctuated by constant traumas and deprivations (Robinson 2011) – the positive effect of such small arrangements should not be underestimated: they productively boost self-esteem and help in the struggle to remain 'clean'.

Last but not least, we conclude that infrastructures are all but simple material matter: specific human and cultural features play a major role in the characterization of the struggle. Gender differences are a clear example in this sense. For men it is usually easier to urinate in public spaces, for homeless women it is difficult to find appropriate spaces to do so. The city provides very few public spaces that are *at the same time* hidden and safe: a remote corner in a public park may be good for privacy but bad for personal security. Activities like changing sanitary napkins during the menstrual cycle can be incredibly difficult to undertake since they involve complex alignment of things, spaces, and personal dispositions. Besides finding the right spaces to change, homeless women have also to find resources in order to buy (or to get for free) those provisions, and they have to do so while being constantly exposed to environmental conditions that can both alter the

regular menstrual cycle and facilitate the emergence of specific infections and diseases. In relation to the latter point, homeless women in Turin found it particularly difficult to deal with sexually-related issues – which can range from vaginal candidiasis to HIV – due to the shame that is associated with them. As one woman said, sometimes it is just easier 'to wait' for the problem to pass, or to try to find the money to buy the medicaments one thinks are right, rather than to enter a counselling room and confront the issue with a doctor, or a volunteer, who may be perceived as judgemental (Liebow 1993). For homeless women, getting these and others infrastructural arrangements right involves an investment of time, emotional, and physical energies, and financial means that are extremely hard to arrange while performing life in the street.

With these examples one does not want to discard the fundamental importance of the service provided by public and private institutions, nor diminish the factuality of the related problems (e.g. people selling clothes on the black market). What is important to highlight however is the nuanced dimension of sanitation practices at the margins, which more often than not passes through small infrastructural details like the scheduling of services, their location, and the way they are delivered. This is the immanent cosmopolitics of washing, shaving, grooming and being able to change clothes and underwear for homeless people: An ecology of practice that is performed through exclusion, sensorial hardships, and corporeal struggle, labour, relative powerlessness, stigmatization, and socially and spatially fragmented assemblages of remaking urban infrastructures each day.

SLUM SANITATION AND THE CONSTITUTION OF THE EVERYDAY

We want now to switch context to consider sanitation practices in informal settlements in Mumbai. While the context has shifted, the centrality of infrastructure's multiple operations through assemblages of everyday life remains. Let's begin with Sammera, a 16 year old girl who lives in Rafinagar Part 1, in northeast Mumbai. She is the second oldest sibling in a large Muslim family, and lives with her mother, father, five sisters, and one brother. Her day starts at 8 am. She prepares tea, washes her face, and helps with breakfast for the family before tidying the sleeping mattresses away. Then she washes the utensils at the threshold of their house, in the same area that the family's clothes are washed in front of the narrow open drain that runs through the centre of their lane. She described how this works: 'We don't wash clothes daily. They pile up because of the water [shortage]' – at the time, the municipality was cutting 'illegal' water connections – 'utensils have to be washed daily, we can't pile them up. But clothes pile up, into big bundles some times. [If there is no water] then we buy the cans [from the relatively expensive cycle-wallas] and wash them'. The rest of the morning is taken up with cooking tiffin lunches for her siblings at school and work, and in the afternoon she helps to prepare dinner. Other than the odd break to watch television, Sameera is busy with the demanding chores of a large family in a small home and rarely leaves the lane other than to use the toilet or to make a visit to

nearby relatives. 'I never speak much with anybody', she says, 'I am always at home'. For Sameera, a key challenge of life in Rafinagar was that neighbours wouldn't work together to ensure that the open drains in the lane remained cleaned: 'No one lends a hand' she said, 'we just push the garbage to the side so that the water can flow . . . This is how illnesses spread . . . mosquitoes breed in dirt'. She added that conditions in nearby lanes close to the main drain are worse: 'There is a wide gutter there. Nobody cleans the garbage there and it remains dirty most of the time'.

This snippet from Sameera's everyday rhythms reveals the gendered nature of domestic work, of labour and daily routine, and of isolation in a dense neighbourhood. It also hints at a larger story of state predation, and this is an important distinction from the Turin case – predation of so-called illegal water connections – and state exclusion through legality and service abandonment (Graham, Desai, and McFarlane 2013). It is at once a spatial story, of the cramped conditions of a busy household in a neglected corner of the city and of the infrastructures that do or not extend to marginalized neighbourhoods, and a metabolic story, of calculations based on the potential safety of water for drinking, of available resources for washing clothes and homes, of suppressing daily rhythms including using a toilet, of the exploitative role of the state around water as well as the role of small-scale entrepreneurs selling water, and of the potential for residents to collaborate in the maintenance of infrastructure. But, as with the stories of homeless people in Turin, this snippet is also suggestive of a rather neglected set of questions around how people experience urban infrastructures.

In the making, sustaining, and unmaking of urban metabolisms – which connect bodies, subjectivities, infrastructures, and urban environments to political, economic, ecological, and social vectors – ambience looms large. Metabolisms are not just political economic functions or resource-based politics, but sensorial processes. Or, better, the ways in which they emerge as political is in part linked to the senses. For residents of Rafinafagar, this linking of metabolic politics and experience to what Vinay Gidwani (forthcoming) calls an 'urban sensorium' is so self-evidentially the case that it is barely worth remarking upon. Sameera, for example, felt life would be easier if there was a bathroom in her house, but she did not want to have one in her home – 'it will smell in the house', she said. She wanted the infrastructure, of course, but only if the smell could be contained. She added that she has an aunt in nearby Lotus Colony with a larger house and a toilet, but the arrangement works well there because there is a wall separating the toilet and living space, so 'there is no smell'. Or take this example from Reshma, who had a relatively good water supply and sometimes sold water to residents. Upon moving to Rafinagar, she said, she found moving around what she saw as a dirty neighbourhood full of unclean bodies a difficult act. 'I could get a bad smell from their bodies', she complained. 'There [water] containers used to remain dirty. I would keep their containers far and fill water in them for them. And I would complain to my mother about having to give them water'. Others frequently complained that the quality of the water supply was constantly shifting, and this was often expressed in relation not just to water pressure but to the smell and

colour of the water. Water would sometimes 'stink', people said, which meant either using it for non-drinking purposes – although that was a luxury not all could afford – or locating, whether through neighbours or through rumour, better quality water from other parts of the neighbourhood or nearby places. In 'legalized' neighbourhoods, residents would sometimes take water samples to the municipality to complain – in non-legalized neighbourhoods like Rafinagar, the very suggestion of doing such a thing might well provoke laughter.

Where infrastructure is fragmented and precarious, it presses on the senses and the body. Its absence is smelled, felt, heard, and as such generates a sense of immediacy and quite often anxiety. Farida lives in Rafinagar. Her husband lost his auto rickshaw to the bank, and now rents one, and she can no longer depend on his earnings: 'Some days', she said, 'he will give [me] Rs. 100, sometimes Rs. 80, sometimes Rs. 180, sometimes he won't give anything . . . I have to pay the light bills, send the children to school . . . I have to run the full house'. In an effort to preserve water and save money, Farida scolds her children if they wet the bed – which results in additional washing – and wakes up her youngest at 1am to go the toilet. Farida and her family cannot use the latrine in the house because the water shortage means she cannot keep it clean. Instead, Farida uses what she called the 'Rs. 1 toilet' on the main road, a private toilet block which, while in poor condition, is more appealing than the municipal toilet block which is even worse, and in any case which is located near an area next to the mosque where men socialize and sometimes make women going to the toilet feel uncomfortable.

Infrastructures are never just material in these contexts: they are corporeal, sensory, and in a recurring process of metabolizing through different relations across space and time – this is why we prefer to talk of *infrastructural becoming*. Rhythm is vital here. As water provisions change over time, calculations on how much water to use for washing clothes and utensils, or whether to wake infants in the middle of the night to go to the toilet, become more or less important. Conditions change over the course of days and nights, and over the year as the monsoon and summer create distinct challenges. This temporal variation is accompanied by important spatial variation – between toilets (e.g., municipal versus private) and across neighbourhoods (e.g., houses located near open drains versus those located a little further away). The question of how to sustain life bleeds into the question of what everyday life is in precarious urban contexts: a life sustained through working with the fragments of urbanism, infrastructure in particular, becomes inseparable from the ongoing reassembling of transitory and sensory urbanism.

In De Certeau and Giard's influential depiction of everyday urban life in Paris, the neighbourhood connects the home to urban life and public space, 'less an urban surface, transparent for everyone, or statistically measurable, than the possibility offered everyone to inscribe in the city a multitude of trajectories' (1984: 11). Their description of neighbourhood trajectories is one reminiscent of Doreen Massey's understanding of space as a confluence of 'stories so far', the multiple times of urban 'throwntogetherness'. While these relations in the neighbourhood are, of course, constituted by translocal relations of different sorts – as

Massey more than most has so powerfully shown – the being there of neighbourhood life, the place where residents spend most of their time – the everyday lived practices beyond the relations, in a sense – is where we see rhythms and (un) making of urban life. As this volume attempts to show, the making of a more common world requires working through ways of coordinating these multiple assemblages.

Like infrastructure itself, the informal settlement too is a corporeal, sensory, and socio-material construction project as much as it a set of sometimes collaborative and sometimes conflictual communities. The emphasis Giard (1984:13) places in this discussion on the agency of the trajectories people enact, read in terms of people's capacities to consume space, is striking. He writes: 'The city, in the strongest sense, is 'poeticized' by the subject: the subject has refabricated it for his or her own use by undoing the constraints of the urban apparatus and, as a consumer of space, imposes his or her own law on the external order of the city'. While this is, to be sure, a romantic vision of urban life, the emphasis on the *refabrication* of the everyday is vital to understanding the rhythms of infrastructural becoming in Rafinagar – indeed, urban life itself – in precarious urban contexts. For example, in Rafinagar, residents often build makeshift latrines in anticipation of the monsoon rains. When the rains arrive, the neighbourhood floods in parts, generating a temporary intensification of illness and disease hazards as well as sensory ecologies, and making the daily journeys to privately run toilet blocks difficult. Materials – jute, wood, sack cloth, and so on – must be recast from their existing use in a new context: the makeshift latrine. They require ongoing maintenance. Over time, assuming it lasts the monsoon and the municipality's demolition bulldozers, the toilet may be improved with other materials that are longer lasting, and in that move a lock may appear to police access. Infrastructural becoming is made through a series of small anticipations and refabrications from the stream of everyday life.

This process of incremental construction reflects more multiple trajectories of building infrastructure and housing in Rafinagar that happen over time, sometimes months, sometimes years or decades, and in contexts of often regular setbacks and demolition. Here is a vulnerable socio-material assemblage that metabolizes sanitation in a particular way and hopes for some semblance of reliability into the future, a metabolization that possesses materials with new agencies, with what Andrew Barry(2005) has called 'informed materials'. The everyday is a space of cosmopolitics, where the cosmos is made through often laborious assemblages structured by relaitons with the state, by local power relations including the power of local leaders, and by materials that are mediated by those relations. Residents know, however, that this cosmos is not reliable, that it may for example be made political in the act of state demolition – the enactment in fact of quite a different cosmopolitical – or that it may itself collapse due to the effect of the monsoon or heavy use. They are acutely aware too that it is not 'modern', that it has failed to provide the necessary relations between senses, body, materials, and ecology that other infrastructures in the city provide, as one women put it: 'There is a world of difference between this and a pukka

[brick-built] toilet. This one remains a bit open, there is a fear of children falling, there is fear that it will get washed away in the high tide, there is a fear that it will break.' Infrastructural becoming here only takes you so far, and the cosmopolitical configuraitons it produces are often vulnerable.

In what senses does this everyday produce a particular kind of cosmopolitical conjuncture? The everyday De Certeau and Giard have in mind is, to be sure, a Parisian everyday at a particular moment, and they would not have claimed more than this. Their neighbourhoods are those of regular and learned interactions between residents and fruit and vegetable markets, and their social codes refer to the etiquette of what can and cannot be acceptably said about people's appearance, including the role of double-meaning, puns, metaphors, and modesty. When they say that 'our categories of knowledge and our analytical models are too little elaborated to allow us to think the inventive proliferation of everyday practices' (1984: 256), it is surely with an awareness not just of the lack of work on everyday urban life but on the geographical narrowness of the contexts they draw on. Other critique, of course, of De Certeau's rendering of the everyday has been more powerful, arguing that he lacks a grasp of the ideological production of the everyday and reduces the emancipatory potential of everyday life to series of cultural forms, including walking, cooking, reading, and so on (Goonewardena 2008). We lose sight here of how the everyday emerges as a kind of frontier between domination and the realization of the possible, or the space of presence where the Lefebvrian 'moment' or Debordian urban situation is alive and set against alienation (Merrifield 2008: 182).

Filip De Boek (2012: 316), writing about the urbanism of Kinshasa, is more instructive for thinking about the cosmopolitical nature of the everyday struggles we have in mind. He argues that the city historically did not only 'look into the mirror of colonialist modernity to design itself', but that it 'always contained a second mirror' provided by its rural hinterland, i.e. that drew on the repertoire of forms of everyday management that facilitated rural life in order to secure and maintain existence in the city. He argues that these rural practices 'provide Kinshasa's inhabitants with urban politics of the possible' (ibid.) – unsteady, provisional, constantly shifting possibilities of associational life, such as the complex web of informal economies. They add up to urban infrastructures, neighbourhoods, and a city that reveal themselves less as the product of the rhythms of urban planning and more as 'randomly produced and occupied living space which belongs to whoever generates, grabs and uses it' and through which residents often create their own solidarities and conflicts – around land rights for instance, such as those in the case of Kinshasa between farmers associations and landowners (ibid.).

This 'possible' is defined here for De Boek by an absence: the lack of material infrastructure in some areas, for example, necessitates alternative forms of association – although here we need to be careful with the term 'alternative' in contexts where these forms of infrastructure are in fact the norm. We are not talking about complete absence here: often there are 'fragments' present from all sorts of historical interventions. This is often a precarious and locally – not centrally – controlled urbanism that depends on what De Boek calls 'the tricky

skills of improvisation' (De Boek 2012: 318). These tricky skills are key practices of the flexible city: they allow some measure of capacity – differentiated across groups and individuals – to respond to the unexpected, as well as constituting what Simone (2009) calls platforms of incrementalism (and see McFarlane 2011). These are infrastructures of everyday urban life, but not as we know them: they are not sunk and capital intensive durable conduits, but forms of organization and operation. The skills of improvisation that De Boek talks about – and here we need to be mindful of the often numbing celebration of improvisation in discourses of entrepreneurial urbanism, including variants of 'smart' and 'creative' urbanism – often require enormous amounts of labour and learning, and the capacity to adapt to often punitive forms of capitalist modernity. De Boek (2012: 320) again: 'The official urban politics "orphans" many urban residents and in the end defines them as out of place in the contours of this newer, cleaner, "better" and more "modern" urban architecture'.

The cosmopolitical in Rafinagar exists in the 'second mirror' that De Boek identifies, a mirror made up of fragments that are assembled in different ways only to be torn apart or undone either by state predation or by the precarity that goes into their very constitution. To look into this mirror is to understand better how marginalized everyday lives inhabit a particular cosmopolitical configuration of assembling infrastructures through fragments in ways that are more or less vulnerable, always multiple if structured by need and local and extra-local power relations, and subject to often sudden change. It is also, in this sense, to 'see like a city', to use Warren Magnusson's (2011) felicitous phrase, in that this form of urbanism – precarious, corporeal, sensory, metabolized, assembled, demolished, and reassembled – constitutes an ever-growing feature of contemporary global urbanism and a vital site for future research seeking to understand and intervene in the cosmopolitical configurations of cities. A focus on infrastructural becoming – in relation to and in the absence of material infrastructures – is for us a vital part of how life and politics is (un)made.

CONCLUSIONS

Homeless people and informal settlement dwellers try to meet the adversities of the environments in which they live in a variety of ways. In part, these are 'coping strategies' – the efforts that are explicitly or implicitly put in place to mitigate material, psychological, and emotional adversities. However, there is more at work here than just coping. The sanitation practices examined here are less 'strategies' and more matters of becoming with the urban, which set in train a variety of sometimes difficult to predict consequences. The productive yet often wearisome practices of building spaces to wash, shave, change sanitary napkins, urinate and defecate are matter of assembling, in a word, an alternative city out of what is at hand. These are *infrastructural becoming*, ongoing processes that weave together aspects of urban life that we too often keep analytically separate from one another: the senses, the corporeal, the infrastructural, the collective, the neighbourhood, the urban fabric.

But what questions do these practices pose for a cosmopolitical understanding of the urban? At a first sight, one could argue that in dealing with these practices we are facing a problem of lack of basic staples – adequate services for homeless people, social housing, or appropriate sewage and water facilities. These staples are vital, and we need to remain vocally and actively critical of the trends of privatization characterizing much of the urban world both in the Global North and South which point precisely in the opposite direction – that of reducing the already risible sphere of the available 'commons'. We cannot and should not forget about a universalistic approach to basic sanitary staples. However, we need also to be alert to how such an approach might take into account the complex and grounded arrangements at play across different geographical and social contexts (Amin 2014, McFarlane et al. 2014). The configurations of the cosmopolitical are translocal, gesturing to a ground shared by many urbanities around the world, but they are first and foremost contextual endeavours. The infrastructure governing the access to public baths, the distribution of second-hand clothes or the gendered-counselling in Turin are distinct from the domestic work arrangements and 'public' toilets in Mumbai's informal settlements. Notwithstanding the importance of translocal solidarities and movements of different sorts (including around sanitation – e.g. see McFarlane, 2011), the cosmopolitical plays out at the immanent sites where struggles can be contextually politicized. The advantage of cosmopolitics is that brings to the heart of the political agenda not just the canonical reading of infrastructure as basic material services – vital though that is to the ecology of practice around material provisions – nor a positivist belief that universal provision will simply solve the issues the inequities of machinic cities, but an understanding of the needs and desires of different groups and places, and the socio-technical power of infrastructure in forging new social and political lives and subjectivities.

We have given examples of this process of subject-formation through the presentation of our ethnographic materials. The 'homeless' and the 'informal settler' are subjects 'not merely produced through discourse but formed in the process of inhabiting urban space, in the act of reading, witnessing, congregating, and moving through urban spaces' (Chattopadhyay 2012: 138). In other words, their political subjectivity – and hence their political cry – is forged, enacted, and practised in part through their day-by-day efforts to obtain appropriate sanitation. This is an alternative and marginalized infrastructural becoming that takes place every day but is rarely seen or acknowledged. Cosmopolitics allows us to take these processes of subject-formations into account, precisely because it forces us to think about the multiple and not the singular. Tracing the infrastructural becoming of marginal urbanites allows research, policy, and practice the possibility of learning about their cosmopolitical struggles as diversely assembled, immanent, and dependent upon non-human as much as human matter.

In the practices and spaces of everyday life urban, becoming and unbecoming is lived in precarious ways, in spaces which are neither merely bare life nor formal citizenship (Chaflin 2014). What a cosmopolitics of the margins can teach us is that urban things – infrastructures, affective atmospheres, urban schedules,

machines, pipes – are not detached from political subjects: they are indeed part of what can be thought of as life and the political, and life and the political can be forged through them. In this regard De Boeck has correctly spelled out there is no 'one public realm, one *res publica*, but a diversity of publics and public spaces, things (material infrastructures), words (verbal architectures), and bodily functions. Together, all of these elements make up the social machine of the public realm as the sum of different collective experiences in which individual survival is made possible or, by contrast, is constantly made impossible' (De Boeck 2012b: n.n.).

Following Stengers, in this chapter we have argued for the necessity of re-imagining life and politics at the margins starting from the processes of becoming that lead from assembling sanitation in precarious conditions. This is a cosmopolitical realm that refutes the definition of any universal 'good' or 'best practice'. On the contrary, it provides the means to acknowledge and re-populate the many '*res publica'* of the contemporary urban, focusing on the infrastructures that make life possible, and through which life is constantly re-made. We believe this is a central task to perform in order to re-invent politics today: to reveal the cosmos at play in the infrastructural becoming (un)making life at the margins, in order to re-assemble it in contextually-defined and cosmopolitically-humane ways.

NOTES

1 See http://www.legislation.gov.uk/ukpga/Geo4/5/83/contents (Retrieved February 2015)
2 See: http://www.cityoflondon.gov.uk/services/transport-and-streets/clean-streets/Pages/Public-Toilets.aspx (accessed February 2015)

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