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Citation for published version:
Makina, A & Lawhon, M 2022, 'Permission to appropriate: Waste pickers' 'guidelines' for contesting and consolidating claims to waste on the streets of Tshwane, South Africa', *Geoforum*, vol. 137, pp. 52-60. https://doi.org/10.1016/j.geoforum.2022.10.003

Digital Object Identifier (DOI):
10.1016/j.geoforum.2022.10.003

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Peer reviewed version

Published In:
Geoforum

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Download date: 16. Aug. 2023

Permission to appropriate: Waste pickers' 'guidelines' for contesting and consolidating claims to waste on the streets of Tshwane, South Africa

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1. Introduction

"I no longer work on Fridays," said a research participant in 2021. His reason? Too many fights on the streets over bins. The idea that there might be so many waste pickers, and so little waste to take, challenges the basic definition of waste as something without value. It also provides a practical challenge to those who see value in waste and emphasize the un(der)tapped potential that can be found throughout the 'urban mine' (see European Commission, 2011; GreenCape, 2020).

The framing of waste as an abundant resource makes it easy to see waste as an area for green growth: new economies can be created, generating jobs and wealth. Yet as many critical scholars have shown, waste economies have long been in existence, and waste picking has long been a widely present activity (for seminal work on waste pickers, see Keyes, 1974 for the Philippines; Birkbeck, 1978 for Colombia; de Kock, 1986 for South Africa). Contemporary literature on waste in the global south has often focused on the ways that select items in the waste stream constitute a resource used by the urban poor to earn a living (Millington and Lawhon, 2019; Beall, 1997; Dias, 2016; Medina, 2008; Samson, 2020; Viljoen et al., 2016; Coletto and Bisschop, 2017; Scheinberg and Anschutz, 2006; Mitchell, 2008). Some of this scholarship emphasizes the contribution of informal waste work to the economy through the way it creates economic value (Samson, 2020) and provides insight into the challenges of integrating waste pickers into policy and formal processes (Sekhwela and Samson, 2020; Simatele et al., 2017).

Seeing waste not as abundant, but as a material that many already claim access to, forefronts the politics of collecting discarded materials. Collection can be understood as a process of appropriation: a taking of discrete objects for exclusive use, a taking that excludes others from access to the same material. The interplay between who accesses, and who ought to get access to what materials, and why, are important questions for understanding the politics of waste. While there are some answers to these questions in the literature which we review below, most focus on claims between private companies, the state, and waste pickers, and the ways in which

particular interventions often exclude established waste pickers (Demaria and Schindler, 2016; Shankar and Sahni, 2018). Most seem to seek a fixed answer, based on different understandings of rights.

Conflicts between types of actors are not, however, the only type of conflict that occurs. Less attention has been given to the processes that shape how waste pickers figure out who gets access to materials *within* the broad category of waste pickers, and how potential conflicts are negotiated. For it is often the case that the same waste pickers access the same bins week after week, often without direct confrontations. Why is this so? How is conflict averted or resolved? More broadly, what can we learn about appropriations, and what those who appropriate in the city want, from waste pickers?

This paper seeks to advance conversations in waste studies, as well as wider considerations of urban appropriations, by examining how individual waste pickers gain, maintain and negotiate access to waste in the City of Tshwane, South Africa. We look at an empirical case to understand the ongoing practices and permissions that enable some waste pickers to regularly access waste. We asked those who work in the informal waste sector about who is ultimately able to access this value and how permissions to access waste were framed, demanded, enacted, infringed upon and contested.

In what follows, we first review literature on waste, ultimately pointing towards ongoing ambiguities at the intersection of waste studies and literature on rights, common property, access, and appropriation. Our understanding of informal waste picking is guided by the notion that "informality is neither *unregulated* nor *amoral*. Regulations and codes of conduct are not always transparent or legible to outsiders, and for many years were not acknowledged or given scant attention" (Lawhon et al, 2018:121). In a context in which state regulations exist but have limited impact, we instead suggest that access to waste might be better understood as constituted by *permissions* that are both *agonistic* (meaning that questions of access are always being negotiated) and *transgressive* (breaking some rules, and thus not agreed upon by everyone). This is followed by a description of our empirical context and research methods. We then turn to our data, organized around key guidelines that we found to prevail in waste picking in the research area. These are not uniform and agreed-upon rules, nor are they drawn from state policy, nor do they adhere to ideas of a commons and commoning. Instead, waste picking requires the ongoing negotiation

of access to scarce and differentially valuable materials within the context of these guidelines. Further, respondents see value in both the ongoingness of negotiation and the ambiguities of transgressions, a point that resonates with (but is not entirely the same as) literature showing preferences for autonomy and flexibility. While we do not want to romanticize the struggles encountered by waste pickers, nor suggest that the existing permissions are necessarily just, none of our participants suggested that a clearer regime of legal rights (even a flexible and autonomous one) would be preferable. Our argument thus contributes to practice by providing insights and reflections that not only trouble, but might reshape ongoing debates over waste, its value, and who ultimately ought to be able to access it.

2. From waste to value: Waste picking as claiming a contested resource

As (some) waste is increasingly considered a resource, it is, like other resources, subject to claims and contestation. As LeBillon and Duffy (2018) argue, conflicts over resources can occur for a range of reasons, including unequal distribution and differences over the values of goods and services in question. Conflicts occur when actors seek to act on incompatible claims: they not only hold different beliefs, but act on them. Different tactics are used to resolve conflicts, ranging from persuasion to coercion to violence (LeBillion and Duffy, 2018). As we seek to show below, conflicts rooted in different claims to resources exist for waste are, at times, mitigated through guidelines that reduce direct conflict.

Drawing on wider political ecological thinking, many have shown how waste management is political: decisions on how waste should be managed, by whom, and who ought to benefit from waste are subject to different viewpoints and interests (Myers, 2005; Lawhon, 2012; Moore, 2012; Cornea et al., 2017; De Rosa, 2018; Sseviiri et al., 2022; Thieme, 2010). This political view is particularly important in the context of burgeoning attention to the value embedded in waste. Discourses of green economies often laud the supposed benefits of recycling, and efforts to increase the capture of recyclable material from the waste stream have occurred across the north and south (European Commission, 2011; in South Africa, see PAGE, 2017; GreenCape, 2020). These discourses, often produced by the state and private sector, imply that waste is an un(der)tapped resource, available for the taking by those innovative enough to see and capture its potential. However, in practice, there are typically already established recycling economies that are ignored or underplayed in such narratives (in South Africa, see Millington et al., 2022).

In this context, conflicts over access to waste are increasingly gaining prominence in waste scholarship (Miraftab, 2004; Dinler, 2016; Shankar and Sahni, 2018; Samson et al., 2020; Schindler and Demaria 2020; Cavé, 2014). When the state, for example, grants new permissions through new recycling initiatives, this process should be understood as *reworking access* to materials rather than *creating new economies*. New policies that work to formalize and make waste flows legible often exclude waste pickers. The state asserts its legal right to allocate permissions, and conflicts arise when these clash with claims from those who have long accessed such materials, justifying their activities through their historical claims to waste (Samson, 2009; Samson, 2015). Many waste pickers both reject state narratives about ownership and continue to take waste materials such as recyclables, often increasing friction in these new arrangements (Samson, 2020).

Conflicts between waste pickers at landfills have also been the subject of study, highlighting the social networks and violence involved in claiming and accessing waste. This includes consideration of the presence of gangs (Schenck et al., 2021), and the significance of nationality (Samson, 2019; Thaba, 2012) as well as violence at dumpsites and along the waste value chain (Muindi et al. 2020). Broadly, such work emphasizes the paucity of studies on conflict between waste pickers and we emphasize limited understanding of how conflicts are negotiated.

The studies described above largely focus on conflict at landfills, where both waste and waste work tend to happen in a concentrated area. Landfills are typically enclosed places, even if their borders are at times porous; this shapes the process of granting permissions and exclusions (Schenck et al., 2019), and means that access often happens through group association (Thieme 2010 suggests this is also true for ‘informal’ waste collection). Analyses, then, largely focuses on group differentiation rather than the particular claims made by these groups, or by individuals within these groups. Access at landfills is not given, and there are instances where the state has revoked the access of waste pickers (Samson, 2009; Mudavhanu, 2020). Literature discusses waste pickers' methods for getting into landfills when they are prohibited, including digging under fences (Mudavanhu, 2020).

Street dynamics, however, are somewhat different: there are networks and norms, claims and contestation in both, and our intention here is not to draw a sharp binary between landfill and street. The unenclosed spatiality of most streets, we suggest,

makes it more difficult to make and enforce claims. A study of waste picking on the streets of Cape Town, for example, discusses informal hierarchical structures among street waste pickers, noting that newcomers have to seek permission from established waste pickers and that sometimes, violence is used as a way to secure access to the waste stream (van Heerden, 2015). In Turkey, Dinler (2016) observed that while anyone can engage in waste picking, the terrain is contested and mediated through tribal, kinship, and ethnic affiliation. Similarly, in Cape Town, while there are informal hierarchical structures that mediate access to bins, it is asserted that anybody can be a waste picker (van Heerden, 2015).

For Dinler (2016), because the streets are not enclosed, waste picking takes place across many neighborhoods, thereby new waste pickers do not have to compete in the same areas as established waste pickers. Our findings in Tshwane show that this might have been the case many years ago, but the increase in waste pickers, coupled with changes to waste collection timetables has created a situation whereby tensions on the streets are commonplace. On the streets, even when banned from taking recyclable waste, waste pickers are still able to access that which was reserved for private companies by arriving earlier than the collection truck (Samson et al., 2020). This is because there are no physical barriers to accessing street bins. However, they are subjected to harassment by residents and accused of stealing waste that was meant for recycling companies (Samson et al., 2020).

Despite some attention to conflict amongst waste pickers, the dominant framing in scholarly literature continues to be about conflicts between waste pickers, the state, and private corporations (Demaria and Schindler, 2016; Shankar and Sahni, 2018; Marello and Helwege, 2018). Additionally, there are challenges to accessing waste because of others who also informally salvage the waste stream. Van Heerden (2015), for example, makes note of caretakers of apartments in Cape Town who salvage bins before bringing them onto the streets for collection. We, therefore, note that access occurs at different points (a landfill vs a bin) and is differentiated by interest in different materials (i.e. some want items for reuse, and others seek particular types of recyclable material).

In sum, scholars have examined many cases of waste politics, including increased claims to resources. Studies have shown that waste pickers face increased competition from private organizations, including those awarded contracts by the state. Many have argued for enabling those who have long engaged in the sector to

have access to materials, yet in places where inequality is rife, this may well entrench established interests. More generally, conflicts also exist among those who engage in waste picking. Samson et al. (2020) note that when a separation at source program was implemented, street waste pickers had to employ creative strategies such as befriending people who could save materials for them or sleeping close to where they would be picking waste. This is because what was previously 'freely' available was now limited due to a formal recycling program. Such creative strategies also, we suggest, are increasingly common where there are many competing claims to waste.

Yet while such conflicts have been widely observed, and many claims and counterclaims have been made, there remains scope to deepen our understanding of these conflicts and negotiations, and the justifications for different kinds of access. Who is granted permissions by whom, and how are such permissions are contested and reworked? In the next section, we introduce our theoretical framework and point toward two types of literature that might help us in understanding ongoing dynamics: those that justify particular appropriations and those which explain existing processes. We contrast the two types of literature and use them as a foundation through which to consider the empirical work that follows.

3. Explaining and justifying appropriations

In most places, including South Africa, the state is the legal owner of, and thus has 'rights' to discarded materials that have been put out for collection. The 'producer' (whether a household or business) is the owner of materials and this producer transfers ownership to the state by depositing items into an agreed upon receptacle (Shankar and Sahni, 2018). Where private companies are contracted to collect waste, this ownership is transferred to them. In South Africa, municipal by-laws generally stipulate ownership by the state or by state-sanctioned authorities, as in the City of Tshwane (City of Tshwane Waste by-laws, 2016). Removing waste from a receptacle is therefore illegal. However, both in theory and in practice, such straightforward claims have been contested. Questions about the meaning of ownership of waste have been asked, with Rodić and Wilson (2017) asserting the importance of legal rights as a means of maintaining consistency for planning and investment purposes. Cavé (2014:818), however, asserts that "municipal authorities have the 'responsibility' to cope with waste; they do not *own* waste".

As with any resource flow, there are many different possible justifications for why particular entities ought to be permitted to access waste and its value. In contrast to considering legal rights, others urge recognition of 'rights' of waste pickers to inclusion in decisions over waste. For example, the global network WIEGO provides a series of cases in which informal waste collectors have improved their legal access to waste (WIEGO, undated). There is no explicit explanation for why these actors ought to have these rights, but the webpage begins by asserting the positive impacts of reclaiming, stating, waste pickers "benefit urban health and sanitation, lower municipal costs and fill gaps in municipal services—all contributing to a more sustainable urban environment." Samson (2015:814) provides a more detailed argument, calling changes in waste management that exclude waste pickers an "epistemic injustice" against those who have historically been doing this work. (Such arguments are also found in our data below). Knowledge is seen as important not only for generating value but as a reason to justify certain individuals and organizations as rightful claimants (Samson, 2015). While some have quite reasonably suggested that those who already undertake waste work ought to continue to be permitted to access its value, this is not always agreed upon. Further, as Millington et al. (2022) have shown, waste companies also have long-established claims to waste and have contributed to creating a waste economy in South Africa since its earliest days. For waste, and in South Africa more generally, allocating rights based on who is currently doing work does little to overcome historical injustices.

In this context, there remains ambiguity over who ought to have what rights to waste, and on what premise such claims are made in conditions of relative scarcity. Such insights can be deepened by looking at conflicts and how they are resolved *within* groups of claimants. In other words, how do particular waste pickers assert their claims to a particular bin? When and by whom are permissions granted or contested?

In this section, we work to distinguish between two lines of scholarship on access in urban contexts, drawing from wider critical scholarship on rights and common property. In this context, we both point towards the relevance of frameworks that seek to answer who ought to have access, and consider a more analytical line of argument, by first asking how claims are made and adjudicated.

3.1 A right to the city or common-pool resource?

Critical urban scholars have argued for the recognition of the 'right to the city', yet what this might mean in practice, remains ultimately quite vague (Attoh, 2011). While Lefebvre (1996 [1968]) has discussed the notion of appropriation as a component of the right to the city, such claims are particularly ambiguous when working to understand the allocation of discrete materials in conditions of relative scarcity, such as waste picking in South Africa. In this case, there is a need for more specific iterations of rights regarding waste, focusing on a tighter vision of who ought to be allowed to claim the value from waste. As we noted above, what is an appropriate basis on which to make rights claims, and what do these claims do?

One proposition is to consider waste as a common-pool resource (Cavé, 2012; Cavé, 2014). Waste, then, can be governed through common property institutions. Around the world, waste pickers are organizing and often seeking collective rights and governance (Marello and Helwege, 2018; Navarrete-Hernández and Navarrete-Hernández, 2018). Some kinds of resources are, notably, easier to govern in common than others: the idea of cooperative practices is easier to imagine for enclosed places like landfills than open-ended urban streets. It is difficult to imagine how one might undertake the kinds of shared governance and exclusions necessary to make commons management work (see Ostrom 1990) in the case we examine below. The preference for autonomy by many waste pickers (Schenck et al., 2016; Dawson et al., 2021) makes it challenging to imagine establishing membership, participation, and a shared understanding of the fair distribution of what is collected. Perhaps important to note is that, in the context of South Africa, existing efforts to shift towards cooperatives as a way to share waste resources have had limited success (Godfrey et al., 2017).

Further, even if waste were to be understood and enacted as a regulated commons, some people will be granted permission to access certain amounts and types of discarded materials and recyclables, while others will not. Perhaps most critically, the idea of a commons does not help us to understand the grounds upon which particular claims are made. In the case of waste as a resource, state intervention has been the source of conflict with those who have historically been involved in waste economies (see above). Further, a well-regulated commons (as used in the literature on the governance of the commons, e.g. Ostrom 1990) is not open-access: there are

rules that determine who can do what, and take what, from the commons. Referring to waste as a common-pool resource might help us to understand the production of particular rules and their enforcement, but leaves unanswered the question of why some (and only some) people ought to be included in the commons and have access to appropriate waste from it. Leaving such questions unanswered implies that waste is either bountiful (there is so much it does not need exclusion) or only marginally desirable (waste picking is so terrible that not many want to do it). Yet, what if neither of these assumptions holds? On what basis can claims be made if there are more people willing to work than materials available for access?

3.2 Towards explaining existing appropriations: Agonistic permission to transgress

As with other resources, access to waste is rarely a free-for-all: there are socially negotiated patterns. These patterns are often not static but contested, legitimated, and transgressed by various organizations and individuals (more generally, see Ribot and Peluso, 2003; Lawhon et al., 2018; for waste in African cities, see Millington et al., 2022; Sseviiri et al., 2022). In this context, rather than naming who has access, or answering who ought to be permitted to access waste, we work to explain how we might understand the already ongoing permissions that shape who has access to waste. This understanding, we suggest, helps us to make sense not only of 'who' has access, but why such access exists--and the limits of efforts to reconfigure permissions through legally recognized rights.

Accessing waste requires ongoing social negotiations with others. This access is not straightforwardly based on opportunism (Bayat, 1997), legality, or morality, but there are logics to claims and counter-claims. As Lawhon et al. (2018:125) argue, "claims of entitlement and permission are grounded in diverse and sometimes conflicting epistemologies of privilege and permission". The permissions we discuss below can then be understood as an example of what Lawhon et al. (2018) call agonistically transgressive urban appropriation which provides an alternative mode of understanding appropriations beyond the frameworks of the 'right to the city' or 'quiet encroachment'.

Agonistic transgressions are not well understood by studies of laws and rights, and happen particularly in contexts where the enforcement of hegemonic rules is limited. As we have noted above, the state's waste regulations are not universally accepted nor adhered to. Agonistically transgressive appropriations involve taking in an

incremental, continuous, and fluid manner, and are always in the making (Lawhon et al., 2018). The idea of agonism is drawn from Mouffe (1999) and its analytical utility here is that it highlights the ongoingness of competition and contestation rather than agreed upon collaboration as a way to understand appropriations. While some claims to the waste stream are more durable than others, all are accepted as tenuous and changeable. All are also transgressive of the law and of some social norms, and although this does not always significantly impact practice, changes in policies or political economic structures can rework practices. In sum, this process is understood as dynamic, lacking a single universal vision of what ought to be: neither the state nor capitalist entities nor collectives of workers have been able to create and enforce a singular vision (see more broadly Watson, 2003; Watson, 2009; on conflicting rationalities in African cities).

4. The research context and methods

The study took place in the high-income suburbs of Pretoria East in Region 6 of the City of Tshwane Metropolitan Municipality. We intentionally chose an area we expected to have high value waste, and more waste pickers (cf Dinler, 2006), and where there was not yet a state separation at source recycling program. The site was also selected with considerations for researcher familiarity and safety given that the work was undertaken by a single female researcher (including interacting with participants during multiple parts of the day), and Author A had previously lived and conducted research there. Our framing and questions were informed by a wider review of literature, Author B's experience working in waste research in South Africa, as well as newspaper articles and government documents. This paper draws directly from fieldwork conducted by Author A over six months in 2018, and a series of follow-up visits and interviews in 2021.

According to the 2011 census, Region 6 had a population of 605,554, with 26% of the population being middle-income, 26% being high-income and 48% being low-income (City of Tshwane, n.d). The housing types in the region are mixed; there are Golf estates as well as informal settlements (City of Tshwane, n.d). However, there were companies that offered recycling services to households and office parks, and this was a point of discussion by some participants (we discuss this point in our empirical section below).

A qualitative approach was deemed appropriate in order to enable detailed information from participants to understand the challenges in waste picking. Given that we were asking questions about what lies behind practices, we wanted to give respondents time to reflect and triangulate across different methods. A qualitative study seeks to understand social phenomena and challenges (Creswell, 2007) and allows for the generation of thick descriptions (Geertz, 1973). The data collection process took a reflexive, iteration approach, which involved reviewing and refining the data as new information arose (Srivastava and Hopwood, 2009). Because verbal responses and corresponding observations were often considered simultaneously for any answers provided to a question, iteration helped to ensure both that the research questions were addressed and that information gaps were filled.

Building relationships with participants was important because of the need for repeat engagements over time. Author A worked to foster trust and rapport by 'hanging out', thereby acquainting participants to the regular presence of the researcher (Browne and McBride, 2015). Other ways of building trust and rapport employed by Author A include reciprocity (Emmel et al., 2007), such as sharing information with participants to bridge the researcher-researched gap. Sharing information was also a way to emphasize the collective humanity of the waste pickers and the researcher. This approach was especially useful in the context of research with waste pickers, who regularly face social stigma (see Peres, 2016).

Twenty-three waste pickers (twenty-one male, two female) were interviewed, and this was combined with participant observation. The interviews were between twenty minutes and two hours long. The waste pickers interviewed usually worked alone but sometimes with a friend. Participants were recruited in the research area while they worked, or socialized, and verbal consent for participation was obtained. Author A started engagements speaking in English, but at times in response to Author A's nationality, some switched to chiShona or their native languages during 'hanging out'. For all participants, individual interviews were conducted in English.

Data collection took place in two phases. The first involved conducting semi-structured interviews with waste pickers. This was useful in setting the stage for deeper engagement with the topic and contributing to knowledge on waste picking. The data was captured after the interviews through notes. Quotes and poignant points were typed on a mobile phone because participants were uncomfortable with notes being taken during the interview process even after rapport was established.

Further, simply carrying a notebook and hand-writing notes seemed to unnecessarily separate the researcher from participants. Thematic analysis was used to interpret the data (Braun and Clarke, 2006), meaning that we searched for key stages in the process of making claims, and similarity across different respondents' explanations of how claims are made and contested.

For phase two, the focus was on those who salvaged the same bins each week. In the discussion that follows, we generally refer to waste pickers individually for the purposes of presenting the guidelines broadly, but at times these guidelines apply to pairs of waste pickers. In this second phase, the emphasis was on observation, rather than more general conversation. This phase involved consistently interacting with individuals in two groups of waste pickers: on trash collection days, and at different stages of their processes. These different stages include while they worked, during the walk to sell their recyclables, while they were on a break (socializing and relaxing) after work, or while they sold their recyclables. Author A made note of key practices and asked targeted questions in response to these activities.

Observation was critical to providing insight into actually existing practices (Darlington and Scott, 2002). For waste picking, observation served as a foundation for follow-up questions. Questions about the actions observed were asked, and this was important because participants and researchers do not always reach the same conclusions from what is observed (Brayboy and Deyhle, 2000). Another point was that during fieldwork, there were instances where participants would respond to a question, yet the activities taking place did not map onto responses. For example, waste pickers initially said that generally, waste picking operated on a "first come, first served" basis, and if you arrive at a bin, you could salvage undisturbed (Interview with waste picker #2, 12 June, 2018), yet, during this same interview, the waste picker in question began to take materials from a bin where another picker was already working.

During this phase, walking interviews constituted an important way of gathering data because the participants were often in motion, whether from bin to bin or to and from selling their recyclables. The process of traveling with participants allows researchers to contextualize the information they are gathering (Wegerif, 2019). Walking the routes alone was beneficial too and, as Emmel and Clark (2009) note, this enables researchers to better understand and observe for themselves how participants inhabit and utilize space.

5. Recasting waste picking as (comparatively) ‘good’ work

Our first step in working to explain permissions for waste requires framing waste picking through two perspectives. The first is that waste picking can be best understood as one of numerous income-earning opportunities. Our findings in this work largely accord with the observations from the literature: while waste work is in many ways undesirable, in a context of widespread un(der)employment, successful waste pickers find it to be *comparatively* good work. Although waste pickers are often imagined to be the poorest of the poor, literature shows that there are instances where they earn more than others (Beall, 1997; Coletto and Bisschop, 2017; Scheinberg and Anschutz, 2006).

The second point relates to labor scholarship and politics, where the default comparison is with the idea of full-time unionized waged work (see Dawson et al., 2021). This, however, was never considered a reasonable point of comparison for our participants. Instead, many framed their work as good because it differed from ‘regular’ work. It has been widely established that waste pickers value their independence (Schenck et al., 2016; Dawson et al., 2021). Though not a focus of this paper, some participants reported that they valued the flexibility afforded by waste picking, as well as the ability to have control over their labor (see Lawhon, Makina and Nakyagaba, in press). This is important because some contrasted waste picking with day labor[1] which was characterized as hard to come by. This means that one would likely be unable to pay rent or buy food (Interview with waste picker #10, 20 July, 2018; interview with waste picker #20, 5 September, 2018). Another point pertained to labor agreements being breached; in some instances, the agreed amount would be lowered after the job was completed (see also Mapendere et al., 2019). Waste pickers reported that if they worked, they would be able to appropriate and hold material objects rather than rely on or negotiate wages. These appropriated objects would then be repurposed or sold for money.

[1] Day labor or a piece job is an income-earning opportunity that can be for a day or a few days/weeks. Some day labor opportunities can lead to longer-term contracts. Typically, in the City of Tshwane, men, in particular, congregate at key locations such as road intersections or outside home improvement stores. They will often hold a tool that represents their trade such as a paintbrush to advertise painting, etc. Other types of day labor opportunities include tree felling, clearing gardens and work at construction sites. Women also engage in day labor, but many times, they engage in domestic work such as cleaning or doing laundry.

Waste picking can be a temporary income-generating activity that can be used as a platform to engage in other work (Beall, 1997). Among the research participants, there was some movement from waste picking to other occupations, and while some participants reported that they had hoped to raise capital to engage in other work, they had not done so three years on (Observation and conversation with waste picker #1, 12 September, 2018; interview with waste picker #9, 19 December, 2018; conversations and observations with participants in 2021).

By reframing waste picking as comparatively good work, our intention is not to deny the ongoing prejudices and reasons why many do not engage in waste picking, nor to paper over the physically arduous and often risky work (see Fredericks, 2018). Author A encountered stories of those who explicitly refused to pick waste, even though they struggled to find stable work. As expressed by waste picker #4 (4 July, 2018) waste picking pays well, but afforded him little dignity because he was always dirty, and subject to suspicious stares, even at the shops. Similarly, another waste picker described friends who did not want to be seen "with their heads in a bin" (Interview with waste picker #1, 12 June, 2018). Still, another found it ironic that he often had enough money to buy food, yet those who ridiculed him for engaging in waste work found it difficult to obtain other means of earning a living (Interview with waste picker #20, 5 September, 2018).

In sum, the framing argument we work to build here is an in-between one, one that recognizes that waste work is conceptualized by many who do it not as a 'last resort' but as a better option than many others. Such framing matters for what follows because understanding waste picking as at least comparatively desirable helps to explain what is at stake in ongoing contestations, including the potential for quite significant gains through successful claims.

6. Preventing and managing conflict in waste picking

We now explain the process of making and contesting claims to waste among waste pickers on the streets of Pretoria East. We outline and discuss the types of claims made and the ways in which various individuals make these claims. We provide insight into the strategies that individuals apply to maintain regular access, including desired behavior and a set of guidelines expected of others. We write these guidelines mindful that there is no expectation among research participants that they

would ultimately form the foundation for a final, conflict-free answer to the question of who can access materials: instead, they are agonistic, ongoing and always to be negotiated, requiring ongoing action to ensure access. Further, these guidelines all exist within a wider legal context in which all appropriations are a legal transgression and are understood to transgress many social rules about dignified and appropriate work.

6.1 Not all waste is accessible

Gated communities, as well as stand-alone houses, are a common feature in the research area. For some of these gated communities, the bins for the entire area are brought out into the streets to be emptied. Waste pickers generally preferred to pick from such sets rather than from individual bins outside stand-alone houses. Employees of the complex (or residents) usually place bins outside the gate on the day of waste collection, or during the evening or afternoon before. Waste pickers used the term 'rigged bins' to describe situations where bins were already searched (Interview with waste picker #11, 22 August, 2018; interview with waste picker #9, 15 August, 2018). Waste pickers remarked that employees of the complex such as gardeners and domestic workers would take some of the valuable discarded materials such as clothes, and electronics, but leave the recyclables. Still, waste pickers tended to leave cardboard, because of the relatively low prices (Between ZAR 60c-ZAR 80c in 2018, interview with waste picker #11, 25 July, 2018; interview with waste picker #9, 15 August, 2018). Additionally, cardboard is bulky, thereby taking up plenty of space in their sacks, and it is heavy; however, some waste pickers found that if there was plenty of it, one could earn a decent amount of money (Interview with waste picker #4, 4 July, 2018). Some waste pickers would use two sacks, one for cardboard, and another for all other materials as a strategy to overcome its bulkiness (Observation and interview with waste picker #6, 26 Sept 2018; observation and interview with waste picker #9, 10 October 2018).

Many office parks are gated and manned by security personnel so waste pickers would not be able to access the waste stream. Additionally, the bins and receptacles outside office parks sometimes did not contain all recyclables. Those who work in office parks such as janitors might take recyclables before (or as soon as) these are thrown out, therefore the items did not make it to a waste stream accessible to waste pickers (Conversation and observation with a janitor outside office park, 27 June, 2018; interview with waste picker #4, 12 July, 2018). Even at a car wash in the research area, an observation was made that instead of throwing away the cans and

bottles, an employee would stockpile these recyclables to sell to a buyback center (Conversation and observation with a worker at a car wash, 27 June, 2018). These encounters showed that many are involved in recycling activities, posing competition for waste pickers. While this has resonance in other cities such as Cape Town (van Heerden, 2015), the implication on the livelihoods of waste pickers is not given sufficient attention. There is, thus, an understanding among waste pickers that some waste is therefore not accessible or available for taking, but—as we detail below—they also deploy strategies through which to access such materials through negotiation and building relationships.

6.2 Cooperation as a way to maintain access

Waste pickers are often in competition with each other, especially for the lucrative items in the waste streams. Some waste pickers collected all recyclables and valuable discarded materials while others were more selective, only taking valuable discarded materials such as electronics and clothes. In some situations, competing waste pickers would pick from the same set of bins, and this was permissible if one was collecting all materials and the other collecting one or two types of materials. This was because there would likely be sufficient materials for all. However, for this to work, it would require the waste pickers involved to agree with the arrangement. Other ways of working the same set of bins involves dividing the bins so that each waste picker is allotted a specific number from the set (Group interview with waste pickers #12, #13, #14, and observations, 27 July, 2018). This occurred if multiple claimants preferred to cooperate rather than fight since conflict could prevent all of them from working there.

When waste pickers ‘camp’ (stake out) while waiting for bins to be brought out, being able to search first is important. In one instance, while two waste pickers (waste picker #18 and a friend) slept next to a set of bins, another picker took advantage of this slumber and began to work. When the sleepers awoke, they did not pick alongside him, even though he was not taking all materials (Observation with waste picker #2, 7 August, 2018). For bins with a regular claimant, or someone already at work, the waste picker would have to agree to have another encroach on their ‘territory’. Some permitted this under specific circumstances such as allowing the encroacher to only take certain items. For example, an encroacher could sort some of the bins, and in return for this labor, take aluminum cans and/or clothing (Interview with waste picker #2, 20 June, interview with waste picker #9, 19 September 2018; observation 17 October, 2018).

Cooperation also occurred as a way to access bins as they arrived on the street. Some waste pickers would assist employees or residents in taking out bins for the advantage of picking first, and this was a common strategy, particularly for complexes where there could be five or more bins (Interview with waste picker #2, 13 June, 2018; observations, 13 June, 2018). This was one way of enabling access for an individual waste picker, and ensuring that no one else accessed the bin first.

6.3 Managing presence and absence when accessing waste

The earnings of waste pickers are characterized as precarious (Viljoen et al., 2016) and entry into the sector is presented as easy due to a lack of barriers to entry (Schenck et al., 2016). However, this ease of entry did not prevent some waste pickers from creating barriers, including engaging in violence to ensure sole access to bins or to deter others from encroaching on their territory. Additionally, participants agreed that to protect their territory, waste pickers would have to be present consistently, because other waste pickers would utilize the absence of regular claimants to their advantage. In short, being absent might result in the loss of one's claim.

For example, after an absence of two months, a waste picker found his regular territory had new claimants who had established themselves (Interview with waste picker #17, 16 August, 2018). The former claimant resorted to fighting, subsequently regaining his claim. He had territory in two parts of the city and in one of these areas, contenders wanted to displace him. He expressed willingness to fight them off, and another waste picker agreed to assist (Interviews with waste pickers #10, #17, 16 August, 2018). In the research area, there was a waste picker who was well-known for fighting for his regular place. He reported in an interview that one morning, he woke up late and was further delayed by the opportunity to salvage a set of bins. As a result, his usual set of bins had already been searched. He noted, "those guys can see I am not there, so someone has already taken my place...the people know me and know that if I am picking, (they must) go elsewhere" (Interview with waste picker #4, 4 July, 2018). It was commonly known among those who worked in the area that he had access to a lucrative waste stream, and through this encounter, clarified that he created and maintained a barrier to ensure exclusive access. This also shows that there are types of appropriations of waste that are in line with quiet encroachment in that they are "small, incremental and peripheral" (Lawhon et al., 2018:118) but also guided by norms beyond simple opportunism. For waste picker #4, he worked to

increase the quantity of recyclables for the day, however small. Those who took advantage of his absence would do the same, even if it was temporary thereby demonstrating the ephemeral nature of some appropriations.

The practices identified above can be thought of as guidelines. If someone is a regular claimant, they expect encroachers to leave when they arrive. However, some waste pickers disagreed. According to them, only the residents own bins and therefore those arriving first should be allowed to work undisturbed (Interview with waste picker #11 and a friend, 22 August, 2018). These different understandings of how things should work troubles our understanding of ownership, access, and rights to waste. At least twice, in 2018, claimants returned to their territory after an absence of a few weeks and in both cases, the initial claimants regained their territory after a physical fight with the encroachers (Interview with waste picker #17, 16 August, 2018; interview with waste picker #20, 17 October, 2018). In one of the instances, the regular claimant had asked a friend to work in his absence, but the friend did not do that, so others took advantage of this absence (Interview with waste picker #17, 16 August, 2018). In these examples, the expectation of first come and first search was suspended because the regular claimant re-established their claim. This section demonstrates the complexity of the rules and guidelines, and is in line with Lawhon et al. (2018) who assert that urban appropriators do not follow one set of rules, rather, the intention is to establish order and processes that would assist in furthering their agendas.

One way waste pickers managed conflict was by looking for different areas to work, where they perceived less conflict (Interview with waste picker #19, 5 September, 2018). Another option was not working on days when they perceived heightened levels of conflict (Conversation with waste picker #4, 2021). Broadly speaking, these appropriations took place within a wider context of considering the risks of transgressions, and what was possible within the confines of the law (Lawhon et al., 2018). For example, in 2018, it was explained that if you fought over a bin, competing waste pickers could attack you at a later stage, sometimes causing physical harm (Interview with waste picker #11, 22 August, 2018). This is important to highlight because waste pickers from different places or working in other suburbs did not operate in the same manner, and thus what is acceptable in one area, might not be

in another. In 2021, one research participant from 2018[2] complained about violence on the streets and reported that some waste pickers would declare a road or street as theirs, barring those who worked there. If challenged, physical violence could erupt. Fighting was not desirable because of the potential to sustain an injury during the process or retaliation afterwards.

6.4 Securing materials from other actors through disruption

Workers from waste management companies (here we refer to these workers as waste collectors, in contrast to waste pickers) sometimes compete with waste pickers for recyclables (Marello and Helwege, 2018). For expediency, some waste pickers would remove recyclables from bins and leave them on the ground, then after searching all the bins, fill their sacks (Observation, 15 August, 2018, observation 17 October, 2018). Research participants agreed that under these circumstances, waste pickers would not take another's recyclables. However, some waste collectors would take these items during the collection process to keep for themselves (Interview with waste picker #11, 22 August, 2018, interview with waste picker #4, 12 July 2018). They would do this by placing the sorted waste (recyclables and valuable discarded materials) in bags at the side of the truck, rather than in the truck with trash (Observation, 15 August, 2018; 17 October, 2018).

Waste pickers would attempt to secure their recyclables before the waste collectors took them, but if this failed, alternative strategies were explored. One strategy involved disrupting traffic when waste collectors took their recyclables (Interview with waste picker #9, 15 August, 2018; interview with waste picker #11, 22 August, 2018). This action, which would prompt road users to intervene, was not favorable to waste collectors: according to our research participants, the general public seemed to be on the side of the waste pickers in agreeing that waste collectors should not take materials for themselves. Conflict was therefore between waste pickers and others who did not have a legal right to the waste. Conflict resolution took place informally, through strategies and tactics.

6.5 Taking from companies is allowed, just don't get caught!

The entry of new organizations sometimes means an additional layer of conflict or contestation. Waste management companies that obtain legal rights to some

[2] Author A, who lives in Tshwane, met the participant while engaging in some errands. When asked how he was faring, he responded as mentioned.

recyclables serve as an example of this. Waste pickers reported that this posed a threat to their livelihoods. The recyclables were placed in clear bags outside residences, in plain view of the waste pickers. Recycling by waste management companies limits what is available for waste pickers, who reported that they took these items, even though they knew that legally they were not meant to. If the items for the companies were available on waste collection day, these were considered a bonus. However, one participant asserted that sometimes the recyclables were sorted and placed outside by residents to assist waste pickers (Interview with waste picker #20, 17 October, 2018). Nevertheless, a prevailing norm was that if recyclables for a company were placed for collection, waste pickers could take them, but they had to ensure they were not caught as this could result in receiving a beating from security. This demonstrates a pertinent point about the regulatory abilities of capital (and even the state), which in many parts of the global South, are limited and even resisted (Lawhon et al.,2018).

Changes and interventions in waste management systems that sometimes make things more modern and efficient, impact waste pickers in ways that may be unexpected and unanticipated by outsiders. For example, changes to the waste collection timetable impact waste pickers. For one participant, waste collection for two adjacent neighborhoods used to take place on the same day and this meant that waste pickers operated over a large area and were less likely to encounter one another and fight because more bins were available. However, there was a change to the schedule whereby collection took place on different days. As a result, waste pickers worked in a comparatively smaller area each day, meaning greater competition. Additionally, those who worked on Tuesdays could (and sometimes would) also encounter the same waste pickers (competitors) on Wednesday (Interview with waste picker #4, 12 July, 2018). These are spatial dynamics that need further examination when investigating informality

7. Conclusion

(Some) waste is increasingly understood to hold value, making contestations over who can access waste increasingly significant. Scholars have repeatedly demonstrated conflicts over waste, and assertions have been made by scholars, activists and states over who ought to have rights to materials. Yet there continues to be some uncertainty over how we ought to understand these claims, and how well they accord with already-existing practices that negotiate access to waste. In this

context, we have sought to analyze how waste pickers in Tshwane explain who gets waste, and why. To some extent, our findings agree with assertions that those who already do the work ought to be able to continue doing this work. Yet while there is a general code of conduct shared among participants, there was not a desire to turn this into fixed rules that must be abided by. Instead, ongoing uncertainty, openness, negotiation and serendipity were seen as part of how waste picking ought to operate.

In this context, we suggest that our respondents see access to waste—the ability to appropriate it—as an agonistic process that generates permissions and is therefore fraught with contestation and conflict. There are established practices shaped by guidelines, which if understood and adhered to might create conditions that loosely accord with a commons. This might create less contentious working conditions, but also result in the consolidation of claims and increase barriers to entry for outsiders. However, the guidelines are not uniformly agreed upon, and what is 'logical' and 'reasonable' differs and depends on the waste picker and the circumstances. For instance, there is a difference of opinion as to whether the waste picker who arrives and picks first or the waste picker who regularly picks a set of bins ought to have access. To be successful in waste picking, one has to be able to enforce claims to items in the waste stream, and also find alternatives to continue to appropriate if unable to enforce particular claims. The ongoing presence and threat of physical confrontations continues to shape waste picking practices; as we noted in our introduction, one research participant stopped working on Fridays due to conflict and contestation. Transgression of the law was not seen as particularly significant, and transgression of broader norms and particular guidelines was seen as part of what enabled flexibility and fluidity, preventing the consolidation of claims.

The expectations associated with the guidelines we describe above trouble straightforward understandings of rights, ownership and access to waste, and bins. In this paper, we showed the different understandings of what enables permission to access waste to avoid appropriation conflicts. Reactions to infractions and broken expectations were different and not managed in the same manner, depending on the risk that the waste picker was willing to take. Encroachers were sometimes accommodated due to the beneficial nature of such cooperation since fighting would result in everyone being chased away. The limited ability to truly enclose the streets also contributes to ongoing dynamism: without excluding people, it is difficult to imagine how to actively prevent new waste pickers from appropriating.

More broadly, we suggest that viewing waste picking as an agonistically transgressive process that includes establishing and contesting permissions exposes processes that have thus far been largely overlooked in waste scholarship and wider studies of urban appropriation. Waste picking can help us to understand the broader process of how some people gain and negotiate permission to appropriate in urban spaces. Permissions granted by the state rarely mattered in our case; in fact, both the state and the capitalist enterprises work against the permissions described above. The uncertainties were often seen as enabling openings, openings that would not be possible in a more consolidated and enforced version of property rights. These openings enable the claiming and negotiating that are fundamental to being able to make a livelihood from waste on the streets of Tshwane.

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