Debilitating Domestic Duties: Precariousness of Female Waste Pickers in Indonesia

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ABSTRACT

Gender differences in the work of female and male waste pickers have often been overlooked. In this article we want to show that for waste pickers in Indonesia there are remarkable similarities between female and male waste pickers. At first sight, there is practically no division of tasks between female and male waste pickers. Nevertheless, the domestic chores of women, gendered differences in stigmatisation, and possible societal expectations about the compatibility of waste picking with femininity do seriously hamper their work as waste pickers. A better understanding of how waste picking is done is important because the activity is one step in recycle chains in the Global South. The article also warns against the generic use of the term 'waste picker' without carefully distinguishing between their different roles in the municipal waste management assemblage.

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INTRODUCTION

Two married waste pickers were using their sharp knives to cut steel zippers and buckles from trousers and metal clasps from ladies' handbags to sell the material retrieved to a junk dealer. The dumping of waste at the landfill of Surabaya by municipal trucks had been temporarily halted in order not to disturb the Under-19 Asian Cup being played in the nearby football stadium (17–29 July 2024) with heavy traffic or bad smells. The enforced hiatus in their search for recyclables allowed them to work at leisure on the zippers and knots and they also had plenty of time for an interview. They explained they had been working here together for six years. Her mother was looking after their only child, to allow them to do so. Discussing how much they collect and earn, they underlined that the yield was their *joint* effort, to avoid any misunderstanding on my side in this respect. Occasionally one of them worked alone, but then they were far less productive and took more frequent breaks, because '*harus semangat kerja*' (you must be enthusiastic about work), she explained. As a rule, they arrived at and left the landfill at the same time, on one motorcycle. They seemed a perfect, very balanced husband-and-wife team, who also enjoyed each other's company. But then, at the end of our conversation, she let slip that every morning she gets up before him to cook a warm breakfast and lunch for them both, while he continues to sleep. My suggestion that he could cook as well was rejected as a funny, totally unimaginable thought.

There has recently been an upsurge of studies on waste pickers like the above couple, because of the recognition of their crucial role in the transfer to a circular economy in the Global South (Gall et al. 2020, Gutberlet and Carenzo 2020, Velis 2017), with indirect positive effects on mitigating climate change (Ford et al. 2022, Gutberlet 2023). Whereas the first studies, starting in the 1980s, concentrated on scavenging as an informal sector activity offering work and income opportunities especially for rural-urban migrants, current studies focus on waste picking as the beginning of recycle chains. The opportunity to scavenge is premised on wasteful 'high-metabolism infrastructures' and the very idea of disposability of goods, and is therefore ultimately not sustainable (Liebman 2023). While, of course, refusal and reduction of consumption or repair and repurposing of products are more fundamental contributions to a circular economy – and the bigger flow of construction waste is handled outside waste pickers – recycling consumer waste helps to reduce the environmental impact of economies as they currently are. A thorough understanding of 'how waste picking actually works' is important to both designing policies to try and close the resource loop and creating new work opportunities. Waste pickers play an essential role in making the economies in the Global South more sustainable.

Classical studies of waste pickers in the Global South usually speak of 'waste pickers' or 'scavengers' in general, without going into their social background or even mentioning the gender of the workers.[1] Studies that have analysed the social background of waste pickers have foregrounded class, caste (in India), 'race' and religion, for instance, as in the case of the famous *zabaleen* of Cairo, a Christian minority operating in a predominantly Muslim environment (Dias 2016, Gutberlet and Carenzo 2020, Fahmi and Sutton 2006, Kasinja and Tilley 2018, Medina 1997, Medina 2010, du Roy 2022). The gendered nature of waste picking is ignored, even in otherwise fine studies that focus on social inequalities and 'waste intimacies' (Butt 2020), effects of toxic waste on the bodies of waste pickers (Binion and Gutberlet 2012), waste picking as a 'form of living' (Millar 2018), and agenda setting editorials (Velis 2017). Our article assumes that waste picking is at base a gendered activity and ignoring this fact has thus far often obscured, among other things, unequal income opportunities, the double burden of reproductive work and stigmatisation of female and male workers.

Indonesia is one of the countries where waste picking is an important economic activity, but religion, caste and ethnicity hardly seem to touch the status of waste pickers. It is the work itself that determines the lower status of the waste picker, but this status does not intersect with religion, caste and ethnicity.

When we began our research on waste pickers in Indonesia, in the city of Surabaya (Freek Colombijn in 2009, Freek from here on), gender did not seem to play a role. In fact, at first sight, the division of tasks between genders was remarkably similar. Both men and women collect waste from residential areas and sort it out, either at temporary collection points (waste transfer stations) or the landfill. Women and men regularly work in husband-and-wife teams. While female and male waste pickers are all the victims of social opprobrium and forms of stigmatisation, there does not seem to be a major difference. However, this observed gender equality was questioned when Rachma Lutfiny Putri (Putri from here on) began her research among waste pickers in Kampung Pendar (a pseudonym), a kampong in central Jakarta, in 2021. At the time she worked for Forum Islam Progresif, a collective combining Islam with social justice advocacy. Although this study focused on religious expression among the urban poor, she was struck by the precariousness of the

1 In this article we treat gender as a binary category, because the waste pickers we have met have performed their gender roles in a traditional manner as either females or males; how gender-nonconforming persons might navigate a waste-picking system premised on a binary division of gendered tasks is a topic that warrants a separate discussion.

waste pickers, noticing small but significant differences between females and males in this respect.

The aim of this article is to try to explain the paradox between what is a real similarity in work done by female and male waste pickers and a difference around precariousness. Both the remarkable similarity between the genders and the subtle differences beg an explanation. Understanding the underlying mechanism of waste picking is important to improve the chances of attaining both a circular economy and gender equality.

METHODOLOGY

Freek has done in total 29 weeks of fieldwork on waste management, principally in the city of Surabaya but also in Semarang, spread out over the years 2009–2024. He has followed the recycle chain of household waste, from the moment it was placed on the street; following the waste, he inevitably often met waste pickers (as well as waste dealers, civil servants, factory owners and civil society). With the help of topic lists, he observed waste pickers at work and held qualitative interviews with them, either at the collection sites or nearby food stalls. He met waste pickers at six temporary collection points or transfer stations TPS (Tempat Pembuangan Sampah Sementara, literally Temporary Waste Disposal Sites) in the city and at the terminal landfill of Surabaya.

Putri first talked to waste pickers in Kampung Pendar in 2021 and, noticing the gendered differences in precariousness, decided to return for three months of fieldwork in Kampung Pendar in 2023, focusing fully on the gender inequality and differences among the waste pickers. She participated in the lives of the waste pickers and accompanied the women on their daily journeys (but without sorting out waste herself), conducted qualitative interviews using topic lists and had many casual talks. She preferred informal discussions with the waste pickers in their free time because they are busy with work all day, as well as participating in events with waste pickers such as a mini concert (*dangdutan*) and a Koran recitation.

While Freek was struck by the similarities in work of females and males, Putri has emphasised the social differences. It was precisely this discrepancy in views that stimulated Putri to return to Kampung Pendar in 2023 to probe the gender differences. In writing this article, we have hovered between a focus on the gender differences (which had triggered our own discussions but was seemingly self-evident to readers of a draft version) and relative gender equality (which Freek at least had initially accepted but begs an explanation from the perspective of gender studies). In the end, we decided to analyse both the similarities and differences between the work of female and male waste pickers.

The researchers have obviously different positionalities. Putri is an Indonesian woman and Freek a Dutch male. While Freek is proficient in Indonesian, he at times has had difficulty following the Indonesian language mixed with Javanese words that some of his interlocutors speak. As a native speaker of Indonesian, Putri had no problems understanding the Jakarta dialect and, after spending three months at one spot, established excellent rapport. Nevertheless, Freek's interlocutors usually showed no surprise about him approaching the waste pickers and appreciated his sincere interest, gainsaying the social opprobrium that waste pickers regularly receive from people identified as middle class. Arguably the biggest difference between us is Putri's social justice advocacy background, which made her more sensitive to the precariousness of female waste pickers.

WASTE PICKING AS A GENDERED ACTIVITY

In the introduction, we stated that most studies of waste pickers in the Global South have ignored gender in their analyses, but there are important exceptions. Michael DiGregario (1994: 75–78) reports a division of tasks between females and males, both waste pickers and waste dealers, working in the informal waste management sector in Vietnam, evidenced by the different tools they use in their waste picking activities. Jo Beall (1997) ascribes the relative lack of mobility of female waste pickers in Pakistan, compared to that of female waste pickers in India (and males in Pakistan), to purdah, the Muslim prescription requiring women to stay out of sight of males who are not kin. Although Islam is also the majority religion in Indonesia, such strict purdah is not enforced on Indonesian waste pickers.

In a rich study of waste picking women in India, Marijk Huysman (1994) shows how men and women do the same work, but women perform it differently because of the reproductive tasks that fall on them. Because of their domestic chores, they have simply less time to collect waste, and because of the limited hours, especially when they are breastfeeding a child, they are also spatially 'forced to collect materials in the immediate neighbourhood in which they live, where competition can be high, and less waste can be found' (Huysman 1994: 161). Moreover, because of their limited mobility, they have less choice of waste dealers and can be dependent on a dealer nearby with consequences for their income. Not only household chores, but also social norms restrict their waste picking activities, as it is considered indecent for Indian women to work outside their homes alone in the evening and at night.

In an equally insightful study of waste picking in South Africa, Linda Musariri and Eileen Moyer conclude that men and women, just as in India

and Indonesia, can be found waste picking, but do the work differently. Partly referring to the work of Manape Shogole, Musariri and Moyer (2022: 54) show 'the distinction in mobility patterns: women are, for example, usually assigned short distances in order to enable them to take care of children, while men end up with longer routes as well as the night and early morning trips'. Hakimu Sseviiri et al. (2022) found that in Uganda males try to keep the most valuable waste like metals for themselves and will thrust women away forcibly if the latter try to access the precious recyclables at the landfill.

Unfortunately, the existing literature on waste picking in Indonesia (Colombijn and Morbidini 2017, Fikri 2020: 63–104, Kawalo, Ngangi and Loho 2016, MacRae and Rodic 2015, Prasetijowati et al. 2018, Versnel 1986) gives little insight into gender differences. The various articles written by Shunsuke Sasaki and Tetsuya Araki (with various co-authors), based on survey data collected at the landfill Bantar Gebang in Jakarta, mention different numbers of female and male waste pickers at the landfill, but do not go into the different ways females and males perform and experience their work. They give income data for households, but do not distinguish between incomes of males and females (see, for example, Sasaki and Araki 2014, Sasaki et al. 2014, Sasaki, Choi and Watanabe 2022). Their tables, mentioning housewives as co-workers, imply that women can at most join their husbands, and do not work independently, but they do not explain the implied gender difference. Likewise, Darni Suhertina (2018) assumes that the work of female waste pickers in the city of Pekanbaru is undertaken simply to support their husbands. USAID has designed programmes to advance gender equality in waste picking, also in Indonesia, but does not offer data on the implied gender inequality that it is trying to solve.[2]

Two other studies give more insight into gender differences in Indonesia. In a seminal study on waste picking conducted in the city of Bandung, Daniel Sicular remarks that some waste pickers work with their spouses, in which case the wife supports the fulltime working husband part time, among other tasks by sorting and packing the waste. If women 'scavenge', they do this only during daytime and not like men also at night 'to protect their reputations' (Sicular 1991: 144, 147). In a hitherto somewhat overlooked study of waste pickers in the city of Denpasar, Bambang Dharwiyanto Putro points out the double burden of domestic work and work in the public sphere of women. The women have less time for waste picking because of the domestic work and have to go out on the street late to collect what remains of the waste (Putro 2020: 545). The findings of Sicular and Putro align with our own findings, to which we now turn.

THE SIMILARITIES BETWEEN FEMALE AND MALE WASTE PICKERS AT WORK IN INDONESIA

The question of to what extent waste picking in Indonesia is a gendered activity must be answered by empirical study, but in this section we first discuss other forms of work to show that waste picking is at least *relatively* gender-neutral. There has been a long, ongoing debate on gender differences at work and at home in Indonesia. Compared to other parts of Asia, women in Southeast Asia, including Indonesia, enjoy an academic image of relative economic independence (Ong and Peletz 1995). The New Order regime of Indonesia (1966–1998) promoted the double role of women as state ideology, but clearly found the reproductive roles as wives and mothers more important than productive work. If women worked in salaried positions, they were expected to be docile and submissive and many of the New Order assumptions remain influential today (Ford and Parker 2008). This state promotion of women as mothers and wives, called '*ibuism*', includes the moral obligation to ensure a clean environment; women, consequently, are held responsible for managing household waste, especially community-based waste management initiatives (Pakasi et al. 2024, Shinta et al. 2023, Asteria and Herdiansyah 2020). The Javanese, the largest ethnic group in Indonesia, have the old saying '*sumur, dapur, kasur*' (well, kitchen, mattress), or washing, cooking, being a sexual partner, to encapsulate the position of women (Fikri 2020: 108). Over the years, however, this saying is becoming outdated and it no longer sums up the current conditions of Indonesian women. More women in Indonesia now work outside their homes, but still bear a double burden (*beban ganda*). Taking data from a national survey, Atnike Sigiro, Alfindra Primaldhi and Bagus Takwin (2018) make a case that domestic work or care is important and therefore should be acknowledged and remunerated by the Indonesian people and government.

Gender differences are clear in important sectors of the Indonesian economy. In the primary sector, since time immemorial both women and men have worked in the important wet-rice cultivation, but with clearly delineated tasks (Palte and Tempelman 1981: 106–16, Partasasmita et al. 2019). Because of mechanisation, jobs in rice cultivation have been lost, but women have been more affected than men, because their tasks especially were taken over by mechanisation. The rural sociologist Pujiwati Sajogyo (1986) asks why there was a decline in women's work in agriculture. She highlights that there is a continuing perception of work

2 CCBO [Clean cities, blue oceans] in Indonesia: https://urban-links.org/ccbo-in-indonesia/; and Six ways USAID is advancing gender equality in the waste sector: https://urban-links.org (accessed 21 Jan. 2024).

as a productive activity with direct economic value, effectively mislabelling social reproductive activities as 'not real work'. Evelyn Blackwood makes a similar argument in her observation of Minangkabau female rice farmers in West Sumatra, despite the Minangkabau being an ethnic group famed for the strong position of its women. Strikingly, the female Minangkabau farmers themselves felt that only career women had 'real jobs' and that they did not (Blackwood 2008). On tea plantations in West Java, employers erroneously assumed males to be the sole breadwinner and consequently denied female labourers permanent jobs (Grijns 1986). Kuntala Lahiri-Dutt and Robinson (2008) discuss the lives of female miners in a coal-mine. The challenges facing women workers are many, including the stigma they are unsuited to doing physically hard, dangerous work like men, and the societal expectation is that they simply accept their double burden and the misogynist prejudices of their managers.

Women have also found their way into factories, where they often constitute the main workforce, controlled by older male supervisors. Their alleged diligence, concentration and 'nimble fingers' make them ideal workers in light manufacturing industries. The patriarchy and the norm to respect elderly people keep these young women in a subordinated position (Mather 1983, Rigg 1997: 216–23, Saptari 1995, Warouw 2008, Wolf 1993). Recent studies of global supply chains confirm continued gender segregation in Indonesian factories with the women, especially those on low wages, on temporary contracts and more precarious work arrangements than men (Osterreich 2020). Women closer to the top of the social hierarchy can also face precarious conditions. Zulfa Sakhiyya et al. (2023) have noted the double burden borne by female university staff, aggravated during the Covid-19 pandemic; the multiple burden for female academics resulted in a widened productivity gap between female and male scholars.

So, women work in agriculture, both on family farms and as labourers, in factories, and in professional jobs. However, these women are also held much more responsible for social reproduction than males and are expected to accept this double burden. Moreover, while females and males work in all the economic activities discussed so far, they also always have different tasks, with the males surveying the female labourers and females considered to be less suited to heavy work. It is against this standard that waste picking seems to have a remarkable gender equality.

Before we go into the apparent equality between female and male waste pickers, there is one general point we need to make. Just as many studies of waste pickers have passed over gender differences, they also often omit an exact description of the work involved and consequently the academic debate lumps quite different activities together under the heading of 'waste picking'. Distinguishing between all work often described as 'waste picking' warrants a separate article, but for now suffice to state that waste-picking work is organised differently in Jakarta and Surabaya. Indonesian cities have a lot of freedom in how they organise municipal waste management (Pakasi et al. 2024). Despite their differences, one similarity is that both cities currently have waste management under control. The situation in Jakarta and Surabaya contrasts favourably with the past (for instance, when a new waste incinerator in Surabaya did not function properly) or with other cities like Yogyakarta where the landfill is full and the municipality has effectively left waste management to the citizens (who often resort to burning their waste). Neither city government envisages a role for waste pickers.

The Cleansing Department of Jakarta uses municipal sanitation workers to collect the waste that is placed out on the street by the residents and load it into small trucks.[3] They work in a team of four sanitation workers, including the truck driver and a controller who mainly oversees the loading process but occasionally lends his fellow workers a hand. The trucks transport the waste to one of the temporary collection points, TPS, in Jakarta. There is also a second group of sanitation workers who sweep the neighbourhoods. Both groups of sanitation workers wear standard uniforms: an orange shirt and trousers, safety boots, gloves and caps. Because of their conspicuous clothing, they are popularly known as the *Pasukan Oranye* (the Orange Squad). The waste pickers (*pemulung*) have the opportunity to collect waste between the time residents have placed it outdoors and when the Pasukan Oranye collects the waste. There are also waste pickers at the landfill, but we have not done research there and omitted this latter group of waste pickers from our analysis.

In Surabaya, the collection of waste is done in a public-private partnership. Neighbourhood associations (*rukun tetangga* or *rukun warga*) are made responsible for hiring waste collectors who collect the waste in carts and deposit it at a TPS. These waste collectors are usually called *tukang sampah* (literally 'waste workers') and not *pemulung*. The practical role of the municipal Cleansing Department is limited to transporting the waste from the TPS to the landfill (run by a private company). At the TPS, the persons hired by the neighbourhood associations sort out recyclables from the waste before throwing the residual waste into skips that are transported to the landfill by the municipality. There are also waste pickers (*pemulung*) active on the landfill in Surabaya. The waste pickers at the landfills usually earn less than the waste pickers operating at the transfer stations, among other reasons, but not solely, because the richest waste has already been

3 At least, this is how the waste is handled in Kampung Pendar and surrounding area. There are more systems both in Jakarta (Pasang, Moore and Sitorus 2007: 1926–27) and Surabaya than we can describe here.

sorted out. Moreover, there are *pemulung* who roam the streets and only pick up what can be sold, like the waste pickers in Kampung Pendar, but, in number of people and volume of waste, their work is less important.

Contrary to what Michael DiGregario (1994) observed in Vietnam, the female and male waste pickers in Indonesia use the same equipment. To operate, a waste picker from Kampung Pendar needs at least one piece of equipment: a sack in which to deposit the garbage while walking around the city. However, most waste pickers in Kampung Pendar and all working from a TPS in Surabaya have a cart that can be pushed or pulled and which makes garbage collecting more efficient. A couple from Kampung Pendar stated that they had to buy or build a cart, costing around IDR 500,000 (approx. 30 Euro). The last few years, it has become common to use motorcycles to pull the carts. In contrast to waste picking on the street, a cart is useless on the sponge-like substance of rotting waste at the landfill; there, all waste pickers, female and male, go around with a large basket or sack on their hip and a *gancu*, an iron hook to search among and pick up waste.

Female and male waste pickers also use similar protective clothing, especially at the landfill where waste pickers are literally standing in the waste and work fully exposed to sun or rain. They also need protective wear to protect their skin from the waste. At the landfill the waste pickers wear baggy trousers, shirts with long sleeves (for instance, from sports clubs or shirts given away free by politicians in election campaigns), rubber boots, and often woollen gloves. Some women wear a smock or combine a shirt with a smock. Both females and males wrap a cloth around their heads and necks to protect the skin from the sun, but the women tie this cloth more neatly, so it functions as a hijab as well. Most women also wear a conical straw hat and males can also opt to wear such a hat or a cap. When males wear a straw hat or women do not wear a smock, from a distance it can be hard to tell who is female and who is male, unless they have a clearly defined female or male physique. The unavoidable dirt clinging to the clothing makes females and males look alike. One gendered difference that only becomes visible when one meet face-to-face is that women often wear gold or golden jewellery.

In Kampung Pendar and at the TPS in Surabaya there is more shade and, although the waste pickers work on the pavement amid waste, they are not stuck on metres-high piles of waste like at the landfill. Less protection is necessary, and clothing is more gendered, for instance with some women wearing dresses and *hijab* and males wearing calf-length trousers and a jacket; the conical hats are also dispensed with. Nevertheless, in Kampung Pendar and at the TPS, the protective clothing also reduces gender differences in appearance. Gender differences in clothing only become clearly apparent when the waste pickers change their dirty clothes before returning home.

In contrast to manual work in agriculture and factories, there is almost no division of tasks between female and male waste pickers. Most waste pickers in Kampung Pendar walk around their neighbourhood, but they also walk for miles outside Kampung Pendar to collect the waste. The waste pickers have their own circuits to pick waste and know and respect each other's routes. There is an unwritten rule that they will not encroach on each other's beats. After they have finished their route, they come together at a central field in Kampung Pendar to sort the collected garbage. The waste pickers have their own place to sort the garbage, called a *lapak*. Normally, a *lapak* is an outdoor area on bare ground that is separated from other *lapak* by thin vertical planks of plywood or sacks of sorted waste (different kind of plastics, cardboard, etc.) ready for sale. One or two waste pickers prefer to sort their garbage in front of their dwellings.

Waste pickers operating from a TPS in Surabaya have fixed routes, not by mutual understanding, but because of the contract they have signed with a neighbourhood association. They get an agreed sum for collecting the waste and transporting it to the TPS and nobody else is allowed to collect the waste in their neighbourhood; they usually serve several, even up to six, neighbourhoods in the morning. During the second part of the day, they sort out the waste at the TPS, where each waste picker has her or his own spot to work and where they leave sacks filled with sorted recyclables ready for sale. Emptying baskets of residual waste, mostly organic waste, into the municipal skips is heavy work requiring lifting above one's head, and a minor gender difference is that some slender-built women prefer to dump the waste in pairs instead of alone. At the landfill, there are no routes among the amorphous mass of waste that can be claimed. Waste pickers, female and male, gather around the spots where trucks dump fresh loads of waste or follow the bulldozers pushing the waste uphill, like birds following a ploughing farmer turning the soil.

For want of space we do not go into the way waste pickers sell the sorted recyclables to waste dealers. Here we only hint at the old discussion about whether waste pickers can be better seen as small, self-employed entrepreneurs or precarious proletarians exploited by waste dealers or factories processing the recyclables (Birkbeck 1978; Sicular 1991). Given the freedom to negotiate prices and to choose between waste dealers, we are inclined to speak of the waste pickers as independent workers. A caveat here is that a sizeable number of waste pickers have a debt relationship to a waste dealer and are obliged to sell to this person (and accept

their price). Waste pickers themselves comment on their independence as a favourable status compared to a previous job as labourer in a factory.

As we can see from the above description of their work, there are many similarities between female and male waste pickers in terms of the nature of their work, entry into the business, equipment, clothing and the ways they go around. The differences between working in Kampung Pendar, at a TPS in Surabaya, or at the landfill are far bigger than the differences between females and males. In our field sites, we have encountered several husband-and-wife teams in which the partners cooperate. They can allocate tasks, but even here there does not seem to be a fixed division; we have seen the males go around to collect waste and females sort it out, but also seen these roles reversed. At the core, female and male waste pickers do the same work. However, there are some subtle differences in their *modus operandi* to which we return in the next section.

Male and female waste pickers in Jakarta and Surabaya not only experience the same work routines, but also face social stigmatisation from the urban communities they live in. Their baggy, unfashionable clothing, not to mention the dirt besmirching it, distinguishes them from most employed adults, who usually wear fitted clothing. One reason they change clothes before returning home is not to be recognised as waste pickers. As a woman on the Surabaya landfill explained why she changed clothes: '*untuk orang lain tidak enak kalau berbau*' ('for other people it is unpleasant if I smell'). It is not simply the fact they handle dirt – their informal status and clothing also make them objects of social opprobrium, in contrast to the formally employed, uniformed sanitation workers in Jakarta. The Pasukan Oranye can count on receiving gratuities known as *uang rokok* (cigarette money) from the residents in the neighbourhoods where they work. This practice of *uang rokok* shows that the sanitation workers are more accepted by the residents. Another manifestation of the stigmatisation of waste pickers is the sign '*pemulung dilarang masuk*' ('entry for waste pickers prohibited') that some residents place at the access road to their neighbourhood. People associate them with criminals and thieves and consider their profession dirty and undignified. Going through the streets with them, Putri has repeatedly observed how the waste pickers are exposed to stigmatisation through unpleasant interactions with and the dismissive attitudes of local residents.

SOCIAL REPRODUCTION AS A FACTOR IN GENDER DIFFERENCES IN WASTE PICKING IN INDONESIA

We began this article with the observation that – with some important exceptions – the existing literature on waste picking ignores the gendered nature of the work. In this section we want to show how waste picking in Indonesia is a gendered activity. The premise that there is gender inequality will not surprise feminist scholarship, and therefore in the preceding section we have first tried to demonstrate that there is a remarkable gender equality in waste picking, which contrasts sharply with other manual labour in agriculture, industry and mining. In this section, we proceed by showing that, despite the general similarity in work routines and stigmatisation of waste picking, there are also subtle, yet significant, gender differences. After having established the base equality, the question of if and how there are gender differences again becomes relevant.

To understand gender differences between female and male waste pickers, we engage with several strands of social reproduction theories. Silvia Federici, a Marxist-feminist scholar, conceptualises housework like providing meals, nurturing children, taking care of the husband or elderly relatives, cleaning and so on as work in the domestic sphere. Federici argues that becoming a housewife is a long process in a woman's life that has been imposed on them since childhood (Federici 2012: 60). However, this housework is not seen as 'real' work. Instead, it is seen as an inherently natural task for women and remains underappreciated by capitalist society. Federici has been advocating for the 'Wage for Housework' campaign since the 1970s to raise public awareness that housework should be appreciated as proper work and therefore paid by the government (Federici 2012: 31)

Echoing Federici, Tithi Bhattacharya asks several important opening questions: 'What kinds of processes enable the worker to arrive at the doors of her place of work every day so that she can produce the wealth of society? What role did breakfast play in her work readiness?' (Bhattacharya 2017: 1). These questions, though they might sound trivial, lead Bhattacharya to discuss the many aspects of social reproduction theory, a theory that 'invites us to interrogate the complex network of social processes and relations that produce the workers' (2). Bhattacharya, referring to Karl Marx, defines social reproduction as 'the activities and attitudes, behaviors and emotions, and responsibilities and relationships directly involved in maintaining life, on a daily basis and intergenerationally' (7); social reproduction is a necessary activity to sustain productive work. The social reproduction includes both how food, clothing, and shelter are made available

for immediate consumption, and the socialisation of children and care of elderly and infirm persons.

Although the capitalist system relies on social reproduction for its labour force, the capitalist system disrupts and limits the very process and work of social reproduction. Nancy Fraser (2017) has called this the 'crisis of care'. Under the liberal competitive capitalism of the nineteenth century, 'there was the emergence of a new bourgeois imaginary of domesticity' that laid down the ideational foundation of social reproduction as women's work (Fraser 2017: 25). During the state-managed capitalism of the twentieth century with its focus on mass industrial production and consumerism, a new form of family institution emerged: the modern ideal of a family in which husbands serve as the primary breadwinners and wives support the households (Fraser 2017: 25). In the present era of globalising financialised capitalism, the manufacturing industry has been relocated to the periphery or Global South countries. Women are included in the workforce as wage workers, an arrangement that has eventually led to the emergence of the dual-earner family. However, social reproduction work is still externalised by the capitalist economic system. Social reproduction work is shifted to families and communities, for those women who are not able to perform social reproduction work because they are working in the workplace (Fraser 2017).

Fraser argues that this externalisation of social reproduction in the present era has resulted in two different forms. On the one hand, there is a commodification of social reproduction for people who can afford to pay for it, for instance career women who can hire nannies to take care of their children. On the other hand, there is a domestication of social reproduction as a private matter for those who cannot afford to 'outsource' the burden somewhere else. The differences in chances of externalising social reproduction in the current phase of capitalism have exacerbated the inequality between lower- and upper- and middle-class women (Fraser 2017; see also Sen 1998, Guerin, Hillenkamp and Verschuur 2021). Fraser's division of social reproduction is highly relevant to female waste pickers. Most waste pickers cannot afford to outsource the social reproduction work to paid nannies. The double burden caused by the crisis of care creates another layer of precariousness for the women and it is a cause of significant gender differences.

In Kampung Pendar, the burden of social reproduction work lies more heavily on the women than their male counterparts. To illustrate, Mak Rita often spends her time on social reproduction work as she explains herself:

> If my grandchildren do not sleep in my room, I sleep there. I usually go to bed at 9:00 p.m. and I wake up at 4:00 a.m. I cannot sleep after 04:00 because I usually (must) iron Diandra's (her granddaughter) school uniform and help her to prepare to go to school.

On another occasion she returned to the matter:

> In the morning, at dawn, I boil warm water for Diandra, who will have her bath. After I have prepared warm water for her, she is willing to get ready for school.

From these stories, we can see that, unlike male waste pickers, Mak Rita is unable to go to work earlier in the morning because she needs to get her granddaughter ready to go to school. Again and again, Mak Rita spoke of her working hours in which typically she only manages to go waste picking around 7:30 or 8:00 a.m., after she has got Diandra ready to go to school. The late start of waste picking has consequences for her productive work. If it is after 8:30 a.m., Mak Rita will cancel her plan to do waste picking completely, or reschedule it until the afternoon, at 3:30–4:00 p.m., with different routes. Reproductive work does not only hamper Mak Rita's work on schooldays. One weekend day, when Putri wanted to accompany Mak Rita, Diandra whinged and asked Mak Rita not to leave. It took a while before Mak Rita could finally persuade her granddaughter to stay at home and let Mak Rita go to the street for waste picking.

In these examples, Mak Rita not only loses 'productive' hours, but also wastes the best hours of the day from the waste pickers' perspective. Their best working hours are early in the morning or at dawn. It is important for waste pickers to start collecting waste before the sanitation workers employed by the government arrive to pick up the waste. Moreover, from the waste pickers' perspective, waste in the morning is still 'fresh' and no other waste pickers have had a chance to touch it. While, as we noted above, waste pickers respect each other's turfs or routes, this protection is not set in stone. Furthermore, early in the morning the waste pickers can collect waste to their hearts' content without being disturbed or judged by other people. In short, Mak Rita's domestic chores determine her working hours and route for waste picking. Her social reproduction work debilitates her productive labour; the former significantly shapes the latter for female waste pickers.

Mak Nur, another female waste picker in Kampung Pendar, tells a similar story. We once watched the scene as she tried to persuade her granddaughter (Sisil) to wash herself. Mak Nur's husband told her not to bother and leave the responsibility with the child, but Mak Nur felt uncomfortable seeing her granddaughter refuse to take a bath, 'because she has not changed her clothes since this morning'. Like Mak Rita, Mak Nur needs to take care of her granddaughter, otherwise she worries about her. While Mak Nur does go waste picking at dawn, she returns home at around 7:00 a.m. for her social reproductive work, including looking after her granddaughter. Mak Nur helps her daughter and son in-law because they both have an outdoor job and come home at around 9:00 a.m., or

her son-in-law brings the child to Mak Nur's. Mak Rita, Mak Nur and other female waste pickers view this additional work burden with mixed feelings. They feel burdened, but nevertheless they do not see it as an obligation, but accept it as a 'normal' form of care of their family members. These stories support Nancy Fraser's conceptualisation of the 'crisis of care', and her point that women with fewer financial resources cannot offload their domestic work to people outside of their families.

In contrast, most male waste pickers do not really bear the burden of social reproduction work. For instance, Mas Rambo said that, after having performed the Muslim dawn or *Subh* prayer at around 4:00 a.m., he is ready to scour the street with his cart until 8.00 a.m. He does not prepare his own breakfast because he usually buys it in food stalls after this first block. If he is not tired, he will add more working hours, picking up waste from 9:00 a.m. until 12.00 p.m. Another man, Pak Umar, said that his wife takes care of their children and domestic chores every day. Pak Umar sets his working-hours from around 7:30 a.m. until 4:00 p.m. and he does not worry about his children if he can only return home late in the afternoon. In these cases, the male waste pickers have more chances in the 'productive' hours and obtain the freshest and best waste in the morning. Besides, they can work long hours as well, without worrying too much about domestic work. The male waste pickers also have more leisure time. For example, Mas Rambo often watches YouTube after work and at lunchtime, while Pak Umar enjoys winding down in the afternoon enjoying cheap drinks and snacks with his friends. The female waste pickers do not have such luxuries because they are expected to do domestic work like cooking, cleaning or minding their grandchildren.

In sum, in Kampung Pendar the women are disadvantaged because their working hours are curtailed and the time they work is less productive, because the most productive hours of the day have already gone. The situation at the landfill in Surabaya seems to be slightly different. To the best of our knowledge, husband and wife teams usually arrive at the landfill together, but the women will have had to get up earlier to prepare the meals for the day, and hence are still weighed down by their double burden. Moreover, women would leave the landfill early to perform their domestic chores; if they had not missed the best hours of the day like their peers in Kampung Pendar, they still had shorter working hours as waste pickers (and more work in total).

Interestingly, we did not encounter such clear gender differences at the TPS in Surabaya. We hypothesise that the difference from Kampung Pendar might be explained by the different organisation of the work. Because of the agreements made with neighbourhood associations to collect the waste from door to door, the waste pickers are assured of the first pick of fresh waste, even when they begin later because of domestic chores.

One remarkable detail is that we heard very few complaints from the women about their double burden. We ascribe this acquiescence to the strong societal norm in this respect, but an alternative explanation is that, for women, it is simply more attractive to spend less time on waste picking than their husbands and devote more time to the household. Although in general productive work is valued more highly than 'unproductive' social reproduction, in the case of waste picking this might be reversed, especially if waste picking were not considered productive either.[4] Shortening the routes of female waste pickers in Kampung Pendar to look after the household chores would then enhance instead of lowering the women's status. If this assumption is indeed correct, the question is whether the state ideology of *ibuism* (the interpretation of motherhood and being a wife as virtuous tasks), Indonesian middle-class norms or norms of the waste pickers themselves prevail in this respect. Another possible question we should ask is whether it is about the *degree* of domestic chores the female waste pickers have to tackle rather than outright acceptance or reluctance to handle such chores.

A partial answer to the question about the relative appreciation – or framed negatively, the relative stigmatisation – of household chores and waste picking is given by male waste pickers whose partners had not joined them and stayed at home. When asked why their spouses had not joined them, we received various answers from the males. The most common explanation was that the women were needed in the household to look after their children. Some male waste pickers said that their wives had given up waste picking and returned to their villages to become housewives because, if they did not do so, '*tidak ada yang mengurus rumah*' ('there is nobody to run the household'). Another reply, though, revealing an implicit comparison was: '*Kasihan, kerja sepert ini!*' ('[We] pity the women, work like this is a mug's game'). Or: '*tidak boleh! Cukup saya di sini*' ('she is not allowed [by me], it is enough that I am here'). Such a positive reassessment of the women's position being caused by domestic duties, however is premised on a fair division of income. If not, their status might be higher than their male partners, but this would also hold for their level of precariousness. One caveat is, of course, that wives of waste pickers are not automatically unproductive. Some simply have other income-generating jobs. Moreover, women who supposedly run the household can generate income by undertaking a variety of tasks as 'housewives plus' (Pakasi et al. 2024: 7). Further research is necessary on the power relations within the household.

4 We owe this hypothetical explanation to one of the anonymous reviewers, whom we would like to thank for this contribution.

So far, we have discussed waste picking and reproductive labour as two conflicting activities, but they do not have to be so. Kathleen Millar has conceptualised waste picking not as work, but as a 'form of living' (Millar 2018: 9), in which 'living' is 'at once, both a livelihood and a way of life' or a 'mode of inhabiting the world' (9). Many waste pickers did not take up their work because they were jobless, and both women and men had often quit a formal job to take up waste picking as a step forward. They especially appreciated no longer having to work under a boss who told them what to do and what hours to work. As a waste picker they could come and go, or take a break, as they pleased and the autonomy, or in Millar's words 'plasticity' (15), of their lives also allowed women to integrate productive and reproductive work. Or, as Millar (69) writes about waste pickers in Rio de Janeiro: 'paradoxically it is the precariousness of the work at the landfill that 'enabled them to contend with insecurities in other dimensions of their lives'. Waste picking as a form of living creates relationships, but also constitutes what is valued. The waste pickers in Indonesia have come to see their work positively as '*kotor tapi halal*' (dirty, but [from a Muslim perspective] ritually clean). It contrasts positively in this respect from other ways of life considered '*haram*' (prohibited by Muslim norms), like stealing or sex work. This comparison with alternative sources of income and the positive choice for waste picking as a good life for Muslims was explicitly made by our interlocutors.

THE FRICTION BETWEEN WASTE PICKING AND IDEALS OF FEMININE BEHAVIOUR

Another factor explaining gender differences that is not directly related to reproductive work consists of societal ideas about feminine and masculine behaviour. Returning to the work rhythm in Kampung Pendar, we note an additional reason starting late debilitates waste picking is the competition with the sanitation workers, or Pasukan Oranye. Our interlocutors complained about the sanitation workers, because the latter prevented them from accessing the waste. The sanitation workers think, and it is not a fully unjustified idea, that waste pickers can litter the street in their search for valuable recyclables. As a male waste picker explained as he walked away from an approaching sanitation workers' truck: 'Why do I still have to sift for waste there? They reprimanded me before because they thought I made more mess by opening the plastic bags to search for waste'.

Many waste pickers in Kampung Pendar have similar reactions and, although not all waste pickers are afraid of the sanitation workers, most will certainly avoid the latter as much as possible. For instance, Putri took the following jottings of such an encounter:

> It was at 10:31 on a bright sunny day, when I followed Mak Rita to a local market to pick waste. She did her work at a place where the local residents dump their waste. When a pick-up truck passed her on the street and one of the sanitation workers shouted to her from the truck: 'Hey! Do not mess up the waste!' I (Putri) was shocked and a bit anxious when hearing this reprimand. Mak Rita heard the shouting, and she was a bit frightened too. She immediately stopped her work, hurriedly picked up her sacks, and ran away to the place where she parked her cart.

This incident captures the competition between the waste pickers and sanitation workers; there is an unwritten expectation that the waste pickers should move somewhere else and let the sanitation workers have the waste. The literature provides evidence that such forms of oppression can negatively affect the emotional and physical health of female waste pickers (Pakasi et al. 2024: 2).

The antagonism with the Pasukan Oranye is another reason waste pickers need to wake up early in the morning and explore the streets before the sanitation workers arrive. Consequently, the female waste pickers bear the brunt of harassment by the sanitation workers more frequently than the males. The already cited Mak Nur, for example, said that she chooses not to work at all if she wakes up a bit later, thus preventing her from pursuing her usual working hours. She undoubtedly knows that she will not get any waste materials and be confronted with an empty, clean street. Getting out on the street early to avoid encounters with sanitation workers is not a realistic option for most female waste pickers.

The response to the sanitation workers discloses a more elusive aspect, namely societal expectations about femininity and masculinity. These expectations do not differ hugely in the case of waste picking. We have already commented on the similar clothing. One minor difference is that smoking during the work is considered masculine behaviour (and almost all men smoke), but deemed inappropriate for females. We have also observed how, at the TPS in Surabaya, female and male waste pickers jointly roll the full containers to municipal waste trucks to be emptied, having a lot of fun together, laughing loudly and making boorish jokes; therefore, in a way the difference between 'masculine' and 'feminine' behaviour breaks down. Nevertheless, there are also subtle differences. We hypothesise that, although both female and male waste pickers are stigmatised, the physically demanding work of waste picking is acceptable for men, but considered somewhat less appropriate for older women especially (and most waste picker women in our field are older women). In Indonesia, people often take *kasihan* (pity) whenever they see an old lady doing

physically challenging work. Does this difference in societal expectations evoke a harsher response to the women from the Pasukan Oranye?

Societal ideas about femininity might also cause another difference in the behaviour of female and male waste pickers, one we would otherwise find difficult to explain: the response to bad weather.[5] Indonesia has a tropical climate with a lot of rain. Obviously, waste pickers prefer to work on sunny instead of rainy days. The rain makes it harder for them to walk for miles with lugging sacks or carts to collect the garbage. Both female and male waste pickers feel uncomfortable wearing a raincoat that hampers their movements and, as they need both hands for their work, using an umbrella is impossible. In addition, they worry they might fall ill. Moreover, not only does cardboard and paper get heavier when it gets wet, the water also makes the cardboard less valuable. So rain both makes the work harder and cuts revenues.

Although male and female waste pickers share similar feelings about rainy weather, they have different ways of navigating this challenge. Most female waste pickers tend to take shelter until the rain stops, and consequently shorten their route, reroute to a closer destination or cancel their trip altogether. The women find rainy days extra burdensome since they are not able to do other activities such as cleaning and sorting the garbage.

Male waste pickers have a different attitude towards rainy days and most of them continue their work. They give different reasons for this attitude but, when asked, did not give elaborate answers. Some of them said that they are in the middle of the work, and it is better to finish this before going back home. One man said that he needed to earn more money and another gave no specific reason other than that he likes working long, hard hours. These answers given by our male interlocutors beg the question of why similar arguments would not apply to the women. Perhaps the males feel that they are the breadwinners in their family, motivating them to work even on inclement days.

Societal ideas about masculinity might also explain the last difference we observed at the landfill of Surabaya. After the trucks of the Cleansing Department have dumped the waste in the ditches surrounding concrete platforms, excavators scoop up the waste and deposit it higher up the mounds of garbage. Daredevils stand in the ditches waiting for the trucks to dump the waste, allowing them have their pick from the fresh refuse, before the excavator scoop swings back and digs it up. Fatal accidents have occurred when the scoop has collided with a waste picker. More men than women take the risk of working in front of the excavators, and they are rewarded with a better harvest. Also, at other places at the landfill, the sturdiest waste pickers, males rather than females, younger rather than older, tend to dominate the most promising locations.

CONCLUSION

We began this article by stating the argument that waste picking is a gendered activity and that differences between females and males have often erroneously been ignored. The gendered nature of waste picking needs to be studied, first, to look for ways to reduce the precariousness of the lives especially of female waste pickers; and, second, because a full understanding of waste pickers is a necessary condition to pinpoint their role in a circular economy.

We then concluded that waste picking is remarkably gender neutral compared to other manual labour in Indonesia, with females and males performing the same tasks and suffering identical stigmatisation. This relative equality can be explained by the fact there is little room for gender differences. Waste picking has fewer specified tasks that can be allocated to women and men than agriculture has. Waste picking is not subject to the patriarchal command structures common in factories, because waste pickers work as small independent entrepreneurs. They do stand in a hierarchical relationship to waste dealers, especially when they have outstanding debt to the dealers. Pertinently, apart from the fact there is some room for negotiation of prices, the waste dealers can be both female and male. Unlike the relationship on a shop floor, the question of who is waste picker and who is waste dealer is not determined by gender.

Despite this relative equality, we have also noted subtle gender differences that stem from two factors. The most important is the social reproduction expected of the women. Because they must prepare breakfast and get children ready for school, they go out on the street later, when the best, freshest waste has already been collected by male waste pickers. They are also limited in their mobility and cannot go to the best sites to which they would have to walk longer. Because this 'crisis of care' or double burden for women, female waste pickers also simply have less time to work on the street. The effect of these 'debilitating domestic duties' has also been observed by others (Huysman 1994, Musariri and Moyer 2022), including in Indonesia (Sicular 1991, Putro 2020) but, because of our focused fieldwork, we have now been able to show in detail the lack of synchronisation of reproductive and productive work of female waste pickers. The conflicting timeframes are debilitating to their productive work.

We also want to argue that a more finely tuned empirical analysis of the organisation of the work is

5 Darni Suhertina (2018) also mentions bad weather as an obstacle for female waste pickers, but does not consider the question of whether they are more hampered by rain than men.

essential to a full understanding of how waste picking works. Whereas other authors have mentioned the importance of getting to the waste when it is still fresh and financially more rewarding, we found that intimidation by municipal sanitation workers is another factor that sharpens the conflict between the rhythm of domestic work and productive work, adding to the precariousness of female waste pickers. A closer analysis of the organisation of waste picking has revealed that the disjunction between reproductive and productive time was less felt in Surabaya than in Jakarta. In Surabaya, waste pickers have more control over their own waste because of agreements with neighbourhoods from which they collect the waste; because of this ownership it matters far less to women if they enter the street late in the day. Moreover, in Surabaya they do not have to compete with municipal sanitation workers.

The second factor that explains the gendered nature of waste picking in Indonesia consists of societal norms about being 'female' and 'male'. This difference seems to play a role in the waste pickers' response to aggressive sanitation workers (in Jakarta), attitudes towards working in the rain, and the willingness to accept the risk of working in front of dangerous excavators at the landfill (in Surabaya).

Future research should also pay attention to power relationships within the waste pickers' households, beginning with the question of how income from waste picking is shared and allocated within these households; this research could also include work by (grown-up) children.

Our provisional conclusion is that female waste pickers lead more precarious lives because they face a lack of synchronisation between their gender and waste picking: there is a disjunction between reproductive and productive rhythms and a conflict between societal views of 'femininity' and waste picking as a tough job. We want to make a plea for greater sensitivity to gender differences and different ways of organising waste picking.

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