

Exploring the political ecology of informal recycling in Barcelona

Authors and contributions

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Developed the theoretical framework, led the development of the data collection framework, contributed to the data collection. In charge of the data analysis. First author of the paper, author of the present draft.
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Extended abstract

In recent years, Barcelona's waste management system has increasingly noticed the presence of informal recyclers, commonly called *chatarros* (from the Spanish *chatarra*, metal scrap). Estimated to be around at least 3000 individuals, they are excluded from the formal labour market mainly due to their status as illegal migrants or to other socio-economic vulnerabilities. These workers select, collect, transport and accumulate scrap metals and other materials and objects from the streets and the unsorted trash, to sell them to the recycling industry and second-hand shops, thus contributing to the circularity of the city's economy. However, the informal character of their work renders them highly vulnerable to social and economic marginalisation and exploitation. Through the lenses of urban political ecology, we investigated the social and economic conditions under which they live and work, addressing the following research question: *how do power relations shape the life and work of informal recyclers operating in Barcelona?* Particular attention was given to the degree of stigma, marginalisation and socio-economic exclusion they face in their interactions with the urban environment. Moreover, we investigated the environmental injustices and potential conflicts that they face as the result of the enforcement of a waste governance and management system that is not designed to interact with them cooperatively and inclusively.

We adopted a theoretical framework based on the concepts of urban metabolism and that of capital accumulation. Demaria and Schindler (2016) and Scheidel et al (2018) define cities as social-metabolic systems regulated by the dialectical interaction between material and energy flows (i.e. the materiality, or biophysical dimension) and the socio-political dynamics underlying the circulation of these flows (i.e. the political economy). We suggest to frame the waste system of Barcelona as a metabolic process that has a material and a political economy component. In this paper, we focus primarily on the power relations underlying and

shaping its political economy. Under capitalism, capital accumulates not only through economic processes of exploitation (Marx, 1867) but also through extra-economic processes or expropriation, such as dispossession (Harvey, 2012). Building on this understanding, Fraser (2023) frames capitalism as a broader “institutionalised social order”, that contains a separation between the capitalist economy, where workers are exploited for a wage, and what is outside of it, and can be invisibilised and expropriated. Every capitalist society develops legal-institutional configurations that define what belongs to the realm of the capitalist economy and what does not, according to what favours capital accumulation. Of particular interest for this paper is Fraser’s concept of racialised accumulation: in certain instances, capitalism develops legal-institutional configurations that exclude groups of people along racial lines, creating “racialised others” who are marginalised or excluded from the market economy and whose work and bodies can be expropriated more easily.

Methodologically, first we implemented a systematic review of the existing literature on informal recycling in Barcelona and its region Catalunya. Secondly, we conducted an ethnographic fieldwork based on participant observation and the collection of approximately 100 surveys and several semi-structured interviews with informal recyclers and other relevant actors. These data were backed by the collection of secondary data, such as city-level official statistics or other relevant sources identified during the process. Our hypothesis is that informal waste recyclers in Barcelona contribute substantially to the circularity of the waste metabolism, but their work is invisibilised and undervalued through social-institutional arrangements that favour profit maximisation along the recycling value chain.

In this version of the paper we present and discuss the preliminary findings. The existing literature on informal recyclers in Barcelona and Catalunya is not extensive, showing that this phenomenon is relatively unexplored. It addresses the migrant and often illegal status of the informal recyclers, their precarious living and working conditions. Most of the papers stress the informal character of this type of job, which is located at the margins of the formal economic system and subject to precarity and exploitation. The results of our data collection confirm and expand the existing literature. We estimate a population of at least 3000 informal recyclers operating in the city. The majority of the respondents of our survey are undocumented migrant men, aged between 20 and 40 years old, of recent migration in Barcelona. Most of them work alone, there are no visible signs of collective organising, and informal recycling is their main or sole occupation. On average, they work more than 50 hours a week, for a daily income of around 20€. Despite great internal variability within the sample, they collect around 100 kg of metals every day, and other objects such as clothes and shoes. They have a functional relationship with construction sites and with the citizens of Barcelona, who provide them with scrap metals. Surprisingly, they do not have many contacts with law enforcement officials, nor with waste management workers. When the informal recyclers we surveyed mentioned getting in contact with these two actors, the nature of these contacts was not overtly conflictual. For example, almost none of them was reprimanded for collecting scraps, or stopped from doing it, nor were their documents checked by law enforcement officers. Interrogated on what are the most compelling problems in their lives, the majority of the respondents identified the lack of papers as the primary reason for their precarious livelihood conditions, followed by the lack of formal job opportunities, which they related to the impossibility to regularise their migrant status.

The preliminary findings show that the work of informal recyclers in Barcelona is characterised by oppressive power relations. We suggest that the oppression unfolds along 3 main intersecting axes: labour, racial, and economic oppression. In terms of labour, they work a high number of hours, their occupation is precarious and not protected by a contract, they face health risks on the job, they do not have bargaining power. In short, they lack most of the basic labour rights. Racially, they are oppressed by a migration system that prevents access to regularisation and creates a condition of illegality that most of the recyclers cannot exit. Economically, they are situated at the very end of the waste value chain and they do not have any control over it, resulting in very low and fluctuating incomes, arguably below the social reproduction level. We argue that this multi-axis oppression is the result of legal-institutional frameworks regulating labour and migration in Spain. These frameworks produce a condition of informality where most of the informal recyclers are trapped. Rather than being accidental, we suggest that this informality is structural and functional to capital accumulation in the waste sector, because it provides a source of racialised cheap labour outside of the formal economy, that produces value that can easily be invisibilised, undervalued and expropriated.

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