

The omnipresence of plastic in everyday life: a photovoice exercise in a peripheral community in São Paulo



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Resumo: The photovoice exercise carried out by USP graduate students explored the omnipresence of plastic in a peripheral community in the municipality of São Paulo. The exercise was conducted in the context of a graduate course in which students visited the Jardim Keralux neighborhood, a place marked by soil contamination and high socioenvironmental vulnerability. The photovoice technique and a transect walk were used as the methodological approach, in which students recorded the impacts of plastic and interacted with the community. The learning was enriched by the students' direct contact with the reality of peripheral São Paulo and its residents, expanding their understanding of the challenges faced by populations living in a context made vulnerable by multiple intersections. The activity encouraged all participants to reflect on inequality, precarious urban planning, and socioenvironmental injustice.

The present article discusses a teaching experience using the photovoice methodological approach with students in a course of the Postgraduate Program in Sustainability of the Universidade de São Paulo (PPgSUS - EACH USP), offered by professors Jutta Guttberlet (University of Victoria, UVic) and Sylmara Gonçalves Dias (USP). Initially, we present the urban context and the socioenvironmental degradation that exists in peripheral territories, accompanied by a transect walk in search of evidence of plastic in the everyday life of a peripheral community of the municipality São Paulo.

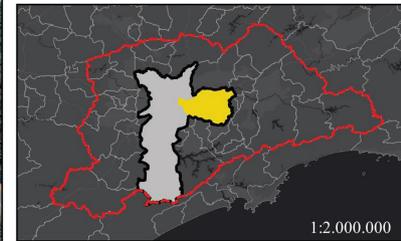
The effects and impacts of plastics can be difficult to pinpoint, they are rather dispersed across the entire chain of production, consumption, and disposal. Although the problem of plastic pollution is currently on the public policy agenda, the associated social and environmental effects are still poorly understood. On the other hand, photovoice is a methodological approach that encompasses the active participation of students in practical experiences involved in a process of action-reflection-action. Here, students who participated in a transect walk

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Localização da Comunidade Jardim Keralux - SP



Fonte: drenagem (PMSP/FCHT/SMUL, 2021), favelas e loteamentos irregulares (PMSP/SEHAB/HABITASAMPA, 2016) e ortofoto RGB (PMSP/SMDU/GEOINFORM, 2017).

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Designer do Mapa: Leticia S. Rodrigues

SIRGAS 2000/UTM zone 23S

Legenda

- RMSP
- Município de SP
- Zona Leste de SP
- Curso d'água
- Jardim Keralux

Figure 1. Location map: Jardim Keralux. Authorship: Leticia Stevanato Rodrigues

Study site

Approximately 8,000 people live in Jardim Keralux (Fig. 1). This neighborhood is heterogeneous in terms of precariousness and existence of infrastructure, basic sanitation, and health risks to residents. Some alleys are always flooded by heavy rains or overflowing rivers, with trash accumulation and no trees or green areas. For over 20 years, the community has been fighting for the regularization of their homes, for improvements in infrastructure and basic services, and for solutions to environmental problems. The occupation and disorderly growth of this neighborhood over the years have occurred without urban planning guidelines or basic infrastructure, similar to what happens in other peripheral areas in large cities in Brazil and other parts of the world. The neighborhood was built on illegal deposits of toxic substances (hexachlorocyclohexane, HCH), which originated from the company Keralux S.A. Revestimentos Cerâmicos, which declared bankruptcy in the 1970s. Adjacent to this area, the Bann Química industry contaminated the soil (cyclohexylamine, aniline, and acetones) and spilled untreated chemical waste into the streams of this region. These two cases of environmental crime are considered among the most serious in the city, with high risks to environmental and human health (Baptista; Oliveira Santos, 2022). These industries have left an environmental liability in the region, with highly contaminated soil and rivers since 1985, putting the local population at serious risk. In addition to these chemical impacts in the area, the community is located in areas at risk and susceptible to flooding, which are intensified during periods of greater rainfall and due to the lack of adequate urban infrastructure in the territory. Source: Gonçalves-Dias, Sato Rodrigues, 2023

carried out in Jardim Keralux present brief representative testimonies of their photovoice as an exercise for a course at PPgSUS - EACH USP. We concluded the exercise with a collective reflection on the methods used to sensitize and provoke the students in the course to understand the critical situation found today, here and there, across peripheral areas of cities.

PLASTIC IN THE EVERYDAY LIFE OF PERIPHERAL COMMUNITIES

The teaching experience took place in December 2023. We had the opportunity to offer a minicourse on participatory and action research methodologies and tools (Clover, 2011). We examined a series of philosophical-methodological paradigms and qualitative data collection techniques and carried out a field activity with the students, with a transect walk and field records, taking photographs and notes. We asked the students to capture images reporting the existence, persistence, use, impacts, and controversies of plastic in the lives of the population of Jardim Keralux. This neighborhood is located on the edge of the East Zone of São Paulo, next to USP – Leste Campus, near the Tietê River (a highly contaminated body of water), the Ayrton Senna Highway, and the CPTM metropolitan train line. In the past, Jardim Keralux was a site used for chemical industrial activities.

THE PHOTOVOICE EXERCISE IN JARDIM KERALUX

The photovoice technique is a participatory approach that combines photography and storytelling to explore and communicate the experiences and perspectives of groups or communities. It refers to a photographic technique in which participants capture everyday reality in the form of photographs, allowing access to the participants' perspective on the phenomenon being studied (Wang; Burris, 1997). In this approach, participants are the protagonists of data collection, who can apply a variety of tools, from the most traditional, such as interviews, questionnaires, and focus groups, to more creative and art-based forms, such as photovoice, participatory video, community theater, interactive mapping, etc. This methodological process has the potential to promote the construction of trusting relationships between the community and academia, that is, public engagement and participation in the creation of knowledge. Thus, scientific education, socialization, training, and raising awareness are often important results of research developed with a participatory lens (Jaeger-Erben et al., 2023).

The professors and the group of students in this course carried out a transect walk for approximately 3 hours through the streets of the Jardim Keralux neighborhood. Whenever possible, a dialogue was established with the local population, to learn about the living conditions and the local context through their testimonies. In this exercise, the focus of the photovoice was on critical observations about the incidence of plastic in that peripheral territory, in other words, the persistence, use, impacts of plastic, as well as its controversies in the daily lives of the population that resides there. Throughout the walk, and while interacting with the population, it was important to situate the students within contexts of vulnerability and resistance, enabling manifestations of reflections, emotions, questions, and empirical-theoretical-empirical perceptions (Duran; Wallerstein, 2003). The following photos and testimonies were selected from the collection built by the students.



Figure 2. Residential furniture that, over time, cannot escape becoming waste (that is not biodegradable). Author: Francine Cruz de Cerqueira Lima , December 19, 2023.

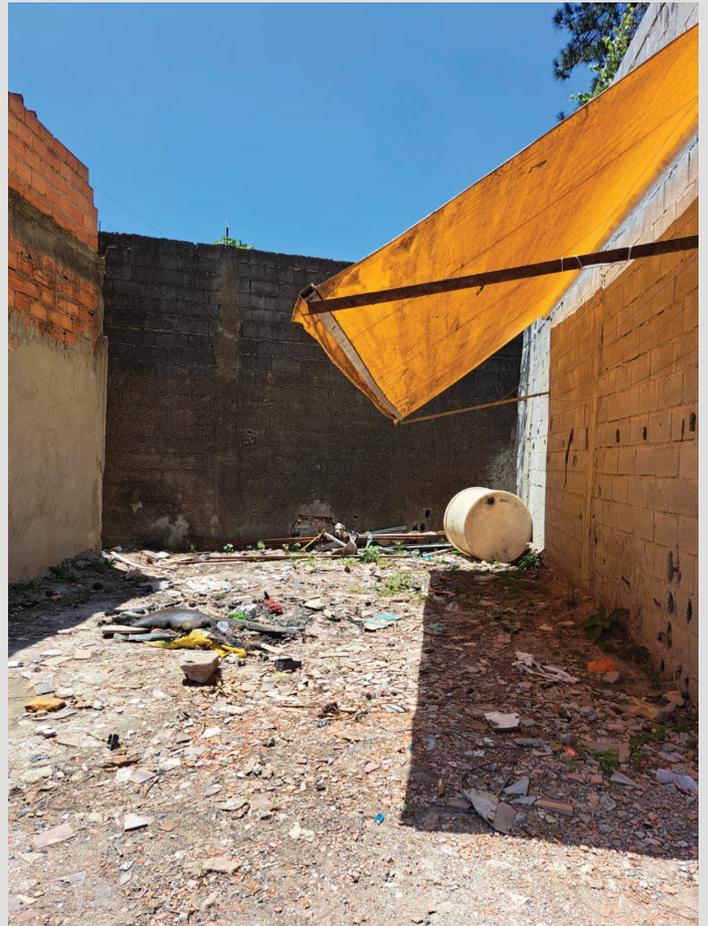




Figure 3. The colonization of plastic: "This photo depicts a piece of plastic bag that was waving like a flag, reminding us how plastic has colonized our lives and social habits, polluting all ecosystems on the planet". Author: Felipe Torres , December 19, 2023.



Figure 4. "The photo portrays the struggle of the Keralux community to have access to basic rights that are denied by the Government. It is a story of solitary and daily resistance". Author: Rodrigo Massao Kurita , December 19, 2023.



Figure 5. "The photo depicts the neglect towards the population of Keralux, with a contaminated river, that has sewage dumped there and that is trashed with plastics and other objects, among which the image draws attention to a plastic bottle for a cleaning product called Veja (meaning "see" in Portuguese)". Author: Fabio Luiz Cardozo , December 19, 2023.

After the walk, we returned to the classroom to briefly reflect on the experience and method. The technique allowed participants to capture images that represented their perspectives, their unique point of view, which were then shared with the group. During this exercise in the Jardim Keralux neighborhood, we saw a new perspective arise among the participants regarding the omnipresence of plastic, especially in peripheral areas of the city, where the lack of regular waste collection services reveals the neglect of public authorities towards the residents of these areas.

CONCLUSIONS

The transect walk and the photovoice technique allowed participants to not only observe, but also critically reflect on the living conditions and environmental impacts in the Jardim Keralux neighborhood, in eastern São Paulo. Direct contact with the community and the urban space highlighted how environmental degradation is intrinsically linked to the social and historical inequalities of the peripheral territory, broadening the students' understanding of the challenges faced by populations that are already vulnerable due to various markers of class, gender, and race. As such, photography can be used here as a means of understanding practices, impacts, and assets that were previously invisible, allowing participants to engage in a critical dialogue on issues related to plastics and pollution. For example, reflection on the omnipresence of plastics in our daily lives and the opportunities linked to the transition to a “plastic-free” city. Moreover, the exercise of recording and sharing perceptions contributed to the collective construction of knowledge, strengthening the importance of participatory methodologies in teaching and research. Thus, the experience reinforced the role of education as a tool for raising awareness and for mobilization, enabling students to develop a more critical and engaged view of socioenvironmental issues. In the end, the initiative not only enriched academic learning, but also provided a significant return to the local community, promoting public engagement and the fight for social and environmental justice.

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