

Perpetual transience: the socio-ecological marginalization of São Paulo's peripheries

Transitoriedad perpetua: la marginación socio-ecológica de las periferias de São Paulo

LUCAS LERCHS / JEROEN STEVENS / CHIARA CAVALIERI

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Abstract

In times of growing social inequality and ecological emergency, inaccessibility to housing pushes poor populations to settle in fragile ecological reserves. Through empirical research in the southern periphery of São Paulo, this article addresses the confluence of these social and environmental crises by analysing how the everyday practices of marginalised communities produce far-reaching territorial transformations. Through three multi-scalar stories, it examines the transformative relationship between marginalised populations and ecologies through the changing temporality of a series of local inhabiting practices that evolve from improvised squatting and minimal landscape manipulation to permanent settlement structures and ecological transfigurations. The article explores different temporalities of inhabiting practices and compares how different levels of oppression generate different socio-ecological relations. These mutating socio-ecological relations - dependency, decay and socio-ecological marginalisation - offer a temporal reflection for understanding the double 'tragedy in the making' epitomised by the socio-ecological marginalisation of São Paulo's southern periphery, where nature and city collide.

Keywords

socio-ecological marginalisation; everyday practices; narrative ethnography; temporal resistances; self-help urbanism.

Resumen

En tiempos de creciente desigualdad social y emergencia ecológica, la inaccesibilidad a la vivienda empuja a las poblaciones pobres a asentarse en reservas ecológicas frágiles. Mediante una investigación empírica en la periferia sur de São Paulo, este artículo aborda la confluencia de estas crisis sociales y ecológicas analizando cómo las prácticas cotidianas de las comunidades marginadas producen transformaciones territoriales de gran alcance. A través de tres historias multiescalares, examina la relación transformadora entre las poblaciones marginadas y las ecologías mediante la temporalidad cambiante de una serie de prácticas locales de habitación que evolucionan desde la ocupación irregular improvisada y la manipulación mínima del paisaje hasta las estructuras de asentamiento permanente y las transfiguraciones ecológicas. El artículo explora las diferentes temporalidades de las prácticas de habitación y compara cómo los distintos niveles de opresión generan diferentes relaciones socio ecológicas. Estas relaciones socio ecológicas mutantes -dependencia, decadencia y marginalización socio ecológica- ofrecen un reflejo temporal para entender la doble «tragedia en construcción» personificada por la marginalización socio ecológica de la periferia sur de São Paulo, donde naturaleza y ciudad colisionan.

Palabras clave

marginalización socio-ecológica; prácticas cotidianas; etnografía narrativa; resistencias temporales; urbanismo de autoayuda.

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Introduction

In times of growing social inequality and ecological emergency, housing inaccessibility drives poor populations to settle in fragile ecological reserves. Consequently, these ecological reserves are exposed to environmental degradation by urban expansion. This article investigates the conflation of these social and ecological crises by analyzing how short-lived everyday practices that piece together marginalized communities provoke long-lasting territorial transformations.

The ethnographic narratives serve as a tool and starting point for identifying and discussing everyday practices and dwelling trajectories, from a grounded perspective, to contributing to current academic discussions. These micro-narratives emerged from twelve in-depth semi-structured interviews conducted with inhabitants of Comunidade KM47 between 6 January and 20 March 2023. In addition, the workshop “*Memórias de Comunidades*” held on 28 January 2023 in Comunidade KM47 reunited another twelve residents around eight selected chronological aerial photographs enabling the group to share their memories by drawing on the photographs and gather temporal socio-spatial data on the historical development of Comunidade KM47.

This article portrays more in-depth the story of Marlene and her family and unravels how the personal story that she tells interlaces with the development of the Comunidade KM47 where she lives; and the urbanization of the Marsilac region in which this community is located.

These multi-temporal stories can be used to investigate the evolving relationships of marginalisation between the juxtaposed vulnerable populations and fragile ecologies. The changing temporality of various inhabitation practices shifts from makeshift squatter housing and minimal landscape manipulations into persistent settlement structures and ecological transfigurations. Thus, the main research questions are: how do these long-lasting peripheral urban territories change over time, and how do ephemeral everyday practices of inhabitation, manipulation and installation shape these transformations? In other words, what peculiar mode of city-making unfolds in the fragile fringe-ecologies of this Latin American megacity? And finally, how can a closer examination of temporality and permanence shed light on the socio-ecological marginalization of São Paulo’s urban periphery?

The article explores different temporalities of inhabitation practices addressing different levels of oppression hence generating different socio-ecological relationships. Based on the collection of inhabitants testimonies, this work conceptualizes the varying levels of temporality as interrelated socio-ecological relationships of dependence, decline and socio-ecological marginalization.

This temporal reflection aims to contribute to the understanding the twofold “tragedy in the making” epitomized by the socio-ecological marginalization of São Paulo’s southern periphery where social exclusion leads nature and city to collide.

The Southern region story

In the 18th century, large areas of the Atlantic Forest occupied the city’s southern territory (figure 1). Geographically, the region was isolated by the topography of the Sea Ridge (*Serra do Mar*) in the south and the hills covered by the Atlantic Forest in the north. In 1792, Portuguese colonizers began transforming old indigenous footpaths, including the Sea Path (*Caminho do Mar*). Settlers saw the value of these paths with a view to facilitating trade and transportation and adopted their

1 Porto-Gonçalves, Carlos Walter. “A Geograficidade Do Social: Uma Contribuição Para O Debate Metodológico Para O Estudo De Conflitos E Movimentos Sociais Na América Latina.” *Revista Eletrônica da Associação dos Geógrafos Brasileiros, Seção Três Lagoas* (2006): 5-26.

2 Miranda, Regina. “Área De Proteção Ambiental Capivari-Monos, Uma Historia.” São Paulo: Departamento de Unidades de Conservação da Secretaria do Meio Ambiente da Prefeitura de São Paulo., 2018.

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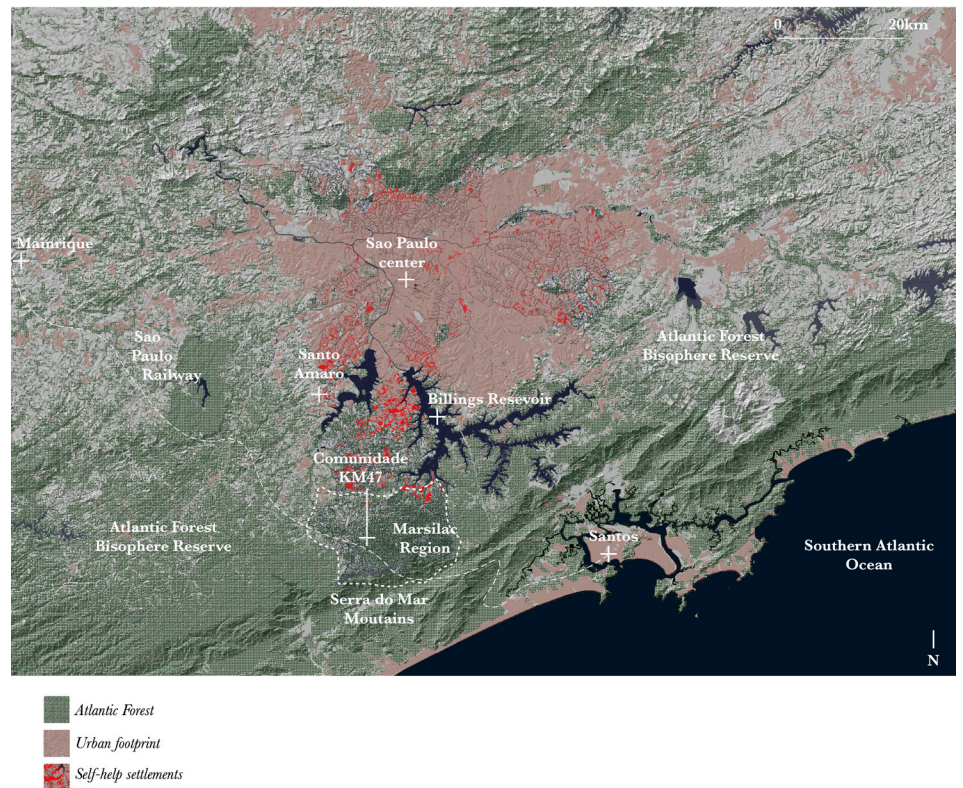


Figure 1. Map of São Paulo context.

routes to reengineer the dense Atlantic Forest landscape. This instrumentalization by the settlers of existing geographical knowledge was common practice in the region, and inherent to the Portuguese colonial project.¹

In the South Region, the route from the municipality of Santo Amaro to the port of Santos followed an old indigenous trail, which had to be travelled by donkey and took several days.² One section became known as ‘The Seven Curves’ (*Setes Curvas*). Dona Theresa – one of the oldest inhabitants of the region – recalls the sizable self-organized effort to remodel the existing path so that the animals carrying heavy loads of resources could navigate the mountainous terrain.³

In a climate of political and economic crisis, the city of São Paulo initiated a railway project linking the town of Mainrique in the southern port to Santos in 1924. To revive the economy, the State was trying to compete with the Canadian-based São Paulo Tramway, Light & Power company, which held a monopoly over the electricity production and railway trade to the coastal region.⁴ As it passed through the *Serra do Mar* Mountain range, this monumental project caused another major landscape transformation in São Paulo’s South Zone. Construction work led to deforestation, altered topography and excavations with no less than 30 tunnels, 18 viaducts and a hundred retaining walls that remodeled the landscape.⁵ At the same time, the São Paulo Tramway, Light & Power Company was busy launching the Billings Reservoir project, which was to build the city’s second largest water reservoir, covering approximately 100 km² with a capacity of 1.2 billion m³ of water, to produce electricity.⁶

The railway line, completed in 1937, profoundly changed the Marsilac region. To supply the building site, the main trails in its vicinity of the gigantic worksite were asphalted.⁷ The *Sete Curvas* section, locally famous for its steepness, was upscaled and consolidated as a driveway.⁸ Simultaneously, gradual destruction of Atlantic forest into agricultural zones was driven by a steady stream of 110, 000 migrant Japanese farmers, most of whom settled on São Paulo’s peripheral agricultural lands.⁹ From the early 20th century, the emergence of industrialization also influenced the Southern region¹⁰ perceived as a potential large-scale reserve of raw materials. The region’s natural riches attracted sawmills, charcoal and

3 Theresa, interview, 2023.

4 de Marchi, Francisco. “Velhos ‘Flashes’ No Reino Do Café.” news release, 1991.

5 Fontes, Luiz Laerte “Mairinque Vai a Santos.” MUSEU VIRTUAL A.M.P.F. - MAIRINQUE, 2006.

6 Alves, Beatriz Truffi, Cecília Ferreira Sacuti, Daniela Desgualdo Pires Osório Bueno, Denise Scabin Pereira, Gabriela de Abreu Grizzo, Gustavo Leonardi Garcia, Luciana de Abreu Nascimento, et al. “Billings.” São Paulo: SMA/CEA (2010).

7 São Paulo, Governo. “Justificativa: Historia Do Surgimento Do Bairro Engenheiro Marsilac.” São Paulo, Brazil, 2003.

8 Theresa, interview 2023

9 Hauser, Henri. “Japanese Immigration in Brazil.” *New Mexico Quarterly* 12, no. 1 (1942): 3.

10 Dean, Warren. *The Industrialization of São Paulo, 1800-1945*. University of Texas Press, 1969.

construction companies, which grew up around and ear to the railway building site and the roads used to transport extracted timber and coal to fuel power locomotives.¹¹ One was a small brick factory that was erected up on a hilltop at kilometer 47 of *Estrada Engenheiro Marsilac*, the road named after the engineer who built the train line.

Dona Vicentina, born at the end of 1930s, remembers the time when five families, including her own, were relocated by a factory owner to live on that land and work in the two newly built ovens. These workers settled and built the first wooden shacks (*barracos*). *Comunidade KM47* was born. The owner ordered them dig two *caipira* wells (countryside wells) to a depth of roughly 10 meters. Oxen and donkeys were used to transport freshly cut wood to the ovens, and charcoal produced to Santo Amaro, the closest city and selling point. Over time, this continuous hauling of materials generated small tracks into the forest from where the resources were extracted.¹² In these days, Dona Vicentina and her coworkers never imagined that these randomly cleared passages leading into the Atlantic Forest would eventually define the structure of a future settlement.

It was not until the 1960s that, due to sizeable population growth and a city-wide shortage of fresh water, the management of the city of São Paulo changed the metropolitan approach to Marsilac's resources. New laws brought in the protection of spring areas and the *Capivari* and *Embu Guaçu* rivers that supplied the city's water reservoirs with water.¹³

11 Ibid 8.

12 Vicentina, interview 2023.

13 Ibid 3.

14 Baeninger, Rosana. "São Paulo E Suas Migrações No Final Do Século 20." São Paulo em perspectiva 19 (2005): 84-96

15 Brito, Fausto Alves de. "As Migrações Internas E as Estatísticas Nacionais." Revista Brasileira de Geografia, Rio de Janeiro, FIBGE 35, no. 2 (1973).

16 de Lima Amaral, Ernesto Friedrich. "Brazil: Internal Migration." The encyclopedia of global human migration (2013).

17 de Mendonça, Lycia. "A Política Habitacional A Partir De 1964." Revista de Ciência Política 23, no. 3 (1980): 141-61.

18 Ibid 16.

19 Rolnik, Raquel. *Urban Warfare: Housing under the Empire of Finance*. Verso Books, 2019.

20 Maricato, Erminia. "Metrópoles Desgovernadas." Estudos avançados 25 (2011): 7-22.

21 Wolford, Wendy. *This Land Is Ours Now: Social Mobilization and the Meanings of Land in Brazil*. Duke University Press, 2010.

22 Fernandes, Bernardo Mançano. "O Mst E as Reformas Agrárias Do Brasil." Boletim Data Luta (2008): 1-10.

23 Martins, Maria Lucia Refinetti Rodrigues. "Moradia Social E Meio Ambiente: Tensão E Diálogo Na Metrópole." (2005).

24 Rizek, Cibele Saliba. "Políticas Sociais E Políticas De Cultura: Territórios E Privatizações Cruzadas." Revista Brasileira de Estudos Urbanos e Regionais 15, no. 2 (2013): 199-99.

25 Fix, Mariana. "Parceiros Da Exclusão." São Paulo: Boitempo 201 (2001).

26 Rolnik, Raquel. *São Paulo: Planejamento Da Desigualdade*. Fósforo, 2022.

27 Fix, Mariana, and Pedro Fiori Arantes. "On Urban Studies in Brazil: The Favela, Uneven Urbanisation and Beyond." Urban Studies 59, no. 5 (2022): 893-916.

Dependence: place-based solidarities

It is in this context that Marlene and her family arrived, around 1970, in southern São Paulo from Ceará, a largely rural region in the north-eastern drylands of Brazil. They were part of a vast wave of migration of people fleeing extreme drought and poverty and seeking a better economic future.^{14,15} At the time, Brazil was mutating from a largely agricultural and rural society into a highly interconnected constellation of urban and industrialized centers.¹⁶ São Paulo would come to play a crucial role in Brazil's industrial ambitions, soon evolving into the pumping heart of the country.

Like so many others that made the "great trek" to São Paulo, Marlene's family never made it to the city. Instead, they had to informally occupy peripheral natural land because, in the face of growing inflation, land and housing in the urban center was already the object of fierce speculation and hiking prices. By then, only families with a salary four times the value of the minimum wage could afford to rent a dwelling space in the city. Meanwhile, the construction of social housing only addressed a fifth of the national demand.¹⁷ Consequently, land-occupations became a principal modus operandi of city-making in Brazil, in the wake of the migration of almost 2 million individuals to the Greater São Paulo which had a total population of 6,5 million inhabitants.¹⁸ These migrants were mostly poorer members of the population that occupied and settled in peripheral lands.

These processes of land occupation started a permanent process of conflicts and negotiations with the state, on how the poor populations belong to the city. The accumulation of ad hoc individual occupations in these peripheral regions started to expand "low- income territories"¹⁹ increasing "the urbanisation of poverty".²⁰ In Brazil, the studies of land occupation has a long legacy from the landless movements^{21, 22} to denouncing the uneven policy structures,^{23, 24} or the financialisation tools developed in uneven urban planning.^{25, 26, 27} Yet, while all these fundamental studies are essential to understand the dynamics of territorial exclusion, they neglect the micro-level intricacies of everyday struggles and their impacts on the lived realities.

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This situated perspective is explored in Paul Routledge's work *Terrains of Resistance*, where he delves into social mobilizations and highlights the importance of *place* as a tool to challenge existing forms of domination.^{28, 29} For him, the particularities of a place and spatio-cultural practices can be used by marginalised groups as tools for contestation.

In São Paulo such forms of localized contestation took the form of squatting as the foremost mode of city-making. During the 1980s, known as the “lost decade”, these practices increased as a nationwide recession in Brazil was compounded by an economic crisis, aggravating social inequality throughout the country.³⁰ This crisis did not spare Comunidade KM47. The brick factory closed down in the early 1980s, a sign of a waning industrial epoch.³¹ With its departure, Zé – who had settled in the area as a young boy with one of the five original families – moved with his family into the carcass of one of the discarded ovens. The old wells were used to supply the remaining families with drinking water. The animal tracks were turned into dirt streets. The now unemployed inhabitants organized the sale of land plots to generate a revenue. As sales soared, the settlement's population grew incrementally.³² With urbanization ramping up, a growing number of sceptic pits were also dug into the red and porous clay soil.³³ These pits percolated with wastewater gradually reaching the landscape's water table, contaminating the shallowest aquifers, while the growing discharge of grey water reached the community's nascent river.

Realizing the urgency, the residents organized *mutiroes* (collective actions) where men built a concrete protection around the spring to prevent further contamination by grey water and women cleaned the spring of waste and other residues.³⁴ This mutual aid practice is representative of solidarity, which is especially necessary –if not vital– to the survival of a young community exposed to harsh environmental conditions and facing frequent threats of eviction. The accumulation of sporadic and allegedly temporary usage eventually led to long-lasting distortions in the territory's ecosystem, now endangering the very community that once thrived there.

Marlene remembers her arrival at Comunidade KM47, in 1990, upon the expulsion of her family from another peripheral community in the southern periphery, as a tough time. She had left behind a son, who was wrestling with a drug addiction and had left the family for a rough life on the streets. Marlene's sister-in-law, who was already living in Comunidade KM47, lent her money to buy a piece of land. The parcel of land they had freshly acquired was 25 meters long by 10 meters wide and located on a plateau in the hills. It was a favorable location because of its relatively flat topography, albeit on the edge of the slope. Compared to other families who had to excavate large amounts of red clay or backfill and terrace steep slopes, Marlene felt privileged. Once the land was cleared, the freshly chopped wood was burned for cooking, whereas good, straight pieces of wood were used as structural columns to build their first *barraco* made of plastic sheets and some light wood panels, mostly recycled (figure 2). The local lifestyle at the time of her arrival reminded Marlene of her life in the North-East of Brazil, as it felt much more rural than urban. The 20 families living there were somewhat isolated because access to the community was difficult. The only connection to São Paulo was the *Estrada Engenheiro Marsilac*, a poorly paved road that flooded and turned impassable during regular heavy rains (Theresa interview 2023).

At the time, Marlene's family lived all together in one ‘room’, without water or electricity. Exposure to the weather conditions, from broiling sunshine to pouring tropical showers, was challenging. During that period, everyone in the Comunidade KM47 lived in *barracos*, as no one could afford to pay for land and materials simultaneously. The provisional building structures were scattered and connected to small dirt paths that later would be named after the first inhabitants.

28 Routledge, Paul. “Terrains of Resistance: Nonviolent Social Movements and the Contestation of Place in India.” (No Title) (1993).

29 Routledge, Paul. “Backstreets, Barricades, and Blackouts: Urban Terrains of Resistance in Nepal.” *Environment and Planning D: Society and Space* 12, no. 5 (1994): 559-78.

30 Furtado, Celso. *The Economic Growth of Brazil: A Survey from Colonial to Modern Times*. Vol. 10: Univ of California Press, 1963.

31 Zé, interview 2023.

32 Ibid 33.

33 Luiz, interview 2023.

34 Socorro, interview 2023.

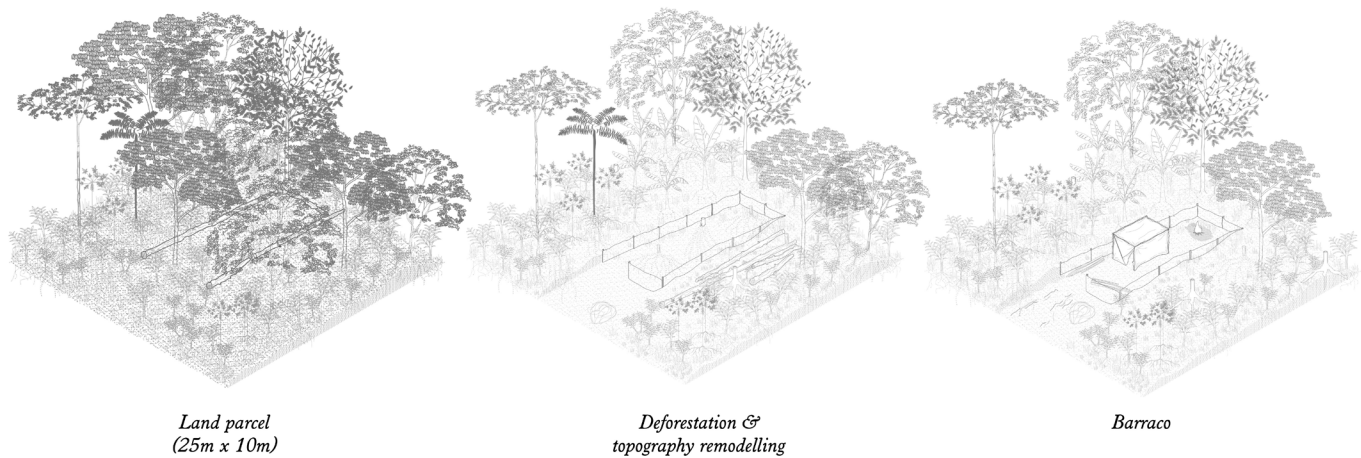


Figure 2. Incremental construction of Marlène's habitat.

In this, as in other land-occupations, tenure insecurity complicates material investment. The perpetual threat of forced eviction, heavy downpours, landslides, and the like, mean that each and every investment can be lost again overnight. This notion of investment is a crucial challenge, as residents make strategic choices and construction typologies based on the prospects, they envision for the places they occupy. Concrete block dwellings are only built in anticipation of "permanent" durability, that is, when families imagine that they will be staying for decades or, at least, a good many years. In this context, investment should be understood not only as a (major) financial investment but also as a form of personal investment, through labor, precious time, physical energy, mental effort, and hope, with the aspiration of putting down roots, that is, genuinely settling into the space and, by the same token, into the place-based consolidation of social networks and durable community relationships. Temporality here becomes a looming liability, whereas permanency becomes a long-term pursuit.

This struggle against time and the consequences of lacking perspective are uncommonly addressed in studies of place-making, which predominantly focus on the attachment to a place^{35, 36, 37, 38} or place as a tool to assert rights to the land.^{39, 40} Hence it remains little clear how specific places are shaped through inhabitants' struggles and, what consequences their local transforming of the environments may have on their practices of city-making.^{41, 42, 43} This pursuit, studying the evolving tactics of Marlene family's inhabitation practices enables to delve into the genesis of place-making by understanding their everyday actions of adapting and inhabiting inhospitable environments.

Such understanding resonates with the work of James Scott's *Everyday Forms of Peasant Resistance*,⁴⁴ stressing the importance of observing day-to-day struggles and their relating resistance mechanisms. This crucial everyday temporal dimension demonstrates the analytical significance of the of so-called in-between revolt, construed as the accumulation of small-scale daily actions whose persistence and regular frequency can have long-lasting and large-scale repercussions. This temporal analysis of everyday life represents popular resistance as a process of autonomous self-help and mutual aid, whose foremost leitmotifs are self-interest and communal solidarity rather than heroic ideological aspirations mobilizing a broader movement.

Scott⁴⁵ and Routledge,⁴⁶ both insist on the variations of resistance practices emerging from the thick messy local realities on the ground. In this sense, Scott acknowledges that there is more than one level and form of resistance, although these differing levels respond, above all, to the various levels of repression.⁴⁷ In the same vein, Routledge writes: "Because the terrain reflects a dialectical

- 35 Tuan, Yi-Fu. *Space and Place: The Perspective of Experience*. U of Minnesota Press, 1977.
- 36 Escobar, Arturo. "Culture Sits in Places: Reflections on Globalism and Subaltern Strategies of Localization." *Political geography* 20, no. 2 (2001): 139-74.
- 37 Relph, Edward. *Place and Placelessness*. Vol. 67: Pion London, 1976.
- 38 Agnew, John, Fred Shelley, and Dennis G Pringle. "Agnew, Ja 1987: Place and Politics: The Geographical Mediation of State and Society." *Progress in human geography* 27, no. 5 (2003): 605-14.
- 39 Ibid 37.
- 40 Olsender, Ulrich. *The Geographies of Social Movements: Afro-Colombian Mobilization and the Aquatic Space Durham and London: Duke University Press, 2016*.
- 41 Hordijk, Michaela. "A Dream of Green and Water: Community Based Formulation of a Local Agenda 21 in Peri-Urban Lima." *Environment and Urbanization* 11, no. 2 (1999): 11-30.
- 42 Roy, Manoj, Sally Cawood, Michaela Hordijk, and David Hulme. *Urban Poverty and Climate Change*. Taylor & Francis, 2016.
- 43 Peek, Olga, Nelson Carofillis, and Viviana d'Auria. "Co-Producing Alternative Urban Imaginaries in the Contested Riverbank Settlements of Guayaquil, Ecuador." In *Communities, Land and Social Innovation*, 166-80: Edward Elgar Publishing, 2020.
- 44 Ibid 1.
- 45 Ibid 1.
- 46 Ibid 30.
- 47 Ibid 1.

relationship between domination and resistance, it is also important to consider the response of (dominating) power to particular movements—how domination juxtaposes (and, at times, overlaps or is entangled with) resistance^{7,48}

In the case of Marlene, and KM47 by proxy, these initial practices of resistance emerge in order to tackle a first level of oppression understood as the colossal and progressive task of adapting environments and ecologies that are regarded as unfit to host modern forms of urban settlement (figure 3). On the ground, these resistance practices consist of clearing paths, cutting down trees along envisioned plots of land, reshaping the topography, excavating pits, inserting punctual palings into the ground, waterproofing surfaces, extracting spring water, and digging channels to discharge wastewater.

This first resistance-oppression interplay engenders a socio-ecological relationship that can be characterized as one of dependency. When the families first arrived and occupied the essentially natural environment, their survival was highly depended on the resources that they could find, as well as on their knowledge about how to use what they found. For the first few decades, the Comunidade KM47's existence depended entirely on how, as a group, they managed to develop responsible extraction processes and uses these ecological assets.

Rainwater, for instance, was already considered a precious resource and was systematically collected in 100l plastic barrels placed in front of the barraco and under the tin roof. This rainwater was mainly used to clean the house.⁴⁹ Although contaminated, spring water was still used to scrub clothes clean on nearby rocks, especially when they could be sundried. As in bygone times by the standards of modern urban metropolises, water brought women together in gatherings where social bonds could be gradually forged.⁵⁰ Whenever possible, some would drive to KM49 to fill plastic buckets at a another, non-contaminated, spring. Later, KM49's clean spring was closed off, following local complaints about spiritual *macumba* rituals, a black cult of African origin that continues to play a central role in Black Brazilian communities.⁵¹ Drinking water unavailability concurrently led to the creation of solidarity network, formed in face of a common menace.⁵² At the time, Marlene mostly had to buy drinking water to cook. In such a precarious situation, where not only water but also money was always scarce, everyday life was highly dependent on such loyal solidarity networks.

In this first temporality, practices of resistance consist of survival. Survival and place-making come hand in hand where the dependent relation with the ecologies helps building a community and local practices develop an emerging attachment to a place.^{53, 54}

Decline, from survival resistance to competitive consolidation

Over time, this socio-ecological relationship of dependence began to evolve in the face of another level of oppression: the gradual depletion of ecological resources. Over the years, the gradual deterioration of water resources has led to sever shortage and contamination.⁵⁵ While the families continued to depend on the local ecology for their survival, water scarcity and pollution led to a new and much more troublesome socio-ecological relationship, classed as decline.

For Marlene, this second level of oppression emerged several months after her family arrived. They had invested all their resources to buying the land and make it inhabitable, capitalizing in the arduous tasks of home building and actively participating to the development of a community. However, their efforts were thwarted when they realized that the only source of drinking water was severely contaminated. In the process of countering this second level of oppression, the families were obliged to develop new ways of getting water and had to be extremely

48 Ibid 30, p. 561.

49 Maria, interview 2023.

50 Socorro, interview 2023.

51 Workshop Memórias de Comunidades 2023.

52 Francisca, interview 2023.

53 Ibid 37.

54 Escobar, Arturo. Territories of Difference: Place, Movements, Life, Redes. Duke University Press, 2008.

55 Ibid 52.

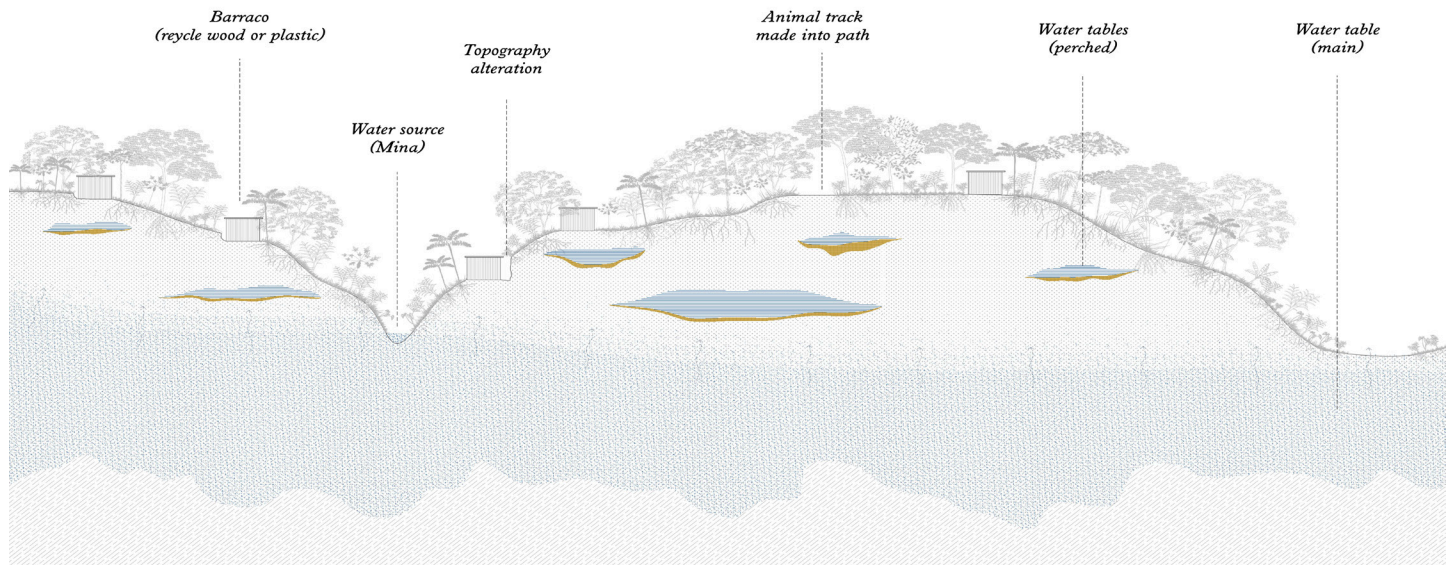


Figure 3. Schematic section of Dependency level in Comunidade KM47.

economical with how and when to use it.⁵⁶ The asymmetry of solutions both exposed and exacerbated inequalities within the community. As some resistance mechanisms jeopardized the resources of others, new resistance mechanisms were invented, perpetuating mutual competition in a scramble for limited resources.

In the temporality of the decline, practices of resistance divided families. Networks of social solidarity gradually came under pressure and became increasingly paralleled by individualized struggles.⁵⁷ For the community, this loss of access to such a vital resource complicated their relationship with the ecologies, juxtaposing shared dependency and mutual responsibility with the dynamics of competitiveness and hierarchical resource extraction (figure 4).

The Comunidade KM47 case differs from conversations conducted by Escobar and Oslender,^{58, 59, 60, 61} who engaged with communities that relied on a strong attachment to their places as a form of survival while using their attachment as a tool to defend their access to land. They present ecologies as supporting marginalized populations. Escobar refers to “place-based struggles” and defends the idea that the attachment to a place is the support for defense strategies in a struggle to maintain control over a territory.⁶² Oslender’s “critical place perspective” builds an understanding of how the particular geographies are instrumental in the structures of spatial organization of these populations.⁶³ In contrast, the Comunidade KM47 case represents a group that was transplanted to these unfamiliar territories and was devoid of initial attachments or specific cultural and geographical ties. This is a key difference, as it drastically changes the relationships between ecologies and communities. This difference enables to study the early changes in the relationships between communities and the ecologies.

56 Ibid 52.

57 Luzhaine, interview 2023.

58 Ibid 37.

59 Ibid 55.

60 Oslender, Ulrich. “Fleshing out the Geographies of Social Movements: Colombia’s Pacific Coast Black Communities and the ‘Aquatic Space’.” *Political Geography* 23, no. 8 (2004): 957-85.

61 Ibid 41.

62 Ibid 55.

63 Ibid 61.

64 Ibid 52.

In this temporality of decline, Marlene and the other families are beginning to suffer from the backlash of their short-term survivalist use of ecologies.⁶⁴ Their initial practices of survival give way to practices of consolidation. This consolidation comes up against a double obstacle: the struggle for habitat permanence against the scarcity of resources and the struggle for keeping a supportive community against the breaking down of social ties.

Socio-ecological marginalisation, the crisis of crises

The growing Comunidade KM47 population began to deplete the water supply in the dry season, forcing the inhabitants to devise alternative plans for water harvesting. A wealthy family, living at the front of the community and owning a

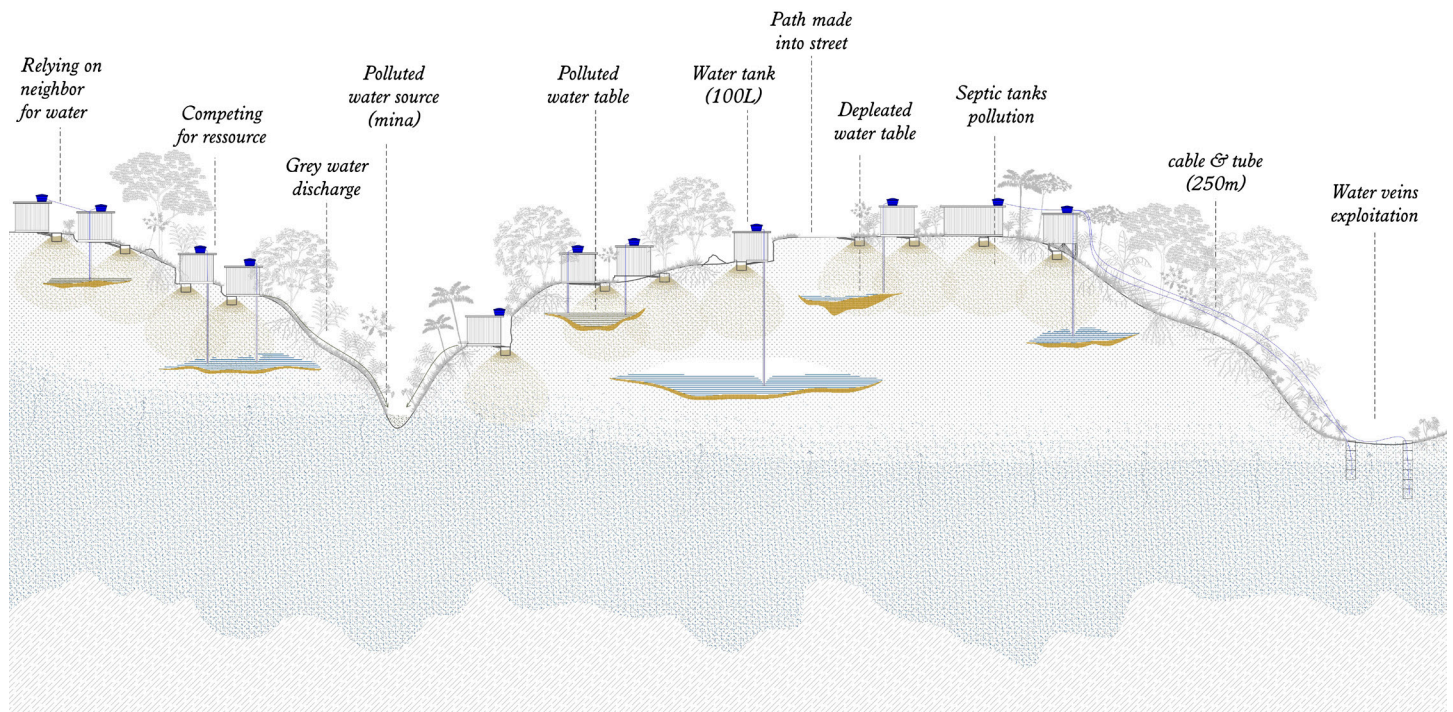


Figure 4. Schematic section of Decline level in Comunidade KM47.

lot of land in the area, built an artisanal well, to a depth of approximately 100m meters. Others, who could afford to do so, dug a semi-artisanal well that were about 50 meters deep. Most people – including Marlene’s family – installed pumps, drilling to the depths of more or less 10 meters into the soils, at the water veins in the depths of the forest. The even less fortunate still, however, had to rely on caipira wells, dug less than 10 meters into the earth. The poorest simply continued to use the contaminated surface water from the spring.⁶⁵ Thus, the depth of water harvesting led to a deeply divided social stratification in which richness and poverty were measured in the purity and taint of water sources.

Today, the state still has not officially recognized the existence of the Comunidade KM47 and its approximately 5000 occupants.⁶⁶ Nonetheless, governmental agencies have tried to support inhabitants in face of the community’s growing water scarcity. A 15,000l tank was installed, an intervention that was initially very well received by the community. Yet the constant passage of inhabitants soon moved the local drug cartel to set up their sales point at the foot of the water tank, discouraging most of the inhabitants from using it. This unexpected turn of events was further aggravated by a storm that broke off tree branches that eventually punctured the lid of the giant tank. Such a large amount of uncovered water provided the ideal conditions for the ever-present local mosquitos to be transformed into dangerous carriers of dengue fever.⁶⁷ Out of a crisis response, a new crisis was born, and a purported source of life hatched once again into a contaminated receptacle of disease.

Against this failure outside assistance, Marlene learned to rely on herself and her family. The disillusionment with the external solution and the impossibility of continuing, with a growing family, to buy their drinking water drove them to explore alternatives. Her sons ventured deeper into the Atlantic Forest in search of water, knowing that this lush forest also drew its resources from the ground. They discovered water veins, which threw the family a lifeline that would ensure their survival through the years to come. These streams appear when the soil is waterlogged and disappear in the dry season. Marlene’s sons dug out the ground, inserted four concrete tubes and installed a pump at the bottom. The word spread and many families followed suit, installing their pumps in these vertical tunnels at the valley bottom.⁶⁸ To connect the veins to their homes, Marlene’s family installed 250 meters of flexible tubing to carry the water, as well

65 Renaldo, interview 2023.

66 Heleno, interview 2023.

67 Ailton, interview 2023.

68 Baiano, interview 2023.

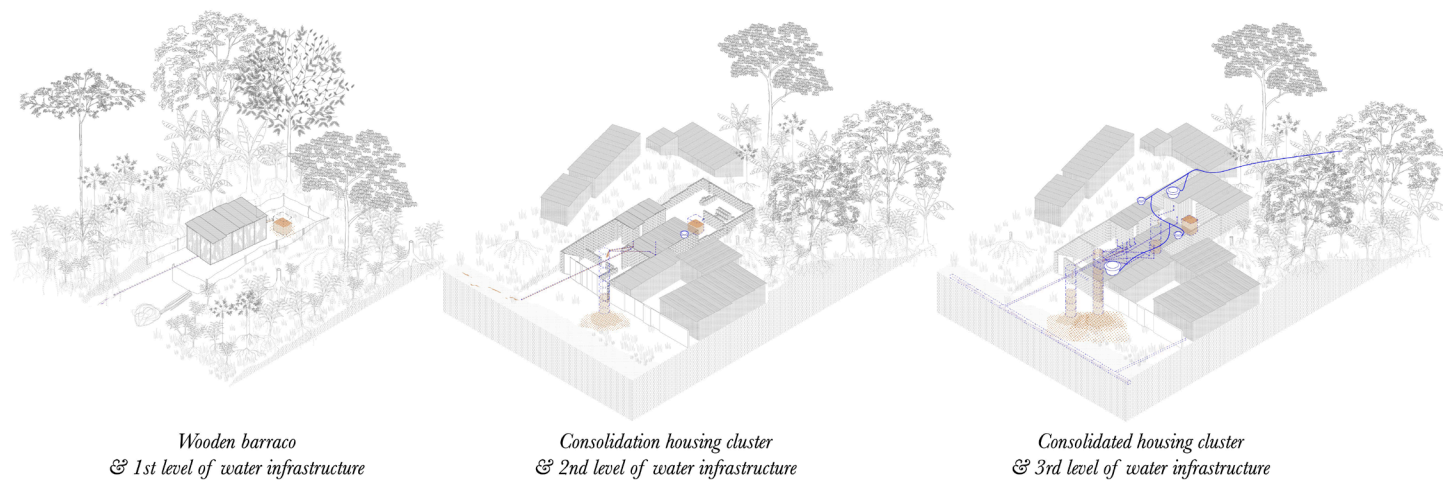


Figure 5. Incremental consolidation of Marlene's family habitat.

as 250 meters of electric cable to supply the pump. Even today, Marlene has to buy a new pump every three months because of its intensive use and distance the water has to cover. This cost is a burden for the family, but a condition for their survival. When the pump breaks, they replace it within a day or two at the most, depending on the water reserves that they managed to build up. Thus, water provision in Comunidade KM47 is not a given right or an entitlement, it requires a perpetual struggle to erect and maintain makeshift infrastructures that are immanently prone to malfunction and collapse (figure 5).

As the family grew from five to ten individuals over the years, their use of the water infrastructure grew. Since she settled there, Marlene's husband has dug three septic pits within the boundaries of their property. Two houses were also built on this land, forming a cluster of dwellings. All three employed long-term savings to buy concrete blocks for construction. Even so, Marlene still regards them as *barracos* rather than houses. Because they do not have a legal electricity and water supply, she considers the temporary denomination of "shed" or shack to be more fitting. The family also developed trenches with tubes to create an alternative sewage system for grey water, which used to run into the streets. Nowadays, grey water passes under the street and is then redirected to the contaminated water source. Today, like most of the families, the family still buys drinking water, uses rainwater to clean the *barracos*, and uses the pump for everything else. The family learned to adapt their water consumption to the local climate. Periods of prolonged drought are hard, forcing the family to fill the tanks of one of the family members every day for his/her smaller family nucleus. Thus, Marlene receives the first 50 liters, her son, and grandchildren the next 100 liters, her other son and daughter the next 100 liters and the last daughter receives the last 100 liters before starting the four-day cycle again.

Although access to water is a human right and a federal law⁶⁹ the city's water company (SABESP) claims that it cannot currently connect the Comunidade KM47 to the drinking water network because of the Seven Curves.⁷⁰ It would not be cost effective to perforate the altered topography this land, adapted for use by pack animals, to install water pipes considering the small number of inhabitants living in the community and its surroundings. Marlene says that she no longer asks anyone for help when water runs out. Given the water scarcity and the accessibility problems, water access and deployment gradually became not only a necessity of resource, but also a measure of social status.

69 Oyeyinka, Oyebanji. São Paulo: A Tale of Two Cities. Vol. 1: UN-HABITAT, 2010.

70 Heleno, interview 2023.

This socio-ecological stratification (figure 6) illustrates the presence of a new socio-ecological relationship built on the basis of the previous two. The first socio-ecological relationship, dependence, resulted in resistance practices confronting

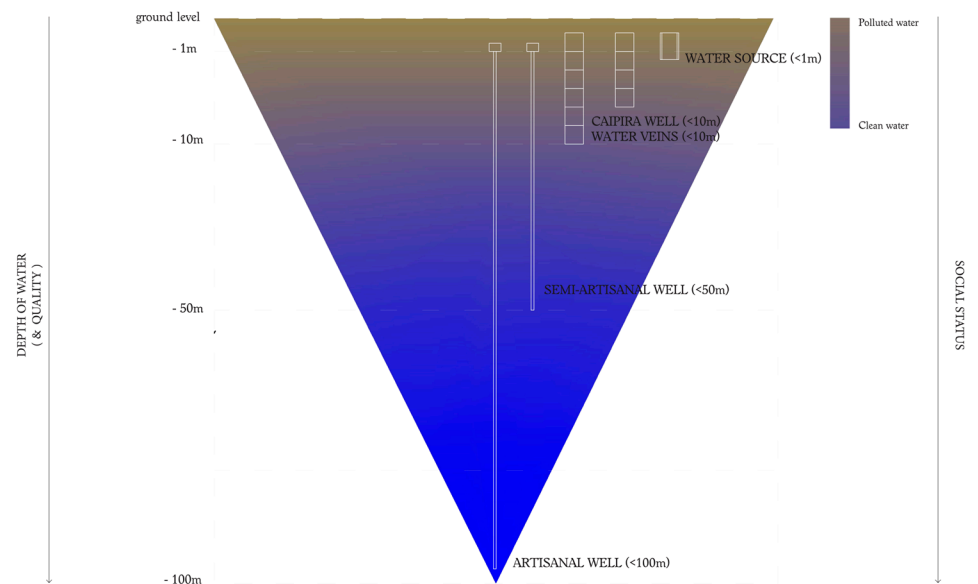


Figure 6. Diagram of socio-ecological hierarchy by water access.

a social tragedy, where the poor were forced to self-build their neighborhoods, creating marginalized communities and occupying lands with no access to basic infrastructure and social rights. However, the families of Comunidade KM47 were able to reduce their precariousness by developing these resistance practices. In doing so, however, the residents gradually engendered and consolidated a second tragedy: an ecological disaster. This ecological tragedy gradually ensued as a result the autonomous urbanization of these natural areas, and its early consequence was the emergence of this second socio-ecological relationship of decline. The combination of these two tragedies created a new socio-ecological relationship as a self-perpetuating dynamic referred to as socio-ecological marginalization.

This third relationship is seen as a vicious circle between the first two, where social marginalisation leads to ecological marginalisation, which in turn drives the families to defend themselves from nature by further urbanizing the reserve. It is clear that Comunidade KM47 families are now drawn against the above socio-ecological marginalization from multiple exposures to polluted water and resulting social issues (figure 7).

This transformation is traceable through the transition from resources scarcity to ecologies that pose a threat to the inhabitants heightening the rejection of the ecologies while, at the same time, generating a socio-ecological hierarchy within the marginalized community. This socio-ecological relationship between communities and ecologies is the long-terms, perpetual relationship to which dependence and decline inevitably lead. In this sense, all marginalised communities on the outskirts of São Paulo are moving towards this relationship at their own pace.

For some communities, this relationship is also the last stage in this race against the ecologies before what Latour could characterize as “becoming modern”,⁷¹ that is detaching themselves from nature with the aim of no longer depending on or suffering from the ravage of ecologies, when they will finally reach the status of urban and have access to all the basic infrastructures. In this sense, the very presence of nature in their midst is a reminder that they do not have access to urbanity. One often heard phrase in these socio-ecological margins is “*Tudo aqui era mato*” (everything here was bush), as historian Janes Jorge puts it: “the Mato is the city’s negotiating front”.⁷² It is also a time marked by social distancing as the community becomes deeply divided by an unequal socio-ecological hierarchy guided by uneven access to scarce resources.

71 Latour, Bruno, and Catherine Porter. “We Have Never Been Modern [1991].” *Contemporary Sociological Theory* (1993): 448.

72 Jorge, Janes. “Morar No Extremo Sul De São Paulo: Sociedade E Natureza Na Região Da Guarapiranga Em Meados Do Século 20.” *Cadernos CEDES* 40 (2020): 266-75.

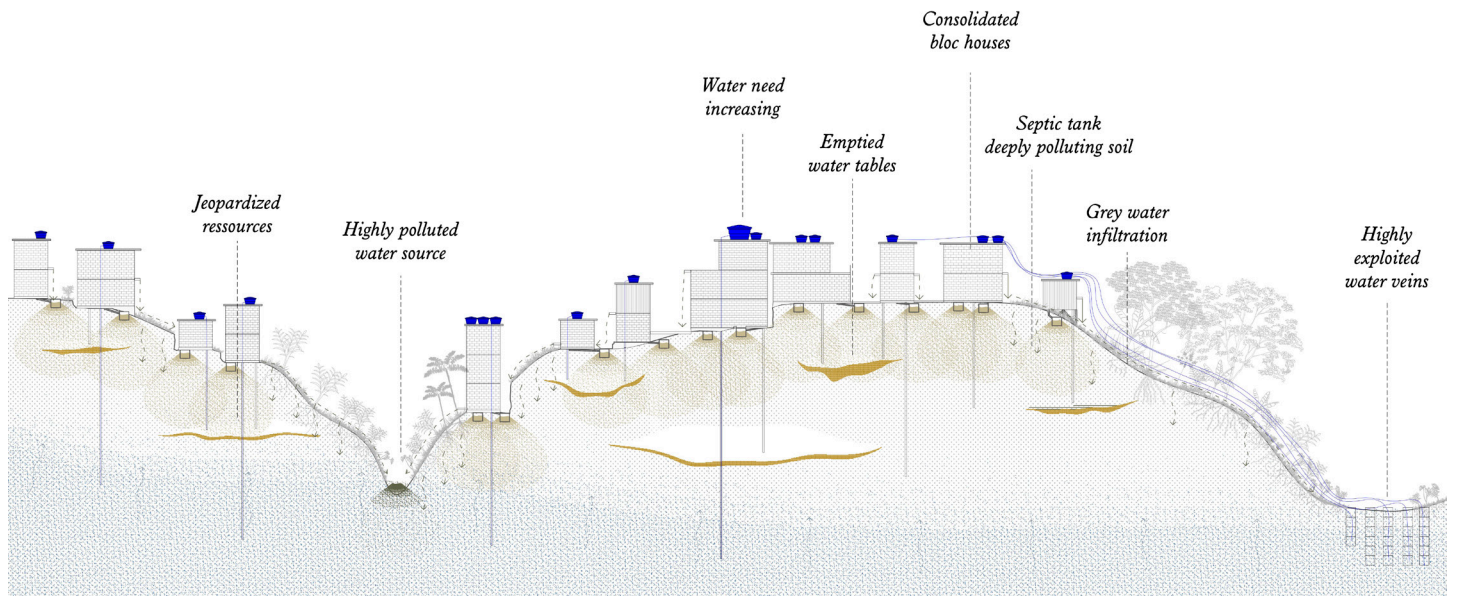


Figure 7. Schematic section of Socio-ecological marginalization level in Comunidade KM47.

Conclusion

These micro-narratives explored – at diverse temporalities – the progressive production of long-lasting peripheral urban territories through the lens of day-to-day practices of inhabitation.

The study of inhabitation practices revealed the dynamism of place-making through the presence of several levels of oppression in response to which practices of resistance emerged. The juxtaposition and interaction between the dynamics of oppression and resistance have generated an understanding of three socio-ecological relationships that describe temporal processes of consolidation of supposedly ephemeral habitats that end up establishing long-term urban configurations.

The relationship of dependence emerged as a mechanism of survival through the labor of adapting these inhospitable lands. This first relationship revealed how place-making practices generated solidarity networks and created social places. The second relationship of decline emerged as a result of the gradual depletion and contamination of ecological resources and revealed how the role of ecologies shifted from being a source of life to being a source of struggle. This temporality led to a swing from shared responsibility to hierarchical competition for the resources extraction. The final relationship of socio-ecological marginalization, which is the sum of the previous two, shows the shift from a situation where ecologies offer scarce resources to another where they become a source of danger.

This generates a vicious circle of mutual destruction between the community and the ecosystems, leading to the establishment of a long-term precarious urbanization and long-term socio-ecological hierarchy within the marginalized community.

By examining these different cyclic socio-ecological relationships, this study highlights how resistance practices based on survival, consolidation, and rejection, that were thought to be temporary and ephemeral, have in fact become long-term archetypes of São Paulo's peripheral housing landscape. The daily acts of inhabiting these places create cycles of urban consolidation and ecological deconsolidation that continually and mutually adapt and marginalize each other (figure 8). The exploration of multiple pasts and present dynamics tells the story of how oppression generate resistance, how temporal becomes permanent, how socio-ecological relationships change inhabiting practices that everyday construct pieces of São Paulo metropolis.

Entre la permanencia
y la temporalidad.
Campos, urbanidad
y tiempo

In between permanence
and temporariness.
On camps, urbanity
and time

LUCAS LERCHS

JEROEN STEVENS

CHIARA CAVALIERI

Perpetual transience:
the socio-ecological marginalization
of São Paulo's peripheries

Transitoriedad perpetua:
la marginación socio-ecológica
de las periferias de São Paulo

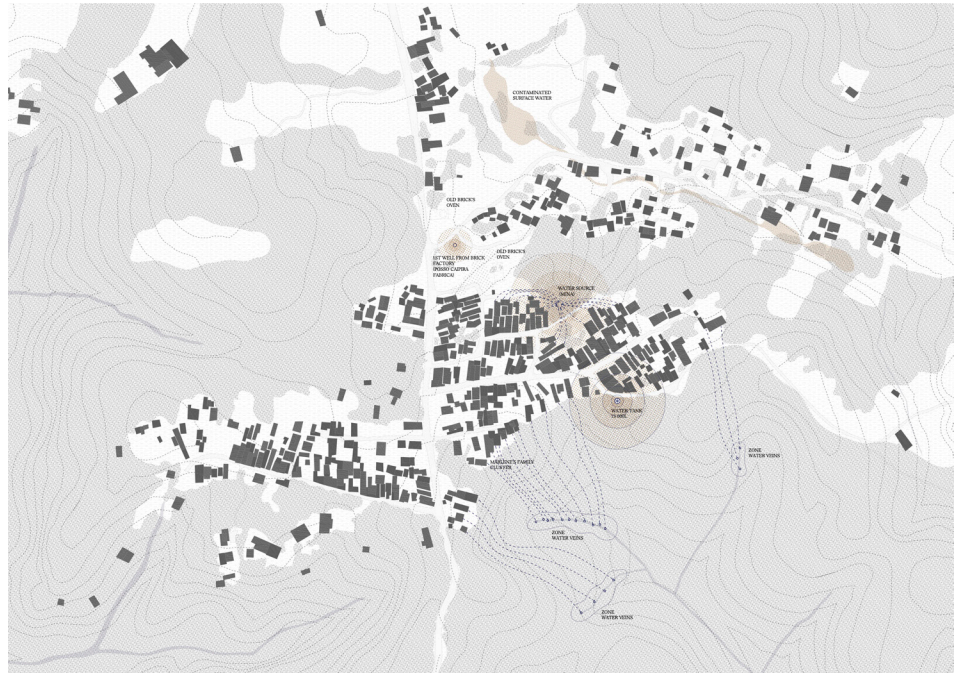


Figure 8. Cartography of Comunidade KM47, 2023.

Authorship

Conceptualization: LL, JS, CC; Methodology: LL, JS, CC; Validation: LL, JS, CC;
Research: LL; Writing (original): LL, JS; Writing (revision and edition): LL, JS, CC;
Supervision: LL, JS, CC.

Image sources

Figure 1. Lucas Lerchs

Figure 2. Lucas Lerchs

Figure 3. Lucas Lerchs

Figure 4. Lucas Lerchs

Figure 5. Lucas Lerchs

Figure 6. Lucas Lerchs

Figure 7. Lucas Lerchs

Figure 8. Lucas Lerchs

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