Ocupação Anchieta Avança!

Co-designing strategies to address the conflict between environmental protection and the right to housing in São Paulo, Brazil

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ABSTRACT

The metro region of São Paulo, Brazil is home to over 21 million people, making it the eleventh most populous metro region in the world. High land costs and a lack of affordable housing leaves few options for low-income families, resulting in the illegal occupation of open land available in the periphery of the city. This land is often protected by environmental laws, thus putting both the occupation and the ecological balance at risk. Environmental advocates leverage Brazil's strict laws protecting the environment and employ narratives of environmental degradation to take legal action and evict occupants. On the other side, public defenders, human rights groups, and social movements fight for the residents' right to adequate housing. These seemingly opposing values are often played out at the expense of vulnerable communities who are often left homeless and resort to occupying other lands, continuing the cycle of conflict.

This visual narrative showcases the case of a recent land occupation, Ocupação Anchieta, and the ongoing efforts to steward the land and improve the wellbeing of the community through participatory planning and a co-design initiative. Through the research initiative, Ocupação Anchieta Avança!, University of Michigan students partnered with locally-based organizations to conduct applied research toward finding local solutions through community-led design. Along with the residents of Ocupação Anchieta, the landowner and the team co-designed and have begun construction of a Civic Center and biodigester to manage waste on-site.

Background

In many developing countries, cities are expanding at unprecedented rates, resulting in housing and infrastructure shortages for some of the most vulnerable populations. With few alternatives, low-resource communities are compelled to occupy open land that is often environmentally protected or unsuitable for development in the periphery of cities.

São Paulo's City Statute (Law No.10.257), passed in 2001, ensures the protection of both environmentally sensitive lands and the right to the city for all residents. Upholding these two constitutional rights is challenging when considering periphery land occupations. Often, environmental protection laws are leveraged to

Figure 1: History of the Land — In 2013, displaced families moved into an area of protected land owned by Instituto Anchieta Grajaú's (IAG), located 17 miles southwest of São Paulo's city center. These aerial images show the boundary of IAG's property and trace the changing site conditions. Intentional burning carried out led to substantial deforestation of primary Atlantic forest, and the land was subsequently occupied, illustrating the rapid urbanization of peripheral lands. The most recent 2018 image shows increased vegetation demonstrating environmental stewardship efforts (Source: Google Earth Pro).

evict poor people from illegal land occupations while ignoring the systemic inequities that trigger these occupations in the first place. To advocate for the people's right to the city, as ensured by the City Statute, the office of the Public Defender, social movements, researchers, and human rights organizations challenge these rulings and seek ways to balance these sometimes seemingly opposing values. Regardless, residents on such sites are often forced off the land within a few years after legal action is taken. Once evicted, the families are added to the end of the social housing waitlist. Additionally, once the land is vacated, actions are seldom taken towards the ecological restoration of the land.

Occupying Anchieta

The community of Ocupação Anchieta is an exemplary case study within this ongoing struggle. In 2013, families organized by the housing rights organization Movimento Anchieta occupied land privately held by an NGO, the Instituto Anchieta Grajaú (IAG). This property had been donated to the NGO by a development company and contains an area of environmental protection (APP), including water bodies and Atlantic Forest. To establish the occupation, the residents deforested large portions of the site and built precarious houses within the protected area. IAG, as the property owner, feared being held liable for the environmental destruction and initially sued the occupants for eviction. After a series of lawsuits and hearings over the period of four years, IAG dropped the lawsuits. Public defenders, human rights organizations, and other social movements have supported and advocated for Ocupação Anchieta resulting in a legal agreement allowing the residents to remain but never to be granted land ownership.

The restoration of the land, respect for the area of environmental protection, and environmentally conscious development were key conditions in the negotiations between the land owners and occupants. As part of the process, the community has relocated 111 homes that were within a highly sensitive creek buffer zone and have sought support from organizations and institutions to implement sustainable projects on the site. The families of Ocupação Anchieta, IAG, and the project team from the University of Michigan are working towards a balance between protecting, preserving, and restoring the natural environment while allowing the families to remain in their homes.

Figure 2: Getting to Know the Community — Today, approximately 850 families, or 3,900 people, call this community home. During March 2017, 64 door-to-door household surveys were conducted by University of Michigan students. Based on the surveys, 53% of respondents did not complete an elementary education and 75% did not have a high school education. Half of the respondents were unemployed and the average income for employed residents was R\$844 (\$270 USD) per month. A lack of education and unemployment result in most families living in extreme poverty.

Community-led Design and Planning Process

During the ongoing tenure negotiations, both the residents and IAG, the landowners, began a process to collaboratively determine the future of the site. This has allowed a variety of institutions and organizations to engage with this process with the hopes of advancing conversations about negotiating the residents' right to the city and the need for environmental protection. Beginning in October 2016, University of Michigan professors Ana Paula Pimentel-Walker and Maria Arquero De Alarcón established a partnership with the community and have both taught and advised a number of students working collectively to carry out participatory planning and co-design.

Figure 3: Day-to-Day Negotiations — “The situation is precarious. We live around raw sewage, rats, trash, and open cesspools,” comments Bete, a middle-aged resident and Secretary of the Residents Association. She goes on to say, “anyways, we can transform all that in a new way of living,” showing the residents strength and optimism. The lack of formalized infrastructure has lead to untreated sewage, trash accumulation in sensitive areas, unstable land, unregulated electrical supply, a lack of clean water, sporadic flooding, and stunted ecological services. At the same time, it is critical to recognize the community’s assets and accomplishments such as urban farming, trash removal, recycling initiatives, and the relocation of 111 families.

Figure 4: Documenting Existing Conditions — In addition to resident surveys, students documented site conditions including water quality testing, locations of trash accumulation, housing types and quality, and condition of sensitive landscapes. Residents led these efforts and were key toward understanding the ongoing challenges.

Figure 5: Partner Network Diagram — Taubman College (University of Michigan) is working with both the community and the landowner, IAG, to develop and implement sustainable development strategies. Relationships throughout the network of partners ranging across cultures and continents have been challenging but key to advancing both the research objectives and the site intervention strategies. The variety of localized perspectives and skills has allowed this project to be stewarded over time and distance.

Figure 6: Collaborating with the community — Team members engaged a range of community members through community meetings, focus groups, and informal conversations. Through iterative co-design of key project components, the residents guided the direction and design of the project to best fit their most urgent needs. These needs have shifted with the frequently changing on-site conditions from sustainable housing prototypes, a waste management plan, reforestation strategies, infrastructure upgrades, and, ultimately, civic amenities.

April 2017: Cultural Center, Catholic church, and playground

August 2017: Culture Shed constructed with two shipping containers

February 2018: Cultural Center design after existing community center was destroyed in a storm

May 2018: Schematic design for Civic Center being implemented

Figure 7: Staying Flexible — A variety of designs were proposed for the site of the now destroyed community center. Communicating openly and often with the residents and on-site partners allowed the project to continue to adapt to changing conditions. While the design of the physical space changed significantly, from the beginning community members illustrated the importance of the center as an anchor of activity and a key place to provide additional support. *Collaborative design proposals drawn by various teammates, including Abhishek Alark Desai, Olaia Chivite Amigo, Laura Devine, Antonela Sallaku, and Yao Tang.*

Figure 8: Supporting the Community — Above are pages from a booklet developed to help land occupations focus on sustainable development strategies. Its graphic style and language speaks directly to residents providing both encouragement and education, and it suggests interventions and initiatives that can be implemented with few resources. Additional topics covered are housing, trash and recycling, sewage treatment, reforestation, and networking and visibility. *Booklet developed by Laura Devine with the faculty advisors. Contact ldeviner@umich.edu for a complete digital copy.*

Figure 9: Supporting the Environment — Managing the sewage waste from the Civic Center with a biodigester is a key benefit to the land. Reliable data on São Paulo's sewage treatment is unavailable, but it is estimated that the municipality treats less than half of the sewage it collects. Currently, some houses are illegally connected to the municipal system and others use a precarious septic system. The photo above is the biodigester that residents are constructing in a five-month construction course coordinated by IAG. These residents will then be hired by IAG to continue the implementation and maintenance of more systems. *Engineering provided by Fluxus Ecological Design and drawn by Laura Devine.*

Figure 10: Joining Community Support with Environmental Stewardship — Above is the design for the Civic Center that broke ground in May 2018. The large assembly space (4) and adjoining rooms (6) allow for a wide variety of uses meeting the diverse needs of the community. The overall plan of the site brings together multiple initiatives, including a fire prevention plan designed by IAG, a new church, and the community's first playground. These are interwoven with design elements that support the environment by absorbing or reusing rainwater on site, revegetation, a garden for growing food, and the management of sewage with a biodigester. *Collaborative design proposal drawn by Laura Devine.*

In March 2017, the professors and 20 students from the University of Michigan involved in an inter-disciplinary Architecture and Urban Planning Capstone traveled to São Paulo to get to know the community and document conditions. This resulted in a comprehensive urban planning report, including imaginative project proposals to illustrate potential outcomes (available [here](#)). U of M team members have traveled back to the site in July 2017 and December 2017. In June 2018, team members returned to São Paulo in order to work with the Brazilian partners to advance and continually refine the most urgent needs of the community.

The collaboration has resulted in a number of proposed initiatives and designs as “the students learn with us and we learn with the students,” says Anderson, a resident and Social Director of the Residents Association. The residents, IAG, and U of M team determined that the most impactful point of intervention is a Civic Center to promote community resilience through providing meetings, education, exercise, and play space, as well as a biodigester to manage the Civic Center’s waste on-site. This component became the community’s top priority following the destruction of their existing community center by a storm in December 2017. Since the storm, the community has been unable to gather and hold community meetings. “We have a lot of work to do, really. Today we are held back, so it is very important the Civic Center opens,” says Moacir, a resident and President of the Residents Association. This outcome has the largest benefit to the community while also allowing for the demonstration of sustainable land occupation practices. When complete, Ocupação Anchieta will invite the surrounding communities, other community leaders, and their network of social movements to visit the project and take the ideas back to their own communities.

Breaking New Ground

The Civic Center is now under construction. The building design and site strategy focuses on providing key community benefits and stewarding the environment. This central meeting place will serve as an anchor and demonstrate a commitment to sustainable development.

Conclusion

The applied research project, Ocupação Anchieta Avança!, challenges eviction narratives of environmental degradation by demonstrating a co-design methodology

resulting in the Civic Center currently under construction. Often, academic work remains in the form of a report, never moving to implementation. The team sought to move beyond recommendations and apply the research to provide a tangible benefit for the community with the support of the Dow Fellowship and Ford College Community Challenge. It can serve as a case study for scholars and educators interested in pursuing similar projects focused on addressing the right to a safe environment and the right to the city. Community-engaged research offers numerous challenges and rewards but has the potential to mold students into future practitioners that are more humble and responsive to community needs and changing conditions.

The project will also serve as a demonstration of the community's commitment to sustainable development through future tenure discussions. These outcomes will be shared among São Paulo's social movement network and potentially be incorporated in future developments in Anchieta and elsewhere. Lastly, the project resists a systemic problem and has provided an opportunity to imagine new relationships between planners/architects and community members.

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