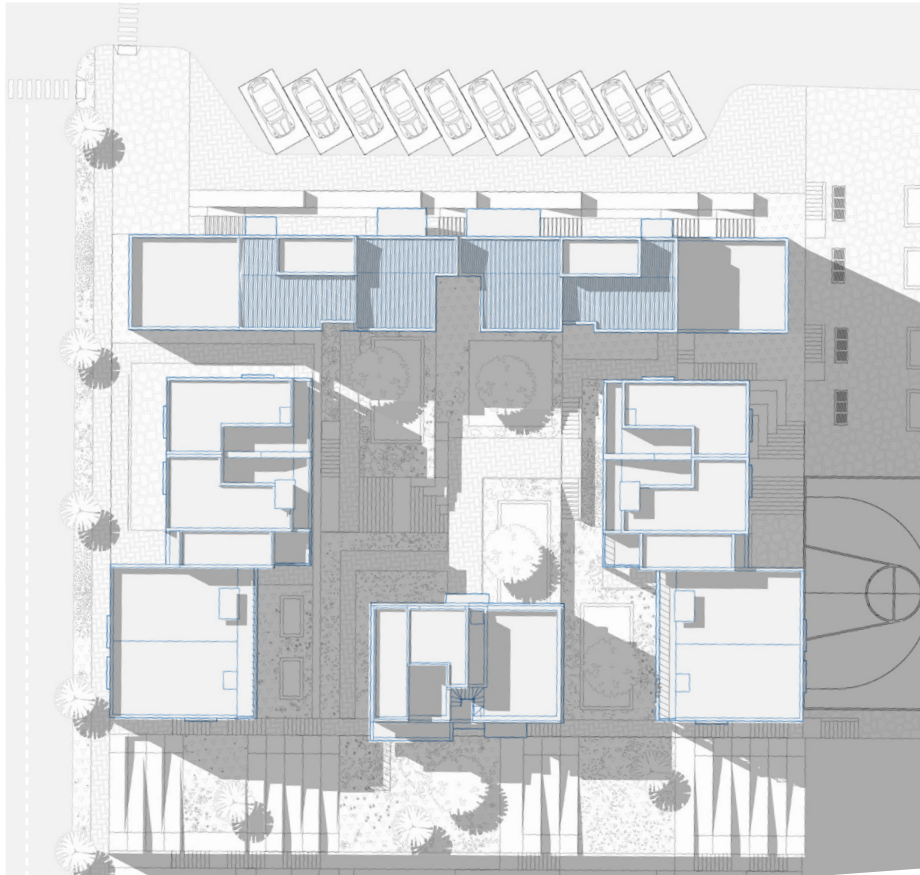# Reflection report

Social-driven redevelopment:

Inclusive community for marginalized people

Msc4 Graduation Design I Global Housing Studio

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1 Introduction

As I meander along São Paulo's bustling Avenue Paulista, I'm entranced by the urban panorama unfolding before my eyes. The city's skyline is punctuated by high-rises, such as the soaring Cásper Líbero TV tower, the avant-garde Museu de Arte de São Paulo (MASP), and major banks like Safra and Citibank building. These skyscrapers transcend the realm of mere construction, they are a testament to cutting-edge architectural innovation and the intertwining of urban development, history and culture.

Yet, within this enchanting cityscape, a stark duality emerges. Amid Avenue Paulista's glitz and vibrancy, I notice an obvious signs of division(Figure 1). Gated communities and vigilant security guard, serve as reminders of the persisting spatial inequities that cast a shadow over this otherwise vibrant scene. The stark contrast between richness and exclusion engages me to explore deep concerns about the nature of equitable urban development in São Paulo, inspiring an exploration of the obstacles I must overcome in our pursuit of a cityscape that represents fairness and inclusivity.

Not only São Paulo, but Brazil as a whole, is grappling with a profound problem that touches the core of its social fabric - the spatial inequality and social injustice of housing. Despite Brazil's remarkable economic growth in recent decades, the benefits of this progress have not been equally distributed, especially when it comes to one of the most basic human needs - housing.

The striking juxtaposition of wealth and poverty in Brazil's vast urban and rural landscapes paints a stark picture of spatial inequality. On the one hand, luxury high-rise apartments and manicured neighborhoods are symbols of prosperity. On the other hand, millions of Brazilians face the stark reality of inadequate housing, informal settlements and homelessness. This vast disparity in living conditions highlights the persistent social injustices that have plagued the country for generations.

To delve into the multifaceted aspects of housing inequality in Brazil is to unravel the story of historical injustices, economic disparities and the challenges of urbanization. It is a narrative that intertwines the complex threads of poverty, inequality, and a rapidly evolving society. In this research, I will not only reveal the grim aspects of the housing problem, but I will also seek to understand the underlying factors that perpetuate these injustices. In addition, I will examine efforts and initiatives aimed at correcting this deep-rooted problem and creating a more equitable and inclusive housing environment for all citizens,especially the marginalized group.

Brazil's housing crisis is more than just a physical problem. It reflects a country's struggle to bridge the gap between privilege and poverty, urban and rural, opportunity and exclusion. In the search for understanding and change, I embark on a journey to address the spatial inequalities and social injustices of housing in Brazil, working towards a future where housing is a right, not a privilege.

Figure 1: Avenue Paulista, São Paulo, Brazil

2 Background

Following the abolition of slavery in Brazil in 1888[1], many former slaves migrated to major cities like Rio de Janeiro, where their housing needs were inadequately met. As the government and market couldn't provide enough housing, jobless migrants began building their own self-built houses called "favelas" on suburban land. These favelas lacked basic amenities like running water and sewage facilities.

Brazil implemented housing decrees to address urbanization-related housing problems, but these primarily served the interests of a few, leaving many without full citizenship rights (Klak & Holtzclaw, n.d.). The forced demolition of informal housing led to the relocation of the poor to unsanitary areas, sparking social resistance and government crackdowns. As a result, favelas multiplied, with 24 appearing in Rio de Janeiro between 1880 and 1920 (Xavier & Magalhães, 2003).

In 2009, the Lula[2] administration in Brazil initiated the "Minha casa, Minha vida (MCMV)[3]" program to address housing access and stimulate the economy during the global recession. This program provided low financing rates and subsidies for low-income families earning up to R$9,000 per month. However, over time, changes in financing, coverage, and regulations have diminished its effectiveness.

Today, Brazil faces a housing shortfall exceeding 6 million units, with 90% of those affected earning less than $1,000 per month. Addressing this crisis raises questions about delivering housing units with limited resources and relocating residents in a flexible and adaptive manner.

São Paulo, like many other urban centers worldwide, grapples with a stark contrast in living conditions and spatial inequity between various income groups. To tackle the housing deficit, the municipality introduced the ZEIS[4] map, making vacant and illegally occupied urban land available for social housing construction. Nevertheless, the distribution of such housing remained income-dependent, excluding specific low groups.

In Grajaú, the marginalized individuals face numerous challenges in their daily lives. The existing housing in these areas often lack essential amenities, basic infrastructure, and a sense of community. This **spatial inequity** and **social injustice** perpetuate a cycle of poverty and exclusion.

3 Aim

Recognizing this issue, there is a pressing need to explore innovative architectural design solutions to improve living conditions and foster **inclusive communities** within São Paulo's favelas. The overarching goal is to bridge income gaps, create opportunities for marginalized residents, and address systemic issues. This research investigates architecture's potential as a tool for social change, aiming to enhance residents' quality of life in underserved communities.

To achieve this, the research will delve into architectural design, urban planning, and community engagement, identifying strategies that empower marginalized individuals, promote inclusivity, and create environments conducive to social and economic progress. By addressing these challenges through architectural innovation, this research seeks to contribute to a more equitable and just urban landscape in São Paulo, offering insights applicable to similar contexts worldwide.

4 Research and design

To realize the aforementioned goals, I embark on an exploration of architectural design's transformative capacity within the urban context. This exploration centers on its potential to cultivate inclusive communities, enhance living conditions, and open doors to opportunities for marginalized individuals. My approach involves an in-depth examination of best practices, case studies, and the specific needs of residents, with the aim of uncovering the foundational principles guiding the creation of empowering architectural solutions. Ultimately, this endeavor seeks to bolster the quality of life for marginalized populations, serving as a catalyst for greater equity and justice within urban societies. To achieve this overarching objective, I have delineated my goals into the following areas.

4.1 Inspiration

What is an effective solution to mitigate the neglect of marginalized individuals within social housing projects?

Before the field trip, I conducted a comparative analysis to build a foundational understanding of Brazilian social housing . During the field trip, I engaged in field observations that allowed me to experience and appreciate the quality of life at a human scale. Subsequently, I explored specific communities, neighbourhoods, or housing projects online, which had implemented strategies to enhance the quality of life for diverse income groups. These **case studies** provided valuable insights into successful approaches. As a result, I endeavored to incorporate key elements from Brazilian vernacular architectural attributes into my own design.

Upon conducting the research, I have identified mixed-income housing as a potential solution to alleviate social segregation in newly developed areas. Additionally, I have drawn conclusions regarding essential qualities that should be assessed in a housing project from an **urban planning** perspective:

1) Social justice
2) Economic diversity
3) Urban resilience
4) Civic engagement

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1 Brazilian Princess Isabel of Bragança signed the Lei urea (also known as the "Golden Act") on May 13, 1888. All forms of slavery were prohibited.
2 Luiz Inácio Lula da Silva: The 39th and current president of Brazil, he previously served as the 35th president of Brazil from 2003 to 2010
3 Minha Casa, Minha Vida - MCMV: My House, My Life
4 Zonas Especiais de Interesse Social – ZEIS: The Special Zones of Social Interest

4.2 Aspiration

What specific considerations should be taken into account to enhance the quality of life for diverse income groups?

After learning from the paradigm established in the case study, my focus shifted towards the architectural scale. To better understand the genuine requirements of inhabitants, I embarked on **field observations**. During this process, I carefully observed and documented intricate details of the environment, the behaviours of the local people, their interactions, and any relevant phenomena. This allowed me to gain insights into the daily activities and routines of the community, as well as identify the specific needs of the buildings and the overall site.

With the support of the School of Architecture and Urbanism at the University of São Paulo (FAUUSP), I have had the opportunity to delve deeper into the sites and various social housing projects in São Paulo. I have actively engaged with local residents and stakeholders, conducting on-site surveys and **interviews**. These interactions have yielded valuable qualitative and quantitative data, shedding light on their perspectives, needs, and concerns.

The field trip to São Paulo offered a profound understanding of the diverse requirements of various income groups, particularly evident in the city's striking disparities in living conditions. I endeavored to comprehend the multifaceted needs of these distinct income groups from various perspectives and subsequently categorized them accordingly:

Urban design
1) Affordability
2) Services
3) Safety
4) Qualities of life

Architecture design
1) Space efficiency
2) Materiality
3) Privacy
4) Amenity

4.3 Adaptation

What are the potential challenges and barriers that may arise during the development of mixed-income housing, and what effective strategies can be employed to address them?

Following my site survey, I shifted my focus towards identifying disparities in living conditions among diverse income groups. **Literature review** played a pivotal role in helping me delineate these distinctions. Furthermore, my attention broadened to pinpoint the factors influencing the quality of life across income strata, drawing upon established criteria by scholars in this field to identify potential design solutions at various scales.

Utilizing data from Google Maps and Geographic Information Systems (GIS), I created visual maps to illustrate **spatial analyses** and relationships within the site. Additionally, resources from the municipality's official website aided in layering various data, including demographics, land use, and infrastructure, to gain contextual insights.

Drawing inspiration from social housing cases in São Paulo, I examined how they implemented these concepts in their designs and sought to incorporate similar ideas into my own design approach(Figure 2).
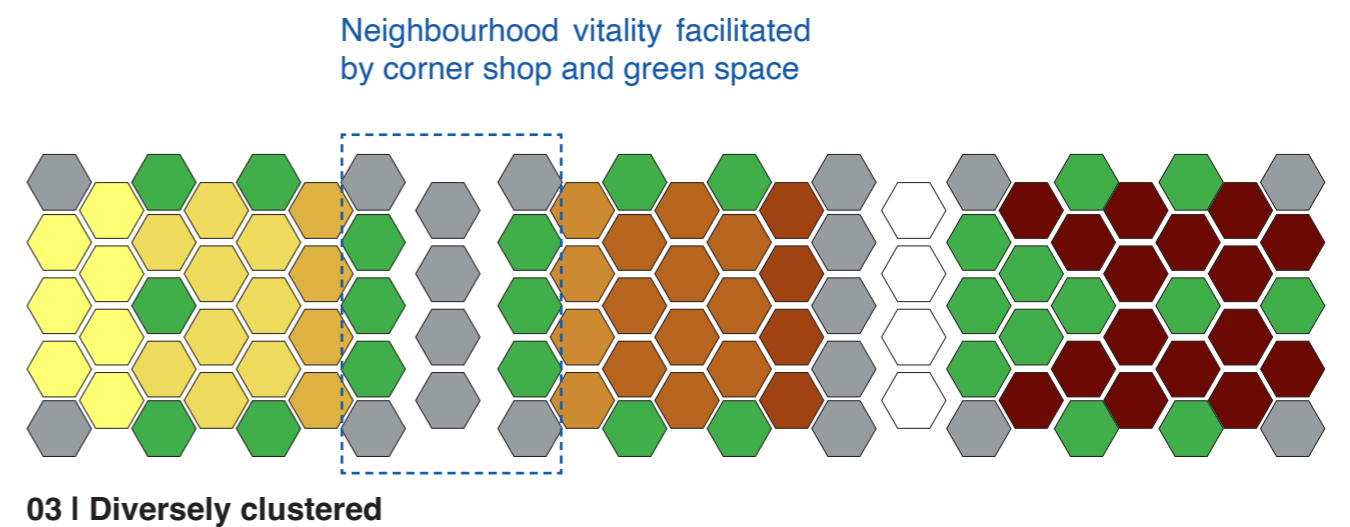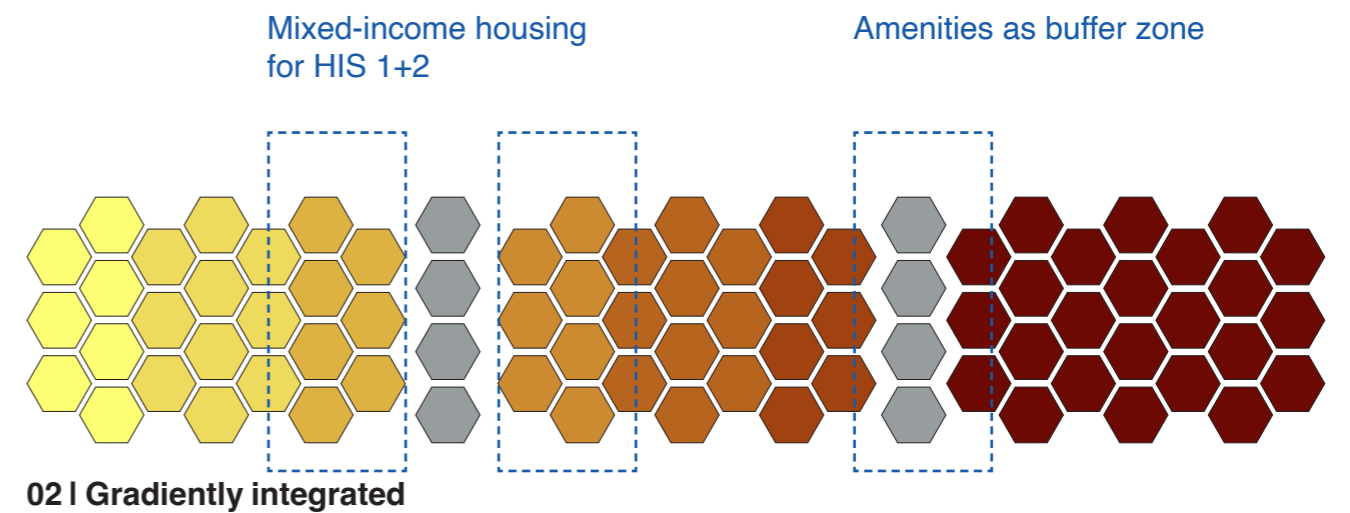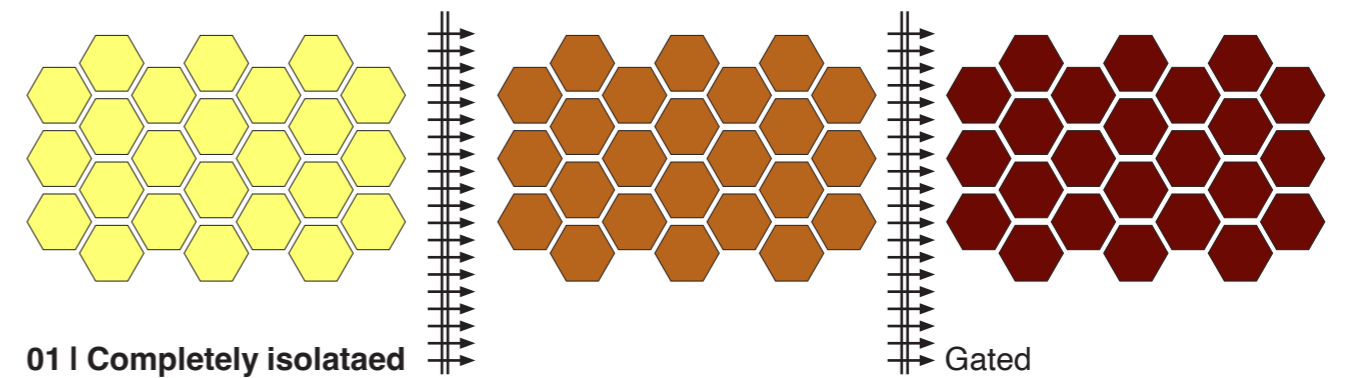
01 l Completely isolataed   Gated

Mixed-income housing for HIS 1+2   Amenities as buffer zone

02 l Gradiently integrated

Neighbourhood vitality facilitated by corner shop and green space

03 l Diversely clustered

Figure 2:Adaptation strategy

Amenities

Green space

Opportunities

HIS 1 (0-3 minimum wages)

HIS 2 (3-6 minimum wages)

HMP (6-10 minimum wages)
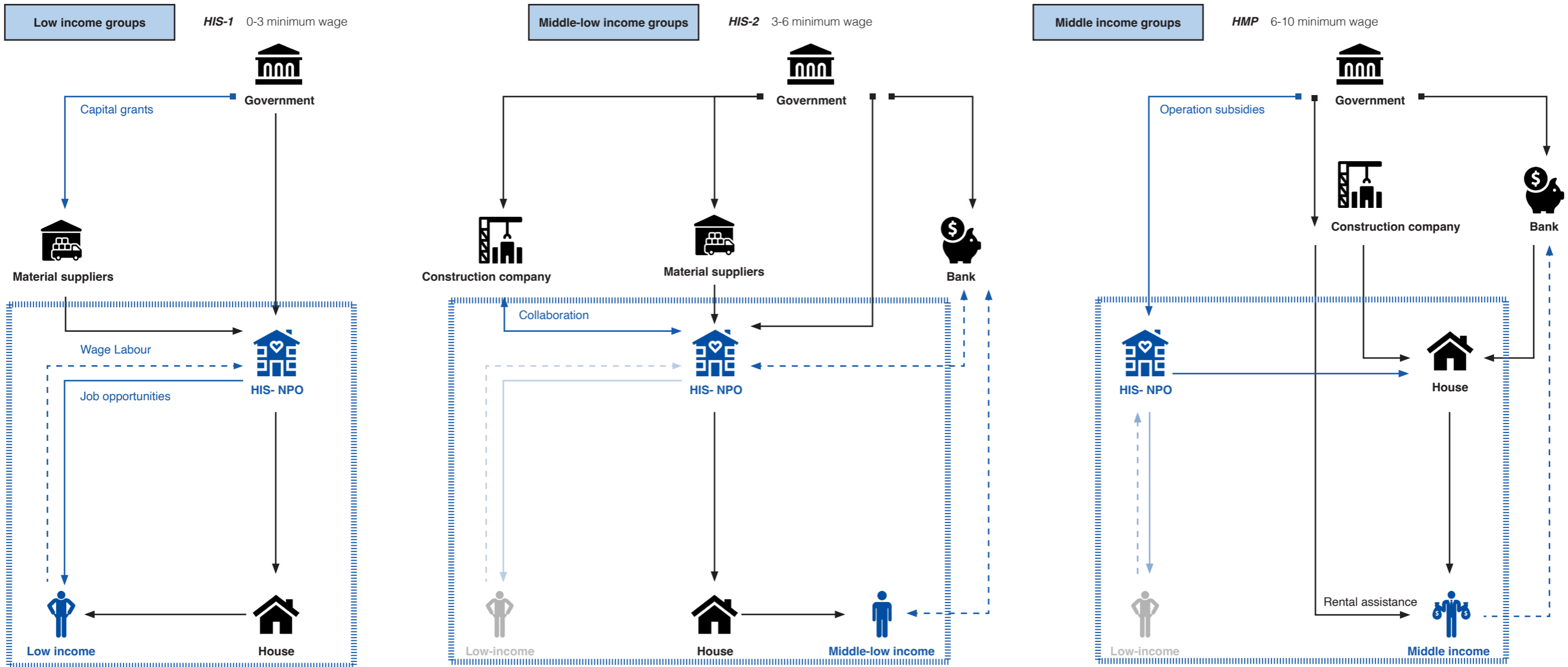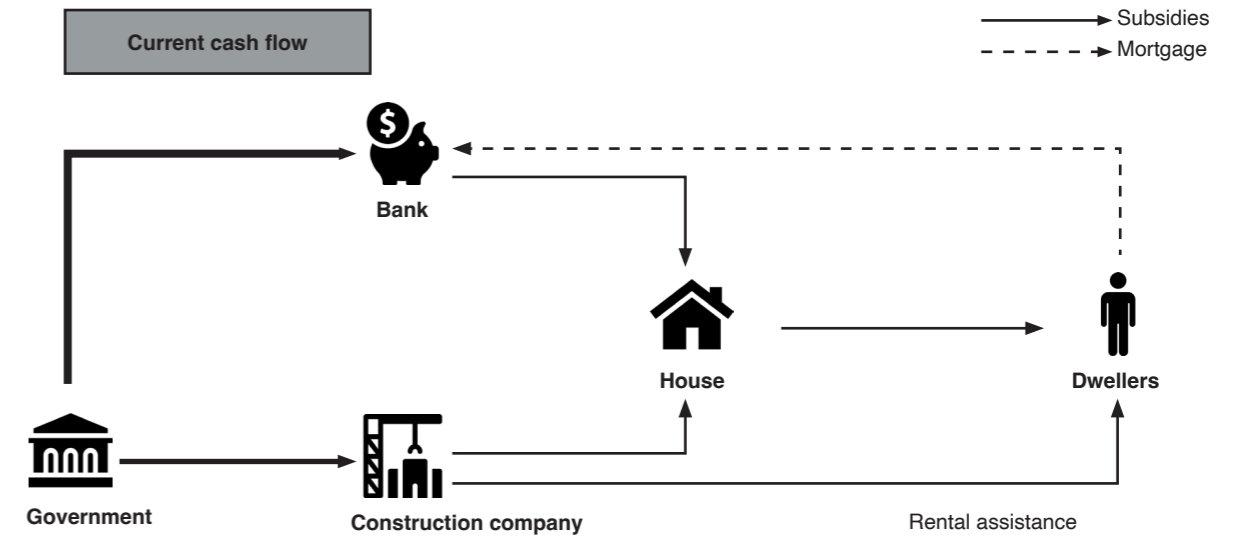
4.4 Engagement

In what ways can architecture provide opportunities for marginalized individuals to actively participate and engage within their community?

When it comes to managerial strategies, I conducted **analysis of existing policies** and initiatives aimed at enhancing the quality of life for diverse income groups at the federal, state, and municipal levels. Additionally, I conducted an in-depth review of the literature to explore the various aspects covered by housing policies. My objective was to pinpoint potential opportunities for managerial strategies and architectural enhancements in the realm of mixed-income housing.

During my analysis, a noteworthy observation emerged: the predominant focus of most social housing projects is profit-driven, primarily centered around financial gains. Consequently, my aspiration is to shift the paradigm towards a social-driven development approach(Figure 3). This entails providing secure, affordable, and inclusive housing solutions tailored to marginalized or low-income communities. The emphasis is on addressing social issues, such as homelessness, poverty, and inequality, by improving living conditions and fostering community well-being.

Current cash flow

→ Subsidies
--→ Mortgage

Bank

House

Dwellers

Government

Construction company

Rental assistance

Low income groups — HIS-1   0-3 minimum wage

Capital grants

Government

Material suppliers

Wage Labour

Job opportunities

HIS- NPO

Low income

House

Middle-low income groups — HIS-2   3-6 minimum wage

Government

Construction company

Material suppliers

Bank

Collaboration

HIS- NPO

Low-income

House

Middle-low income

Middle income groups — HMP   6-10 minimum wage

Operation subsidies

Government

Construction company

Bank

HIS- NPO

House

Rental assistance

Low-income

Middle income

HIS-NPO Non-Profit Organization for Social Interest Housing

Figure 3: Social-driven managerial strategy

5 Ethical challenges and opportunities

Marginalized residents of these areas have long endured feelings of neglect, and this frustration is exacerbated by prolonged disengagement from the design and planning process. During the interview with community members, it became clear that while stakeholders occasionally sought information from them, they often failed to genuinely engage in the design process and often neglected to share in the final outcome. This disconnect contributed to a general sense of exploitation among these residents, further exacerbating their existing socioeconomic challenges. Therefore, designers must aware of these limitations (Bonacin et al., 2019),to address this systemic issue and cultivate a sense of empowerment and inclusion, fostering mutual communication is crucial, necessitating active engagement of these residents in the decision-making process.

While programs for social housing, rent, and credit are intended to help low-income individuals, many policies can inadvertently exclude them. My goal is to compensate for these exclusions through the construction process, thereby alleviating financial stress. The construction and development of the area will occur in phases, allowing the community to gradually adapt to the new environment and integrate into new job opportunities, fostering mutual growth.

Creating a sense of community among people of various income levels is crucial in mixed-income housing. To achieve this, I design shared spaces like parks and community centers where residents can come together and connect. However, bringing together individuals from diverse backgrounds can sometimes lead to challenges, which I aim to mitigate by promoting mutual respect and providing conflict resolution resources. Additionally, I ensure general consistency in building materials and facade while maintaining the cluster's character, so as to showcase the identity of the neighbourhood.

Managing financial limitations and bureaucratic challenges can be formidable. To overcome these obstacles, I advocate social-driven development, collaborating with government and non-profit organizations to secure funding and ensure smooth project execution. Non-profit organizations can also serve as advocates for local residents, articulating their vision for the community while facilitating the distribution of resources, materials, and job opportunities for construction and maintenance.

6 Relation

In São Paulo, much like in many other cities globally, there exists a stark divide in living conditions between various income groups. Nowhere is this division more pronounced than in the sprawling favela areas, where marginalized individuals confront daily challenges that stem from inadequate housing, a lack of essential amenities, and deficient infrastructure. This situation perpetuates a distressing cycle of poverty and exclusion that demands our attention and action.

In this context, I believe "Master of Architecture, Urbanism, and Building Sciences" programme aim to equip students with the knowledge and skills needed to confront pressing building challenges. I find a deep resonance between my research and the objectives of these academic pursuits. My research is driven by a compelling goal: to address the spatial inequities and social injustices in housing that afflict urban centers. And my design centered on exploring innovative architectural design solutions that enhance living conditions and foster inclusive communities, aligns with these educational goals.

To be more specific, I seek to uncover how architecture can be a catalyst for social change, elevating the quality of life for residents in urban periphery(Figure 4). It delves into various aspects of architectural design, urban planning, and community engagement, all with the aim of identifying strategies that empower marginalized individuals, promote inclusivity, and create environments conducive to social and economic progress.

Moreover, my research touches upon specific challenges inherent to the development of mixed-income housing and proposes effective strategies to address them. It's this practical and solution-oriented approach that can enrich the broader objectives within the "Global Housing Graduation Studio".By adopting a bottom-up research methodology that incorporates the aspirations of inhabitants, we can engage more people in the social-driven development process, ultimately fostering an inclusive community.

In essence, my research stands as a bridge between academic exploration and real-world impact, offering insights and solutions for the complex and pressing issues of housing inequality and urban development and contribute to a more justice society.
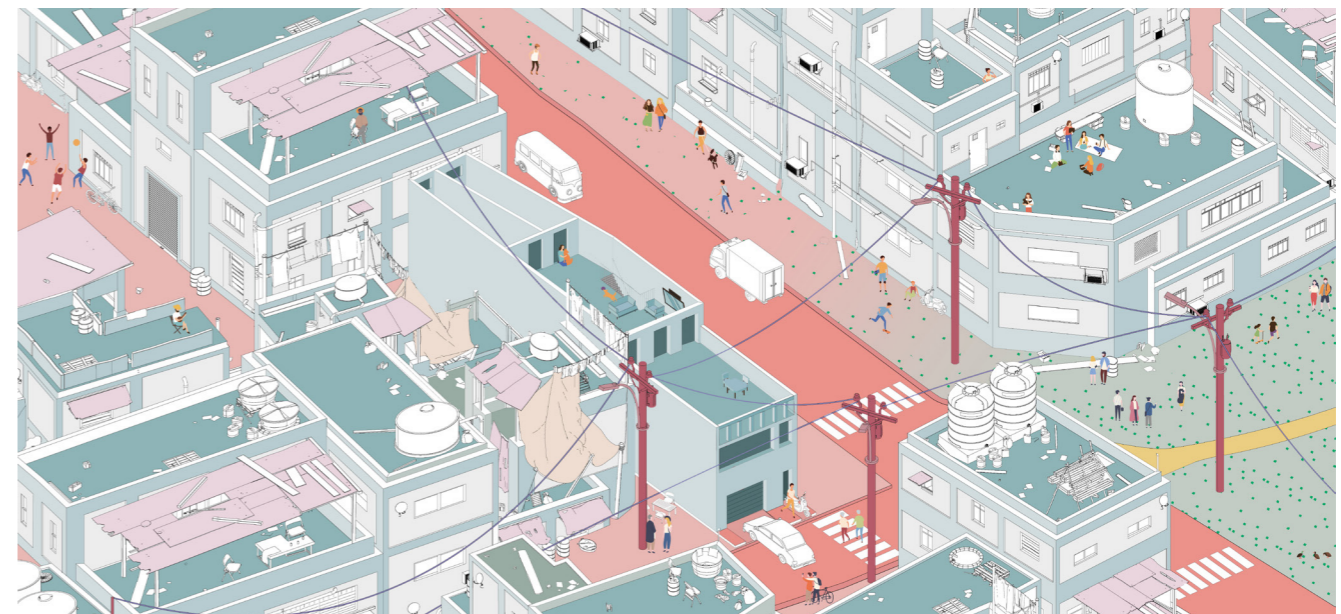

Figure 4: Atmospheric synthesis of Grajaú, São Paulo

7 Bibliography

Bonacin, R., Dos Reis, J. C., & Baranauskas, M. C. C. (2019). Universal Participatory Design: Achievements and Challenges. Journal on Interactive Systems, 10(1), 1. https://doi.org/10.5753/jis.2019.714

Klak, T., & Holtzclaw, M. (n.d.). The Housing, Geography, and Mobility of Latin American Urban zy Poor: The Prevailing Model and the Case of Quito, Ecuador.

Xavier, Helia Nacif and Fernanda Magalhães (2003.) The Case of Rio de Janeiro. IN: The Challenge of the Slums—Global Report on Human Settlements 2003. UN-Habitat (United Nations Human Settlement Programme.)