Putting People First in Porto Maravilha

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Abstract

The decline of historic urban centers and the proliferation of informal developments have posed economic and urban issues to a vast number of municipalities across the globe. The exploration of this topic by architects and urbanists, planners, economists and academics as well as the discussion on whether design can be effectively harnessed as a tool to reduce social inequality are as old as the issue From the belief in the social itself dimensions of architecture and urbanism. and based on a design assistance philosophy built around a whole-systems approach to communities, a program was developed in which interdisciplinary teams provide community-centered ideas to an array of urban challenges on a pro-bono basis.

Local architects from Brazil with support from the local municipality of Rio de Janeiro partnered with a team from the United States for a workshop in Rio which benefitted from the attendance of local architects, students from Rio's architecture schools and students from an American school of architecture. The workshop focused on the port district of Rio de Janeiro (Porto Maravilha) encompassing adjacent neighborhoods including Morro da Providência. Students from both countries worked collaboratively document each of these areas coordination with team members. A presentation and report outlining eight key principles focused on design solutions that put people first, were provided to the Rio community.

The decline of historic urban centers and industrial areas have posed economic and urban issues to a vast number of municipalities across the globe¹. Similarly, the topic of informal settlements and their relationship to the formal city has been a subject of professional thought for decades². Believing in the social dimension of architecture and urbanism, and based on a design assistance philosophy built around a whole-systems approach to communities, the American Institute of Architects created in 1967 the Regional/Urban Design Assistance Team program (R/UDAT)³. The program has brought together numerous interdisciplinary teams to provide community-centered ideas to an array of urban challenges on a pro-bono basis, supporting over 158 communities of varied scales across the globe. The program delivers a set of best practices that respond to the local context, whole-systems analysis that can lead to integrated strategies and engagement of the local community.

Invited by the local chapter of the Brazilian Institute of Architects (IAB-RJ) and Brazilian Architecture and Urbanism Council (CAU) with support from the local municipality of Rio de Janeiro, the R/UDAT Rio was developed during a four-day long workshop which benefitted from the attendance of local architects, students from Rio's architecture schools and graduate students from the University of South Florida School of Architecture and Community Design. The workshop focused on the port district of Rio de Janeiro (Porto Maravilha) encompassing the neighborhoods of Gamboa, Saúde, Santo Cristo, Morro da Providência, and immediately adjacent parts of the city center (Figure 1). Students from both countries worked collaboratively to document each of these areas in coordination with the R/UDAT team members. A public presentation

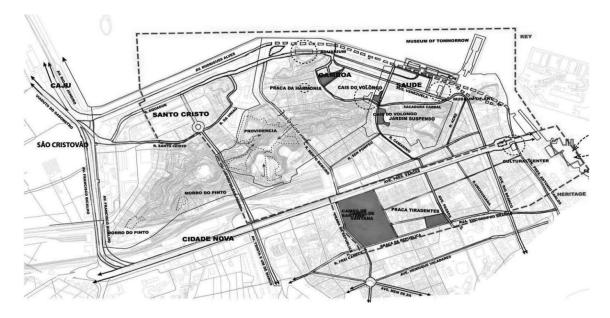


Figure 1. Overview of the study area, north of Rio de Janeiro's City Center.

accompanying report, published online in English and Portuguese⁴, were produced as a result of the team visit and workshop. Students continued to develop the recommended principles of the report through a design studio format upon return to the United States.

Project Overview

The port area is of paramount significance to Rio de Janeiro, the second largest city in Brazil with a population of approximately 6.8 million people, embodying many critical points in global dialogues about the city of the future⁵. The relevance of the site transcends the city, state and country, featuring a collection of historic assets: the Valongo Wharf, a designated UNESCO World Heritage Site (2017), and a large number of late 19th and early 20th century buildings, predominantly double-story "sobrados" in Eclectic style, together with impressive warehouses and factories. The Wharf is a tangible remnant of the port of entry of an estimated 900,000 enslaved Africans from 1811 onwards; making it the largest entry point for slaves into the Americas.⁶ The site includes the birthplace of samba and other intangible expressions of Afro-Brazilian culture. Another key characteristic of the area shared by other global metropolises is the Post-Olympic legacy.

The local municipality's aim of increasing the site's population from 32,000 to 100,000 by 2020⁷ was dramatically impacted by the ongoing economic crisis that has stalled the implementation of existing plans⁸, leaving the provision of housing and other community benefits⁹ unaddressed in spite of the investment of approximately 6 billion dollars. The works which materialized focused on infrastructure with the implementation of a LRV (Light Rail Vehicle) network, a cable car connecting the Gamboa neighborhood to the Providência Hill (currently deactivated) and creation of three anchor cultural superstructures that became strong urban nodes: the Museum of Tomorrow and Rio Art Museum on Mauá Square, and the Aquarium on the north end of the study area. The site also features the largest Ferris wheel in Latin America. Financed with substantial public investments which were enabled by the sale of air rights (following a proposed re-zoning of the area), and private investments, these impactful infra-structural gestures aimed at attracting visitors and economic investment, planted the seed for future private investment and publicprivate partnerships, and placed Rio on the global stage.

The community includes residents from the Morro da Providência, Rio's first favela established over 120 years ago. Transient users

of the area consist of tourists and commuters who work in the area and adjacent city center. The Strategic Plan for Rio acknowledges that the growth of favelas can be attributed to "a historical absence of policies and financing of low-income housing" ¹⁰ and lack of political will to resolve "land regularization and social and productive integration from the favela to the city". These are issues that most major global cities are struggling to deal with and might be of particular interest to emerging countries in Africa and Asia as a comparative case study.

After reviewing information made available by the municipality and universities, presentations by local architects and municipality representatives, and based on interaction with local community members, the following key urban issues were identified in the area:

- Favelas are isolated as urban fabric and social group in spite of the visual and physical proximity;
- Safety is an issue in Rio, including murder and traffic fatalities, discouraging tourism. Rio strives to be a World Class city but currently lacks the urban safety closely linked to increased opportunities for social-economic mobility
- The study area is a vibrant neighborhood during the day but a high percentage of vacancies create an eerily unpopulated place at night.
- Pedestrian travel faces various geographic, social, security and engineering obstacles;
- Commuters face long commutes by car;
- There is a need to build sustainability and resiliency into the current plans by allowing increased participation and integration of the local community, targeting response to local needs.

Recommendations

After studying the key issues above, and upon site visits at different times of the day, the following eight key design principles were outlined, through the lens of social equity, in response to the issues above:

First: Put People First

A core principle of sustainability is that everyone gets their fair share of resources for sustainable development through four key concepts^{11,12}:

- Distribution equity: The poor get their fair share of resources.

- Structural equity: Address the cycle of poverty and vulnerability that comes to historically disadvantaged populations through generations.
- Procedural equity: Meaningfully engage affected populations in problem identification and decision making.
- Intergenerational equity: Ensure that future generations have opportunities that are not squandered by current generations.

Second: Focus on Connections

While the implementation of the LRV network and the undergrounding of highways increased connectivity in the pre-established development nodes, there is room for improvement of the urban experience for the different stakeholders through the activation of the spaces in between these anchors. The establishment of cycling lanes and pedestrian paths can increase footfall supporting local businesses and vice-versa. Incentivizing use of public transport and support to pedestrianization will likely reduce traffic fatalities and will enhance the perception of safety, increasing the number of "eyes-on-the street". Interaction with local community members revealed that the construction of the cable car was considered beneficial therefore its reactivation would be welcomed by locals.

Third: Be Transformative

implemented works have transformative by relying on large scale projects that demanded substantial budgets. Now that the infra-structural and anchor nodes are in place, there is potential to implement profound transformation with smaller projects; projects that will weave the urban fabric together, increase safety, support local communities, and attract investors and tourists. Fulfilling the goals of housing and jobs provision for the local community, as outlined in CDURP's (Urban Development Company for the Port Region) Porto Maravilha and Rio's Strategic Plans, is the most critical task responsible for the long-term successful rehabilitation of the area, making viable the municipality's goal of sustaining Rio's stance as a World Class city.

Fourth: Include Small Gestures

While designated "small" gestures (budget-wise if compared with the already implemented works), tactical urbanism interventions can be of tremendous urban and social impact. Examples are: invest in universally accessible routes to

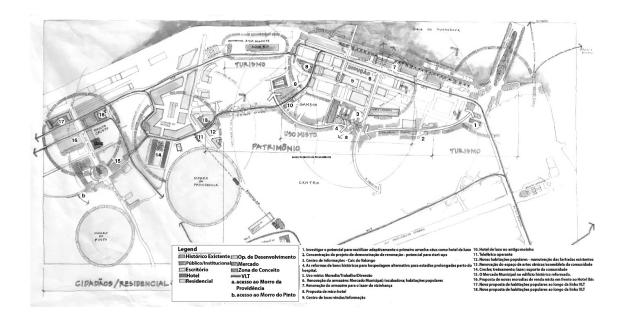


Figure 2. The proposed urban nodes (circled in pink).

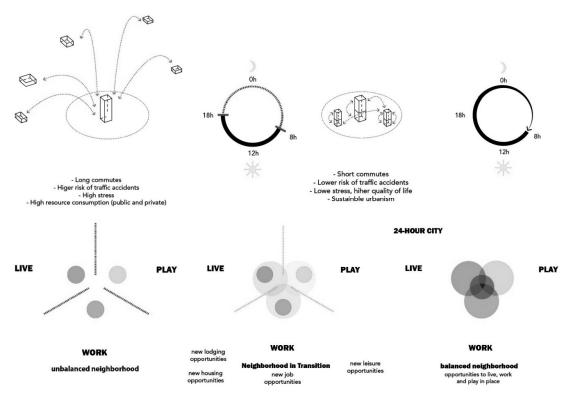


Figure 3. Mixed uses and provision of housing near work support city life.

enhance pedestrian experience; implement a heritage route that will stimulate local and tourist foot fall while educating locals and tourists, or creation of local community centers, daycare, health centers or job training facilities, fostering the much needed reduction in social inequality and income disparities which are intrinsically associated with urban violence.

The analysis of the study area identified five key nodes which, if revitalized, will support cohesion of the urban fabric (Figure 2):

- Promote the adaptive reuse of the A Noite building (perhaps as a hotel) capitalizing on the improvements to Mauá Square and the influx of tourists;
- Revitalize the Sacadura Cabral Street, implementing rehabilitation incentives and partnerships with public institutions or public-private partnerships, and including it in a heritage trail that celebrates the tangible and intangible significance of the site.
- Harness the potential of large industrial and warehouse buildings to be rehabilitated as an "Innovation District" between Avenue Venezuela and the waterfront. The District could serve as an incubator for startups. Entrepreneurs could be incentivized through the provision of live/work spaces at low-cost while receiving training support. "Pop-up" sites for businesses could be implemented and, upon demonstration of success, businesses could receive incentives to restore or redevelop properties.
- Invest in community centered development of the area around the Gamboa cable car stop that connects Providência Hill residents to the site. Partnering with long standing Brazilian institutions such as SESC, SESI, SENAC would support services, education, training and recreation for the local community, while playing a critical role in street activation by utilizing the potential offered by existing buildings and empty sites.
- Redevelop a portion of the Santo Cristo neighborhood along the Rua da América providing mid-rise affordable and mixed-income multifamily housing.

Fifth: Serving City Residents' Needs Serves Tourist and Visitors' Needs Projects focused on serving residents with livable spaces fulfilling the underserved residents' need for shelter, work, basic services, education and recreation create a more desirable, connected and safe place for residents and visitors.

Sixth: Activate Streets

A zoning ordinance focused on a more balanced mix of "live, work and play" spaces and political will to address the housing issue can strongly support the desired transformation of the area (Figure 3). In spite of the efforts to attract businesses, a substantial percentage of new office buildings remains empty due to the economic crisis^{13,14}. This issue added to long stretches of the study area suffering from blight, including empty sites, squatted or sub-utilized buildings that fell victim to lack of investment (and of economic and policy tools) supporting owners to maintain and repair properties, rendered the urban fabric dead in spite of its outstanding potential for redevelopment. There is a need to develop thriving local businesses that can keep streets active at varied times of the day and attract visitors.

Seventh: Celebrate Heritage

The Strategic Plan for Rio notes that "The urban revitalization of the central area, and especially of the port region, is one of the largest opportunities for valuing heritage in the city" 15. Porto Maravilha is an area of tremendous heritage potential, featuring historic sites designated from local through international levels, sited within protected Historic Districts that encompass most of the site's footprint. The celebration of heritage can occur through two key strategies:

- Community-focused initiatives that foster rehabilitation, restoration and adaptive reuse of significant buildings, serving as catalysts for sustainable economic, social and urban transformation (Figure 4);
- Celebration of a unified identity narrative through the experience of heritage trails. Trails can provide physical connection between the historic sites, create pride through heritage, leverage heritage for revitalization, promote sustainable urban cultural tourism and tell a story, providing economic and educational benefits for the local community and visitors alike.



Figure 4. Economic and policy strategies can support community-focused and sustainable revitalization of historic buildings.



Figure 5. The Workshop process: Students from Rio de Janeiro's Universities, University of South Florida and architects exchange ideas.

Eighth: Make a Business Case

Aside from the currently used incentives designed to attract developers/construction firms such as buying and selling of air rights and exemption of affordable housing units from property tax, CDURP's plan would benefit from expanding quality revitalization to its adjacent neighborhoods and from collaborating with public, private and community partners. Strategies such as: Tax Increment Financing, Linkage Fees, Philanthropy, Low Income Housing Tax Credits, Historic Tax Credits, Community Land Trusts (CLTs), Naming Rights and Sponsorships, Mass Transit Agency Funds, University and Hospital Partnerships and Impact Investments are a few which can support the implementation of the seven concepts above.16

Student Work

University of South Florida students continued the process by building design proposals from the project's eight key principles (Figure 5). While pursuing the application of all principles the following themes emerged:

- 1. Inclusivity of Informal Developments;
- 2. Cultural Heritage and World Heritage Site Memorial:
- 3. Integrated Tourism;
- 4. Regenerative Infrastructure and Environmental Remediation as a Tool for Community Development;
- Vibrant and Safe Public Spaces from Vacant Parcels;
- 6. Housing Security through Redevelopment and Social Housing Models.

Conclusion

The R/UDAT study demonstrated the value of interdisciplinary approaches to the urban condition that apply integrated strategies and thinking across key topics. Many of the outcomes and recommendations that emerged from the process reflected the connections between key issues facing the project area and the need to have more integrated policies in place to achieve its goals. Similarly, the value of a democratic methodology that does not include preconceived notions but allows strategies to emerge from a dialogue demonstrated greater potential to achieve sustainable and systemic change for the project area through a more integrated implementation effort than has been applied previously. The interdependence of the

project areas communities and public and private interests became more clearly linked. The partnerships and institutional relationships born of this process can be nourished for additional value-added thought over time as student work and university contributions bring further effort to the conception of Porto Maravilha in the future.

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