



## The Radical HIVE: Experiments in Social Housing and Urbanism in Latin America

Marilys Nepomechie\* e Eric Goldemberg\*\*

\*Associate Dean, Architect, and Professor at Florida International University. Her professional and academic projects have been honored with over 40 design and research awards, national and international exhibition and publication. Marilyns is a CINTAS Fellow in Architecture, and co-curator of the exhibitions Miami | La Habana: Magic City | Novia del Mar; MIAMI 2100: Envisioning a Resilient Second Century; La Habana Moderna 1902-1959; and The Radical HIVE: Social Housing + Urbanism in Latin America. She is the author of Building Paradise: An Architectural Guide to the Magic City, and editor of

Bienal Miami + Beach 2001-2005: A retrospective.

\*\*Co-founder of MONAD Studio, he is an Associate Professor at Florida International University in Miami. Eric is the author of the book Pulsation in Architecture. His works have been published in The New York Times, BBC, The Guardian, Le Monde, Forbes Magazine and Architectural Record. Also worked for: FOX News, CNBC, The Discovery Channel and National Geographic. It has been and exhibited at the Museum of Modern Art in New York (MoMA), the P.S.1 Contemporary Art Center, and the Jewish Museum of Florida – FIU among others.

### Abstract

This essay describes and comments upon the process of researching organizing an exhibition focused on social housing in Latin America, particularly during the 20th century. Titled “The Radical Hive: Twentieth Century Experiments in Social Housing and Urbanism in Latin America”, the exhibition was mounted in the spring of 2016 (January – May) at the Miami Center for Architecture + Design, in Miami, Florida. An eponymous symposium, held at the Florida International University Miami Beach Urban Studios, subsequently brought together international academic and curatorial experts on the subject of social housing for a daylong gathering of spirited discussion.

**Keywords:** Architectural Exhibitions. Latin-American architecture. Social Housing.

## Introduction

**T**he effective design and production of social housing represents one of the most significant challenges facing our society today. Arguably, the topic is the unnamed elephant in the room of our design professions: insufficiently acknowledged, the subject opens a profound dimension of architecture, one that frames its substantial agency as socio-cultural engine. While recent generations of architects have looked away from this critical program and expertise, current socio-economic, environmental, political and urban pressures have conspired to bring it to the forefront of disciplinary attention once more. Assessed in conjunction with the newly augmented capacity of the profession to rethink housing in the context of an enhanced technological and material arsenal, the topic of social housing has been reframed as the subject of academic and professional relevance in the fields of architecture and urbanism.

“The Radical Hive: Twentieth Century Experiments

in Social Housing and Urbanism in Latin America” (Figure 1), was an exhibition mounted in the spring of 2016 (January – May) at the Miami Center for Architecture + Design, in Miami, Florida. It was launched precisely with an eye toward convening and advancing a critical conversation about social, accessible, affordable housing with a broad audience. Among its members: the local community, the design and planning professions, the real estate development and construction industries, elected officials and urban policy makers, financiers, civic advocates and of course academic colleagues and students, whose built legacies these conditions of need will almost certainly define.

Over the course of four months, at a prominent street-front location in the heart of downtown Miami, social housing drew the attention of an academic, professional, and lay public. In a city with pronounced income disparities and widely acknowledged shortages of affordable housing,



Figure 1. General view. Exhibition inauguration day. Source: Eric Goldemberg, photographer.

the resulting level of awareness served as a reminder of the power of architectural exhibitions to envision alternative realities, and in that process, to suggest strategies with the potential to make our cities whole.

### **Social Housing in Latin America: a post-war legacy**

“The Radical Hive” and its associated programming centered on key paradigmatic urban housing projects, realized in Latin America from the mid-twentieth century to the present. The corresponding European and Asian lineages from which those projects emerged, through the postwar legacies of, among others, Team X and its critique of CIAM, focused the research, analysis and documentation efforts incorporated in the exhibition. Through two- and three-dimensional representations, accompanied by a broad range of physical models, the exhibition highlighted multiple facets of the

processes that produced, in the subject period, fertile ground for experimentation. Among these: the work of the first Archigram, the Japanese Metabolists, the work of Alison and Peter Smithson, of John Habraken and the SAR, of Moshe Safdie, and that of many others, each in resonance with the work of Le Corbusier in the Unité.

Focus subsequently turned to the challenges and opportunities historically and currently inherent in the design, construction and delivery of affordable, accessible, resilient urban housing across the Americas. In Argentina, Brazil, and many other Latin American countries, remarkable parallel developments were identified to those produced in postwar Europe. Notwithstanding their clearly traceable roots, the Latin American examples were noteworthy for their capacity to expand upon those precedents. Through the incorporation of local nuance and culture, these projects effectively articulated an intention to forge a powerful and uniquely South American identity.

For contemporary practice, the implication of the substantial number of urban planning and social housing projects produced in Latin America during this period includes the establishment of discernible legacies --for urbanism; for housing affordability and accessibility; for manufacturing systems and processes, for construction and assembly systems, for incremental and participatory design and construction practices; for social resilience and community planning strategies; and, in short, for the

social, economic and environmental sustainability that contemporary architects must address in the creation of an equitable built environment.

### Re-examining housing components

A parallel line of investigation and analysis focused on the history of technological innovation in the production of social housing. Advancements in construction processes and assembly systems have long been leveraged to facilitate efficiency, speed and economies of scale. Researchers documented and analyzed the evolution of large-scale, building-delivery strategies, extending from the early part of the twentieth century, to the present-day.

The production of sizable numbers of residential units involves multiple systems and layers of operation designed to address the challenges of repetition and variation in the pursuit of efficiency, economy, identity, character, and ultimately durability and livability. As part of their work, exhibition researchers employed advanced 3D modeling and digital fabrication processes to replicate several of the building components employed in the subject projects, assessing issues of seriality, modularity, and rhythmic adaptation. The work of these combined pursuits engaged them in dual strategies for investigation and creation, allowing for a multivalent understanding of the social, economic, environmental and urban issues involved in the development of multi-family housing projects.

### Themes + Strategies + Tactics:

“The Radical Hive” privileged the documentation, analysis and representation of a specific range of themes, operational design strategies, and construction tactics. Among them: Urban and infrastructure strategies, including programmatic, spatial, vehicular, pedestrian, environmental, and social. Other critical themes included: Approaches, goals and tactics for *residential unit aggregation, organization, wayfinding and livability; for manipulation of project scale and identity; for construction processes and innovation in material usage, assembly and in [pre]-fabrication; for the respective roles –advisory and/or participatory-- of the professional architect/ builder and the owner/ end user/ resident in project design and construction; for the viability of employing design competitions as instruments of project realization; for understanding the projects as laboratories for architectural / formal, technological, methodological, economic, and social ‘experimentation’; and finally for a post-occupancy assessment of the projects through the lived and recorded experiences of its long-time residents from around the world.*

### A Case Study: Social Housing Projects: Estudio STAFF, Buenos Aires, Argentina

“The Radical Hive” introduced the social housing oeuvre of several seminal Latin American practices of the latter half of the twentieth century.





Figure 2. General view. Complex: “Conjunto Habitacional Moron”. Source: projects belong to the archive of Estudio STAFF<sup>1</sup>.



Figure 3. High and low buildings, with detail of vertical circulation. Complex: “Conjunto Habitacional Ciudadela I”. Source: projects belong to the archive of Estudio STAFF.

1. Eric Goldemberg, son of founding partners Teresa Bielus and Jorge Goldemberg, is the curator of the archive.

Among them, *Estudio STAFF* had significant impact in the field from the late 1960s to mid 1980s, a particularly fertile period in Latin American architecture, subject of a 2015 survey by the Museum of Modern Art in New York.

An architectural practice founded in 1964 by Teresa Bielus, Jorge Goldemberg and Olga Wainstein-Krasuk in Argentina, *Estudio STAFF* selected its name to reinforce the primacy of the “team” over that of any individual member’s contribution. The name also reflected the attitude of the studio with regard to an understanding of the primacy of the city: architecture was understood to express its true significance through urban themes, through the comprehensive urban design that superseded isolated, spectacular episodes. Uninterested in the creation of objects, the firm understood singular works of architecture as opportunities for partial concretization of a great urban theme or as the synthesis of complex, intricately linked urban phenomena. *Estudio STAFF* defined the task of the architect as the integration of sociological, anthropological and neo-technological principles articulated through engineered systems.

The professional production of this studio concentrated on large-scale social housing projects, realized in the context of the PEVE (Plan de Erradicación de Villas de Emergencia), a state-funded program based on national architectural competitions that reformulated social housing for sites

throughout Argentina where only precarious conditions of living existed. Three projects in the outskirts of Buenos Aires characterize the outcomes of this process. All were constructed in the decade of the 1970s, and all remain in use today. Models and analyses of two of the projects (*Ciudadela* and *Soldati*) were included in the exhibition:

**Conjunto Habitacional Moron** (Competition: 1970), located in the western part of the city of Buenos Aires, was the result of a State-funded plan to eradicate shantytowns carried out through professional architecture competitions. The complex was designed to provide social housing for 7,000 inhabitants. The design was organized as a series of four-story linear slab structures, interconnected by stairs and bridges of concrete and steel to frame a series of community courtyards. (Figure 2)

**Conjunto Habitacional Ciudadela I y II** (Competition: 1971) combined the typology of four-level linear slabs and large courtyards, with thirteen-level towers. Located at the intersection of the slabs, the towers form an organization of ‘knots’ that punctuate the assemblage. The project incorporated the innovative use of multiple colors and complex patterns to provide variation and a sense of identity to the organizational system. Built in two stages between 1973 and 1978, the complex was designed to house 17,000 inhabitants. Schools, a shopping center and community services occupied public spaces on the ground level. (Figure 3)



Figure 4 Aerial view. Complex: “Conjunto Habitacional Soldati”. Source: projects belong to the archive of Estudio STAFF<sup>2</sup>.

Conjunto Habitacional Soldati (Competition: 1972), the largest and most complex of the projects, was designed for 17,800 inhabitants and organized by a series of ‘knots’ combining three and four-level linear buildings with eight and sixteen-level residential towers. Throughout the project, bridges, stairs, and terraces function as social connectors and community spaces. The playful volumetric disposition of the multicolor buildings creates a variegated profile intended to echo the Buenos Aires skyline, and counter the sense of anonymity that is typical of large housing projects. (Figure 4)

Four urban strategies defined the theoretical and formal framework of the studio as evidenced in their projects: *Density, complexity, ambiguity and systematization*. Eschewing monolithic, top-down solutions, a strategy of *density* sought to achieve richness in large-scale design through the superimposition of sequential layers of data over intertwined structures, an attempt to counter the monotony born of infinite repetition. The theme of density was directly connected with those of *complexity* and theatricality. The architects sought to preserve the intricacy of the city in their projects, challenging normative definitions of typology to provide authentic settings for urban life. Interwoven with these strategies was the desire to achieve a multivalent *ambiguity*. Through the deployment of multiple color patterns over rich volumetric arrays, *Estudio STAFF* sought to recover the power of architectural delight cast

aside by the Modern Movement. These strategies were integrated through ordering systems designed to safeguard the complex aspirations of the projects, while facilitating adjustment to their practical realities.

### The exhibition projects

The following 30 projects, listed in alphabetical order, were selected to 1- Trace the post-war European and Asian architectural lineages of key twentieth century social housing developments, and 2- Follow the design and construction strategies that emerged from those seminal works, particularly in Latin America. The selected works were mapped, researched, documented, and analyzed in the context of the subject themes. Analog and digital models were created for each project, and the results were formatted, mounted and displayed at the *Miami Center for Architecture + Design* [MCAD].

Barbican Estate, Bouca Housing Complex, Brazil Box House, Brazil 44, Carabanchel Social Housing, Casa Bloc, Casa Urbanization Canaveral, Conjunto Habitacional Ciudadela I y II, Corviale Social Housing, Conjunto Habitacional Soldati, Gavea, Habitat 67, Ivry de Sienne, La Fundación, Lafayette Park, Mirador, Nakagin Capsule Tower, Piedrabuena, PREVI Experimental Social Housing Projects, Robin Hood Gardens, Reidy, Unidad Vecinal Portales, Unidad Residencial Presidente Suarez, Unite d’Habitation Berlin, Urban Think

2.A video with aerial view of the complex can be seen at the link: <https://www.facebook.com/alejandro.goldemberg/posts/10213055817504185?pnref=story>

Tank Venezuela, Villa Nueva El Paraiso, Villa Verde, Walden 7.

**Exhibition + Symposium Credits:**

**Co-Curators | Researchers:**

Marilys Nepomechie, Eric Goldemberg. Florida International University Department of Architecture. College of Communication, Architecture + The Arts, Miami, FL.

**Research + Fabrication Team:**

Mohammed Aljehani, James Allen, Tatiane Almeida, Andres Barros, Marco Campa, Christopher Centeno, David Ciambotti, Brandon Cummings, Jessica Dickinson, Jihan El Abadi, Carlos Fernandez, Sara Garulet, Valentina Garibello, Richard Gomez, Alejandro Gutierrez, Kevin Hutchinson, Sonia Jaramillo, Apoorva Varum Kulkarni, Adan Quesada Matute, Tara Mazloomi, Jorge Martinez, Branco Micic, Mark Miglionico, Manuel Menoya, Ricardo Miranda, Carolina Papale, Maria Peguero, Alejandro Reyes, Marvin Rodriguez, Adriana Rojas, Fiorella Salamanca, Daniel Salazar, David Santana, J. Turner, Oscar Vanegas, Eduardo Vera, La Shai Waterman

**Symposium Panelists:**

Umberto Bonomo, Pontificia Universidad Católica, Santiago, Chile; Alastair Gordon, Florida International University, Miami, FL; Ana Paula Koury, University São Judas Tadeu, São Paulo, Brazil; Margi Nothard, Glavovic Studio, Ft. Lauderdale, FL; Patricio del Real, Museum of Modern Art, New York, NY.

**Project Funding:**

The Cejas Family Foundation and the Andrew W. Mellon Foundation - Wolfsonian-FIU generously funded the exhibition and symposium. The Miami Center for Architecture + Design, the Florida International University School of Architecture, and the Miami Beach Urban Studios each contributed additional support.

