



Bresciani Valdés Castillo y Huidobro, *Unidad Vecinal Portales*, Santiago, Chile, 1958-1968. Pedestrian square contained between the buildings and houses. © René Combeau, 1960, Archivo de Originales SIGM. FADEU PUC

Housing explorations. *Unidad Vecinal Portales* in Santiago

BY UMBERTO BONOMO

This article explores the contribution of *Unidad Vecinal Portales* – built in Santiago de Chile by the studio Bresciani, Valdés, Castillo y Huidobro – to the debates on social housing in Chile between the 1940s and 1960s. A series of radical decisions, put into action in the complex, demonstrate a deep exploration at the urban, typological, and aesthetic levels. This exploration has given life to an important case study in Chile and Latin-America, where urban and architectural challenges of the second half of the 20th century blend harmoniously.

Santiago de Chile, 1950: metropolitanization and institutional modernization

After WWII, housing development in Latin America played an important role in facing the dwelling deficit, increased by the great migration from the countryside to the city that took place in the 1940s and 1950s. This transfer meant a profound transformation of Latin American cities, which were experiencing intense metropolitanization processes.

Throughout the 20th century, Chile had been a pioneer country in the experimentation on mass housing.¹ Since the first decade of the century, a series of laws and public institutions lead to profound changes in urban planning, in models of affordable housing projects, and ultimately in the way lower and middle-class Chileans were beginning to live together in the cities.

This is the case in Santiago. Between 1940 and 1950, the city was already considered a metropolis, having exceeded one million inhabitants and having a large housing deficit that increased at very high rates year after year.

At the time, the State was also facing a strong modernizing momentum. A fundamental institutional, political, and administrative maturation process was taking place, which allowed the government to carry out large and ambitious residential projects.

To fully comprehend Chilean housing production in the 1950s and 1960s, it is necessary to reconstruct the figure, and role of the main institutional actors who were part of this heroic moment of modern Chilean architecture and urbanism.

An institution called *Caja de Previsión de Empleados Particulares*² [Private Employees' Pension Fund] had been created in 1924 and, like many other pension funds, it was in charge of building houses for those affiliated with the institution.

In 1948, to encourage private participation in the low-cost housing business, the well-known *Ley Pereira* (Law No. 9135) was passed. This legislative instrument considered relevant tax exemptions to encourage the real estate business, and thereby promote the creation of economical houses for the middle and lower sectors of the population. The approval

of *Ley Pereira* implied the formation of EMPART (private employees) Societies. These organizations were companies made up of 90% of public capital from *Caja de Previsión de Empleados Particulares* and the remaining 10% was capital from the most important Chilean construction companies of the time.

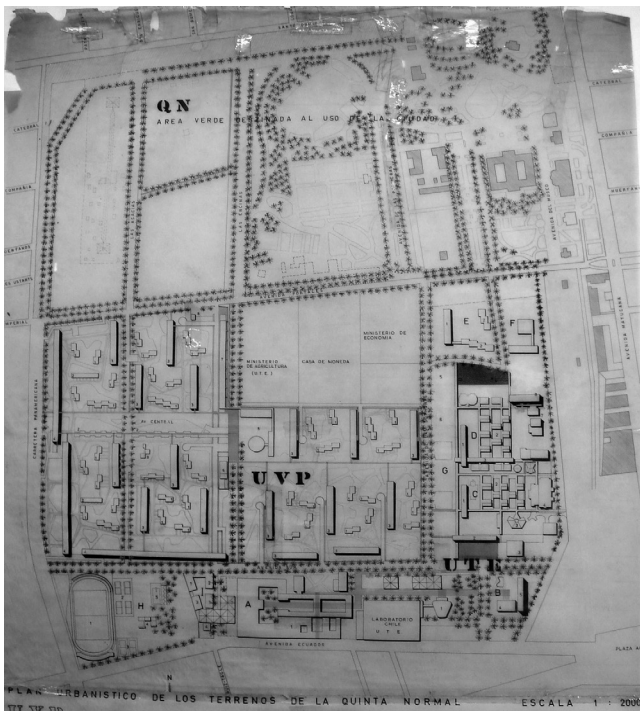
The second fundamental and decisive action to understand the performance of the State in the construction of affordable housing is the creation in 1953 of *Corporación de la Vivienda*³ [Housing Corporation, CORVI]. This entity was a public institution created through the combination of two previous agencies: *Caja de la Habitación Popular*⁴ [Popular Housing Fund], created in 1936, and *Corporación de Auxilio y Reconstrucción* [Corporation for Relief and Reconstruction], founded in 1939. Between 1953 and 1965, CORVI had the mandate to build low-cost housing in the main cities of Chile, thereby contributing to the country's urban and residential modernization process.

The project: a field for disciplinary exploration

Probably the most emblematic neighborhood units built in Santiago from 1954 onwards are *Unidad Vecinal Providencia* [Providencia Neighborhood Unit] and *Unidad Vecinal Portales* [Portales Neighborhood Unit]. The first one was located in the center of Providencia, in an affluent sector of the city of Santiago. The second one was developed in the old sectors of *Quinta Normal de Agricultura*, an old urban park that had been consolidated on the western side of the city since the second half of the 19th century.

The architectural commission for the *Unidad Vecinal Portales* project was awarded to the architecture studio Bresciani Valdés Castillo y Huidobro. This group of young architects, who graduated from Pontifical Catholic University of Chile, was probably one of the most important studios of the 20th century in Chile. In a plot of 31 hectares (ha), they were able to materialize a very radical urban and architectural model, in a project that took the concept of the “neighborhood unit” to extreme conditions.

In the old urban park of *Quinta Normal de Agricultura*,



01 Bresciani Valdés Castillo y Huidobro, *Unidad Vecinal Portales*, Santiago, Chile, 1958-1968. Plan of *Unidad Vecinal Portales* inserted in the *Quinta Normal de Agricultura*, 1954. © Archivo de Originales SLGM. FADEU PUC

the architects created a residential complex for more than 11,000 people. The project consisted of 19 residential blocks of five and seven floors, and more than 300 single-family houses with one and two floors, arranged between the housing blocks.

Three major explorations explain this project and illustrate its radicalism and experimental nature. The first one is an intense urban exploration, which explains the relationship of the complex with the pre-existing park. The second one is a typological search of apartment models and types. And the third one is an aesthetic exploration, which provides the project a particular meaning, and social and cultural significance. These design explorations make *Unidad Vecinal Portales* a unique neighborhood: since 1960, it became a national and international reference, and was widely published in the most important architecture magazines in Latin America, Europe, and North America.

Urban exploration: the project in the park

Villa Portales, as its inhabitants know it, was built within the productive sectors of the park of *Quinta Normal de Agricultura*. This area – which at its peak had an extension of more than 100 ha – was composed of an ornamental park, productive sectors, orchards, vineyards, large tree-lined streets, museums, and pavilions of cultural infrastructure. The area was a frequent destination for Sunday walks for the Chilean upper class which, since the middle of the 19th century, began to populate the adjacent Yungay neighborhood.

In the area corresponding to the productive sectors, vineyards, and orchards of *Quinta Normal de Agricultura*,⁵ *Caja de Empleados Particulares* bought a site in 1954, that belonged

to the Faculty of Agronomy of the University of Chile and built a large housing complex for the institution's members.

The residential complex is divided into 4 quarters, divided by two main axis forming a cross. The north-south and east-west arms of the cross structure the large pedestrian walkways of the metropolitan area of the complex. The center should have become the true civic center of this new residential neighborhood, being supposed to include a church, a supermarket, commercial stores, and corporate headquarters. Unfortunately, this infrastructure was never built, leaving the “heart” of the neighborhood without a program.

Another important urban structure that configured the whole complex is a system of 15 pedestrian squares, whose names come from the ancient species of fruit trees present in *Quinta Normal de Agricultura*. The urban idea that was at the origin of the project was the will to maintain all existing trees, to provide this new urban environment with mature and lush vegetation, between which residential blocks and houses could be arranged.

The pedestrian squares are “contained” between one block and the other. The blocks are arranged in a north-south direction to receive double sunlight, and apartments are arranged along both sides of the “bars”, so residential spaces get perfect cross ventilation. Each of the residential blocks is 100 meters (m) long, except for those that are located in the extreme south and west of the complex, which had the function of containing the residential space. The separation between one block and the other is also 100 m. The architects decided to use these dimensions to generate an explicit act of physical and cultural continuity between the historic city outside the park (where blocks are 100 x 100 m) and the new modern residential neighborhood.

The traditional city block – compact, densely built, and with continuous boundaries – is reversed. It is here configured by air, light, and emptiness. This explicit decision adds a new layer of complexity to certain rash judgments, which have traditionally referred to these architectural and urban experiences as projects of ideological rupture and *tabula rasa* urbanism.

In the empty urban space contained between the “bars” and around the pedestrian squares, single-family houses with one and two floors are arranged. The houses have the function of reducing the metropolitan space to a domestic scale, suitable for the surveillance of children's recreational activities.

Each component of this complex urban system has an articulated role in *Unidad Vecinal Portales*, but is, at the same time, clear and easy to understand. The urban exploration and solutions put into action here continue to be a study model for new generations of architects who walk through *Villa Portales*, being usually amazed by the fact that the construction of a project like this was possible.

Typological exploration: standards and family types

Unidad Vecinal Portales was built in two phases. The first phase was developed by the *Caja de Empleados Particulares* between 1958 and 1961, and the second phase by CORVI

from 1961 to 1968. The change of institutions meant an important transformation in the residential standards of the departments of the complex, and in the type of families that would inhabit the buildings.

During the first phase, 10 blocks were built, using 24 different types of apartments with dimensions between 52 and 140 square meters (m²). This area of *Unidad Vecinal Portales* is the best known and most characteristic of the project. It has been extensively published since 1961, usually with photos taken by the photographer René Combeau (1921-2011). In the residential blocks of this sector, transparency prevails, and an articulated system of balconies, *loggias*, and *brise soleils*, made up of yellow and blue plastic sliding shutters, gives dynamism to the facades. The idea of the architects was to build a transparent building, through which one could see from east to west the Andes and Cordillera de la Costa.

This first area is also characterized by a peculiar system of elevated pathways, which crosses the central area of the complex towards the west. These elevated pathways pass over the roofs of one- and two-story houses and enter the corridors of residential buildings.⁶ This elevated circulation system had the function of evading a restriction established by a law in force at the time, which limited the height of low-income housing buildings to 4 stories. For this reason, the architects decided to build a real vehicular street on the third floor of the western blocks. By doing so, they were able to build a seven-story building composed of a three-story

block superimposed on a four-story one. Therefore, they could increase the density at the edges of the plot and free up the ground in the center for common spaces.

CORVI was in charge of building the second phase of the complex. This larger public institution had the mandate to build houses throughout Chile and applied new standards to the departments of the complex. To build the nine remaining blocks of the project, only nine different types of apartments were used, with a surface area between 60 and 90 m². Balconies, *loggias*, floor-to-ceiling windows, and sliding shutter systems disappeared. These decisions reflect the need of CORVI to rationalize the construction process by repeating the types of apartments and living spaces in a more systematic way, reducing costs and construction times.

The difference between sectors one and two of *Villa Portales* is perceived by walking through the complex. The change also makes a difference in the type of family that inhabited the place. The first inhabitants were members of *Caja de Previsión de Empleados Particulares*, with shared social networks and circles, while the latter were not.

The intense formal and typological exploration carried out during a decade in *Unidad Vecinal Portales*, reveals the administrative and logistical tensions of pioneering work in the Chilean architectural scenario. More than 30 different types of departments were used, thus demonstrating the complex machinery required to form 200 m long blocks (which is the case of blocks 1 and 2), with a vehicular street on the third floor.



02 Bresciani Valdés Castillo y Huidobro, *Unidad Vecinal Portales*, Santiago, Chile, 1958-1968. Elevated pathway system included in the western part of the complex. © René Combeau, 1960, Archivo de Originales SIGM. FADEU PUC



03 Bresciani Valdés Castillo y Huidobro, *Unidad Vecinal Portales*, Santiago, Chile, 1958-1968. Children playing in the common gardens. © René Combeau, 1960, Archivo de Originales SGM. FADEU PUC



04 Bresciani Valdés Castillo y Huidobro, *Unidad Vecinal Portales*, Santiago, Chile, 1958-1968. Existing tree included inside an elevated pathway. © René Combeau, 1960, Archivo de Originales SGM. FADEU PUC



05 Bresciani Valdés Castillo y Huidobro, *Unidad Vecinal Portales*, Santiago, Chile, 1958-1968. The Peumo Square restored in 2015 by the governmental program *Quiero mi Barrio*. © Umberto Bonomo, 2017.

Aesthetical exploration: the beauty of construction

The third layer of exploration implemented by the Bresciani Valdés Castillo y Huidobro studio in *Unidad Vecinal Portales* is related to a deep aesthetic search and experimentation. The morphological and urban conditions described above were the basis for the configuration of a residential environment full of expressive intensity and spatial density.

In line with the postulates that had been introduced by Sigfried Giedeon (1888-1968) in the book *Architecture and Community*,⁷ where the Swiss author highlights the role of architecture in the educational process of the community, murals and *bas-reliefs* by the Chilean plastic sculptor Ricardo Irarrázaval (1931-) were included in *Unidad Vecinal Portales*. The abstract figures proposed in the large structural walls of the complex had an educational role: they articulated the constructive dimension with the natural conditions, defined by the trees and vegetation present in *Quinta Normal de Agricultura*. This plastic and artistic richness, along with the radicality of shapes and sizes, the materials implemented, the system of elevated walkways, the vehicular street on a third floor, the roof gardens and the generous spaces to socialize, gave this neighborhood a fundamental imprint. Its unique nature has strengthened the sense of belonging and identity of its inhabitants, who – aware of the architectural and urban values consolidated here – have been a fundamental part of the heritage of this place since its creation.

Conclusions

Since 2006, Chile has implemented a neighborhood recovery program entitled *Quiero mi barrio* [I love my neighborhood]. This program developed during the first government (2006-2010) of President Michele Bachelet (1951-) has recovered more than 200 emblematic neighborhoods in Chile; one of these neighborhoods being *Unidad Vecinal Portales*. The program has recovered the common spaces contained between blocks and houses and, after the highly destructive earthquake of 2010, also worked on the restoration of part of the residential blocks damaged by the disaster.

In the 14 years of the program, the facades of blocks 1, 2 and 4 and the 15 community squares have been recovered, giving new life and program to the spaces that are the center of the social life of the complex. Although it must be admitted that, due to new projects and interventions, the squares lost part of their original natural character, these new interventions have considerably improved the habitat of the residential environment.

Today, *Unidad Vecinal Portales* is a renovated neighborhood with recovered common spaces, with a central location in the urban area of Santiago, connected with urban motorways and metro stations. Its area of green spaces per inhabitant is much higher than the standards proposed by the World Health Organization (WHO), and higher than the average area of green spaces for all inhabitants of the city.

By comparing the pandemic life of an average inhabitant of the center of Santiago with that of an inhabitant of one of these large modern housing complexes – with 80% of the site free for green spaces – the validity and currency of these large urban and social projects can be understood. These projects aimed to improve the quality of life of people, by providing them with not only residential, modern, healthy, and well-lit built houses, but also spaces to make the great dream of community life possible.

Notes

- 1 For more information about housing in Chile, see Rodrigo Hidalgo, *La vivienda social en Chile: y la construcción del espacio urbano en el Santiago del siglo xx*, Santiago, Pontificia Universidad Católica de Chile, Centro de Investigaciones Diego Barros Arana, 2005.
- 2 Umberto Bonomo, *Las dimensiones de la vivienda moderna: la Unidad Vecinal Portales y la producción de viviendas económicas en Chile, 1948-1970*, Santiago, PhD Thesis, Pontificia Universidad Católica de Chile, 2009.
- 3 One of the most exhaustive works about CORVI was developed by Alfonso Raposo, Max Aguirre, *Espacio urbano e ideología: el paradigma de la Corporación de Vivienda en la arquitectura habitacional chilena: 1953-1976*, Santiago, Universidad Central, Centro de Estudios de la Vivienda, 2001.
- 4 Luis Valenzuela studied all the production of the Popular Housing Fund. This study resulted in Luis Valenzuela, *Mass housing and urbanization on the road to modernization in Santiago of Chile, 1930-1960*, Cambridge, Harvard University Press, 2005.
- 5 María, Angélica Apey, *Historia de la sociedad nacional de Agricultura*, Santiago, Sociedad Nacional de Agricultura, 1998.
- 6 Francisco Chateau, *El Espesor del Suelo Moderno: el problema de articular verticalmente grandes estratos horizontales en la UVP*, Santiago, Master Thesis, Pontificia Universidad Católica de Chile, 2002.
- 7 Sigfried Giedion, *Arquitectura y comunidad*, 2nd Ed., Buenos Aires, Nueva Visia, 1958.

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