



Santiago Arenal, Santa Maria Micaela Housing, Cooperative, Valencia, Spain, 1958-1961. View from Perez Galdós Avenue. © Ximo Michavila, 2007.



## ***Santa María Micaela* Housing Cooperative in Valencia: a Critical Assimilation of the Modern Legacy**

BY CARMEN JORDÁ AND MAITE PALOMARES

The history of Valencian architecture reached one of its highest points with a project for the *Cooperativa de Agentes Comerciales*, consisting of a group of 138 dwellings (1958–1961) on the corner between Pérez Galdós Avenue and *Santa María Micaela* Street, after which this complex is named. It is a residential complex unique for its early and conscious association with a distinct modernity that would not be limited only to the national setting, as we shall see. We only have to consider some of the leading works of that period, which revived the contributions of the grand masters, Le Corbusier being the main focus, but not forgetting Mies van der Rohe. Indeed, the critical analyses undertaken by the Team X group, as well as the interpretations of the modern legacy that the Latin American architects undertook, are well known.

Santiago Artal, the author of the *Cooperativa de Agentes Comerciales*, deserves a place for his way of understanding architecture and for the aspirations reflected in his work. Although of a withdrawn character, Santiago Artal's biographical profile is worthy of mention as he possessed certain characteristics that are not very common today and which may even seem a little extravagant in today's consumer society. These, indeed, led to his professional career being cut short very early on. His attitude was utopian and radical, as well as being naive within an idealism that would lead him to consider architecture as an ethical commitment and to live the constructive experience as an authentic public service. Such a tenacious follow-up on work in progress by the architect, who was present on site full-time during the working day, and who took part in whatever building task that was taking place, even mixing concrete, is highly significant. Regardless of other factors, this explains why today we can still appreciate some impeccable finishes, as good maintenance both of the installations and materials carefully chosen for their durability, was ensured, going beyond merely fulfilling the economic objectives<sup>1</sup>.

Santiago Artal graduated from the *Escuela de Madrid* in 1957, one year before starting the project for the *Cooperativa de Agentes Comerciales* in *Santa María Micaela* Street, which was to be his *opera prima*, although he did have previous experience having worked with his father, Emilio Artal Fos, an architect exiled in Argentina who returned to Valencia in 1947. His father's career also presents a clear specialization in residential program, among which should be mentioned — and for the same client, incidentally — a slightly earlier work (1956–1959) situated on the corner of the *Gran Vía Ramón y Cajal* and *Calle Cuenca* in Valencia. Outstanding here is the sobriety of this building's urban image, at the same time as simplifying and updating the particular distribution of many large dwellings in the

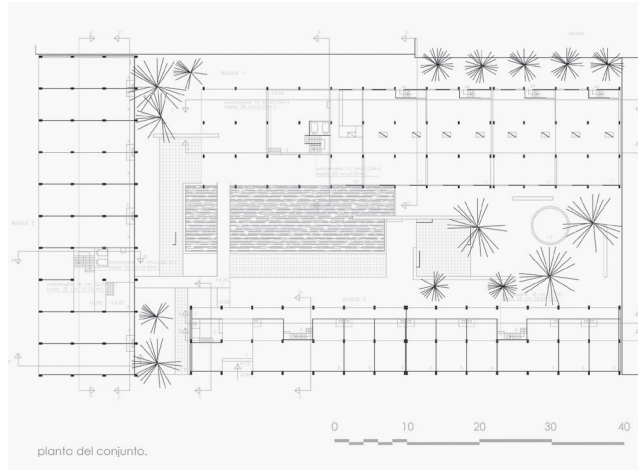
traditional typology of the *ensanche*<sup>2</sup> by having all daytime zones facing the exterior and segregated from the rest of the program, without resorting to the use of the usual corridor to organize the flats<sup>3</sup>.

The novelties that the *Santa María Micaela* group presents are more far-reaching: from the relationship that the architecture itself establishes with the city to the inclusion of the duplex as the proposed form of dwelling, a disciplinary contribution that dates back to Moscow at the end of the 1920's and to public housing policy, is well known. In addition, Santiago Artal's project introduced an important urban planning alternative to municipal planning, which traditionally considered a closed block with interior courtyard for a rectangular plot of 45.5m × 83.4m, replacing it with a rigorous alternative land usage, of Corbusian inspiration. The result is a group of three residential blocks with commercial premises on the ground floor around an internal space for communal use, featuring a pond and covered walkways, inspired by Mies van der Rohe, whose main function is to direct and connect the internal circulation. As a critique of the conventional layout of the city, Artal's fragmentation of conventional municipal building programs is perfectly articulated to provide orientations and views, the centralization of common services and housing density, making non-speculative use of the land available and always attempting to encourage social coexistence. The absence of prejudgments on the part of the civil servants of the time is worthy of mention, as they were capable of evaluating and authorizing an urban improvement that was expressed through very different ideas to those provided for in the urban planning regulations of Valencia at that time.

### **On the Program and Techniques**

Access to the complex is gained tangentially from one end of the complex, which provides a good degree of privacy

**01** Santiago Artal, *Santa Maria Micaela Housing*, Cooperative, Valencia, Spain, 1958-1961. General layout plan. © Personal archive of Carmen Jordá.



**02** Santiago Artal, *Santa Maria Micaela Housing*, Cooperative, Valencia, Spain, 1958-1961. Plans (simplex and duplex) and transversal section by the rubbish chute. © Personal archive of Carmen Jordá.



**03** Complex from *Santa Maria Micaela* Street. © Ximo Michavila, 2007.



**04** Façade with duplex terraces. © Ximo Michavila, 2007.

to the communal interior space and, at the same time, permeability with the city. The volumes built are prisms, with one lower two-story block of flats of 135 m<sup>2</sup> on a single floor, whereas the other two identical blocks are of 12 storeys consisting of duplexes whose program varies depending on whether they have 3 or 4 bedrooms. The ground floor has commercial premises when facing the street and there are community premises, or porticoes opening onto the staircases, when they face inwards.

It should be noted that the circulatory layout offers great coherence, reminding us of the collectivist emphasis of the *avant-garde* and the analyses of the 1950s that prized neighborly relationships, as has been said earlier on. In the lower block there are two staircases that serve 2 dwellings on each floor and to which access is gained at zero level, through a continuous portico in the form of a street leading out onto the communal area. In the tall blocks, Santiago Artal grouped the vertical circulation together at two points, one in each building, and with private access to the dwellings through six spacious and continuous galleries in the form of “raised streets” open to the outside. Again the desire to create space for public use should be noted in the area where the corresponding part of the staircase meets the longitudinal galleries, especially as these crossing points are wider, a section of two storeys being open to view. The entire project strategy is deployed on the façades in question, resulting in a great expressive presence, which has become one of the characteristic signs identifying the *Santa María Micaela* group.

The structure represents a decisive contribution to defining the modern image of the residential complex, whose skeleton of concrete, naturally, is displayed on the outside following the dictates of the new aesthetics<sup>4</sup>. Furthermore, an implacable modular principle suffuses the entire project both in plan and elevation, also involving the metrics of the open and closed spaces. All of this translates into an orthogonal framework (of 4.5 m in width and 4.8 m in depth), which is the essential key for understanding the work from the different constructive, compositional and distributive parameters. With a protagonism, therefore, not only technical, the grid layout constitutes the basis from which the types of housing, of one or two floors, are created.

It should be pointed out that, despite the repetitive nature of the structural scheme, the architect knew how to offer a diversity of housing that, in the case of the taller blocks, were resolved as duplexes, a typology loaded with doctrinal resonances and novel at that time in Valencia. With the intention of eliminating the inner light wells, all of the duplexes have through ventilation with rooms opening onto the outside and organized on three sections of spanning slabs. In the words of the author himself “they are of three or four bedrooms, with a surface area that varies between 120 m<sup>2</sup> and 159 m<sup>2</sup>, depending on whether they are of type A, B, C, or D. The sleeping area is on the top floor with a central bathroom, and on the lower floor or daytime area, there are the hall, kitchen, sitting-dining room and a large terrace”<sup>5</sup>. It should be added that the connecting stairway between the two floors of the duplex is a single linear

section, parallel and backing onto the party wall. On the upper floor, the three structural spanning slabs correspond with three functional units, whilst that relationship is different on the lower floor with its two units, due to the access gallery and a services shaft that marks the limit of the kitchen. This last circumstance, not then common in Valencian architecture, should be stressed as it is significant in that mechanical systems of ventilation began to be introduced at that time. Santiago Artal incorporated another novelty in the lower block of houses, which only have one floor. This is the “study” that the architect included in the description of the program and situated next to the living room, both because of the living room having access from two sides and because of the circulation that distributes towards the other rooms of the dwelling: a characteristic that undoubtedly came from what even then was historical experience of public housing.

The service installations constitute a chapter of great importance in works planning that, implicitly, the architect recognizes in the descriptive memory of his project when he stated:

*All the water, electricity, sewage, telephone, television aerials are centralized through the bathroom ventilation shafts, through which a ladder from the basement to the roof has been installed. An underground tunnel of 1.5 m wide by 2 m. high runs under the three buildings and between them to house the ducts and airshafts. That is to say, all vertical and underground duct installations can be checked... Next to the lift shaft and on each landing is the rubbish chute. In the event of an electricity cut, there is a generator...<sup>6</sup>*

It is interesting to observe the idealist facet — even utopian — of Artal when his convictions led him to build certain communal installations: “On the terrace of one of the tall blocks there is an industrial washing machine for washing and drying the tenants’ clothing. This is why this activity has not been taken into account inside the dwellings.”

However, it must be said that with an appropriate foresight of other communal installations, always accessible for checking, Artal achieved an optimal result in terms of the maintenance and working life of his buildings<sup>7</sup>.

Just as the structure is closely linked to the architectural expression of the whole, the materials appear to have been chosen deliberately to emphasize the ideas of the project itself. Without overlooking constructive rationalism as a maximum aspiration, his choice displays an intentionally diverse nature that includes yellow brick enclosures, opaque red glass panels beneath the windows and blue stoneware cladding for the terraces, whose parapets consist of white-painted prefabricated pieces. In short, a strict compositional geometry arising from an uncovered grey concrete frame with a chromatically internal tapestry inspired by the principles of neoplasticism. The image of the building is also marked by alternating horizontal perforated strips — or circulation galleries — in contrast with a number of highly significant vertical shafts, both built with the same white shuttering of the terraces, clearly evoking the work of Le Corbusier.





05 Santiago Artal, *Santa María Micaela Housing*. Cooperative, Valencia, Spain, 1958-1961. Circulation galleries or raised streets. © Ximo Michavila, 2007.



06 Santiago Artal, *Santa María Micaela Housing*. Cooperative, Valencia, Spain, 1958-1961. Presence of shuttering in circulations and terraces. © Ximo Michavila, 2007.

### Links

One cannot help but recall that Artal had visited *L'Unité d'Habitation* in Marseille, although he had also attended the 8<sup>th</sup> International Congress of Modern Architecture (Hoddesdon, England) where the seeds of the Team 10 ideas were sown, with the consequent rejection of the *machine à habiter* concept of the canonical classification of human activities into 4 functional categories and their replacement by others based on social relationships and on the link between architecture and its setting. Hence the significance of the street, something that is fully adopted in the urban planning of the *Santa María Micaela* group, as well as the way that the “raised street” is used for its usefulness in encouraging meetings between neighbours, as the Smithsons, among others, argued. Moreover, in order to evaluate the introduction of the duplex, one should bear in mind the *Narkomfin* experiment of Ginzburg and Milinis, designed in 1928 and built in a very short period of time, precisely when Le Corbusier was in Moscow. The increasing use of this typology following the lessons learnt from the magnificent Russian complex cannot be coincidental, as access is gained to the dwellings through two open corridors in the façade and there is a communal laundry, situated in the communal services building.

In this contextualization exercise, we must not overlook Latin American architecture. Firstly, we should consider *Pedregulho*, a large-scale residential complex, with various independent installations and access to the dwellings by means of shuttered corridors. The duplexes are on the three upper floors. The project (1946) was drawn up by Affonso E. Reidy and was built<sup>8</sup> in Rio de Janeiro, Brazil, at the same time as *L'Unité d'Habitation* in Marseille. Both architects were in regular contact and kept each other informed of the progress made on their respective buildings. However, this reference is not made only because of the connection with Le Corbusier, but to the wide dissemination that Brazilian architecture had in the 50s and its regular presence in journals of international prestige to which Santiago Artal

either subscribed or knew of. Bearing in mind the family's period of exile in Buenos Aires, it seems even more relevant to mention the *Edificio de Vivienda Colectiva* in Talcahuano Street (1954–1957) of Luis and Alberto Morea, an award winner at the São Paulo Biennial of 1957. Although this does not have duplexes and the rate of its horizontal galleries on every third level is more Corbusian, this impressive Argentinean block displays the verticality of its concrete skeleton in a similar way to the Valencian building whose design (1958), was slightly later.

With regard to sociology, Artal himself stated that his clients were middle class, without domestic staff, who wanted to take advantage of the ground floor for commercial premises. Today his residential complex, with few changes, represents an oasis in the city. The inhabitants, among whom are several architects, express a high degree of satisfaction. They appreciate the communal areas, especially because of the possibility they provide for children's games in a pleasantly designed ambience. Returning to the relationship between past and present, it is advisable to be acquainted with recent methodologies on the reuse of residential property, where typological flexibility appears to be an essential condition for whatever undertaking. In this sense, the *Santa María Micaela* buildings have a suitable layout of “supports” in terms of the structure and services, i.e. without great changes, it is easy to obtain spaces that can be converted into multipurpose areas to meet the current needs of the different family units<sup>9</sup>.

It cannot be said that the work of Santiago Artal met with early recognition in line with its interest, although it did appear relatively early on in specialist Spanish journals. Despite its merits, it would have to wait until the important work undertaken by **docomomo** Iberia, from 1994 onwards, for the complex on *Santa María Micaela* Street to be analyzed in depth and appropriately documented and disseminated internationally<sup>10</sup>.

The municipal authorities have legally treated this complex as Protection Level 2 in the *Catálogo del Plan General de*



07 Santiago Artal, *Santa Maria Micaela Housing*. Cooperative, Valencia, Spain, 1958-1961. Upper view with walkways. © Ximo Michavila, 2007.



08 Santiago Artal, *Santa Maria Micaela Housing*. Cooperative, Valencia, Spain, 1958-1961. Access portico to the block with single floor dwellings. © Ximo Michavila, 2007.

*Ordenación Urbana* of Valencia. This will remain so until the future approval of the complex as an Asset of Local Importance, according to the proposal of the Cultural Heritage Department of the Valencia Regional Government made in 1998. Official protection must guarantee that the residential complex preserves its most genuine characteristics.

The *Santa María Micaela* residential complex is like a living organism that is growing old with dignity. ■

#### Notes

- 1 The residential complex is well preserved. Only some transformations related with evolution of society can be observed. Accessibility regulations for the disabled explain the presence of the badly designed ramps and thermal comfort, which today means air conditioning; require extractors that may disfigure the façades.
- 2 The 19<sup>th</sup> century grid expansion areas of Spanish cities (the Eixample in Barcelona is a well-known example).
- 3 Carmen Jordá, "Comunidad Valenciana", in *La Vivienda Moderna. 1925-1965. Registro docomomo Ibérico*, Barcelona, Fundación Caja de Arquitectos, 2009, p. 247-302.
- 4 The unclad concrete structure that creates the image of the buildings is a common characteristic in the international architecture of the 1950s, even though it was somewhat late in arriving in Valencia. For this reason Santiago Artal deserves credit for being a pioneer in this respect. According to the descriptive memory of the project: "The structure is of reinforced concrete for both economic reasons and for its plastic qualities. It is completely modular, all the girders and struts in the three blocks are of the same length. The spanning slabs are of prefabricated joists and concrete beams. The sand and gravel will be mechanically washed on site. The structure will be vibrated...".
- 5 Santiago Artal, *Descriptive Memory on Grupo de Viviendas para Cooperativa de Agentes Comerciales*, 1958.
- 6 *Idem*.
- 7 By means of the service installations, two aspects of the architect's character can be observed: his foresight by including a common waste disposal system that still operates today and, on the other hand, a mistaken intuition in his planning of a communal mechanical laundry, which is not appreciated by the residents.
- 8 Eline Caixeta, *Affonso Eduardo Reidy, "O Poeta Construtor"*, PhD thesis, Barcelona, UPC, 1999. The chapter "*Pedregulho: Ensinar a Vivir en la Cidade*" (p. 311-404) contains a specific bibliography where there are interesting references to international journals.
- 9 Josep M. Montaner; Zaida Muxí; Daniela Arias; Roser Casanovas and David Falagán (Ed.), *I Congreso Internacional de Vivienda Colectiva Sostenible*, Barcelona, *Máster Laboratorio de la Vivienda Sostenible del Siglo*

xxi, 2014. The minutes include the inaugural conference of N. John Habraken, the well-known author of "supports theory". Recent methodologies are analyzed by Josep M. Montaner, "*Tipologías de Vivienda Colectiva de Promoción Privada para el Siglo XXI. Tres Casos de Estudio: Flexibilidad, Agrupación y Sostenibilidad*", in Maite Palomares; Jose Parra (Ed.), *Vivienda Colectiva de Promoción Privada*, Valencia, Colegio Oficial de Arquitectos de la Comunidad Valenciana, 2006. In his article Josep M. Montaner examines design criteria from the perspective of social change.

- 10 The sequence of the first regular publications that include some content referring to the work of Santiago Artal is the following: *Arquitectura*, No. 34, 1961, p. 15-17, with texts by the architect himself based on the descriptive memory of the project; *Hogar y Arquitectura*, No. 86, 1970. Although very complimentary, the commentary on "*Edificio de Viviendas Dúplex en la Calle Santa María Micaela 12*", written by Tomás Llorens and Emilio Giménez, is very brief; *Geometría*, No. 13, p. 38-71, 1992. Carmen Jordá's article, entitled "*Valencian Architecture. Itineraries of Recent History*" analyzes and puts the pioneering work of Artal into context. Later, international recognition of his work became more widespread, especially after being taken into consideration by: Xavier Costa, Susana Landrove (dir.), *docomomo Ibérico 1925-1965. Architecture of the Modern Movement*, Barcelona, Fundación Mies van der Rohe, 1996. Likewise, his work would be included in the publications of Miguel Centellas, Carmen Jordá and Susana Landrove (Ed.), *La Vivienda Moderna. Registro docomomo Ibérico 1925-1965*, Barcelona, Fundación Caja de Arquitectos, 2009.

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