
Social Housing Design. Urban proposals

A possible interpretation throughout the last thirty years of *Habitação Social* in Portugal

EURAU'12

ABSTRACT. The paper compares some recent Portuguese productions (framed in the activity of the Instituto Nacional de Habitação) with three residential projects by Alvaro Siza (Bouça, São Vítor and Malagueira), trying to show how the mechanisms of spatial organization of housing translate ideas, attitudes and specific proposals for the city, interpreting and defining strategies for construction of the urban space, combining particularities of the territory, history and memory.

Simultaneously, inserting the projects analyzed in the general trend of research on social housing Portugal, the study draws interpretive hypotheses to describe the specificities of the Portuguese case.

KEYWORDS: Social housing - Public residential space - SAAL - INH - Portugal.

Santiago Gomes

*I Facoltà di Architettura - Politecnico di Torino
c.so San Maurizio 5c - 10124 - Torino - Italia
tel. +39 011 020 37 07 / +39 339 657 62 62
e-mail: gomes.santiago@gmail.com*

1. From a House to the City

Throughout the whole 20th Century, the urban issue is inextricably interwoven with the architectural research about new residential models. From the early formulations of the Utopian Socialists to the *siedlungen* of social-democratic Germany, from Le Corbusier and Russian Constructivists' projects to the new paradigms of the urban Dutch regeneration, the studies which were carried out around the typological and distributive aspects of housing propose and interpret new living ways, reflecting at the same time specific ideas for the city.

In the latest years, it seems that the residential question has been once again playing a central role in the articulation of the political discourse around the construction of the city. The discipline deals again with collective housing, bringing back to the heart of the debate an issue which was abandoned at the end of the 20th Century.

The main approach oscillates in most cases between extolling the idea of environmental sustainability – identifying social housing as a privileged field for technological experimentation – and a political and programmatic approach concerning the opportunities that building development itself offers in terms of reactivation of the economic cycles of production.

From a strictly architectural perspective, typological-distributive aspects are rarely addressed, being the research about the ways of living the domestic and public spaces more often subordinated to romantic and evocative considerations about a communitarian and pre-urban life.

This approximation is not surprising, given that the production of the last thirty years is consistent with a neoliberal model of privatization typical of the 80s and 90s which, coupled with the crisis of modern project, mechanically reproduces trivialized and stereotyped models of housing and urban living.

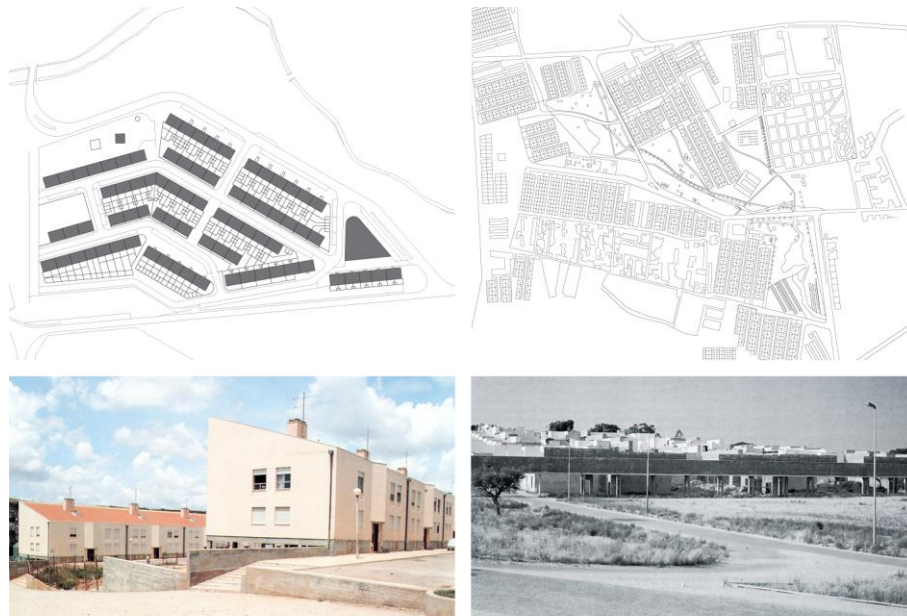
If what we just said gives a general idea about the drift of the inevitable supremacy of speculation on disciplinary practice, this assumption represents only a superficial step and prompts us to further investigate the current state of architectural research on housing.

The present study, starting from the identification of a defined geographical and chronological area, proposes a systematic analysis of recent housing production. It could be defined as an attempt to identify recurring and innovative models for defining space, retrieving a scientific knowledge which can offer operational tools for the project.

In order to conduct this analysis, the research focuses on the production of social housing. Due to their own nature – as well as to the fact that they are framed within extraordinary logics and conditions – public housing programs are in fact a privileged setting for experimentation. In a way, they set the project on the edge of the market, still rigidly framing it within the economic and regulatory context.

In particular, the paper, which constitutes one of the partial outcomes of a broader research on social housing in Portugal (GOMES, 2012) compares some recent Portuguese productions (framed in the activity of the Instituto Nacional de Habitação) with three residential projects by Álvaro Siza (Bouça, São Vítor and Malagueira), trying to show how the mechanisms of spatial organization of housing translate ideas, attitudes and specific proposals for the city, interpreting and

defining strategies for construction of the urban space, combining particularities of the territory, history and memory. The projects analysed share the awareness of the implications and intrinsic possibilities of the projects of social housing, intended as chances to shape significant portions of the city.



Site: Oeiras, Caxias, Laveiras
 Realization: 1991
 Number of dwellings: 144 (400)
 Project: Nuno Teotónio Pereira , Pedro Botelho
 Client: Câmara Municipal de Oeiras
 Contractor: Sociedade de Construções Amadeu Gaudêncio SA

Site: Évora, Quinta da Malagueira
 Realization: 1977-...
 Number of dwellings: 1200
 Project: Álvaro Siza Vieira, Nuno Lopes
 Client: Câmara Municipal de Évora
 Contractor: Coop. Boa Vontade, Coop. Giraldo, FFH

(Fig.1)

The project by Nuno Teotónio Pereira and Pedro Botelho of around 400 apartments in Oeiras represents the continuation of the research on housing led within the architectural firm of rua da Alegria already starting in the 1970s. Lined up along the road layouts designed by the Master Plan, the buildings define the blocks, developing in low strips which provide more than the half of the apartments with a private garden. Such option shows how the intervention was set up taking in consideration the surrounding urban fabric, characterized by low buildings (INH, 1992). The diversity of the external spaces proposed by the project also determines the settling logic and the buildings' scale itself. Along the streets which delimit the borders of the intervention area, the architects placed the highest buildings, which also include business premises on the ground floor. On the contrary, the internal streets, with their two floors exclusively residential buildings, are characterized by a "slower" pedestrian scale. The space within the strips inside of each block consists of gardens with direct access from the living room of the ground floor apartments. Each *patio* can be reached from the apartments located on the first floor as well, thanks to a system of raised walkways.

Led by similar principles, the urbanization plan of Malagueira (1977) represents for Álvaro Siza the opportunity to provide continuity to the experience started in Porto in the previous years with the SAAL process.

With the project of the *Bairro*, Siza develops a low, dense and continuous urban fabric consisting of single-family houses. Displacing facilities and services in strategic points, he assigns to public buildings a central role for the integration of the new district within the surrounding urban fabric, in an attempt to attenuate the rigidity of the zoning of the plan issued in 1975 by the *Direcção Geral da Sistemização Urbanística* (DGSU), following the principles of the *Charte d'Athenes* (DUARTE, 2007).

Located in the urban expansion area West of Évora, Malagueira residential complex still hosts 1,200 single-family houses, as well as services and collective facilities organized into three main sectors. The first sector, to the South-West, represents an expansion of the informal fabric of the unauthorized district Santa Maria. The second sector, to the North, develops along an initially rural path, which currently border a commercial area. The third one, to the West, structures the fabric of the illegal district *das Fontanas* and accompanies the topographic pattern of the ground.



(Fig.2)

The structure of the plan is based on two almost orthogonal axes. The East-West one follows one of the main approaches to the city and consists of two streets. One is dedicated to vehicles, while the other, which is covered, is pedestrian. The North-South axis regulates a previously existing rural road layout. Its first part, until the

crossing with the other axis, is dedicated to vehicles, but it turns into a pedestrian path alongside the public park. Buildings develop orthogonally to the main axes. Although some exceptions exist, the residential typology mostly comes down to two configurations, which can be applied to the dimensions of a 8 x 12m one-front lot: apartments facing the street with a rear garden or apartments in the shape of a letter L, with the garden overlooking the street. Within these two configurations, a number of distributive and evolutionary solutions develops. There are no buildings with more than two floors and the number of sleeping-rooms depends on the necessities of the different families, with possible subsequent modifications (PORTAS, 1991:48). The adoption of one or the other configuration in each single lot gives the complex constant rhythm and diversity, keeping the unity of the expressive treatment and a common language.

The project in Conceição de Tavira (1992) fit in with the research led by Álvaro Siza in Malagueira. It consolidates a portion of the expansion area of the city of Tavira, paying special attention to the simplification of the building process and to the optimization of the spaces of connection. Included within the *Plano da Conceição*, the 70 apartments complex designed by Pedro Serra Alves takes up a whole rectangular block. Delimited to the North by the national road 125, which follows the coast of Algarve, the ground is crossed diagonally by one of the streets which structure the Master Plan of the area. This influences the alignment of most apartments and guarantees at the same time good conditions for the North East - South West orientation.

The project includes two typologies of duplex single-family houses, built around a private rear courtyard, with a smaller access *patio* to the street. Volumetric variation and layout are consistent with conditions of dimensional modularity, which grant interaction between the two typologies. Therefore the combination of different units is realized through the application of a principle of simple aggregation. This allows the creation of wide open spaces within the block and, at the same time, reduces the surface of external walls, determining a significant economic and energy saving.

The misalignment of facades and volumes, together with the alternation on a regular rhythm of both typologies, shape a dynamic urban front, where full and empty volumes and cast shadows mark the space, defining an articulated composition from extremely simple elements.

The strip of single-family row houses designed by Álvaro Siza represents the first and only intervention of the operation SAAL by São Vítor which was actually realized within the dense urban fabric to the East of Porto's old town. Built along *rua da Senhora das Dores*, the building takes up a block which was made free by the demolition of one of the *ilhas* which characterized the building models of the district behind São Lazaro Hospital. With his project, Siza redesigns the pedestrian paths through the definition of the new building and its harmonization with the existing ones, highlighting the intention of shaping his intervention - besides the need to solve the housing problem - primarily as a way to build the city. The first implementation phase includes a series of buildings which lie between the empty space inside the block and a wall belonging to the old demolished *ilhas*. This establishes a relationship of continuity with pre-existing landscapes and alleys and reaffirms a critical point of view which contrasts the "vital coexistence between ruins and new, renouncing to the modernist *tabula rasa*" (FRAMPTON, 2005:14).

The complex consists of eleven T3 duplex apartments and one T4 duplex apartment, which represents an exceptional element within the building, introduced by the curved covering. Located above the walkway which leads inside of the lot,

the T4 also determines the articulation of the building right by a natural modification of the height of the soil.

The composition of the building is characterized by an austere language, influenced by North European architecture. The series of partitions dividing the apartments gives rhythm to the facade and delimits the entrances to the apartments which articulate the collective space and the intimate indoor space.

Such spatial gradation – which can be also found in Malagueira and Tavira – continues inside of the apartments, where the height of ceilings constantly increases, reaching the top in the living room, which leads to the private *patio*.



(Fig.3)

Consistently with Siza's proposals in São Vítor and Malagueira, the project by Paula Petiz grounds the external spaces organization and the buildings layout on a heterogeneous urban fabric. The solutions draw on well-established elements such as the creation of private external spaces, the direct access to the apartments from outside and the minimization of the area of the internal. Located in an area which is strongly shaped by the presence of the highway A28 to the West and where unauthorized settlements and industrial warehouses coexist with no apparent logical display, the project intends to structure the urban space through the recovery and incorporation of the latent signs of an inhomogeneous fabric. Integrating the existing paths and establishing scale connections with buildings and

infrastructures, the project becomes an instrument to mend the fragments of a city which does not exist.

Such sensitivity is put into practice through the choice of the models of soil occupation. The layout is characterized by the repetition of two kinds of three storeys compact buildings, disposed autonomously and grouped together following an articulation and a rhythm which are determined by the layout of the existing buildings.

Arranged following such logic, the 24 autonomous blocks constituting the complex generate a series of external spaces, differentiated by a hierarchically organized texture. The alternate series of public spaces on a different scale is regulated almost exclusively by access elements such as stairs and footbridges on one side, and little walls delimiting the individual *patios* on the other.

The project by Carla Baptista and Freddy Ferreira César in Funchal (2006) reintroduces the high density collective programs, articulating proven solutions, proposing widely tested typologies, but articulated following innovative aggregation systems. Consistently with the research led by Siza in Bouça and São Vítor, the project gathers and combines the international studies on the building width, elaborating typologies of duplex with access from the gallery.

Lining up along the border of the block, the building develops into two separated volumes which define two internal yards differentiated by scale, accessibility and functional destination. The yard to the North, smaller and enclosed along the whole perimeter, hosts an equipped garden, while the wide space to the South, which includes the kindergarten building and where most of the commercial premises look onto, is completely open towards the urban fabric, representing its continuation.

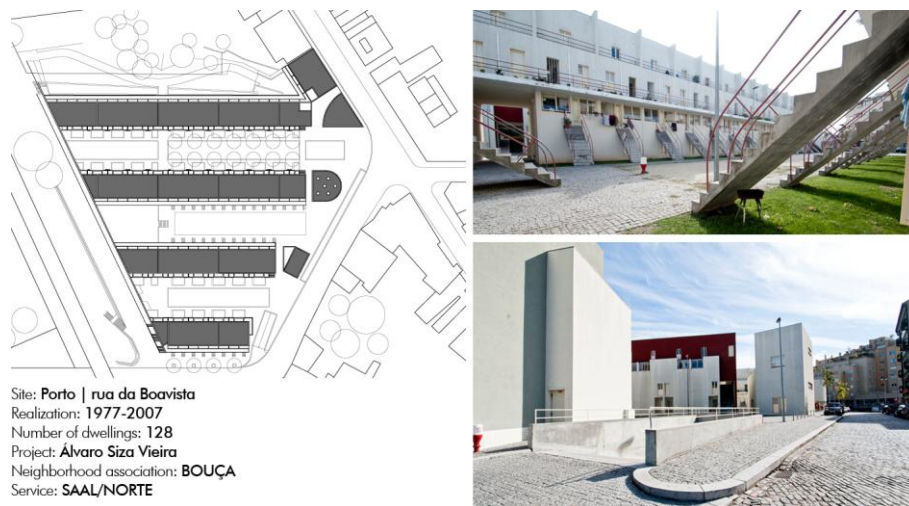
The two compact volumes which constitute the complex are integrated by the levels continuity, both the horizontals – through the aligned handling of the facades – and the verticals – through the different floor levels.

The building layout mirrors the ground altimetric progress carrying at the top of the building the irregular shape of the land, characterized by a significant steep towards the sea. Keeping free the low ground space, the project allows visual permeability, integrating the inner yards spaces within the series of open spaces of the city.

The access system and the handling of the facade originate directly from the conditions generated by the characteristics of the urban fabric. Going towards the fast-flowing roads, the necessity to provide a higher level of privacy determines the adoption of a traditional access system (landing with elevator and stairwell with two apartments at each floor). It also influences the internal organization of the apartments, where the bedrooms are located on the inner yard side, whilst on the street side the verandas – set back from the edge of the street – create an austere composition, which is animated by the apparently irregular distribution of the openings of kitchens and living rooms. On the contrary, on the less-travelled roads the solution is represented by duplex apartments with access on the yard side through alternate external galleries, while on the external facade the continuous balconies are characterized by the alternation of sunscreen elements.

In Bouça's project, the articulation with the surrounding urban fabric is guaranteed by the volumes dedicated to collective use which, located at the top of each housing block, mark the complex entry from *rua da Boavista*. Alongside the opposite border, a long wall in the same height as the buildings separates the intervention area from the railroad to the North.

Moving from the definition of the elements which articulate the complex with the surrounding context (business premises and public spaces on the *rua da Boavista* on one side and the gallery-wall which protects the complex from the trains, which are currently integrate in the subway network), the apartments are located along four parallel lines, each one with four floors. Including two different duplex typologies, the blocks create two wide collective yards with stairs which lead directly to the first floor. Access to the duplexes located on the third floor is granted through continue galleries located on the stairs' opposite side.



(Fig.4)

The longer block delimits the complex on the inner side, articulating the existing height land difference through the creation of a series of private *patios* belonging to the duplexes on the ground floor.

The backward position of the ground and first floor on the facade, together with the external stairs, determine the rhythm of the repetitive succession of typologies. On the second floor the rhythm is stressed also by the chromatic variation that is configured as crowning in the overall composition of the complex.

2. Social Housing in Portugal. Some interpretive hypotheses

The continuity which emerges from the description of the seven projects – considering the over thirty years that separate the early sketches of Siza for the Bouça's complex from the realization of the residential block in Funchal – synecdochically describes the historical process of evolution of the disciplinary responses to the housing question in Portugal. A process which could be defined schematically as developing through fluctuations, as a cyclical evolution, where phases and specific material responses to the housing question rarely follow one another each one as an immediate result of the previous step. It is a dialectical evolution, where the phases come one after the other on the levels of typology,

formality and language, as well as on the urban level and on the ground of the different ideas of city. The phases rise as reforming moments. The replacement of models is not realized through the introduction of original proposals, but rather recovering and revising the pending questions which had characterized the previous phases, even several years before.

The utopian-philanthropic collective housing model of *habitação colectiva* of the early private-public interventions, which represents an evolution of the consolidated practices of popular housing, is replaced by the adoption of the traditional family-owned individual house. This recovers the question of the "*casa portuguesa*" of the late 19th Century through the action of a political power which handles it as an instrument for social control.

Made possible by the economic and social circumstances, the debate around collective housing of the mid-forties – which recovers the experiences of the first period – initially evolves into the definition of the modern city of the sleeves, being almost immediately challenged by the influence of an international debate which pursues a reform of the anodyne language of the CIAM, combining, in a local way, linguistic modifications between the tropicalist Brazilian aesthetic and the English brutalism. Combining the international debate with the local cultural debate, during the *verdes anos 50* the linguistic renewal is accompanied by the research around the authentic elements of the Portuguese tradition. This research, with its telluric-rural element, provides the basis for the beginning of an investigation on the single-family typologies, which, despite the fact that in that period is limited to suburban environments, at the same time starts to challenge the idea of the big planning as an instrument for building the city.

While a proper Portuguese direction founded on the economy of means and on a realistic approach to trade practice consolidates, the impulse for scientific research around the housing question – which aligns Portugal with the rest of European countries – paves the way for the major expansion plans on the model of the *grands ensembles*, made possible by the speculative capitals flowing into the process of promotion of public housing. Megastructures – most of which unfinished – shape the city with the best "Golden Lane" and "Toulouse-le-Mirail" style, bringing once again to the fore the integrated master plan as a mechanism for the construction, or rather for the re-creation, of huge portions of the city.

After the April Revolution, the projects of the newborn *Serviço Ambulatório de Apoio Local* – especially in its *portuense* version – start challenging the big plans, elaborating precise and fragmented alternatives, basically establishing opposite and countertrend typological and urban models, recovering the developments of the 1950s and 1960s. Articulating the outcomes of the *Inquérito à Arquitectura popular portuguesa* from the perspective of the ideas and the North European models from the 1920s from a linguistic-typologic point of view, the SAAL operations propose a specific way of building the city, which is founded on the interpretation of the site, as well as on the real production conditions. The design criterion, which inspires most of those initiatives refuses the "formula of isolated blocks within anonymous spaces". It privileges instead the existing types and dimensional scale: conglomerates of two- or three-floors houses with direct contact with both the street and the other external spaces, sometimes small private yards; the mix of new buildings with the restoration of the degraded ones; the evocation of the very same working-class typology of the *ilhas*.

The sudden interruption of the SAAL process reactivates the projects for the mega-complexes. The big continuous building, which includes several kinds of housing, connections on different levels and a spatial articulation which tries to recreate new

spaces for social interaction, reappears within the urban landscape. However, the prolonged economical crisis impedes the realization of such proposals.

After abandoning both the SAAL experience and the opportunities to realize the big dimension expansion plans, the discipline of the mid-1980s in Portugal aligns itself with the international drifting and the "erudite" disciplinary practice is excluded from the real estate developments, which at the moment represent the only possible path for putting into action the research on housing.

The outcomes of the production in the early years of the initiatives financed by the INH are revealing as to the state of the debate. The economical constraints which characterize the environment where the programs operate lead to well-tested typological models characterized by the trivializing private promotion. Complexes on a large scale of more or less tall blocks are introduced within the suburban fabric without interruption from the standardized production "offered" to the middle-class by the market.

Starting from the 1990s (significantly the first case study – a project by Nuno Teotónio Pereira – is from 1991), disciplinary research elaborates proposals for social housing, recovering the studies from the 1950s and from the first years after the Revolution, which were never concluded.

Following the previously mentioned logic of alternation and recovering the pending discourses, the recent production still develops – or maybe just suggests again – more or less up-to-date versions of the SAAL experience, which in turn, as previously stated, collected the unfinished investigations of the first regionalistic period. The choice of single-family duplex typologies, the proposal of models for internal space structuration defined through the organization of few elements, the attention for the scale and the shape of both territory and urban fabric and the substantial reduction of the scale of the complexes, constitute recurring issues and concerns, which characterize the production of social housing within the period under consideration.

The Funchal complex, the most recent one, matches these concerns with a proposal of significant dimensions. Its conception of occupation of the urban space aligns itself with the idea of building the city by fragments. The distributive research around the internal apartments organization develops in absolute continuity with the process it is set in and the aggregation and accesses system also somehow recovers the previous experiences (Bouça), at the same time showing a new interpretation of the systems which were tested within the mega-complexes. If from a linguistic perspective the research introduces the developments of the contemporary international debate, on the other side the adopted compositional principles are subjected to the very same sensitivity for the relationship between the housing internal and external space and the urban space which characterizes the statements of the SAAL examples. In this case these concerns are indeed probably more realistically applied.

Even recognizing the side developments which appear within the landscape, the analysis of the social housing production during the period of activity of the INH highlights how the SAAL operations still deeply influence the Portuguese housing production.

This probably happens because – as claimed by Nuno Portas – a modern disciplinary tradition lives on within the Portuguese architectural culture. It resists to the influence of the modifications of the processes of housing production, perhaps because the failure – particularly from the social perspective – of the experiences of the late 1970s has not been completely metabolised. Or maybe such circumstance is due to the importance that such projects acquired as plugs within

the construction of a shared project for the city, representing a unique experience of participation and (mystified?) involvement of the inhabitants throughout the planning process.

Or maybe, in conclusion, right because aligned with a deeply modern spirit – kept alive through an empirical realism – the context where the SAAL interventions took place still evokes in the mind of the architect who “transforms society”, that wonderful, only dream, which an architect, according to Távora, can dream when he is awake.



(Fig.5)

Legends

(Fig. 1) Left: housing in Laveiras, general plan and view from the road (credit: INH 1992, 12); Right: housing in Malagueira, general plan and street view (credit: PORTAS 1991:49)

(Fig. 2) Left: São Vítor Housing, general plan, axonometric view and internal view (credit: BANDEIRINHA 2007:423); Right: housing in Tavira, general plan and view from the road (credit: INH 1993:21)

(Fig. 3) Left: housing in Monte Espinho, general plan and aerial view (credit: INH 2006:8); Right: housing in Funchal, general plan and view from the road (credit: IHRU 2007:28)

(Fig. 4) Housing in Bouça, general plan, courtyard view and view from the road. (credit: S. Giannini)

(Fig. 5) Above (in order): traditional housing block in Olhão, housing in Malagueira and Housing in Tavira. Below (in order): Patio of Lisbon in early 20th Century, housing in Bouça and housign in Oeiras (credits: *Arquitectura Popular em Portugal*, vol.3, 1988:203; PORTAS 1991:51; INH 1993:21; "Os Pateos de Lisboa" in *Ilustração*, 01/10/1929:28; S. Giannini; INH 1992:13)

Bibliography

BANDEIRINHA, José António. *O Processo SAAL e a Arquitectura no 25 de Abril de 1974*. Coimbra, Imprensa da Universidade de Coimbra, 2007.

BECKER, Annette; TOSTÕES, Ana; WANG, Wilfried. *Portugal: Arquitectura do século XX*. Munchen, New York, Lisboa, Prestel/PF 97, 1997.

COELHO, António Baptista. *INH, Instituto Nacional de Habitação 1984-2004, 20 anos a promover a construção de habitação social*. Lisboa, INH-LNEC, 2006.

COELHO, António Baptista; COELHO, Pedro Baptista. *Habitação de Interesse Social em Portugal 1988-2005*. Lisboa, Livros Horizonte, 2009.

DUARTE, José Pinto. *Personalizar a Habitação em Série. Uma Gramática Discursiva para as Casas da Malagueira de Siza*. Lisboa, FCG, FCT, 2007.

FRAMPTON, Kenneth. *Álvaro Siza. Tutte le opere*. Milano, Electa, 2005.

GOMES, Santiago. O problema (e algumas soluções) das casas portuguesas. Modelli di organizzazione dello spazio dell'abitare sociale in Portogallo [1989-2007]. PhD dissertation, Politecnico di Torino, 2012.

Instituto da Habitação e da Reabilitação Urbana (IHRU), *Prémio INH/IHRU 2007*. IHRU, Lisboa, 2007.

Instituto Nacional de Habitação (INH), *Prémio INH 1992*. INH, Lisboa, 1992.

Instituto Nacional de Habitação (INH), *Prémio INH 1993*. INH, Lisboa, 1993.

Instituto Nacional de Habitação (INH), *Prémio INH 2006*. INH, Lisboa, 2006.

PEREIRA, Nuno Teotónio. *Evolução das formas de habitação plurifamiliar na cidade de Lisboa*. Lisboa, FCG(?), 1979.

PEREIRA, Nuno Teotónio. *Escritos: 1947-1996, selecção*. Porto, FAUP, 1996.

PORTAS, Nuno; MENDES, Manuel. *Portogallo. Architettura, gli ultimi vent'anni*. Milano, Electa, 1991.

TEIXEIRA, Manuel C. *As estratégias de habitação em Portugal, 1880-1940*. in *Análise Social*, vol. XXVII (115), 1992, (1º), pp. 65-89.

TOSTÕES, Ana. *Os verdes Anos na Arquitectura Portuguesa dos Anos 50*. Porto, FAUP, 1997.

TOSTÕES, Ana (compil.). *Arquitectura Moderna Portuguesa 1920-1970*. Lisboa, IPPAR, 2003.

Biography

Santiago Gomes is an architect, graduated at the First School of Architecture of the Politecnico di Torino (2006). Born in Buenos Aires in 1978 he has studied Architecture in Buenos Aires, Lisbon and Turin. In 2012 he obtains a PhD in Architecture and Building Design at Politecnico di Torino, where he has been covering the position of teaching assistant since 2006. In past he has participated in the research project "Articulaciones Urbanas: Configuraciones, Técnicas y Movilidad para Proyectar la Ciudad Latinoamericana" at the School of Architecture, Design and Urbanism of the Universidad de Buenos Aires (2005-2006) and in several research projects in Architectural Design at the Politecnico di Torino (2009-2011). In 2010 he started together with Sandra Giannini the architectural firm "Follow the Architect", based in Torino. Their projects have been exposed in architectural exhibitions, including the VIII Biennale of Architecture in Venice, and published in books and catalogs.