

GINO MALACARNE\*

## URBAN HOUSES. INTERIOR SPACE AND URBAN SPACE

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### DOMY MIEJSKIE. PRZESTRZEŃ WEWNĘTRZNA I PRZESTRZEŃ URBANISTYCZNA

#### Abstract

The design hypotheses have developed an idea of residential building that proposes a principle of adaptability and flexibility for the construction of residential spaces and settlements.

In this connection, the study focused attention on the Japanese tradition of building and housing.

The Japanese housing tradition becomes a chance to develop a comparison intended to help regenerate and renew the compositional mechanisms that characterize the contemporary culture of habitation and housing design.

*Keywords: Urban project, Collective and domestic space, contemporary habitation, Japanese house, Flexibility*

#### Streszczenie

Hipotezy projektowe rozwinęły idee zabudowy mieszkaniowej, która proponuje zasadę zdolności dostosowania się i elastyczności konstrukcji przestrzeni mieszkalnych i osiedli.

W tym względzie, tekst koncentruje się na japońskiej tradycji budowania i zamieszkiwania.

Japońska tradycja architektury mieszkaniowej przez porównanie może stać się szansą na odtworzenie i odnowienie mechanizmów kompozycyjnych charakteryzujących współczesną kulturę zamieszkiwania i projektowania architektury mieszkaniowej.

*Słowa kluczowe: projekt urbanistyczny, zbiorcza i domowa przestrzeń, nowoczesne zamieszkiwanie, japoński dom, elastyczność*

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\* Prof. Arch. Gino Malacarne, DA-Department of Architecture, University of Bologna.

For human life, a house means shelter; however, its construction also determines a city's places, its public and collective spaces alike. Consequently, its construction results in "a fixed scene for human activity". [1] The house features a public side, the exterior, and a private side, the interior. The public side belongs to all and not just the inhabitant, and this calls for civil architecture. The interior is a private place, dedicated to domestic life, and needs a design approach that seeks to interpret the liturgy of domestic life without forcing the inhabitant to carry out maintenance on some burdensome work of art, or to live in a coercive place where everything is predictable. On these issues, reference can be made to Adolf Loos' lucid reflections and designs. Or trying to build houses seen as open, free spaces that are as flexible as possible from a functional point of view.

As for house design and its relationship with the city, I believe it is key to reorient architectural research towards a regeneration of urban studies and the relationships between architectural type and urban morphology, proposing a recovery of the applications developed on these issues in Aldo Rossi's writings and works. Along with others, I support the necessity for scientific continuity with these studies and their respective way of understanding rational design as a means to link the destiny of architecture with that of the city. What interests me is a design experience that belongs within a civil horizon of architecture in which we can recognize and state that: "Living is only possible as a collective space". [2]

## 1. THE URBAN PROJECT

The housing estates that provide the general framework for this research insist on a rediscovery of architectural spaces compatible with an urban and morphological development that allows domestic wellbeing in the home plus an indispensable, unmistakable urban look. [3]

A rebirth of the city's peripheral urban forms and places is desirable also in the light of the extensions in meaning that this issue has earned, on the one hand in relation to the growing importance attributed to the need to protect the environment and capitalize on existing cultural heritage, on the other in consideration of the burgeoning interest in opportunities for urban reconstruction and transformation. As mentioned earlier, in tackling the issue of the relationship between architecture and place, the project envisages the construction of defined and unmistakable residential urban settlements that pave the way to an urban development that will regenerate parts of the surroundings as well as the city in question, in order to capitalize on its landscape and historical features.

Taken as a whole, the project has been devised as an urban system of unmistakable *insulae* in which nature, history and technique are able to set out urban parts that are formally defined and unmistakable, once again thanks to architectural design. It is worth recalling that the issue of residential development, quantitatively significant in every city, is arguably what best allows us to verify, through design and construction, the structural transformations that have taken place over time in cities, given that they constitute entire parts. An issue that arguably clearly accentuates the relationships that subsist in the history of cities between types of building, urban morphology, and places' distinctive, unmistakable identity.

In fact, the first aspect, type, principally concerns the divisions and layout of housing estates, while the second, morphology, reflects the city's aggregation structure in elevation; this link creates and determines the form of urban places and, as a result, their specific, unmistakable appearance.

## 2. “A HOME FOR EVERYONE”

The housing problem keeps cropping up as an emergency.

A disproportionate offer, for many unaffordable, hand in glove with the number of unsold properties, are the most evident aspects of the right to housing issue. A right that arguably represents what has united the requests of populations and underprivileged classes of every age sooner than any other necessity.

This right, now accentuated by the economic crisis – to remain in our own part of the world – has also been bolstered by the increase in migration. The research project we are presenting, although autonomously drawn up, does not neglect the fact that architecture is also a political act and that the best works arise out of a state of necessity. Given that architectural design is a summary that takes the form of insight founded on research and knowledge, it does not evolve only within the limits of its own disciplinary confines or in self-referential terms, but by starting from fresh necessities defined by its own time. “In architecture,” Bruno Taut wrote, “style and character develop in such a way that the forms are born in harmony with the needs”.

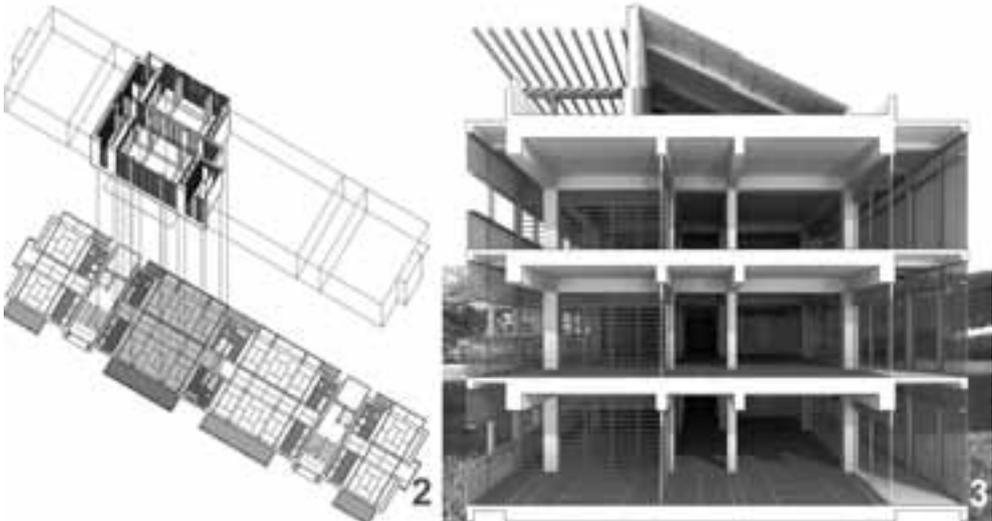
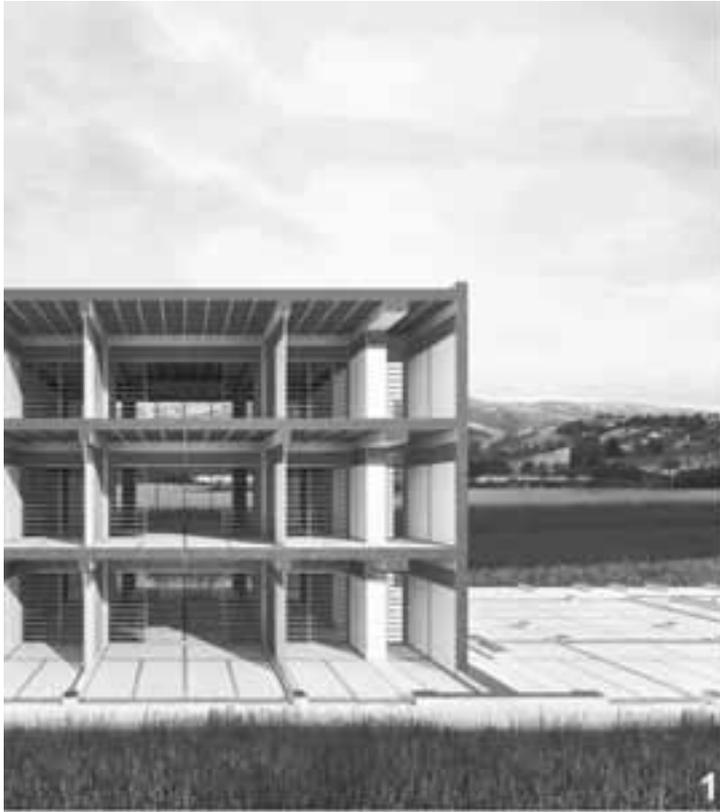
The responsibility to respond satisfactorily in architectural terms with respect to the scarce resources available, concerns architects along with the need to find, by means of research, operating procedures and tools that are appropriate for our times. The research that guided the housing estate and dwelling projects sought to go beyond the term “social” housing, in its ambiguous recent interpretation, which refers to a specialist response to a quite precise and definite social problem. On the contrary, we have tried to recoup the general notion of a social theme and an architectural era: the idea of a “home for everyone”, going back to a statement by Elio Vittorini: “a home that is truly habitable, whether for a labourer, an industrialist or an academic, a bona fide home for everyone” [4].

From a design point of view, the “home for everyone” identifies architectural issues of a generic kind that do not necessarily match economic and social aspects and cannot be distinguished on the basis of social status, activity, gender or role. More privileged themes attempt to offer diverse possibilities for the home space, aspiring to an architectural quality that is representative of housing estates whether newly designed or already existing. From this standpoint, the construction of a residential building is a concrete chance to provide an answer, and to extend the offer of accommodation varying in size, materials and construction characteristics, within consolidated or newly expanded urban areas.

Now more than ever, residential construction constitutes an important challenge and at the same time an opportunity for architecture and for the growth and definition of a city’s places. A challenge that is increasingly complex, conditioned on the one hand by the impossibility for many to get a foot on the bottom rung from a financial point of view, and on the other by the proliferation of lifestyles (accentuated by migratory phenomena) expectations of liveability in urban and domestic spaces, technological innovation and new awareness of the environment as a whole, and the question of environmental sustainability in the construction of cities in general.

## 3. ADAPTABLE HOUSES/FLEXIBLE HOUSES.

The project ideas were developed for certain residential areas lying between the towns of Forlì and Cesena. The design concept hinges on the role of the urban project and the



- III. 1. Photomontage, cross section of the residential apartment building
- III. 2. Exploded axonometric diagram of apartment blocks
- III. 3. Transversal perspective section of apartment blocks

significance that housing estates can take on in processes to regenerate and transform urban areas, seeking to recoup the general notion of a social theme and an architectural era: the idea of a “home for everyone”. Starting from this general notion, certain concepts were developed focussing on the idea of a residential building whose dwellings would be characterized by a principle of adaptability and flexibility as regards both construction and space

In this connection, the research turned its attention to the construction and residential tradition in Japan. A comparison born with the intention and attempt to regenerate and refresh the compositional mechanisms that characterize housing design and a culture of contemporary living that seems “forced” into the uncritical use of distribution schemes of a rationalist ilk, standardized and trivialized by the commercial interests of the property market. In fact, the traditional Japanese house, and the devices that characterize its spaces, shape and structure, represent a possibility of renewal in presenting the idea of a “home for everyone”, given that they articulate and develop themes and characteristics lined to the ductility and flexibility of the spaces.

The history of the traditional Japanese house is marked by a shrewd development of the relationships between a dwelling’s structure and form, in which the value of empty space available for functional and dimensional adaptation constitutes a historical example and a concrete reference for progressive research into the theme of contemporary living. This attention towards the Japanese house is naturally aware of the fact that it is unthinkable to repeat an experience or a tradition through a “transplant”.

Over time, architectural culture in general, and the domestic Japanese variety in particular, have offered a remarkable impulse towards renewing the culture of the house, as shown by the architectural works of many modern masters, starting from Frank Lloyd Wright. As Wright himself wrote, we “couldn’t live in Japanese houses [...]. For once it can’t very well copy. The ethnic eccentricity is too great” [5], however it is equally certain that, “the West needs this source of inspiration.” A standpoint shared by Bruno Taut in his writing. Interest in the Japanese house lies in the compositional simplicity that distinguishes it, in the fact that the rooms, excluding the toilets, do not have one single exclusive pre-established function, but are places for living, just as the poet Kenkō noted in one of his diaries: “Some agree in establishing that it is opportune, in building houses, to include a room without a particular destination, one that is beautiful to look at, and that can serve for many uses”[6].

An interest, therefore, that goes beyond the minimalist aestheticizing idea of architecture that traditional Japanese styles are often associated with. In the consolidated Western tradition the various rooms have predetermined functions. The specialization of rooms – a theme dear to the architecture of the Modern Movement – arranged in an uncritical application of compositional principles and functionalist distribution schemes, has over time caused a progressive impoverishment of the spatial qualities of the interiors of the house we live in.

As underlined by Georges Perec when researching “a statute of the habitable”, “Apartments are built by architects who have precise ideas on what an entrance means, or a living-room, a parents’ room, a children’s room [...].

And yet, at the beginning, all the rooms more or less resemble one another, it is useless to try and impress us with stories of modules and other nonsense: they are no more than kinds of cubes, let’s say rectangular parallelepipeds; there is always a door and, for now, quite often, a window [...]. In short, a room is a rather malleable space. I don’t know and I don’t want to know where the functional begins and ends. In any case, as I understand it, in the model

division of today's apartments, the functional functions according to an unequivocal, sequential and nychthemeral procedure"[7].

Perec continues by invoking an apartment with the presence of a "useless room, absolutely and deliberately useless," and invoking "a space without a function (not without a specific function or multifunctional)"[8].

In Japanese houses, the rooms, although very similar to one another, nonetheless possess a hierarchy which, as Fernando Espuelas has observed, "do not respond to functional criteria but to situations and dimensions"[9]. The space inside Japanese houses is arranged as "a neutral frame that is not activated except by [human] personal presence"[10].

The rooms are the spaces Japanese people live in, whose quadrangular shapes are fixed by the number and layout of mats (*tatami*), variable in relation to the type of dwelling and the role of the room. Despite the physical similarity with its neighbours, each room has its own name according to its main purpose but a multiplicity of uses that depend on the size of the house. In effect, as Fosco Maraini wrote, any of the rooms with *tatami* can serve as a bedroom just as it can serve for eating: "In theory. The rooms are a neutral destination, they are 'a space' which from time to time is adopted for the most opportune use. In reality, of course, one room ends up being 'the parents', another 'the children's', a third for guests, visits, meetings – nevertheless, a fundamental elasticity remains" [11].

Without entering into the merits of a specialist dissertation, it can be stated that the *tatami* is the household element that brings order to its space, defining its proportions and measurements. And it is to the *tatami* that the other elements of the house adapt themselves: pillars, doors, corridors, balconies, windows, ceilings, etc. Through a series of compositional principles – geometric and relational – the rooms as units of form, dimension and meaning arrange themselves one adjacent to another, facilitated by their rectangular geometry which permits free reciprocal movement. The modular grid known as the *ken* ensures that everything is cohesive, regulating the addition of rooms from the centre of the house out towards the garden. According to Heino Engel, the compositional pattern of the rooms *in steps* [12] if, on the one hand, almost never leaves space for interior corridors – the spaces for circulation are the veranda and those already envisaged inside each room –, on the other it does allow the recreation of external spatial concavity defined by two orthogonal perimeter walls.

For Fosco Maraini, the spread of this rational system for the construction and organization of domestic space, "produced a civil architecture that allowed the construction of a great variety of houses, according to the single spatial needs, the means available and personal taste, in the rich combinatory play of unified modules" [13] which therefore determine, as already mentioned, a kind of prefabrication.

Like their location, the size of the rooms is variable. The light, sliding perimeter walls, constructed from mobile panels, make it possible to join various rooms, while the external sliding doors visually extend the gaze outside the house. The diverse compositions determine a fluid, seamless interior space, changeable and adaptable with the varying of necessity and daily living. An interior space that relates at both a compositional and perception level with the natural space outside. In the traditional Japanese house, the relationship with nature is in fact determinant and inextricable in ensuring a healthy authentic liveability for the spaces inside the house. This spatial quality is made possible by the fact that the load-bearing structure, a framework, no longer conditions the definition of the interior spaces; in fact the curtain walls are independent. The construction system determines a consistent relationship between the form and the construction, representing, along with the curtain

wall panelling system a superior example of modern standardization and a possible answer to the question of seismic safety. In addition, this acknowledged synthesis between functionality and beauty presents, as already mentioned, characteristics of ductility, flexibility and distributive adaptability that are not to be confused with a certain formal agnosticism or a nonchalance over type.

In my opinion, Aldo Rossi's considerations on the matter remain valid; he identified indifference over distribution as one of the founding characteristics of architecture. "The real value of a dwelling need not be commensurate with the surface (...) the real value of a dwelling can only be given by the possible concrete forms of freedom of the single"[14].

Indifference over distribution contrasts with positivist/functionalist space in the sense of "a space without density, a space without memory, belonging to the future"[15].

In any case, the aspects of transformability and flexibility are a result of compositional principles and techniques. And so the traditional Japanese house has been taken as a starting point to develop a design strategy that can infuse some important lifeblood into the search for flexibility in domestic spaces in the face of the surfeit of uses that the space of a house lends itself to. In addition, adaptability and indifference over distribution let us question the quality of a dwelling. This question usually sees technical and technological answers regarding efficiency, sociological, dimensional, urban planning solutions and so on, but never in terms of the quality of the space with reference to the architecture. Quality is frequently determined by the materials, that is, a simple complement in defining spaces. Over the last few years, performance in terms of energy efficiency and technological, possibly sustainable features have endorsed new labels of comparison. Spatial qualities seem not to form part of the debate except in rare cases. And so it is helpful to recall the lesson of Adolf Loos and all those architects who have sought to build quality domestic space in time.

In fact, generally speaking, we can say that in time the residential building has developed through the triad of structure-form-liveability, with particular attention to the use of construction systems and materials, increasingly emphasizing technical and system aspects while forgetting the component linked to the construction of the house's places and a natural domestic wellbeing, and above all setting aside its vocation of defining urban places. And so the Japanese house would seem to offer an absolute flexibility with its interchangeable spaces. As Walter Gropius wrote, "The flexibility of use of these components is so high as to satisfy two apparently contradictory needs, which is to say, unity and variability, uniformity and diversification." [16]

These possibilities allow the reasons behind an urban project to coexist. A project that must be carried out within a determined time and must present a unitary character in representing civil values, along with reasons that welcome the individual and private characteristics of its inhabitants.

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