Progetti per la città compatta. Il caso di San Salvario a Torino


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Summary

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Projects for compact city: the case of San Salvario in Turin

Themes and objectives of this study

This study responds to a dual need. The first one can be expressed as the contingent necessity and it is linked to a specific case study, the redevelopment and transformation of the San Salvario district in Turin. This area consists in an orthogonal grid of late nineteenth and early twentieth century blocks, with a discontinuous structure due to the presence of plots which have never been developed or were destroyed during the Second World War, and which continue to be unresolved, as a consequence of neglect or planning indecision.
The second need can be expressed as a permanent idea and is the concept of the continuity of the historical city, offering a chance to reflect on the meaning of block and neighborhood in urban contemporary design. The overall objectives of this study are to confirm the role of the compact city as a fundamental settlement principle of great cultural and social value, and to demonstrate its feasibility, also in terms of environmental sustainability, through housing projects that fit into the existing urban context thereby completing and transforming the existing structures.

Brief history of the neighborhood

The district of San Salvario developed since 1851, when it was approved, after a nearly decennial discussion and planning phase followed to the demolition of the boundary wall (1840). The discussion results were expressed through the plan for the "*Enlargment of the city of Turin outside Porta Nuova*" by the architect Carlo Promis, which extended between the river Po with the park and the Valentino Castle, summer residence of the Savoy monarchy, and the Porta Nuova, the city gate where stands the new railway station (1860-68) by the architect Alessandro Mazzucchetti.
Even the latest expansion of the city, carried out by the end of the nineteenth century, confirmed the historical settlement pattern of Turin: the neighborhood is made of compact and densely built blocks, following a regular and orthogonal grid. In this context the principal roads emerge (from north to south: Via Nizza, Via Madama Cristina and Via Massimo D'Azeglio; from east to west: Corso Vittorio Emanuele II, via Guglielmo Marconi, Corso Raffaello, Corso Dante and Corso Bramante) and also some squares are drawn inside the geometrical system of the blocks (Piazza Madama Cristina, Largo Saluzzo, Piazza Nizza).[1]
Promis' plan canceled the "Allea Oscura", the ancient tree-lined suburban avenue that diagonally connected the Castle of Valentino to Porta Nuova, by putting forward a regular framework of streets and blocks, in continuity with the Roman city and the extensions of the eighteenth century.[2] The grand perspectival axis that connects the Convent of San Salvario with the Castle of Valentino and the layout of Via Nizza became, at the contrary, part of this new urban system, giving rise to the variables in the guidelines of this part of town.

Description of morphological characters and building typologies

The stages of construction followed one another for a century from the center outwards and from via Nizza to the river, until the almost complete occupation of the building lots.
The building structure has the typical features of the nineteenth century city: each block is divided into regular parcels of various sizes (from 15 x 35 to 15 x 45 m for corner lots, from 10 x 15 up to the 30 x 45 m for the other lots) and the occupation of the land is intensive. It often yields a speculative logic more than compositional and architectural principles. Despite the blocks magnitude, except for rare cases, the use of courtyard for common areas or gardens, is not expected. The parcel is built in all its depth, with a forward building on the road and a perimeter constructions inside the courtyard.
The variety of building forms is one of the distinguishing features of the neighborhood, and is due to the fragmentation of the land property, the coexistence of residential and productive functions and the duration of the construction process.
Promis' plan established some quantitative parameters (such as the floors number, initially set at 4 with 15.40 m in height and no dormer windows and attic, then raised to 16.00 m also for the internal courtyards and finally to 21 m with attic). It also provided some indications on the distribution of the volume and composition of the facades. Particular care was taken with the formal configuration of the houses facing the main traffic axes, which had to have arcades on the ground floor, intended for shops, and should turn at the corners with an identical design to at least 7.60 m in to suggest the continuity of the facades even on the side streets.[3]
The use of several different built types as well as a stylistic variation of facade solutions corresponds to each stage of construction. Essentially there are four main housing types:
- The middle-class house with arcade, characterized by the unitary project of the fronts on the street with shops at the ground floor and rental housing types. It is situated on Corso Vittorio and along Via Nizza;
- The Umbertine house, the most modern in terms of services, but fitted with the type of mansion, which still retains the row of halls and reception rooms and the "decoration" of the facade as an element of social achievement;
- The middle-class rental home, result of a "patrimonial" idea of the city, which provides the most rational exploitation of volumes and living spaces, introducing also the diffusion of sinks, toilets and common services;
- The gallery house, intended for the lower classes and usually localized within the courtyards, with shared toilets outside the home.

The blocks on the road always have a double volume with a double pitch roof. The access is only provided by a pedestrian/carriage entrance of varying sizes between 3.5 and 4.5 m, connected to the square stairwell, usually with three flights. Flats are directly reachable from the landings, in some cases even directly connected to the gallery of the internal buildings.
The floor height varies from 5 m for the ground floor (sometimes with mezzanine), to 4.50 m for the main floor, up to 3.50 for the upper floors. The twentieth-century architectures, on the other hand, show greater uniformity, despite the remaining exception of the ground floors. The fronts on the street have balconies, often arranged in the characteristic alternating pattern, with railings and decorations in accordance with the taste of the time.
The gallery house is generally used for the buildings inside the courtyards, with simple volume, leaning against the walls of the lot, with a U, C or L schema. The stairwells coincide sometimes with those of the main building, or are independent, accessible from the court. The interior facades statements do not present any type of decoration and the toilets are often outside the home, on the balcony or, in later examples, grouped near the stairwell. The roof has a single pitch towards the interior of the court (often completed by a mirror-like solution on the bordering lot).
Only in a few cases within the urban structure of San Salvario there is the relationship between porch, hallway, staircase, courtyard and sometimes garden, which is typical of the noble buildings of the seventeenth and eighteenth centuries expansions of Turin. This is a relationship later transposed in the open element of the "passage" or of the "gallery", which represents an important connection tool, both from the visual and functional point of view, between the public space of the road and the residential texture. The interior of the courtyards of San Salvario is extremely fragmented, because of the division of land and since the origin is occupied by one third by buildings, used at the ground floor as garages, workshops and stables and at the upper floors for housing. Even if it is not built in many cases with the passing of time the yard was occupied by low buildings used as warehouses or garages. In addition, the galleries were plugged with structures built with different materials depriving the court of its own architectural and environmental quality.

Continuity of the contemporary city with the historical city

The research is based on the complementarity between analysis and design as a fundamental knowledge tool for the transformation of reality. From these premises, the work is therefore intended to verify some design hypothesis on the urban structure of San Salvario: by the construction of new housing in order to complete the missing texture that are able to reinterpret the historical experience of architecture in a contemporary way, confirming the key idea of the compact city as a sustainable city, from the environmental and cultural point of view. This centrality of the urban project identifies in the block the specific field of application where, at the same time, it is possible to find the foundational issues of "making city" and solve the current problems of loss of land, energy saving, and life cycle assessment. Only where this dual approach – which expresses a synthesis between the generality of the urban scale and the peculiarities of the architectural scale – is not irretrievably lost, it is still possible to create urbanity, giving a strong response to urban sprawl.
In order to make the living spaces being regarded as sustainable, the necessary condition is to correspond to a clear urban logic, to its global construction, to a civil project. The criteria of quality in the design of urban housing inside the block may not be related only to the materiality of the construction, but it must always correspond to an idea of the city, showing a necessary continuity with tradition.
An experimental design that, using sustainable materials and techniques, considers architecture as a separate object from the context (preferring the logic of consumption to those of the architectural composition) is destined to suffer by a "naive environmentalism", marking the same conceptual distance that exists between the provisional character of an episode and the complexity of a story.

The experience of urban studies in Italy and Europe

The idea of the continuity between the contemporary city and the city of the past as an application field for the project moves nevertheless from two more general topics of discussion and research. On the one hand, a renewed critical interest for the studies in so-called "urban analysis": in the seventies and eighties, in Italy and Europe, it already laid the "technical" and architectural knowledge of the elements and constitutive processes of the urban organism at the basis of development and transformation of the city, and it underlined the contemporary potential of historical structures.[4] On the other hand, there is the comparison with some recent experiences in Europe that have implemented this legacy by confronting with the actual construction of a place, testing the model of the compact city as an example of sustainable city, actualizing the notion of neighborhood as a functionally independent unit (with precise type-morphological characteristics and strong identity), and ultimately by enhancing the theme of the urban block as a characterizing element through architectural solutions with clear value of actuality.
We refer, among others, to the experiences of Berlin (by the IBA 1979-84 to the "Kritische Rekonstruktion" in the nineties), of Hamburg (from the Hafen City to the IBA 2013) and of Frankfurt (from the researches of the German Institute for Urban Art to the reconstruction projects for the central areas of the city), but also of Barcelona (from the reflections on the Cerdá plan to the 1992 Olympic games until the most recent transformations of the plan 22@ for the Poble Nou) and Amsterdam (from the new residential districts on the islands of Borneo-Sporenburg and KNSM/Java to the IJburg).[5]
After decades of testing settlement models which pretended to be an alternative to the city and were founded on its dissolution, these studies and these experiences demonstrate the rise of a new interest and a new openness towards the actual experience, the real built environment, as it is and as it was, and also a chance to rehabilitate a concept of living the city more directly linked to our daily actions. The reality of the historical city seems to be the most reliable reference point from which it will be possible to recover, by means of architecture, some general objectives of collective and social character including the desire of substance and durability and a renewed idea of "beauty" of the city.[6]
These experiences also show how housing occupies again a central place among the themes of contemporary design and regains its role in the construction of the city, giving up to speculation at all costs and on the contrary looking for a scale suitable to the sites and to the definition of a built environment in which the question of "*decorum*" of public space regains its sense of collective social value.

Role of the project in the urban transformation

An analysis of the urban texture of the city was made using historical maps, retracing existing buildings and recognizing the permanent elements and typologies of the historical city. These studies have been followed by an analysis of the relationship between the solid and empty spaces and of the paths and the permeability of the spaces. Finally, study and project models of the areas of intervention as well as of the individual buildings have been constructed. The products of the analytical phase are basically a series of historical and analytical maps and a typological survey of the ground floors. These materials were the analytical basis on which projects have been set.
The design choices are aimed at re-establishing a close relationship between the house and the road – or square – as construction element of collective space, in continuity with the ideas, experiences and examples of the ancient city. In particular, the proposed projects, impacting on urban morphology through the volumetric definition and typological choices, try to investigate the relationship between the collective dimension of urban space and the private dimension of the house, by relating the built form with the shape of the open space. The theme of living is developed not only through the definition of the functional and distribution aspects, but especially by confrontation with the urban block and with the historical texture of the city, taking the volumetric and compositive theme as key element in the design of housing. The architectural design can, thus, reveal the potential of a "contemporary use" of the compact city, reestablishing its significance from the point of view of living but also claiming the eminently collective right of each theme of architecture.

Some case studies

Basically projects can be divided into four thematic groups:
- Projects completing the street front;
- Projects stitching inside the block;
- Projects of reconstruction of large portions of blocks or new construction in unbuilt areas;
- Ideal proposal for the architecture of a modern block.

Focus of action is, firstly, the reconstitution of the continuity of street fronts and, secondly, the design of collective or private courtyards that are identified by a clear architectural solution of space and even by a formal unity of the facades.
The project proposals derive its housing types directly from the analysis of built city: the block-house, with a driveway entrance and staircase with three flights for the buildings on the street front, or the townhouse in narrow and deep plots cases; the balcony house for the buildings inside the court and the type of the palace for the great urban spaces. Within these consolidated elements we worked on the construction of housing space, introducing duplex solutions on the upper floors of the block-houses with setbacks and balconies on the road, and experimenting, in the courts, the use of the balcony applied to town and row houses where the distribution element takes on the sense of an outdoor space, of an extension of the house.

The facade issue

In this idea of "urban" architecture, a key role is played by the theme of the facade, as an expressive element of the public-private relation of living and not as a place of a fictional self-representation. It happens not without difficulties: the front is the "face" of the house, through it the building presents itself to the viewer and by the means of it the architect expresses his responsibility towards the community as well as towards the individual.[7] It is a problem even more felt in the case of the completion of urban voids on the street front, where the facade is all that you can see of the project and should, by itself, explain its reason and sense. Here it is often not only the case to fill a physical absence, but also to evoke the material and formal characters of what is missing or disappeared, in order to find solutions for the facade which are able to reproduce with evidence that relationship street-house/public-private which is typical of the historic city. The search for an appropriate architectural language, shared and expressive of the contemporary time, is therefore perhaps the crucial issue with which these projects have to deal, using, with all consequences, once again, the experience of history.
The articulation of the composition is structured through the use of moldings, which start from the elements of construction (spans, overlapping of floors, doors and windows), but go beyond, trying to restore to the structural and functional apparatus (pilasters, lintels, string courses, drip-stones and also window-sills, gutter pipes, etc.) their decorative value, precisely in the sense of "decorum". A decorum in this case starts from the reality of the city and from it derives the elements of composition: the search for modular and proportional systems, the use of symmetry and asymmetry, the interplay of horizontal and vertical parties, the alternation of solids and voids, the hierarchy between the parts, the search for coherence between parts and whole, between architecture and city.

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Notes

[1] About Turin's urban history see Comoli Mandracci, 1983; Passanti, 1983 and Comoli Mandracci - Viglino, 1984.
2 The avenue had been maintained in the first projects, like that of 1843 by Giuseppe Talucchi and in some solutions by the same Promis, strongly influencing the shape of the blocks and the arrangement of the lots.
[3] See Caldera, 1993 and Scarzella, 1995. In consequence of the "law of Naples", in 1885, also in Turin was enacted in 1892 by the Royal Society of Hygiene, a new Building Regulation, to replace the one of 1862, which provided guidelines about sanitry issues, and in particular established precise relationships between the width of streets, building height and size of the inner courts.
[4] See Panerai - Castex - Depaule, 1987; Magnaghi - Tosoni, 1989; Martí Arís, 1990; Schröder, 2008; Caja - Landsberger - Malcovati, 2009; Brenner, 2010; Malcovati, 2011.
[5] About Berlin see: Burg, 1995; Brenner, 2004; Stimmann - Kieren, 2005; Caja - Malcovati, 2009; about Hamburg: HafenCity Hamburg, 2008 and 2012; Hamburgische Arkitektenkammer, 2011; Menzl - González - Breckner - Vogelsang, 2011; about Frankfurt: Stadtplanungsamt Stadt Frankfurt am Main, 2006; Mäckler - Pellnitz, 2011; about Amsterdam: Claus - van Dongen - Schaap, 2001; de Maar, 1999; Bellini, 2007; about Barcelona see: Martí Arís, 1982; Institut Municipal de Promoció Urbanistica, 1991; Busquets, 2005, de Sola Morales, 2008.
[6] Mäckler - Sonne, 2011.
[7] See Neumeyer, 1995 and 2011.

Legenda

Turin, San Salvario, site plan, housing project on the block between Via M. Cristina, Via G. Bidone, Via Ormea, Corso Raffaello, typological studies.

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