

The Kleinstadt as a Model for the Modern City. The Case Study of Saraçoğlu Residential area of P. Bonatz in Ankara

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ABSTRACT

Ankara is located in Anatolian plateau of Turkey, marked by the river of the Su il Enguri and an uninterrupted stretch of steppe. The Ottoman fabric clings on a rocky hill and the city at the beginning of the twentieth century was dispersed at his feet without identity.

Here in 1944 P. Bonatz (1877-1956) builds Saraçoğlu residential area in the southern suburbs. Bonatz perfected with the forms of architecture a sense of space related to the german idea of *Kleinstadt*, in which the small city establishing a new relationship with the existing city and the characters of nature.

The area is articulated by double architectural principles. On the one hand recognize and give value to the orographic structure of the horizontal plane on the east side and of the slope hill on the west, according the architecture to the beauty of the landscape. On the other hand determine the relations between the facades of the houses on the streets and courts, to define the sense of domesticity and community through the search of a language refunds techniques and forms of housing tradition.

The district consists of 75 buildings and 435 apartments built with load-bearing structures in concrete and wall in local stone, in addition to a school and a ministry building. The houses are aligned along three axes in north-south direction and set the polarity of the system in the square on the hill.

The language relies by two aspects of Turkish culture as the roofs protruding from the wide eaves, wooden balconies and narrow windows high on a wall simply worked in plaster.

The closed form of the residential area offer a settlement model that moves from the idea of the garden city, present in the plan of Ankara by H. Jansen, to face the problems of the modern metropolis.

KEYWORDS: modern city, landscape character, human settlement, traditional form, non-ostentatious language

1 INTRODUCTION

Theodor Fischer was a professor of *Baukunst* and *Städtebau* in the Technische Hochschule of Stuttgart between 1902 and 1908. In the *Sechs Vorträge über Stadtbaukunst*, Fischer had written in 1922 after the great experience concerning the *Staffelbauplan* for Munich of Baviera, he defined an absolute principle of the relationship between nature and architecture, between the forms of the territory and the forms of the settlement. This possible relationship originated from the description of an ancient city as Priene situated in a specific geographic region: "The way in which the dominant building stand out and the surface of the market places itself on the foundation, predicts, in particular, a fundamental law in architecture and urbanism: anything nature offers must not be wiped out, but developed, improved trough

increasing height and levelling the surface. The force of architecture is not based on its contrast with the nature, on the contrary, in a broad sense, in the adaptation” [1].

The approach aiming at recognizing the *topographic value* originated from a *moderate* will to transform nature, to *fold up* the form of the architecture in harmony with the landscape. Consequently, the *beauty* of the architecture shines through its *measure* and through the size-profile it defines in the city and in the landscape. In order to find the *right measure* Fischer uses in architectural composition both the *contrast* technique and the *affine* form technique, working on the analogy of the elements in the modern city; he specifies the characteristics aiming at creating a significant sense of belonging according to the cultural area and he offers us a *positive thought* in declaring that *architecture in itself is a contrast* if it is considered as tectonic construction and as an art in comparison with the natural ground: “Far be it from me to think that the contrast is to be avoided in urbanism. Any artistic effect can be conceived without it. The contrast is in every body standing on the ground; the contrast is already that tectonic regularity against the nature, the unnatural. But the production of the contrast is not an art in itself, on the contrary the art is only the overcoming of any contrasting thing, to achieve unity” [2].

In 1948, Sedad Hakki Eldem wrote a long and exhaustive essay *La maison Turque* about the Turkish house, probably designed to the magazine *L'Architecture d'Aujourd'hui*. The work of Eldem concerned the sense of the construction of the house and the way in which, in the process of development of the house-type, some permanent and durable aspects of the Turkish houses reinforced: "... the plan is always composed of one or more rooms arranged along a line, a straight line, at right angle or surrounding the court, connected by a portico, within the walls. But the Turkish house is not completely orientated toward the interior court. The need for space and largeness requires more open environments spreading on the exterior world. In this way the overhang elements and the lowered plan level of the first floor become clear. [...] The bow-window plan, which forms one or more sides of a court-garden, is gradually abandoned, in order to make space to a type of more modern house which could be more suitable for the climate. The lateral bow-window places at the centre of the house dividing it in two parts. The rooms faces each other from the opposite walls” [3].

The study of the vernacular architecture rides out the local influences and puts to use a process of abstraction in which it is possible to track down the character of generality of the founding principles and, at the same time, to understand the space arrangement of the house both as an *inside* space and as an *outside* space: “First of all, the house was considered as a simple space for the family life. And women above all spend their life mainly in the house. The Turkish house, in fact, is first of all comfortable... wardrobes everywhere and for everything... fireplaces could be found in any room and for the coldest regions, plaster and ceramic tile stoves were housed in the wall niches and with the chimney outside. The attention to the comfort and the physical comfort went together with the need for a constant contact with nature. The love for nature, therefore for the garden, is innate in every Turkish, and the Turkish house must absolutely involve a part of nature... the house opens on this side toward the garden. The latter encloses the house all along its sides and is connected to it in the veranda: jewels of every respectable house, the hall-pavilion” [4].

2 PAPER FORMAT

P. Bonatz was the council member of the Ministry of Education in 1943; between 1946 and 1954 he was charged of the building of the Opera House and he was the professor in the Technical School in Istanbul. In between (1944-1946), it places the third experience that P. Bonatz (1877-1956) had in Turkey and which was represented by the planning and realization of the residential district Şükrü Saraçoğlu in Ankara. After H. Jansen, C. Holzmeister and B. Taut, he also contributed to the development of the capital of the new State and, in particular, he translated through the strength of the architecture the answer to the growth and the definition of the great city, to the contradictions of the modern *Grossstadt*.

The settlement is situated in the Southern part of the Ottoman urban fabric (Ulus) and of expanding village (Kale), over the iron route line along the great tree-lined avenue Jansen designed in the city

development plan dating 1928. Bonatz designs the new district beginning from two clear principles: constituting an autonomous part within the growth process of the city; facilitating the recognition of this part of the city thanks to the relationship between architectural elements and the shape of the territory, or more exactly among the building of the architecture and its integration to the ground structure *on which* and *among which* the buildings are placed.

The area of the district is one of the conspicuous points characterising the geographical structure of Ankara. The urban landscape is, in fact, composed of a series of wavelets of the ground, of hills, whose steep slopes are still in their natural state and its anthropization concerns only the head and the foot/the summit and the valley as an alternation of concave – convex spaces.

The surface of the design has a double-facing slope: from South to North there is a gentle fall which is 10 m. high; from West to East, instead, the difference in altitude is about 12m while in the most extreme part there is an unexpected 5m high leap representing a real protuberance in the Southern part of the ancient city and the first of a long series of uplands.

The definition of the *part* derives from additional perfect-finish parts which can be hierarchically and organically connected to it. Four city blocks are arranged in succession and they are linked together through the overlap between full architectural space and the empty spaces of the road and the courts.

The four blocks extend lengthwise linking itself to the frame of the road of three northward and southward routes. The perimeter of the islands is constituted by aligned buildings which are situated, by a narrow margin in their position, to absorb the peculiarities of the ground without denying the continuous wall on road while closing the space delimited by the court-garden inside them. On the horizontal plane every block is a finished residential unit, in which the heads of the two central blocks functionally change in two public buildings, a school and a casino; on the vertical plane the tension deriving from the size of the architectures give a different value to the places they build and in which the reason for this *small city* can be recognised.

Bonatz puts the tallest buildings, having 3 and 4 floors, in the Western highest part; the lowest buildings, having 2 and 3 floors, are instead situated gradually from the foot of the upland up to the oriental wall of the urban area. The volumetric choice is a design choice aiming at the exaltation of the physical datum through the exaltation of the architectural buildings and the empty spaces among them. In this way the value of the empty space is a value of form.

In fact the residences which have 3 and 4 floors rise to define the city crown (the *Stadtkrone* according to Taut) and represent the polarity of the part: on the high ground the lengthened square lies. It was first contained by a 'C'-shaped building and then defined by the abutment of a blade-shaped building that opens its view on the houses down and on the city in the distance. The beauty of this collective place derives from the double character it embodies: being *confined*, a place in which both the residence and the community spirit can be recognised, the spirit founding a place through the act of fencing and allocating; being *open*, a place that dilates itself according to the size of the town since it houses the beauty of the external landscape and that set with the town the terms of its proportion.

The residences which have 2 and 3 floors function as a continuous wall on the road and cracked wall along the plan of the blocks which defines the court-gardens as an *interior* element in comparison with the street even if it is situated *outside* the house. These places have a collective origin. They describe the attempt to bring the nature in the city; the character of an external element – as the wood or the cultivated plants – within the *interior* urban and domestic spaces – as the green square or the system of the equipped free spaces.

The principle of composition of the *cross sectional view* connects the architecture to the structure of the ground, the house to the road and the court-garden, the part of city to the great modern city calibrating the size of the buildings, the relationship between the height and the size of the fronts and from the articulation of the facade which strengthens the interior character of the house in respect to the *exterior* and public character of the court and of the city. The relationships, Bonatz had implemented, attempt to give the definition of the garden as a domestic space according to a modern perspective, in which the greater size of the green is strictly connected to the openings of the facade which transform an individual space in a community and collective space.

On one side, the shape of each element derives from the relationship with the ground and from the synthesis of a finished part containing an area of the city. The *terraced* residential building allows to the blocks to open toward the pre-existing city broadening the spatial perception of the garden-court and pulling, as a physical element, the fixed scene of the historical houses made of plaster and of the surrounding steppic landscape. Along the perimeter of the residential blocks, the curtain wall fragments in specific points thus preserving the transversal connections which are useful to go through and to connect different public spaces (the square to the hill, the roads, the court-gardens). The facades, connected with the outside through traditional devices (the gallery, the bow-window), enclose the building volumes planimetrically misaligned in order to preserve the intimacy of the rooms of the house and to allow the architecture to be build according to the orographic structure, as it was a tectonic element integrated with the *surface of the things*.

On the other side, the research on the layout of the modern residence does not break the relationship with the tradition of the Turkish house and it updates its language through a process of simplification and unostentatious. Bonatz carries on its study identifying the permanent features of the life within the house and the consolidated rules concerning the building techniques. The clarity of the structure of this settlement is based on the different typologies of the residence. In this case, *the architecture acquires the value of the limit that it closes and of the entrance that can be crossed*. Bonatz designs 7 different types of residences in which he changes the interior space arrangement and, above all, the articulation of the external facades. The typological structure is connected to the urban morphology.

The urban spaces of the four blocks are defined according the typologies I, II, III, VI. In particular, these space refers to the tightened spaces of the first block in the East and to the third area which is enclosed by the casino on the North. The houses of the typologies III and VI have an axial direction on 2 and 3 floors; starting from the central staircase it is possible to enter into 2 apartments and repeating the housing unit to 4 and 6 apartments respectively. In the typology II, the opening for the stairwell is placed at the centre and, as a consequence, three apartments are arranged to form a pinwheel plan per 3 floors.

The differences in this typologies stand in the relationship between the rooms and the facade, between the facade and the exterior space. The main room in the typology II and III are orientated toward the street while in typology VI, the room overlooks the green upland and the garden-courts. It is possible to understand which is the internal structural framework looking at the exterior facade through a different declination of the element constituting the relation between the house and the road, between the collective space of the house and the collective space of the city. In typology III and in its variations, the main room of the house – the *selamlık* or *sofa*, according to the Eldem's essay – stretches outside through a wall extroversion supported by shelves, or through a progression in the overhangs and in the largeness starting from the ground. In the typologies II and VI the main room of the house opens to the outside through a wooden bow-windows – the *çardak* – which occupies the whole central part of the facade *leaning against* it, or the main room is united specularly to the others and the whole quadrant is divided into 4 sections where rhythmic patterns are produced in the diaphragm walls by wooden pillars, *built in* the wall.

Through a form of the construction, Bonatz regulates the founding space of the house – the *room* on which all the other rooms lean out. This space, whether it is a hall or a bow-window, can be considered as an amphibious space because of its *internal and external* nature; the house expresses through the articulation of its exterior integument the civil value inside the city. The *interior-exterior space* is the place in which the room merges with the court-garden while the house merges with the city. Somehow, the main room expresses its prevalent accommodating public nature and it is orientated toward the road; the domestic rooms for the everyday life and for the work are, instead, orientated toward the courtyard and the square in order to respect the prevalent *inner* nature that these places set forth as collective places in which the residence recognizes itself. The court and the square belong to the settlements that, according to the present interpretation, are uniform and finished and which set forth the close adherence between the form of the blocks and the form of the residence and, on a large scale, between the form of the city within the form of the metropolis. From the depth of the courts it is possible, in fact, looking through the Ottoman urban fabric on the Northern hill, standing over the lower casino building; beside, from the Western hill, the view spreads out on the wide territory.

The building typologies used for the *building* of the hill are the typologies VII and V; the typology IV has been used to set the limits of the central block, whose great court-garden culminates in the scholastic building.

The typology VII is used only to build the hill; actually, it is a great synthetic form in which three residential bodies line up orthogonally. They show a peculiarity in their distribution: every building unit consists of a central stairwell around which two apartments place symmetrically; every apartment, in turns, is arranged around a central axis represented by a lengthened space, – *combined room* – crossing the house from one front to the other. This communal room is expressed on the facade through tripartite wall extroversion, where the rectangular window casing emphasizes the autonomy of an element linked to the great coverage or finished by independent lean-of slope.

The overhangs on both fronts produce a double compositional clarity. In the first place, the walls of the house are built around the rectangular square and the *sofa* represents the communication between the exterior space of the square and the interior space of the house and then between the interior space of the square and the exterior wide horizon of the landscape; therefore the most important part of the home is *at the same time a private and collective, limited and boundless place*. In the second place, the language of the facade becomes a monument; the character of simplicity is preserved through the use of plaster and from the classical stratification of base-elevation-crowning but the discrete elements inserting in the walls of the houses with the trilithic and wooden structure of the *çardak* here become full elements taking on the wall's patterns. Indeed, the thickness of the overhangs results in the shade engraving on the perimeter of the opening and reflecting on the window casings, opportunely placed backward in comparison to the flush façade. The absolute form of the architecture depends on the absolute form of the hill.

The wall, in typology V, proceeds with the largeness of the square which is oriented toward the Eastern slope. The distribution is similar to the typology VII where the concatenation of rooms originates a central and uniform space stretching out from facade to facade through a shelf overhanging – a covered balcony – on the western side and moving slightly back the general facing on the opposite side – 5 rectangular flush openings on the surface. This diaphragm-wall has the largest opening in the house toward the outside and, in comparison to the other typologies, it does not stretch physically *on the outside* but it allows the landscape to invade the *inside* through the beauty of the light and the continuous view on the territory, as if the *whole* house was a real observation point of the Anatolian landscape.

On the same slope is it possible to enter the residential units through an elegant staircase with double flight of steps and a portal with squared stone jambs, giving a noble nature to the façade on the square rather than on road.

The typology IV rises about 12 m. and 3 floors, on the garden-court which is about 70m wide. It results a ratio of 1:6 between the front height and the free space width. In this apparent horizontality, the system of blocks recognises a role of prevailing hierarchy to the enlarged space of the courtyard; the succession of residences places the central room on the court and the secondary rooms on the exterior roads skimming the macro block. The school in the North, which is a trilithic double eight box and plaster, is placed at the end of this part of the town maintaining a constructive and formal analogy with the adjacent houses.

This detail confers to the experience of Bonatz the ability of placing itself as an heritage for the students and as a petrified testimony of his attempt in connecting with the principal elements of the architecture. The way toward the essence – the *roots* – of the architecture results in the wooden structure of the square pillars and of the railing which quietly enriches the plastered façades; in the chromatic variation between the walls and the stringcourse, between the walls and the base or the upper ornamental cornices and whose architectural origin shows the nodes within the load-bearing structure; in the large fan-shaped coverings at the corners – as Bonatz described – that explain themselves in the craft technique of the carpenter; in all the fronts subject to the proportion 1:1 or 1:2 and to constant rhythm between full and empty spaces.

3 CONCLUSION

“In the old Istanbul only the mosques and the adjacent works were built using stone and with lead domes standing on their top. Schools, hospitals, bookshops, cafeterias and public baths constituted the sacrosanct area where buildings were made of stones. Instead, the houses were made of dark brown wood with wooden and flat tile covering. What a bright contrast was created if, from the top of the hill, the clear walls made of calcareous stone with the bright roofs covered with bluish lead in, the domes and the bright plating, arose from the anonymous wooden residences” [5].

At the peak of his career, P. Bonatz witnessed, in Turkish land, how the *Grossstadt* could be built through the definition of the *Kleinstadt*: the great form of the modern city made of the smaller forms of its different parts, both being independent and recognizable in the design of continuous and consistent units. The quarter Şükrü Saraçoğlu is a small city within Ankara; it is the *all in the all with a centre and a limit*. It permeates perfectly the structural nature of the ground. This is the most important lesson that Bonatz learns from Fischer, the teacher in the School of Stuttgart.

The architecture, besides, expresses the belonging to a building tradition and to a way of living that does not stiffen its form but it represents the driving force and the field in which this theme is found again and reinvent itself. “No imitation. Be free from of all the decorative elements. You will see so that everything that still remains has, nevertheless, Turkish nature: the proportions, the character, the roof – Why everything has been done in this way? Was it for fashion? Was it only a pure formal will? Or did it have deepest reasons?” [6]. This is the sublime lesson he gives to S. Eldem and E. Onat: a *real* modernity facing the culture and the history of a population.

Bonatz brings the value of the landscape to an anthropic dimension because the district represents, in the economy of the city, a module of its growth, a geographical unit of the territory; the value of the landscape is also the value of the light that enters the house to place the house to a higher unit, to the continuous profile of the existing structures. In this way, Bonatz brings back to Ankara the spirit of Istanbul which founds its beauty on the *analogy* and on the *contrast* and confers to a part of city the objective relation between the dominant and the subordinates elements, between the *houses* at the valley bottom and the *monuments* on the hill.

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Figure 1: Plan of the Saraçoğlu residential area in Ankara



Figure 2: View from the court to the Ottoman urban fabric



Figure 3: Orographic section across the buildings and the court-gardens



Figure 4: Abacus with the facades of the residential typology II, III, IV and its variations

