An identity for the sustainable city

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1. Introduction

Whilst awareness grows that available land is not infinite and that low-density housing increases the need to commute and consequently pollution, many people are leaving cities due to the excessively high costs of property, many areas of contemporary cities are seen as unsafe and degraded and because they want to live in less built-up areas. Once they have moved outside the city, they realise they are in places that are too isolated to attract and sustain services and infrastructures to improve the quality of public areas and that these places are just as unsafe. They also have to drive everywhere, meaning that roads into the city are congested.

This trend, which in a certain sense is anti-urban and pays little attention to soil consumption, coexists with a growth in ecological awareness and regulations aimed at rating energy saving in buildings. There are many experimental areas defined by residential criteria which apply technologies for passive energy saving, with the use of recyclable materials and installations for solar energy and water recycling. The two trends, a traditional habitat with reassuring one-family homes and a more experimental and urban one, co-exist, with a clear prevalence of the former. This contradiction is present not only in the building sector but also on a more general level. The first aspect that I would like to examine in this paper is the importance of a reflection on the contemporary city, to put sustainable architecture into a structural context. In particular I would like to focus on the concepts of urbanity and duration of the building as factors that can provide architectural direction to the debate on sustainability. The second aspect is based on the observation that if, on the one hand, we can legitimately consider that the need to build homes using active and passive systems of energy saving will be increasingly recognised, on the other hand it is difficult to understand the forms and density of this habitat. These notes focus on the analysis of some characters of housing construction in Milan built in the 50-60 characterized by several new factors still to understand and apply: the flexibility of the plants, the representativeness of the facade, the dialogue with the context, the search of urbanity and the duration of the building.

2. The contemporary city. The search for the “urban effect”

In the recent past there has been the tendency to consider the development and the phenomenon of the dispersion of the contemporary city as the natural growth of an autonomous organism. However, here we do not intend to acquire the model of the dispersed city as an fact of our era that is incontrovertible or non-adjustable; that is, whilst being aware of the complexity of the question which makes it even difficult to agree on the meaning to give to the scientific terms of the
question by town-planners and economists, we intend to consider the dispersed city not as something new which is the result of contemporary confusion and complexity or “the abnormal result of speculative processes left to themselves”, but rather it has to be evaluated as the outcome of “processes controlled by ways other than planning.”

In his article entitled “La strada dello spazio urbano” Raffaele Pugliese synthetically describes the town plan covering several municipalities of a collusive type that has linked Milan with its surrounding area, taking the principle of zoning as a starting point. He maintains that “on the one hand Milan in words took on the objective of confirming, on the quantitative level, the large urban parameters (population and manufacturing activities), but in the facts denied the space for this continuous presence but fomented, through the system of compatible functions, the creation of massive quantities of services, accompanied by the entrenchment of a rapid and deleterious process of expelling the weakest functions from the municipality. On the other hand, the towns in the surroundings, with town plans increasingly on a broad scale, offered concrete spaces at a low cost for manufacturing site schemes, zoning schemes, schemes for trade etc., opening up to the resettlement of the weakest functions (low-cost housing, small businesses and manufacturing, mass retail trade) which zoning traditionally relegated to the fringes of cities.”

The dispersed city is not, therefore, an autonomous organism that evolves according to its own internal rules, but it represents the result of precise settlement policies from which the distances can be taken today in an attempt to orient the development of the city. It is not, therefore, a casual evolution, but rather a causal one. Considering, for example the so-called “Po megalopolis” which stretches from Turin to Venice, in addition to settlement policies, the following other joint causes can be identified which give rise to the dispersed city in certain areas rather than in others: a network of small and medium urban centres, with a “historic” layout; an exasperated process of occupation of the territory in these cities both by the residential part and manufacturing activities and services; building in this territory is low-intensity and low-density; the service activities are, as well as dispersed, of a dimension such as to serve large parts of the population that has settled in the area. These services, moreover, have an urban and metropolitan connotation. Other joint causes: overall this territory does not appear to be functionally specialized; the use that the inhabitants make of this territory is of the “urban” type, i.e. it simultaneously leads an autonomous life (like a part of a city) but at the same time it is strongly integrated with all the others; the use of the territory is made possible by a very high rate of mobility of the population, therefore in the population in each of its parts and the population that uses that part of the territory there is no relation or regularity; in time the territory tends to present some levels of social specialization.

Essentially there would appear to be a certain convergence between the “compact” city and the “dispersed city” or at least, an integration.

It is difficult to evaluate the quality of life in an area which by definition is extensive, a portion of territory that stretches from Turin to Milan to the towns in the Veneto and Friuli regions on the one hand, from Turin to Bologna and Rimini on the other. Eugenio Turri wonders whether the megalopolis has a heart. “But the dispersed city, although it comes from

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3 Ibid.
4 Ibid. p. 119.
6 Ibid. p. 55.
men’s “desire for a city”, the legacy in part of the rural condition of the past, ends up by being the indifferent city, the non-place, the atopic or a-geographical geography, the non-city for which the bonds that count today are other than those with an urban centre, the historical heart of the ancient and extraordinary cities of the Po valley, with their magical squares dripping with humanity and history: they are increasingly places for the enjoyment of modernity, such as the supermarket which stands outside the urban centre, the motorway toll station, the road that leads out of the city, where the new services are concentrated: the market city, the car dealer, the discotheque, the sports ground, the railway station, the airport. This requires daily use of a car, to which is linked the completeness and the extent of the road and motorway blood circulation, the use of which makes us feel we are not only or no longer offspring of the city we belong to even though we live in the dispersed city but also participants in a system of relations that the megalopolis has built up according to newer models of living and production, induced by very recent development.”

What is absent from the megalopolis is the sense of living space with participation, an absence of spaces of identity. Eugenio Turri again points out how it is necessary to restore life to symbolic places and spaces.

Orienting the diffused city would thus appear possible by identifying significant nodes by identity and density.

2.1 The urban potential of residence

At European level, there has been on-going reflection for some time on the search for the “urban effect” from actions characterized by high residential density.

“One of the greatest objectives of the current critical reflection on residence is to stimulate the renewal of residential space, not only from the necessary reformulation –spatial and technical – of the constructed cell, but from the search for new urban orders. Orders capable of effectively agreeing with new changing scenarios, where the idea of a recognizable city, opposed to the territory “outside the walls” would have given way to the evidence of a new territorial urban reality on other scales, not from the continuity of building, but from the force and neutrality of the great networks destined to structure it.”

Particularly in Northern Europe, new residential forms linked to the new urban dynamics are being experimented with and theorized. “I would suggest considering the term of urban building to understand the problem in all its complexity. Each urban settlement is liveable and ecological if the residence is a decisive part of the structure. And, on the contrary, the residence enriched by the complexity of the urban functions, can become homes.”

Four recurring themes relative to the most commonly practised forms of settlement can be identified. The first is seen in the road-block-building, the second in the reiteration of the models of the modern, the third in the search for variation, probably with the desire to restore a visual and social complexity of the historical city, the fourth in the organization by clusters. This last type cannot be traced back to specific models of settlement, but would depend on internal thematization. For example, variable building density, or the connection of residential islands to the metropolis through systems of infrastructures, recognisability of the intervention or strong characterization of public space.

The residence is offered as a resource to guarantee liveability for the new city with the need to have the strength to orient the dispersed city, creating symbolic spaces in correspondence with the significant nodes. For the public space to

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10 C. Magni *Il progetto dell’abitazione e le forme del mutamento* Clup, Milan.
be experienced, there has to be a high density of residence. High density also allows lowering the cost of the homes because it amortizes the cost of the area on a higher number of apartments. This allows concentrating more resources on the quality of the latter. In the search for the “urban effect” an important role is played by determining the formal and functional aspects of the open space where the buildings stand.

3. The duration of the building
The problem of the duration of the residential building is a factor highlighted here, together with urban planning, in relation to the question of sustainability. The deterioration that assails and has assailed many areas of low-cost building, constructed according to the methods and technologies of modernity, is evident. The speed of the deterioration of the materials has often corresponded to the great difficulty in finding funds for the renovation of the properties. This has engendered phenomena of a loss of interest in the neighbourhood by the inhabitants and lack of identification with their own home, a fact which fuels the spiral of deterioration. Moreover, building homes that last is a challenge not only for low-cost housing but for buildings in general. “It is my impression that buildings are destined not to last as well as in the past,” says Rafael Moneo. “It is not just a problem of a lack of solidity. There is a widespread belief (...) according to which buildings are destined to disappear and I also have this sensation. Architecture is about to become ephemeral art.”11 The effort to construct buildings that last is therefore a first step towards the sustainability of the building. In this sense, the tradition of the Milanese apartment building built in the post-war period by architects such as Albini, Asnago and Vender, Caccia Dominioni, Magistretti, Minoletti and Ponti, represents important evidence of constructive knowledge combined with research aimed at the solidity and dignity of the home.

4. Façades in Milan between efficiency and conservation
In the case of the city of Milan and the dynamics of development that have characterised it in the last thirty years, it is increasingly clear how important it is to return to the reflections and experiments on the apartment building by many Milanese architects during the 1950s and 60s. The desire to measure up to the characteristics of the city and the building knowledge used to confer a lasting nature on the home can be a reference to orient the forms of sustainable building. The use of facing materials, the study of construction details necessary for the good functioning of the building, integrated with reflections on the recognisability of the home, can contribute to defining forms of sustainable residences from the point of view of preserving the building and, through updating, its energy efficiency. In particular, the firms of Cino Zucchi Associati and Consalez Rossi Architetti Associati have recently worked in this direction. Their works are declaredly in continuity with the reflections by the large number of architects who rebuilt Milan, which bore the mark of bombings during the Second World War, and later its expansion. Amongst the most important figures, Gio Ponti (1891-1979), in Domus, the magazine he founded in 1928, laid down his programme of architecture stating a philosophy of living aimed at reformulating the idea of the modern home. “The Italian home is not the cosy and protected shelter of dwellers against the harshness of the climate (...). Its design does depend solely on the material needs of living, it is not only a machine à habiter. The so-called comfort is not in the Italian home only in the things that meet the needs and

comfort of our lives and the organisation of services. Its comfort is something superior, it gives us back the measure of our own thoughts; it encourages healthy habits through its simplicity; its expansive welcome fosters the feeling of a confident, patriarchal life.”

There is a moral demand which the action of the architect must answer, the home is not only a problem of art or technique, but of civilisation. In his words, a vision, a poetic and not a normative tension can be perceived that is the result of an anti-dogmatic and a-specialist approach. In his reflection aimed at redeeming architecture from the formal abstraction of a certain rationalist culture, he focuses on a reinterpretation of the relationship with nature and tradition: “We also have to rebuild Man’s naturalness in the environment, understanding him as natural history even in the verses of his spirit.”

He pursued “an impatient search for a technical civilisation capable of expressing the intrepid taste for the new to which he attributed value, characterising the myth of a culture ready to continually be reborn from the ashes of its past.” Exemplification in this sense is represented by the use that he made of the light façade. Ponti believed that civilisation in general, and therefore architecture as well, proceeded from a heavy period to a lighter one. This is a debate that is anything but settled and has also made a great return, “it would suffice to think of two very immediate examples such as Mario Botta and Herzog e De Meuron (…) who propose two different hypotheses on the role of technology as a motor of different hypotheses linked to form: on the one hand the idea of monumentality linked to the concentration of matter, on the other an idea of de-materialisation linked with the autonomy of the skeleton of the façade.”

For Palazzo Montecatini, built between 1935 and 1938, Ponti’s façade aims to exalt the regularity of the openings identifying “horizontal and vertical alignments of the windows and openings which is well represented by the abacus of the stones. The two materials produced by Montecatini, slabs of marble and aluminium, become the protagonists of the entire building, being translated into an interesting means of communication and icon of the group….all the window frames are exactly flush with the marble slabs of the façade, in order to eliminate the window as a hole, as a contour of smashed-in wall.” The aim was to remove all impressions of heaviness, taking lightness as synonymous with civilisation. The division between the wrapping and frame on which technology could be based made it not modern to speak of materiality. The Pirelli skyscraper (1956 -61) also adds to these principles the rejection of the horizontal line in favour of a sort of polygon, which Ponti was to call the diamond line, and the association of the curtain wall with the solid parts faced by ceramic tiles, a shiny, cleanable and washable material. In addition to looking for an image appropriate to his time and place, Ponti was also looking for an incorruptible architecture, unlike the simply plastered one of modernity which often tended to deteriorate quickly. The topicality of the heavy-light association was also joined by that of lasting-ephemeral. Today the economy, in the more commercial meaning of the word, demands schematic solutions and the factors affected by the economy, such as speed, industrialisation, the repetition of elements, the ease of transport, also act in the same direction so that the entire building process has been transformed by them.

In the words of Raphael Moneo: “a mimetic representation is often the sign of a very schematic thought.” The impression is that buildings are not meant to last as well as in the past. It is not just a question of a lack of solidity, but the fact that architecture seems ready to become an ephemeral art. “This is one of the reasons why architecture today

16 Idem. 204.
17 Raphael Moneo, La solitudine degli edifici e altri scritti (Torino: Umberto Allemandi & C., 2004), 212.
often has recourse to a superficial image of its past: contemporary society does not believe that its creations can last. What counts is the first impact of a building and not how long it will last".18

References

MAGNI C., *Il progetto dell’abitazione e le forme del mutamento Clup*, Milano.