

One of the group of young collaborators hand-picked by Ernesto Rogers shortly after he took over the editorship of *Casabella-continuità*, **Aldo Rossi** began contributing to the journal in 1955 while still a student at the Milan Politecnico (from which he would graduate in 1959). These were years when the most polemically engaged Italian architects of the earlier generation—Rogers, Ludovico Quaroni, Giuseppe Samonà, and others—were overturning the modernist myth of a *tabula rasa* architecture abstracted from the historical development of the city, in search of a new relationship between architecture and urbanism. As Rossi's early writings attest, he was much engaged in these debates. At the same time, an article of 1959 on Adolf Loos already hints at the more detached poetics of his later work.

In the early 1960s Rossi became involved in teaching—first in Arezzo as assistant to Quaroni, then in Venice alongside Carlo Aymonino, eventually returning to Milan in 1965. Here and in new writings, he began to elaborate his ideas on architectural morphology and urban typology. These would fully emerge in *The Architecture of the City* in 1966. A project of 1962 for a Monument to the Resistance in Cuneo announced his preoccupation with primary forms simplified to the extreme and suffused with dramatic tensions. He also began collaborating with Giorgio Grassi, whose work coincided with his not only in its rationalism but in its radical view of architecture's disciplinary autonomy.

In 1966 the publication of *The Architecture of the City* proved a major 389-91 event. With Robert Venturi's *Complexity and Contradiction in Architecture*, it effectively broke the stranglehold of functionalist thought. Though marred stylistically by repetitiousness, the book was hugely influential, going through four Italian editions in a dozen years and quickly being translated into several languages. What was seminal in Rossi's modern-day search for "the fixed laws of a timeless typology" was his assertion of the architecture of the city as the fundamental artifact of human culture and the repository of collective memory. Citing the work of the French school of urban geography founded by Marcel Poète in the 1920s, Rossi evoked the role of the singular place—the *locus*, whether a natural element or man-made monument—within the formal repertoire and historical transformation of the urban fabric. He stressed the complexity of the city's evolution, condemning "naïve functionalism" while insisting on the value of typological study as a rational basis for design.

In the years following, Rossi's work became increasingly autobiographical. Veering from the urban science aspired to in his book and from Grassi's rigorist concept of architecture as *mestiere*, he embraced the poetics of the "analogous city," an oneiric self-referentiality drawing on the fragmented unconscious of collective form. This leap into the postmodern imagination would be marked with a second book, *A Scientific Autobiography*, given its initial publication by the Institute for Urban Studies in New York in 1981. At the same time, the potency of Rossi's forms—popularized through his evocative drawings—and of the thesis of the earlier book coalesced the neorationalist movement that became known around the world as the *Tendenza*. *The Architecture of the City* would appear in English in 1982 also under the imprint of the Institute for Architecture and Urban Studies. The latter was instrumental in introducing the Italian school to the United States in the 1970s through the efforts of its director, Peter Eisenman, whose own work had been influenced by the prewar rationalism of Giuseppe Terragni.

From Aldo Rossi, *L'architettura della città* (Padua: Marsilio, 1966), pp. 25-30; footnotes omitted. English edition: *The Architecture of the City* (Cambridge, Mass.: MIT Press, 1982), trans. Diane Ghirardo and Joan Ockman, pp. 32-41. Courtesy of the author. Translation courtesy of MIT Press.

The urban artifact as a work of art

[...] As soon as we address questions about the individuality and structure of a specific urban artifact, a series of issues is raised which, in its totality, seems to constitute a system that enables us to analyze a work of art. As the present investigation is intended to establish and identify the nature of urban artifacts, we should initially state that there is *something in the nature of urban artifacts that renders them very similar—and not only metaphorically—to a work of art*. They are material constructions, but notwithstanding the material, something different: although they are conditioned, they also condition.

This aspect of "art" in urban artifacts is closely linked to their quality, their uniqueness, and thus also to their analysis and definition. This is an extremely complex subject, for even beyond their psychological aspects, urban artifacts are complex in themselves, and while it may be possible to analyze them, it is difficult to define them. The nature of this problem has always been of particular interest to me, and I am convinced that it directly concerns the architecture of the city.

If one takes any urban artifact—a building, a street, a district—and attempts to describe it, the same difficulties arise which we encountered earlier with respect to the Palazzo della Ragione in Padua. Some of these difficulties derive from the ambiguity of language, and in part these difficulties can be overcome, but there will always be a type of experience recognizable only to those who have walked through the particular building, street, or district.

Thus, the concept that one person has of an urban artifact will always differ from that of someone who "lives" that same artifact. These considerations, however, can delimit our task; it is possible that our task consists principally in defining an urban artifact from the standpoint of its manufacture: in other words, to define and classify a street, a city, a street in a city; then the location of this street, its function, its architecture; then the street systems possible in the city and many other things.

We must therefore concern ourselves with urban geography, urban topography, architecture, and several other disciplines. The problem is far from easy, but not impossible, and in the following paragraphs we will attempt an analysis along these lines. This means that, in a very general way, we can establish a logical geography of any city; this logical geography will be applied essentially to the problems of language, description, and classification. Thus, we can address such fundamental questions as those of typology, which have not yet been the object of serious systematic work in the domain of the urban sciences. At the base of the existing classifications there are too many unverified hypotheses, which necessarily lead to meaningless generalizations.

By using those disciplines to which I have just referred, we are working toward a broader, more concrete, and more complete analysis of urban artifacts. The city is seen as the human achievement *par excellence*; perhaps, too, it has to do with those things that can only be grasped by actually experiencing a given urban artifact. This conception of the city, or better, urban artifacts, as a work of art has, in fact, always appeared in studies of the city; we can also discover it in the form of greatly varying intuitions and descriptions in artists of all eras and in many manifestations of social and religious life. In the latter case it has always been tied to a specific place, event, and form in the city.

The question of the city as a work of art, however, represents itself explicitly and

scientifically above all in relation to the conception of the nature of collective artifacts, and I maintain that no urban research can ignore this aspect of the problem. How are collective urban artifacts related to the works of art? All great manifestations of social life have in common with the work of art the fact that they are born in unconscious life. This life is collective in the former, individual in the latter; but this is only a secondary difference because one is a product of the public and the other is for the public: the public provides the common denominator.

Setting forth the problem in this manner, Claude Lévi-Strauss brought the study of the city into a realm rich with unexpected developments. He noted how, more than other works of art, the city achieves a balance between natural and artificial elements; it is an object of nature and a subject of culture. Maurice Halbwachs advanced this analysis further when he postulated that imagination and collective memory are the typical characteristics of urban artifacts.

These studies of the city which embrace its structural complexity have an unexpected and little-known precedent in the work of Carlo Cattaneo. Cattaneo never explicitly considered the question of the artistic nature of urban artifacts, but the close connection in his thinking between art and science as two concrete aspects of the development of the human mind anticipates this approach. Later I will discuss how his concept of the city as the ideal principle of history, the connection between country and city, and other issues that he raised relate to urban artifacts. While at this point I am mostly interested in how he approaches the city, in fact Cattaneo never makes any distinction between city and country since he considers that all inhabited places are the work of man: "... every region is distinguished from the wilderness in this respect: that it is an immense repository of labor. . . . This land is thus not a work of nature; it is the work of our hands, our artificial homeland."

City and region, agricultural land and forest become human works because they are an immense repository of the labor of our hands. But to the extent that they are our "artificial homeland" and objects that have been constructed, they also testify to values; they constitute memory and permanence. The city *is* in its history. Hence, the relationship between place and man and the work of art—which is the ultimate, decisive fact shaping and directing urban evolution according to an aesthetic finality—affords us a complex mode of studying the city.

Naturally we must also take into account how people orient themselves within the city, the evolution and formation of their sense of space. This aspect constitutes, in my opinion, the most important feature of some recent American work, notably that of Kevin Lynch. It relates to the conceptualization of space, and can be based in large measure on anthropological studies and urban characteristics. Observations of this type were also made by Maximilien Sorre using such material, particularly the work of Marcel Mauss on the correspondence between group names and place names among Eskimos. For now, this argument will merely serve as an introduction to our study; it will be more useful to return to it after we have considered several other aspects of the urban artifact—of the city, that is, as a great, comprehensive representation of the human condition.

I will interpret this representation against the background of its most fixed and significant stage: architecture. Sometimes I ask myself why architecture is not analyzed in these terms, that is, in terms of its profound value as a human thing that shapes reality and adapts material according to an aesthetic conception. It is in this sense not only the place of the human condition, but itself a part of that condition, and is represented in the city and its monuments, in districts, dwellings, and all urban

artifacts that emerge from inhabited space. It is from this point of view that a few theorists have tried to analyze the urban structure, to sense the fixed points, the true structural junctions of the city, those points from which the activity of reason proceeds.

I will now take up the *hypothesis of the city as a man-made object*, as a work of architecture or engineering that grows over time; this is one of the most substantial hypotheses from which to work.

It seems that useful answers to many ambiguities are still provided by the work of Camillo Sitte, who in his search for laws of the construction of the city that were not limited to purely technical considerations took full account of the "beauty" of the urban scheme, of its form: "We have at our disposal three major methods of city planning, and several subsidiary types. The major ones are the gridiron system, the radial system, and the triangular system. The subtypes are mostly hybrids of these three. Artistically speaking, not one of them is of any interest, for in their veins pulses not a single drop of artistic blood. All three are concerned exclusively with the arrangement of street patterns, and hence their intention is from the start a purely technical one. A network of streets always serves only the purposes of communication, never of art, since it can never be comprehended sensorily, can never be grasped as a whole except in a plan of it. In our discussions so far street networks have not been mentioned for just that reason; neither those of ancient Athens, of Rome, of Nuremberg, or of Venice. They are of no concern artistically, because they are inapprehensible in their entirety. Only that which a spectator can hold in view, what can be seen, is of artistic importance: for instance, the single street or the individual plaza."

Sitte's admonition is important for its empiricism, and it seems to me that this takes us back to certain American experiences which we mentioned above, where artistic quality can be seen as a function of the ability to give concrete form to a symbol. Sitte's lesson beyond question helps to prevent many confusions. It refers us to the technique of urban construction, where there is still the actual moment of designing a square and then a principle which provides for its logical transmission, for the teaching of its design. But the models are always, somehow, the single street, the specific square.

On the other hand, Sitte's lesson also contains a gross misperception in that it reduces the city as a work of art to one artistic episode having more or less legibility rather than to a concrete, overall experience. We believe the reverse to be true, that the whole is more important than the single parts, and that only the urban artifact in its totality, from street system and urban topography down to the things that can be perceived in strolling up and down a street, constitutes this totality. Naturally we must examine this total architecture in terms of its parts.

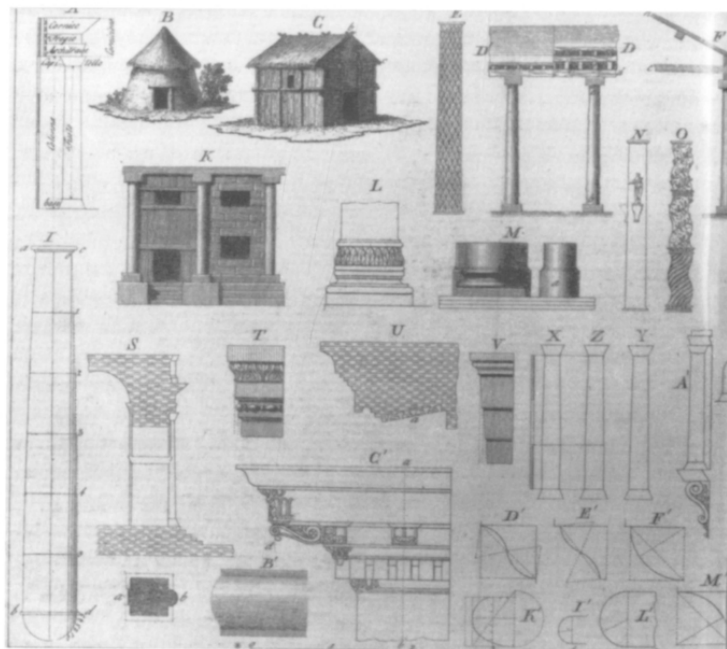
We must begin with a question that opens the way to the problem of classification—that of the typology of buildings and their relationship to the city. This relationship constitutes a basic hypothesis of this work, and one that I will analyze from various viewpoints, always considering buildings as moments and parts of the whole that is the city. This position was clear to the architectural theorists of the Enlightenment. In his lessons at the Ecole Polytechnique, Durand wrote, "Just as the walls, the columns, &c., are the elements which compose buildings, so buildings are the elements which compose cities."

Typological questions

The city as above all else a human thing is constituted of its architecture and of all those



Palazzo della Ragione, Padua.



From Francesco Milizia, *Principj di Architettura Civile*, 1832.

works that constitute the true means of transforming nature. Bronze Age men adapted the landscape to social needs by constructing artificial islands of brick, by digging wells, drainage canals, and watercourses. The first houses sheltered their inhabitants from the external environment and furnished a climate that man could begin to control; the development of an urban nucleus expanded this type of control to the creation and extension of a microclimate. Neolithic villages already offered the first transformations of the world according to man's needs. The "artificial homeland" is as old as man.

In precisely this sense of transformation the first forms and types of habitation, as well as temples and more complex buildings, were constituted. The *type* developed according to both needs and aspirations to beauty; a particular type was associated with a form and a way of life, although its specific shape varied widely from society to society. The concept of type thus became the basis of architecture, a fact attested to both by practice and by the treatises.

It therefore seems clear that typological questions are important. They have always entered into the history of architecture, and arise naturally whenever urban problems are confronted. Theoreticians such as Francesco Milizia never defined type as such, but statements like the following seem to be anticipatory: "The comfort of any building consists of three principal items: its site, its form, and the organization of its parts." I would define the concept of type as something that is permanent and complex, a logical principle that is prior to form and that constitutes it.

One of the major theoreticians of architecture, Quatremère de Quincy, understood the importance of these problems and gave a masterly definition of type and model:

"The word 'type' represents not so much the image of a thing to be copied or perfectly imitated as the idea of an element that must itself serve as a rule for the model. . . . The model, understood in terms of the practical execution of art, is an object that must be repeated such as it is; type, on the contrary, is an object according to which one can conceive works that do not resemble one another at all. Everything is precise and given in the model; everything is more or less vague in the type. Thus we see that the imitation of type involves nothing that feelings or spirit cannot recognize. . . .

"We also see that all inventions, notwithstanding subsequent changes, always retain their elementary principle in a way that is clear and manifest to the senses and to reason. It is similar to a nucleus around which the developments and variations of forms to which the object was susceptible gather and mesh. Therefore a thousand things of every kind have come down to us, and one of the principal tasks of science and philosophy is to seek their origins and primary causes so as to grasp their purposes. Here is what must be called 'type' in architecture, as in every other branch of human inventions and institutions. . . . We have engaged in this discussion in order to render the value of the word *type*—taken metaphorically in a great number of works—clearly comprehensible, and to show the error of those who either disregard it because it is not a model, or misrepresent it by imposing on it the rigor of a model that would imply the conditions of an identical copy."

In the first part of this passage, the author rejects the possibility of type as something to be imitated or copied because in this case there would be, as he asserts in the second part, no "creation of the model"—that is, there would be no making of architecture. The second part states that in architecture (whether model or form) there is an element that plays its own role, not something to which the architectonic object conforms but something that is nevertheless present in the model. This is the *rule*, the structuring principle of architecture.

In fact, it can be said that this principle is a constant. Such an argument presupposes that the architectural artifact is conceived as a structure and that this structure is revealed and can be recognized in the artifact itself. As a constant, this principle, which we can call the typical element, or simply the type, is to be found in all architectural artifacts. It is also then a cultural element and as such can be investigated in different architectural artifacts; typology becomes in this way the analytical moment of architecture, and it becomes readily identifiable at the level of urban artifacts.

Thus typology presents itself as the study of types that cannot be further reduced, elements of a city as well as of an architecture. The question of monocentric cities or of buildings that are or are not centralized, for example, is specifically typological; no type can be identified with only one form, even if all architectural forms are reducible to types. The process of reduction is a necessary, logical operation, and it is impossible to talk about problems of form without this presupposition. In this sense all architectural theories are also theories of typology, and in an actual design it is difficult to distinguish the two moments.

Type is thus a constant and manifests itself with a character of necessity; but even though it is predetermined, it reacts dialectically with technique, function, and style, as well as with both the collective character and the individual moment of the architectural artifact. It is clear, for example, that the central plan is a fixed and constant type in religious architecture; but even so, each time a central plan is chosen, dialectical themes are put into play with the architecture of the church, with its functions, with its constructional technique, and with the collective that participates in the life of that church. I tend to believe that housing types have not changed from antiquity up to today, but this is not to say that the actual way of living has not changed, nor that new ways of living are not always possible. The house with a loggia is an old scheme; a corridor that gives access to rooms is necessary in plan and present in any number of urban houses. But there are a great many variations on this theme among individual houses at different times.

Ultimately, we can say that type is the very idea of architecture, that which is closest to its essence. In spite of changes, it has always imposed itself on the "feelings and reason" as the principle of architecture and of the city. [...]

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300-7

392-98

200-4

The theme of the "great number"—how to accommodate a continuously increasing population—and of large-scale urban form tended to be elaborated during the late 1950s and early 1960s within the technical-utopian framework of the megastructure and the debates on dynamic process, mobility, and mass communications. While this discussion had an Italian counterpart, notably in Umberto Eco's semiological theory and his book on the "open work" (1962), the discussion of what came to be known in Italy as the new urban dimension underwent a rather different development. Here, concern centered on the formulation of concrete design strategies linking historic urban centers to developments in the countryside. Responding to the dramatic changes that had taken place in the Italian landscape during the previous decade—especially in the northern industrial zone triangulating Milan, Turin, and Genoa—architects acknowledged the destructive effect of uncoordinated local initiatives. Giuseppe Samonà was among the first to address the problem, calling, in an essay entitled "La nuova dimensione della città" (1959), for an integrated and realistic planning approach to urban and territorial expansion.

Over the next several years the *città-territorio* became a major subject of discussion, bound up not only with quantitative and technical considerations but also cultural and formal ones. It was **Vittorio Gregotti** who most articulately framed the latter with the publication in 1966 of a special issue of *Edilizia Moderna*, of which he was then editor, entitled "La forma del territorio." He also published a book, *Il territorio dell'architettura*, the same year, from which the following extract is taken. Milanese and of the same generation as Aldo Rossi, Gregotti had come to maturity during the transforming years of the postwar economic miracle. He was old enough to have attended CIAM's "heart of the city" conference in Hoddesdon and to have worked on the design of the Velasco tower in the office of the BBPR, and was also among the circle of young collaborators—with Rossi, Gae Aulenti, Guido Canella, and a handful of others—to come under the wing of Ernesto Rogers during the years when *Casabella-continuità* played its major role. While Rossi would stress the cultural and geographical specificity of urban places in *The Architecture of the City*, Gregotti undertook to extend Rogers's *preesistenza ambientale* to the territorial scale, positing a fluid new relationship between the built organism and the rules of formal typology. This "anthropogeographic" approach was based not on metaphorical but material considerations: the topography and ecology of a region, its history and culture. Drawing on research into the visual perception of urban form by the American Kevin Lynch as well as on insights offered by communications theory, structural linguistics, and anthropology, Gregotti sought to synthesize this diverse material within the architect's domain of competence.

The scale of several of Gregotti's subsequent projects, notably a winning competition design for the new University of Calabria campus at Cosenza (1974), permitted him to test his ideas. Rejecting the monolithic megastructure for the spatial limits of fixed, finite volumes, he sought to infuse his forms with a sense of their own artificiality in the landscape and of the geographic "modification" they performed. In an essay of 1982, "L'architettura dell'ambiente," written shortly after succeeding Tomás Maldonado as editor of *Casabella*, Gregotti returned to his abiding theme, describing the relation of the building to the site as the "essence of architectural work."

Published as "Architettura, ambiente, natura," in Vittorio Gregotti, *Il territorio dell'architettura* (Milan: Feltrinelli, 1966), pp. 92-94. Revised from the introduction to "La forma del territorio," special issue of *Edilizia moderna*, no. 87-88 (1966), pp. 1-11. Courtesy of the author and Giangiacomo Feltrinelli Editore.