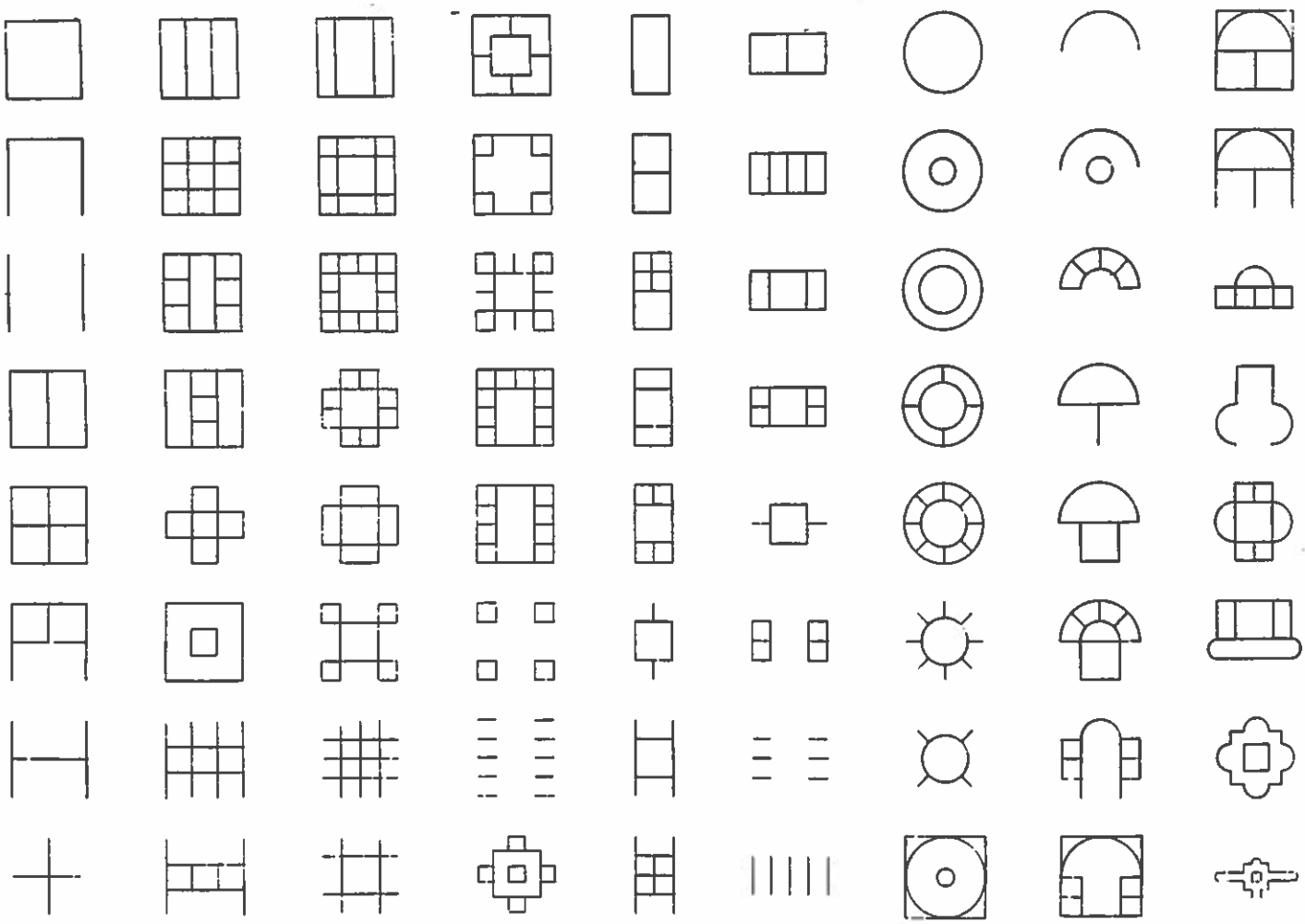

1 (frontispiece) Building forms, J. N. L. Durand, 1809.

On Typology

Rafael Moneo

I

To raise the question of typology in architecture is to raise a question of the nature of the architectural work itself. To answer it means, for each generation, a redefinition of the essence of architecture and an explanation of all its attendant problems. This in turn requires the establishment of a theory, whose first question must be, what kind of object is a work of architecture? This question ultimately has to return to the concept of type.

On the one hand, a work of architecture has to be considered in its own right, as an entity in itself. That is, like other forms of art, it can be characterized by a condition of uniqueness. From this point of view, the work of architecture is irreducible within any classification. It is unrepeatable, a single phenomenon. Stylistic relationships may be recognized among architectural works, as in the other figurative arts, but they do not imply a loss of the singularity of the object.

On the other hand, a work of architecture can also be seen as belonging to a class of repeated objects, characterized, like a class of tools or instruments, by some general attributes. From the first hut to the archaic stone construction, primitive architecture conceived of itself as an activity similar to other kinds of craftsmanship, such as the making of textiles, pottery, baskets, and so on. The first products of this activity, which we in retrospect have called architecture, were no different from instruments or tools: building a primitive hut required solving problems of form and design similar in nature to those involved in weaving a basket, that is in making a useful object. Thus, like a basket or plate or cup, the architectural object could not only be repeated, but also was *meant* to be repeatable. Any changes that developed in it were particularities that could be found in any product of craftsmanship over time. In this sense, the uniqueness of the architectural object was denied. From this point of view a work of architecture, a construction, a house—like a boat, a cup, a helmet—can be defined through formal features, which express problems running from production to use, and which permit its reproduction. In these terms it can be said that the essence of the architectural object lies in its repeatability.

The very act of naming the architectural object is also a process that from the nature of language is forced to typify. The identification of an architectural element like "column," or of a whole building—"courthouse"—implies an entire class of similar objects with common characteristics. This means that language also implicitly acknowledges the concept of type.

What then is type? It can most simply be defined as a concept which describes a group of objects characterized by the same formal structure. It is neither a spatial diagram nor the average of a serial list. It is fundamentally based on the possibility of grouping objects by certain inherent structural similarities. It might even be said that type means the act of thinking in groups. For instance, one may speak of skyscrapers in general; but the act of grouping pushes toward speaking of skyscrapers as huge, distorted Renaissance palaces, as Gothic towers, as fragmented pyramids, as oriented slabs. . . . Then, as one becomes increasingly precise, one introduces other levels of grouping, thus describing new ranks of types. One finishes with the name of a specific building.[1] Thus the idea of type, which ostensibly rules out individuality, in the end has to return to its origins in the single work.

Architecture, however—the world of objects created by architecture—is not only *described* by types, it is also *produced* through them. If this notion can be accepted, it can be understood why and how the architect identifies his work with a precise type. He is initially trapped by the type because it is the way he knows. Later he can act on it; he can destroy it, transform it, respect it. But he starts from the type. *The design process is a way of bringing the elements of a typology—the idea of a formal structure—into the precise state that characterizes the single work.*

But what precisely is a formal structure? One could attempt a series of opposing definitions. First the aspects of the *Gestalt* could be emphasized. This would mean speaking about centrality or linearity, clusters or grids, trying to characterize form in terms of a deeper geometry. In this sense, certain texts have described all covered

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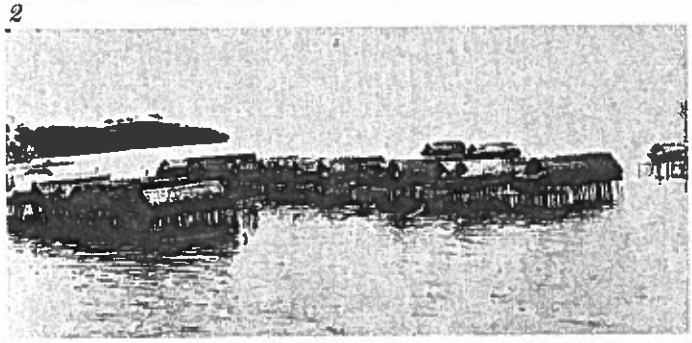

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2 El Oued in the Sahara, aerial view.

3 Barakan village near Port Moresby, Papua, New Guinea.

centralized spaces, from the primitive hut to the Renaissance dome to that of the nineteenth century, as being of the same "type."[2] This however reduces the idea of type as formal structure to simple abstract geometry. But type as a formal structure is, in contrast, also intimately connected with reality—with a vast hierarchy of concerns running from social activity to building construction. Ultimately, the group defining a type must be rooted in this reality as well as in an abstract geometry. This means, for example, that buildings also have a precise position in history. In this sense nineteenth century domes belong to an entirely different rank of domes from those of the Renaissance or Baroque periods, and thereby constitute their own specific type.

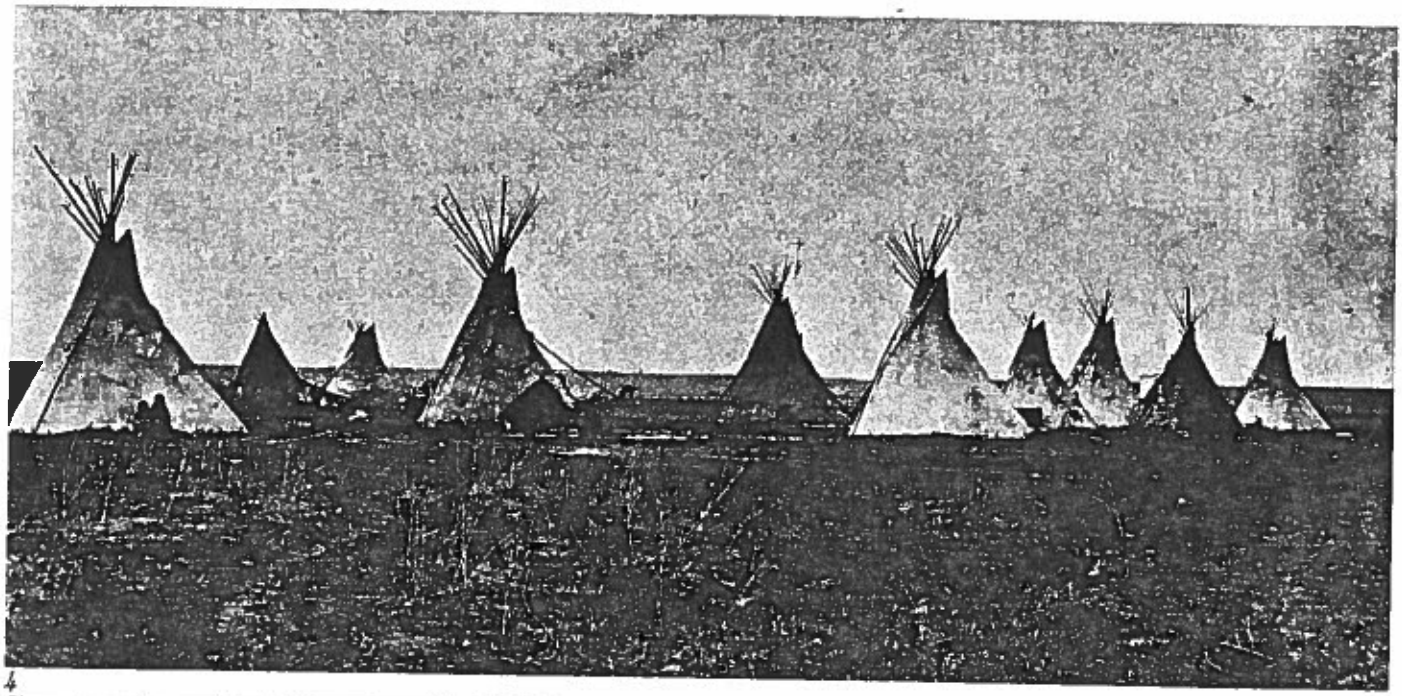
This leads directly to the concept of a typological series that is generated by the relationship among the elements that define the whole. The type implies the presence of elements forming such a typological series and, of course, these elements can themselves be further examined and considered as single types; but their interaction defines a precise formal structure.

Thus, Brunelleschi introduced the lantern as a logical termination of the dome at Florence, and this form was imitated for almost three hundred years. The relationship between the classical dome and post-Gothic lantern should be considered as one of the most characteristic features of Renaissance and post-Renaissance domes, giving them a certain formal consistency. When Enlightenment architects worked with domes they entirely changed the relationship between the elements that defined the formal structure—dome and lantern—thus generating a new type. Types are transformed, that is, one type becomes another, when substantial elements in the formal structure are changed.[3]

One of the frequent arguments against typology views it as a "frozen mechanism" that denies change and emphasizes an almost automatic repetition.[4] However, the very concept of type, as it has been proposed here, implies the idea of change, or of transformation. The architect identifies the type on or with which he is working, but that

4 Cheyenne village, Western Plains, U.S.A.

5, 6, 7, 8 Houses in Cebrero, Lugo, Spain.



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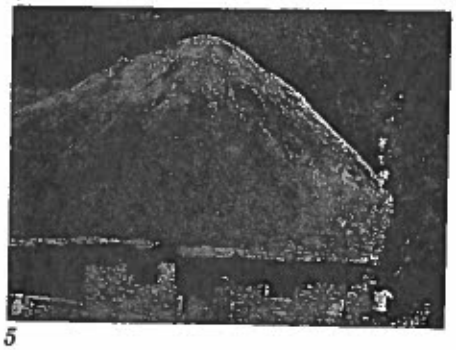

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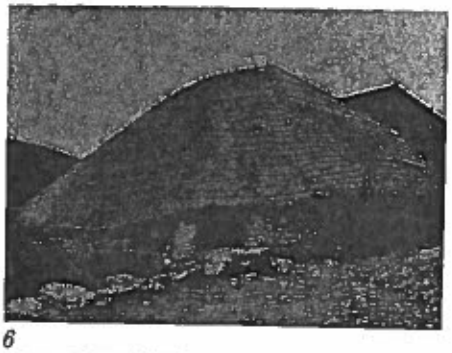

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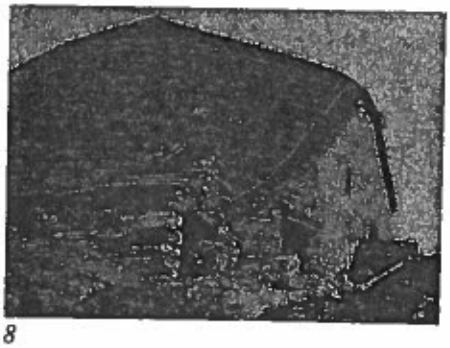

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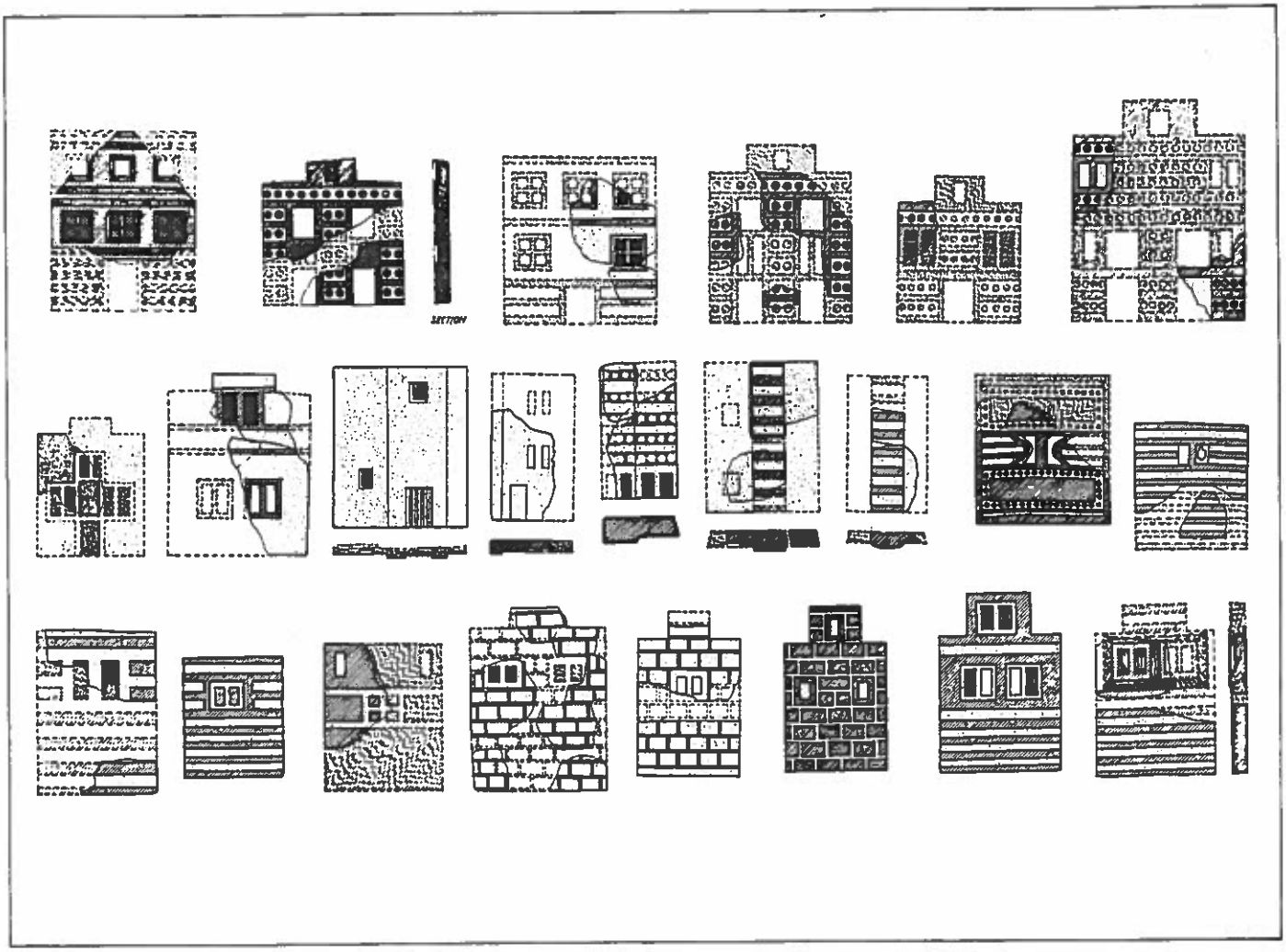
9 Faience tablets representing houses and towers. The Palace of Minos, Knossos, Crete.

10 Plans, Casa dei Signori. Francesco di Giorgio Martini, Tratatto di architettura.



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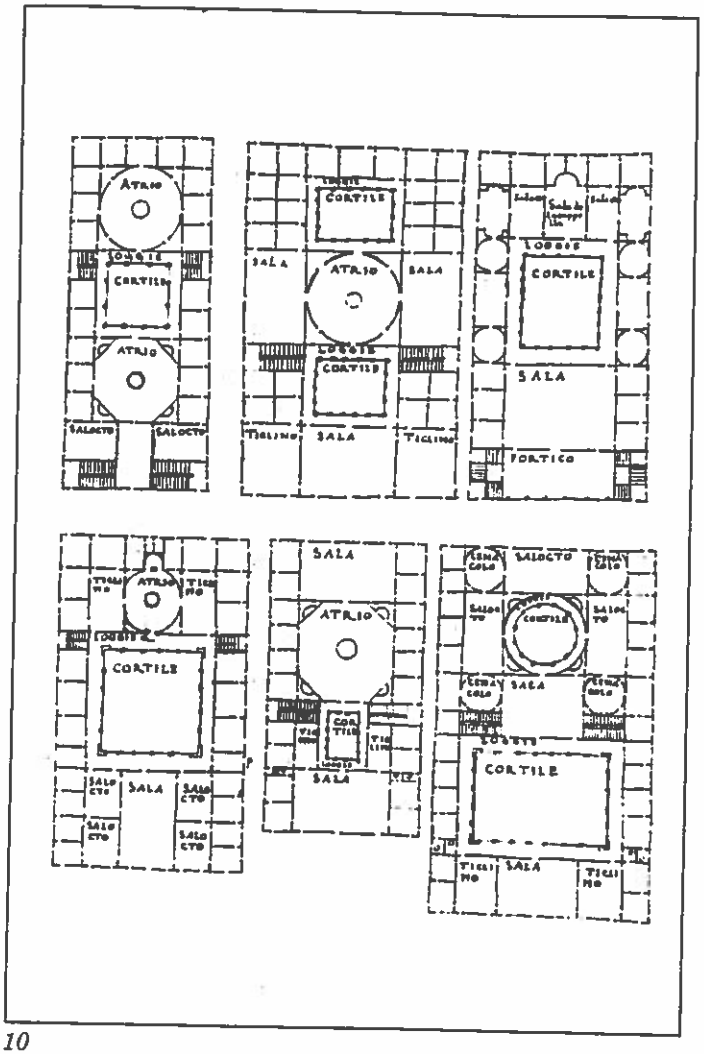
does not necessarily imply mechanical reproduction. Of course, the typological approach per se does not demand constant change; and when a type is firmly consolidated, the resultant architectural forms preserve formal features in such a way as to allow works of architecture to be produced by a repetitive process, either an exact one as found in industry, or an approximate one, as found in craftsmanship. But the consistency and stability of forms in such instances need not be attributed to the concept of type; it is just as possible to conclude that the struggle with an identical problem tends to lead to almost identical forms. Or in other words, stability in a society—stability reflected in activities, techniques, images—is mirrored also in architecture.

The concept of type is in itself open to change insofar as it means a consciousness of actual facts, including, certainly, a recognition of the possibility of change. By looking at architectural objects as groups, as types, susceptible to differentiation in their secondary aspects, the partial obsolescences appearing in them can be appraised, and consequently one can act to change them. The type can thus be thought of as the *frame within which change operates*, a necessary term to the continuing dialectic required by history. From this point of view, the type, rather than being a "frozen mechanism" to produce architecture, becomes a way of denying the past, as well as a way of looking at the future.

In this continuous process of transformation, the architect can extrapolate from the type, changing its use; he can distort the type by means of a transformation of scale; he can overlap different types to produce new ones. He can use formal quotations of a known type in a different context, as well as create new types by a radical change in the techniques already employed. The list of different mechanisms is extensive—it is a function of the inventiveness of architects.

The most intense moments in architectural development are those when a new type appears. One of the architect's greatest efforts, and thus the most deserving of admiration, is made when he gives up a known type and clearly



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sets out to formulate a new one. Often, external events—such as new techniques or changes in society—are responsible for impelling him toward this creation of a new type, in accordance with a dialectical relationship with history. But sometimes the invention of a new type is the result of an exceptional personality, capable of entering into architecture with its own voice.[5]

When a new type emerges—when an architect is able to describe a new set of formal relations which generates a new group of buildings or elements—then that architect's contribution has reached the level of generality and anonymity that characterizes architecture as a discipline.

II

Given this close relation between type and the discipline of architecture, it is not surprising to find that the first coherent and explicit formulation of an idea of type in architectural theory was developed by Quatremère de Quincy at the end of the eighteenth century, precisely at the time when the traditional "discipline" of architecture had been thrown into question by emerging social and technical revolutions.[6]

For Quatremère the concept of type enabled architecture to reconstruct its links with the past, forming a kind of metaphorical connection with the moment when man, for the first time, confronted the problem of architecture and identified it in a form. In other words, the type explained the reason behind architecture, which remained constant throughout history, reinforcing through its continuity the permanence of the first moment in which the connection between the form and the nature of the object was understood and the concept of type was formulated. The type was thus intimately related with "needs and nature." "In spite of the industrious spirit which looks for innovation in objects," Quatremère writes, "who does not prefer the circular form to the polygonal for a human face? Who does not believe that the shape of a man's back must provide the *type* of the back of a chair? That the round shape must itself be the only reasonable *type* for the head's coiffure?"[7] The type was in this way identified with the logic of form connected with reason and use, and, throughout history, whenever an architectural object was related to some form, a kind of logic was implied, creating a deep bond with the past.

Based in this way on history, nature, and use, the type had to be distinguished from the *model*—the mechanical reproduction of an object. Type expressed the permanence, in the single and unique object, of features which connected it with the past, acting as a perpetual recognition of a primitive but renewed identification of the condition of the object. Throughout the nineteenth century, however, the idea of type was applied in exactly the opposite way. Manuals and handbooks, so important for nineteenth century architectural knowledge, offered *models* or *examples*. The new importance assume by *programs*—a word that curiously does not appear in Quatremère's *Dictionary*—is in clear opposition to his concept of type-form, and transfers the focus of theory to a new field, that of *composition*. Composition is the tool by which the architect deals with the variety of programs offered by the new society; a theory of composition is needed to provide an instrument capable of coping with a diversity that, with difficulty, can be reduced to known types. In this sense composition should be understood as the mechanism that resolves the connection between form and program—or form and function—to which a new idea of architecture is wedded. It is from this point of view that the difference between Quatremère and someone like Durand can be seen.

For Durand, the first aim of architecture is no longer the imitation of nature or the search for pleasure and artistic satisfaction, but composition or "disposition." This idea of composition is directly related to needs; its relevant criteria are, accordingly, convenience and economy. Convenience seeks solidity, salubrity, and comfort; economy requires symmetry, regularity, and simplicity—all attributes to be achieved with composition.

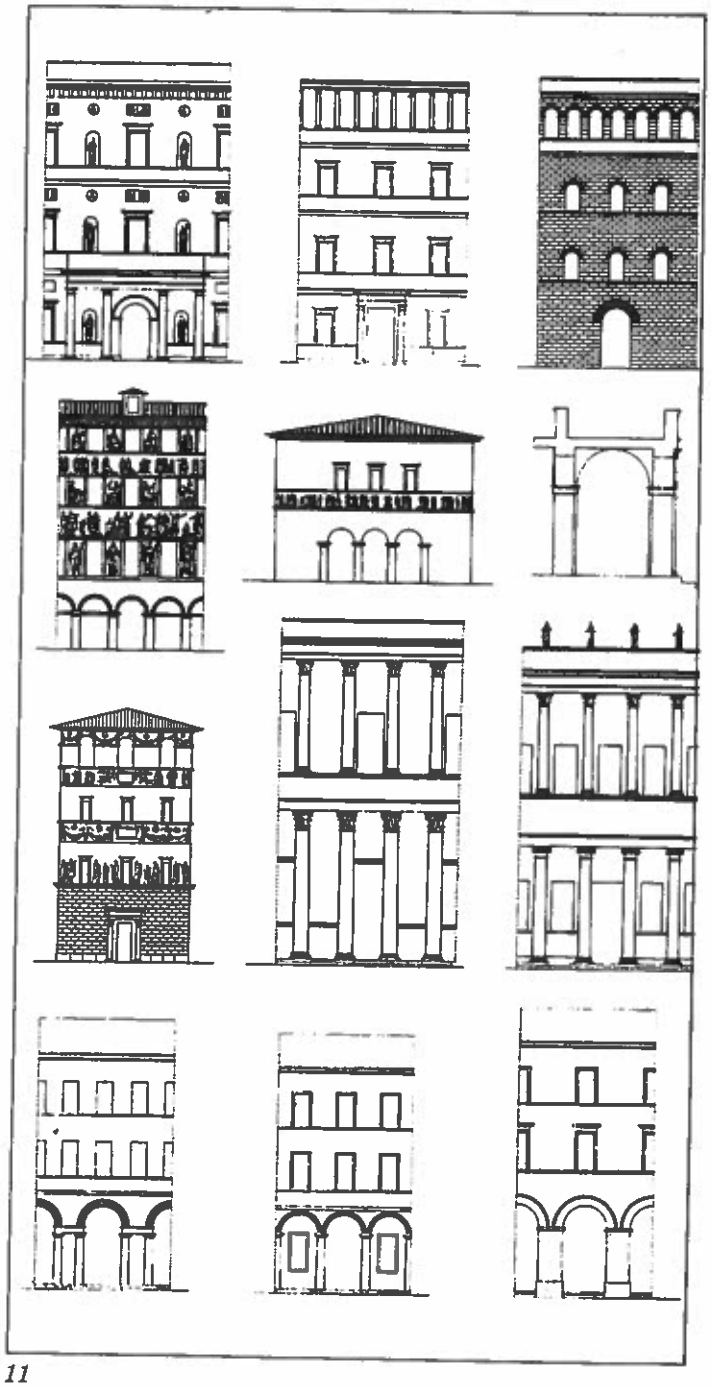
According to Durand, the architect disposes of elements—columns, pillars, foundations, vaults, and so on—which have taken form and proportion through their relationship with material and with use. These elements, argues Du-

11 Facade combinations. J. N. L. Durand, 1809.

rand, must be freed from the tyranny of the Orders; the classical orders should be seen as mere decoration.[8] Having established the elements firmly through use and material, Durand says that the architect's task is to combine these elements, generating more complex entities, the parts of which will—at the end, through the composition—be assembled in a single building. Thus Durand offers a series of porches, vestibules, staircases, courts, etc. as parts of future buildings associated with precise programs (figs. 1 [frontispiece], 11–14). These parts, ordered and presented like a repertoire of models, constitute the materials available to the architect. By using these parts, the architect can achieve architecture through composition and still retain responsibility for final unity—a classical attribute that Durand does not deny to the building. But how to achieve this unity? Durand proposes two instruments with which to handle the composition, to rule the construction of a building, whatever its program: one is the continuous, undifferentiated *grid*; the other the use of the *axis* as a support for the reversal of its parts.

Both mechanisms are essentially contrary to Quatremère's idea of type as based on elemental and primitive forms. Quantification is now posed against qualification: on the grid and with the axis, programs—buildings—could be flexible as well as desirable. The square grid ended the idea of architecture as it had been elaborated in the Renaissance and used until the end of the eighteenth century; the old definition of type, the original reason for form in architecture, was transformed by Durand into a method of composition based on a generic geometry of axis superimposed on the grid. The connection between type and form disappeared.

Durand himself avoided the idea of type; he used the word *genre* when, in the third part of his book, he described the variety of buildings classified according to their programs. He collected, and sometimes even invented, hospitals, prisons, palaces, libraries, theaters, custom houses, barracks, town halls, colleges (fig. 15); a collection which presupposed a certain concern with type, although solely identified with the building's use. In so doing, he repeated the treatment he had adopted twenty years before in his



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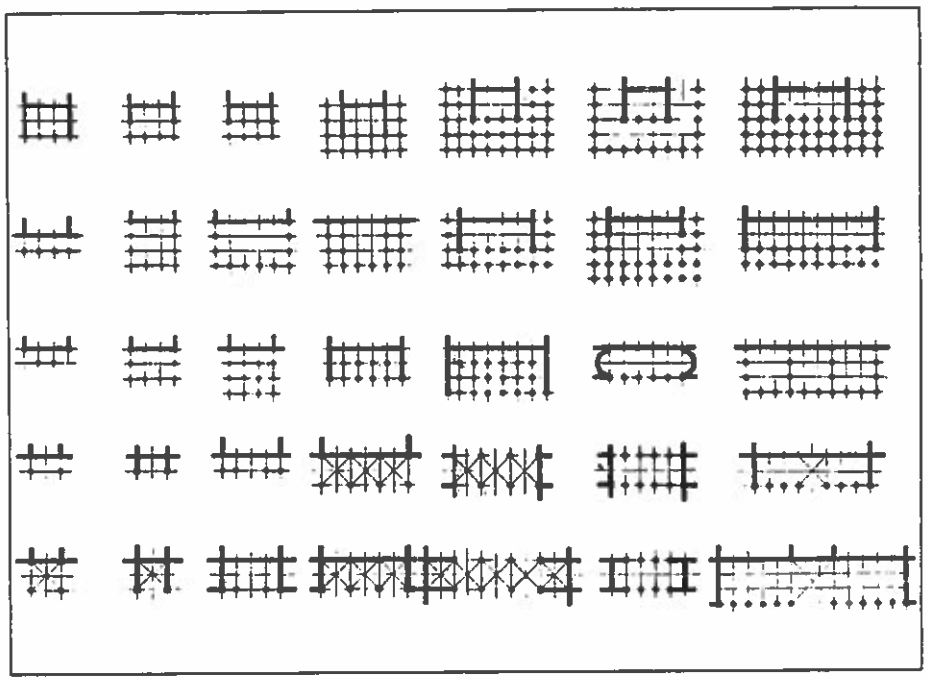

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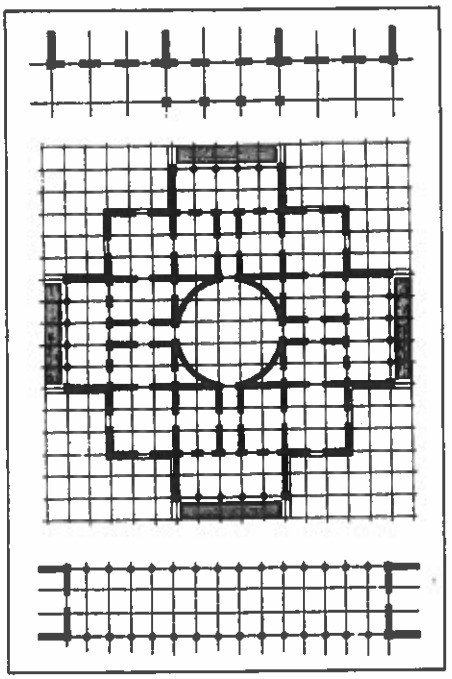

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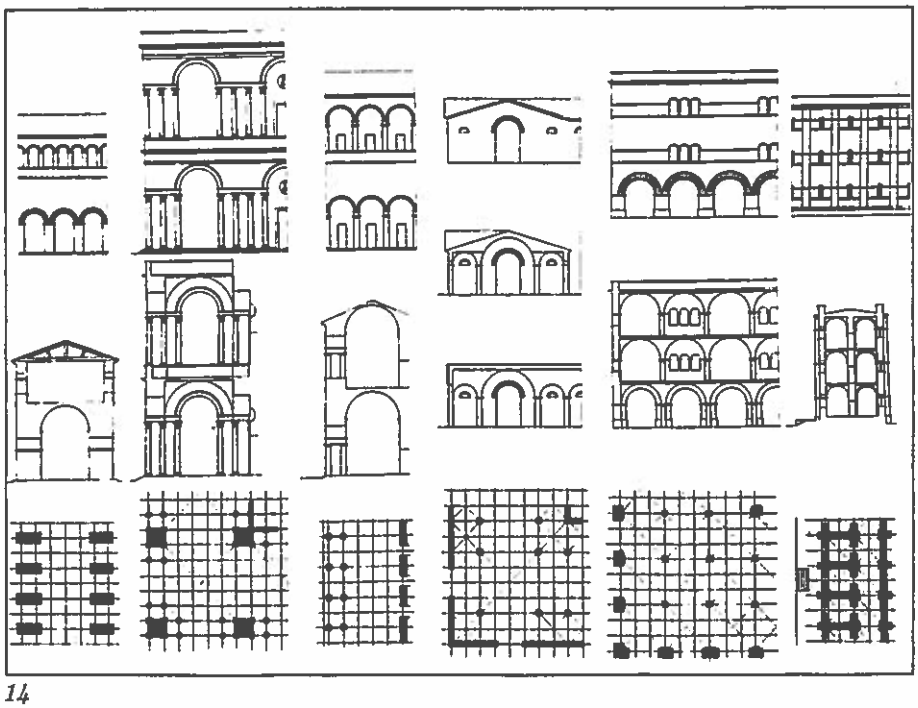
12 Plans for porches. J. N. L. Durand, 1809.

13 Plan combinations. J. N. L. Durand, 1809.

14 Facade combinations. J. N. L. Durand, 1809.



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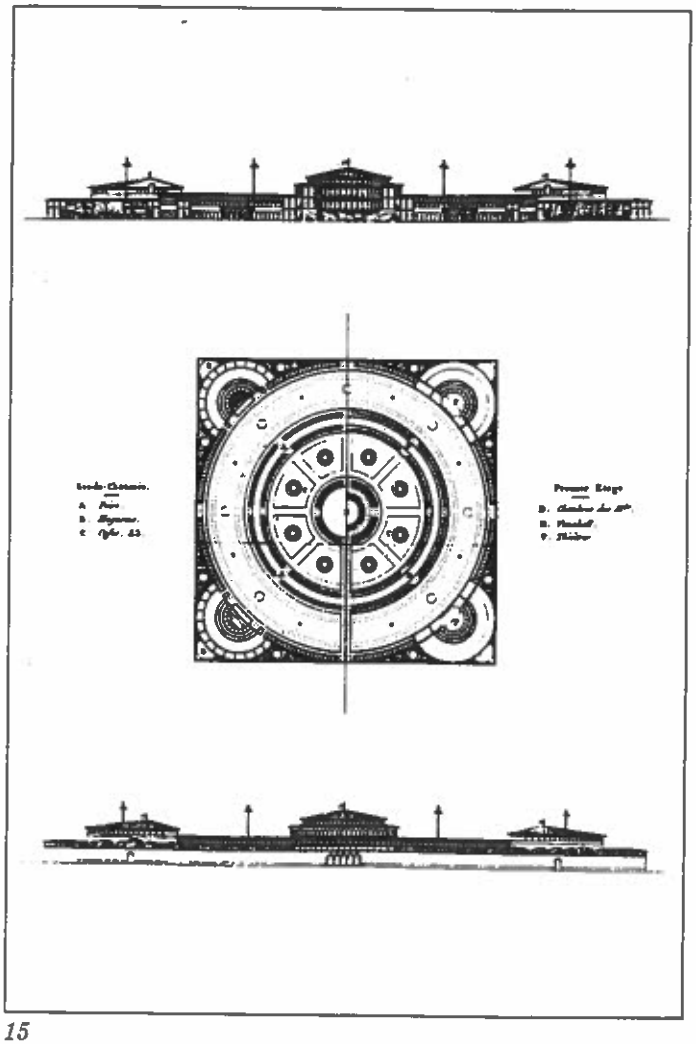
15 Prototype for a fairground.
J. N. L. Durand, 1809.

Recueil et parallèle des edifices de tout genre . . .[9] in which temples, churches, squares, and markets were categorized according to their program or use—categories which interested him more than their forms and more than any related questions of style or language.



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But in proposing a list of models, and afterward defining the rules and principles of composition, Durand's work anticipated the nineteenth century's theoretical approach to architecture: a knowledge based on history as a quarry of available material, supported by an idea of composition suggested by Durand's principles, elaborated and later finalized in the Beaux Arts architectural system of the last years of the century. Durand would have understood, no doubt, why the battle of styles exploded with such virulence in the middle of the century. "Style" was something that could be added later, a final formal characterization given to the elements *after* the structure of the building had been defined through a composition, which somehow reflected its program.

Durand thereby offered a simple enough method of coping with the programs and the new building requirements demanded by a new society. The demand that the object be repeatable was superseded by a new and different point of view whose basis was not sought in the nature of the architectural object. The conditions and attributes of the object itself which were central to Quatremère's inquiries ceased to be critical. It was the immediate responsibility of the architectural object as a theoretical instrument with an institutionalized role to make itself comprehensible as a product. Without doubt this new approach to architecture was related to the appearance of schools; as the product of the architect, architecture needed a body of doctrine—an idea of composition reinforced by a broader network of examples either of buildings or of single elements.

The handbooks and manuals which began to appear in the nineteenth century, followed Durand's teachings, simply displayed the material available to the profession, classifying buildings by their function in a way that could be called typological. But however much well-defined single

elements and vague and imprecise schematic plans for various kinds of programs seemed to beget generic *partis* and thus seemed to suggest type forms, that total and indestructible formal structure which has been defined as type was irrevocably flattened. It had become a mere compositional and schematic device.

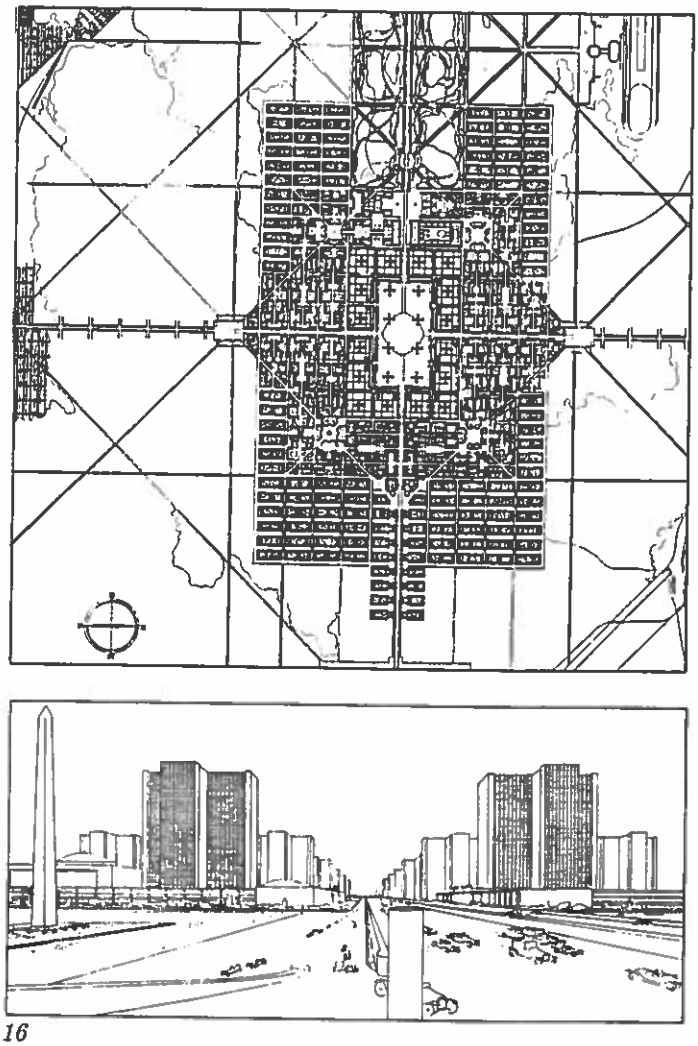
III

When, at the beginning of the twentieth century, a new sensibility sought the renovation of architecture, its first point of attack was the academic theory of architecture established in the nineteenth century. The theoreticians of the Modern Movement rejected the idea of type as it had been understood in the nineteenth century, for to them it meant immobility, a set of restrictions imposed on the creator who must, they posited, be able to act with complete freedom on the object. Thus when Gropius dispensed with history,[10] claiming that it was possible to undertake both the process of design and positive construction without reference to prior examples, he was standing against an architecture structured on typology. The nature of the architectural object thus changed once again. Architects now looked to the example of scientists in their attempt to describe the world in a new way. A new architecture must offer a new language, they believed, a new description of the physical space in which man lives. In this new field the concept of type was something quite alien and unessential.

This changed attitude toward the architect's product is clearly reflected in the work of Mies van der Rohe, in which the principles and aspirations of both Neoplasticism and the Bauhaus are joined, giving a certain degree of generality to the example. His work can be interpreted as an uninterrupted attempt to characterize a generic space, which could be called *the* space, of which architecture is simply the materialization. According to this notion, the architect's task is to capture the idealized space through the definition of its abstract components. Like the physicist, the architect must first know the elements of matter, of space itself. He is then able to isolate a portion of that space to form a precise building. In constructing his building, he seizes this space and in doing so he constructs a building characterized not by its use—as a school, hospital, church, etc. in the manner of the nineteenth century—but a "space" in which an activity is produced only later. From this point of view, the I.I.T. campus must be understood more as a *space*—a physical fragment of a conceptual space—than as a set of buildings submitted to a process of architectural composition. The space is simply made available, it could be a church as well as a school. Mies was disturbed neither by functions nor materials; he was a builder of form-space.

Even when he designed a number of houses with the generic and quasi-typological designation of "courtyard houses" (fig. 17), the designation was more an allusion to a well-known type than a reduplication of it. These houses are in the end defined by the way in which the architect has materialized space; the court itself does not structure their disposition: in them, space takes precedence over type. Thus the houses are understood as single aesthetic events in which the architect copes with a new reality. Whatever connection they have with the past—in architectonic terms, with the type—is carefully avoided in favor of a generic and actual description of the *current* world. For Modern Movement architects also wanted to offer a new image of architecture to the society that produced it, an image that reflected the new industrialized world created by that society. This meant that a mass-production system had to be introduced into architecture, thus displacing the quality of singularity and uniqueness of the traditional architectural "object." The type as the artificial species described by Quatremère and the type as the "average" of models proclaimed by the theoreticians of the nineteenth century now had to be put aside; the industrial processes had established a new relationship between production and object which was far removed from the experience of any precedents. Taken to its logical conclusion, such an attitude toward mass production was in clear contradiction to the Modern Movement's own preoccupation with the unique spatial object. But with regard to the idea of type, both aspects of Modern Movement theory, however contradictory, coincided in their rejection of type as a key to understanding the architectural object.

16 La Ville Contemporaine, project.
Le Corbusier, 1922.



Mass production in architecture, focused chiefly on mass housing, permitted architecture to be seen in a new light. Repeatability was desirable, as it was consonant with industry. "The same constructions for the same requirements," Bruno Taut wrote,[11] and now the word "same" needed to be understood *ad litteram.* Industry required repetition, series; the new architecture could be pre-cast. Now the word type—in its primary and original sense of permitting the exact reproduction of a model—was transformed from an abstraction to a reality in architecture, by virtue of industry; type had become prototype.

This could be seen in Le Corbusier's work where the contradiction between architecture as a single and unique event and architecture as a process of elaboration of industrial prototypes is clearly marked. From the beginning, Le Corbusier was interested in this condition of an industrial prototype allowing for limitless repetition. The Dom-ino house, of all the "industrialized" schemes proposed by Le Corbusier in the twenties and early thirties, insists on this theme as do the towers in the Plan Voisin or in the Ville Radieuse (fig. 16). Later, the Unité d'Habitation becomes a clear example of such an attitude: it can be readapted—Marseilles, Nantes, Berlin—without alteration; it is a *unit,* the result of factory production process, capable of being sent anywhere. In Le Corbusier's theory, the building industry should be analogous to the auto industry; like primitive architecture, but now through the industrial process, the new architecture should return to its former status as a typal instrument.

This new idea of type effectively denied the concept of type as it had been conceived in the past. The singularity of the architectural object which in the nineteenth century had permitted adaptability to site and flexibility for use within the framework of a structure was violently denied by the new architecture, committed to architecture as mass production.

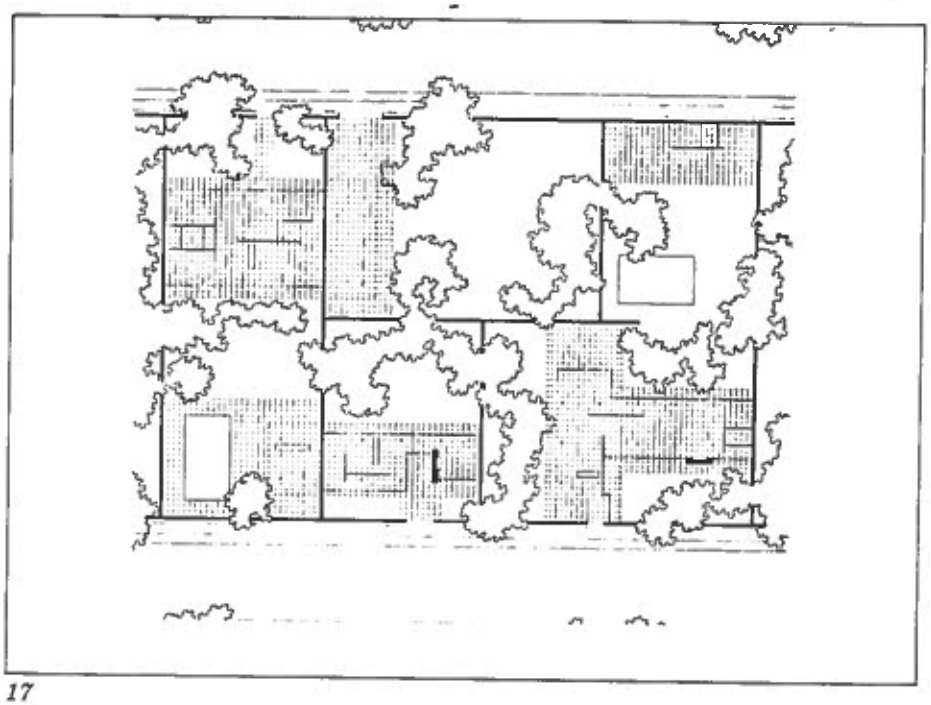
But there was a third argument against the nineteenth century's concept of typology. This argument was provided by functionalism. Functionalism—the cause/effect relationship between requirements and form—seemed to

17 Courtyard houses, plan. Mies van der Rohe, 1938.

18 Victorian era row houses, Newcastle upon Tyne, England.

19 Single family house plans and circulation diagrams. Alexander Klein, 1934.

20 Analysis of building plans. Alexander Klein, 1934.



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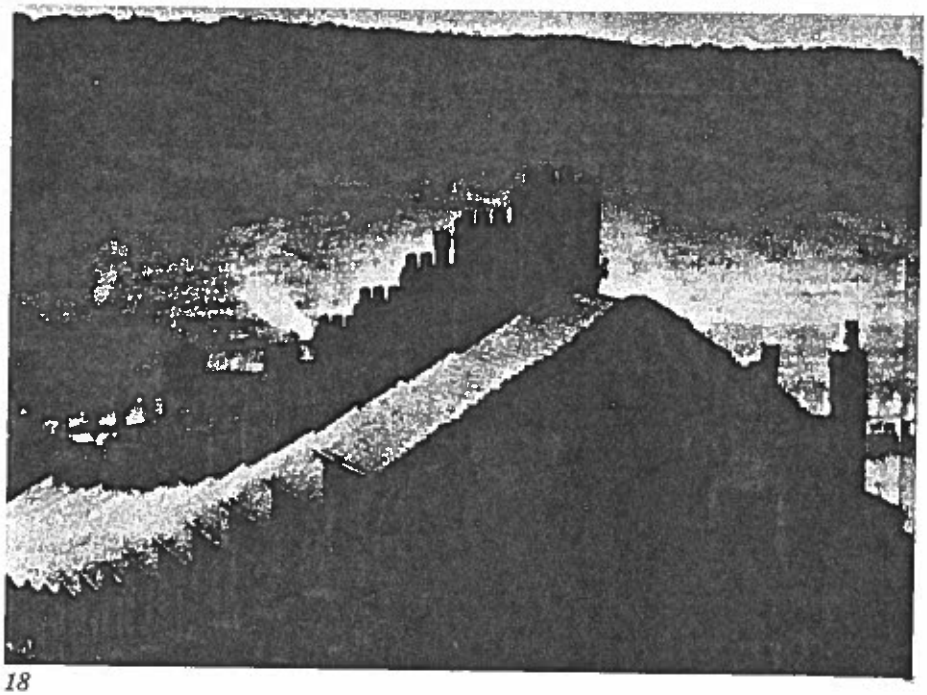

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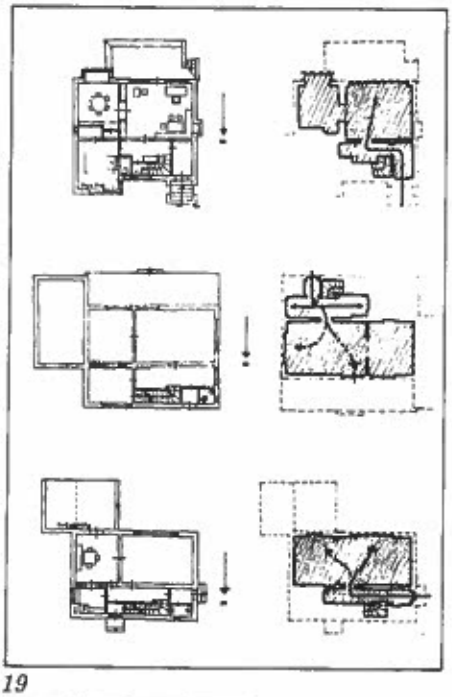

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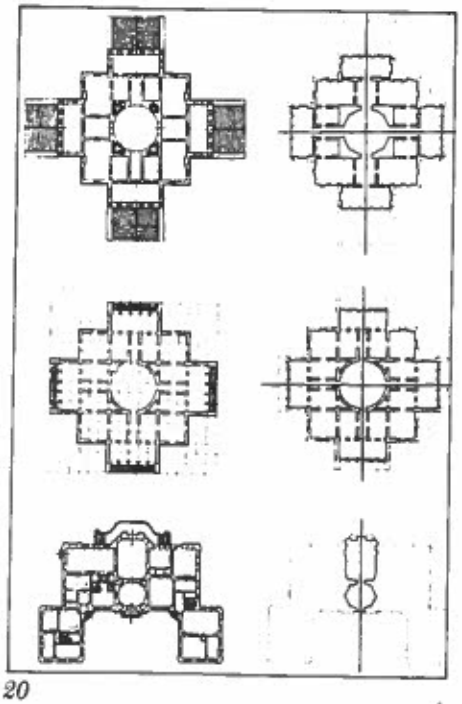

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provide the rules for architecture without recourse to precedents, without need for the historical concept of type. And, although functionalist theory was not necessarily coincident with the other two attitudes already described, all three had in common the rejection of the past as a form of knowledge in architecture. Yet each followed a different path; functionalism was mainly concerned with method, while the other two dealt with figurative space and production respectively. The unique qualities of each problem, of each precise context for which functionalism seemed to provide a unique resolution, seemed to be posed against the idea of a common structure that characterized type. Architecture was predetermined not by types, but by context itself. As an almost inevitable conclusion, architectural theories connected with functionalism deliberately rejected typology.

Paradoxically, functionalist theory, which explicitly stood against typology, also provided the basis for a new understanding of the idea of type. This consciousness of type appears in the work of architects such as Taut, May, Stam, etc., who were grouped around the CIAM congress, and can be found in a number of writings—e.g. the classic work by F. R. S. Yorke on *The Modern Flat.* [12]

The attitude perhaps becomes most explicit in the work of Alexander Klein. Klein's attempt to systematize all the elements of the single house in his *Das Einfamilienhaus* was a clear and new approach to the problem (figs. 19, 20).[13] While recognizing the value of the type as a structure underlying and giving form to the elements of any architecture, he was at the same time able to modify and explore the type without accepting it as the inevitable product of the past. In so doing, he attempted to submit the elements—identified now in terms of use—to the rationality of typology by checking dimensions, clarifying circulation, emphasizing orientation. The type seemed to lose both the abstract and obscure characterization of Quatremère and the frozen description of the academics. Housing types appeared flexible, able to be adapted to the exigencies of both site and program. For Klein, the type, far from being an imposition of history, became a working instrument.

Their starting point was the site of the Modern Movement's failure: the traditional city.

IV

Against the failure of the Modern Movement to use type in terms of the city, a new series of writings began to appear in the sixties which called for a theory to explain the formal and structural continuity of traditional cities. These saw the city as a formal structure which could be understood through its continuous historical development. From this point of view architecture was considered neither as the single artistic event proposed by the avant-garde nor the industrially produced object, but now as a process, in time, of building from the single dwelling to the total city. Accordingly, in Saverio Muratori's *Studi per una operante Storia Urbana di Venezia* the urban texture of Venice was examined, and the idea of type as formal structure became a central idea that demonstrated a continuity among the different scales of the city. For Muratori, type was not so much an abstract concept as an element that allowed him to understand the pattern of growth of the city[14] as a living organism taking its meaning primarily from its history. He explained the historical development of Venice as a concept that would link the individual elements with the overall form of the city. These types were seen as the generators of the city and implicit in them were the elements that defined all other scales; so, for example, in Venice *calli*, *campi*, and *corti* are seen as typal elements which are intimately related with each other, and each is without meaning if not considered as types in themselves.

This approach, underlining the relationship between the elements and the whole, proposed a morphological method of analysis for understanding architecture, which has formed the basis for a continued development of typological studies. In the second half of the sixties, it finds its most systematic and complex theoretical development in the work of Aldo Rossi and his circle. But this emphasis on morphology, reducing typology exclusively to the field of urban analysis, was complemented by a renewed interest in the concept of type as first postulated by Quatremère and renewed by "Typologia" by G. C. Argan.[15]

Argan returned to the origins of the concept, interpreting Quatremère's definition in a more pragmatic way and avoiding the Neoplatonism that it implied. For Argan the type was a kind of abstraction inherent in the use and form of series of buildings. Its identification, however, inasmuch as it was *deduced* from reality, was inevitably an *a posteriori* operation. Here Argan differed radically from Quatremère, whose idea of type approached that of a Platonic absolute—an *a priori* "form." For Argan it was through the comparison and overlapping of certain formal regularities that the type emerged; it was the basic form through which series of buildings were related to each other in a comprehensible way. Type, in this sense, could be defined as the "inner formal structure" of a building or series of buildings. But if the type was part of such an overall structure, how could it be connected with the individual work? The notion of type propounded by Quatremère as "something vague, undefined" provided this answer. The architect could work on types freely because there were two moments, "the moment of the typology and the moment of the formal definition," which could be distinguished from one another. For Argan, "the moment of typology" was the non-problematic moment, implying a certain degree of inertia. This moment, which established a necessary connection with the past and with society, was in some way a "natural" given, received and not invented by the form-defining artist. However, Argan gave primacy to the second, the form defining moment—that is, he did not see typology, although inevitable, as the primary characteristic of architecture. In this way he revealed his respect for Modern Movement orthodoxy. And yet, the very concept of type, as has been seen, opposed both Modern Movement ideology and the studies in design method which became its natural extension in the sixties.

If, as argued by the methodologists, architecture was the formal expression of its various requirements, and if the links between such requirements and reality could be defined, then architecture as a problem of method could be entirely resolved. Form, however, is in reality a product of an entirely opposite methodolgy—and not the result of method as was previously understood. In this sense, Ernesto Rogers, following Argan, was able to oppose the concept of type-form to the concept of methodology.[16] Knowledge in architecture, he proposed, implied the immediate acceptance of "types." Types were part of a framework defined by reality which characterized and classified all single events. Within this framework, the architect worked; his work was a continuous comment on the past, on the prior knowledge on which his work was based. According to Rogers's theory the design process started with the architect's identification of a type which would resolve the problem implicit in the context within which he was working.

Of course, the very identification of such a type was a choice by virtue of which the architect inevitably established ties with society. By transforming the necessarily "vague, undefined" type in a single act, his work acquired a certain consistency with a specific context. From this point of view, his work could be seen as a contribution to the contextualization of a more generic type. Thus, the development of a project was a process that led from the abstract type to the precise reality. In other words, through the concept of type, the architect was provided with an instrument that allowed him to undertake the design process in quite a different way than that demanded by the methodological approach. Rogers's theory in this way resembled a more traditional approach. It was Aldo Rossi who in the late sixties bound together the morphological approach of Muratori and the more traditional approach of Rogers and Argan through Quatremère. In so doing he introduced a more subtle but also problematic notion of type.

For Rossi the logic of architectural form lies in a definition of type based on the juxtaposition of memory and reason.[17] Insofar as architecture retains the memory of those first moments in which man asserted and established his presence in the world through building activity, so type retains the reason of form itself. The type preserves and defines the internal logic of forms, not by techniques or programs—in fact, the type can be called "functionally indifferent." In Rossi's idea of architecture, the corridor, for example, is a primary type; it is indifferently available

21 Catasta plan of Rome showing the area of the Porta di Ripetta, the Corso, and the Ospedale di San Giacomo degli Incurabile, 1807.

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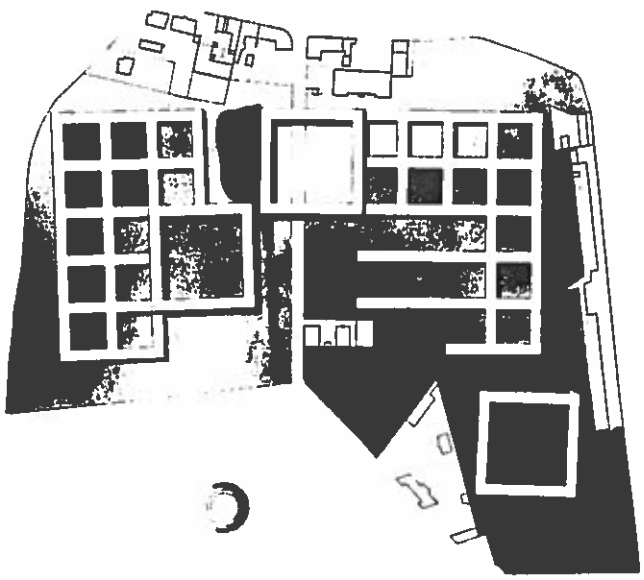
to think in terms of a possible rebirth of Quatremère's ideas, this attitude was not necessarily present in the work of his followers. They merely imitated the language of this attempted return to origins without respecting the search itself. While it is also true that the impact of the structuralist approach to the type concept has been pervasively present in a large number of projects connected with the recent Neo-rationalist movement, most of these projects confirm the existence of a new typological attitude dialectically opposed to the context in which they act.[22] However these projects present an important question. Can the same definition of type which enabled these architects to explain the growth and continuity of the traditional city in terms of its formal structure be used to propose new "types" in contradiction to this structure? That is, can such new projects be considered as strictly typological if they merely explain the growth of the old cities? In the works of the Krier brothers the new vision of the city certainly incorporates the structural component implicit in the typological approach to the old city; the city that they draw is a complex space in which the relationship and continuity between the different scales of elements is the most characteristic feature (figs. 25, 29). But they are in reality providing only a "typological view" of this city: they are not building the city itself by using the concept of type. Thus, the relationship between city and place, city and time, that was earlier resolved by types has been broken. The city that grows by the successive addition of single elements, each with its own integrity, has been lost forever. The only alternative now seems to be the *reproduction* of the old city. The concept of type that was observed in the old city is used to structure the new forms, providing them with formal consistency, but no more than that. In other words, typology today has come to be understood simply as a mechanism of composition. The so-called "typological" research today merely results in the production of images, or in the reconstitution of traditional typologies. In the end it can be said that it is the nostalgia for types that gives formal consistency to these works.

The "impossibility" of continuity, and thus of the retrieval of type in its most traditional and characteristic sense, is

24 Competition project for a residential district, San Rocco, Monza. Aldo Rossi, with Giorgio Grassi, 1966.



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emerges again in the broken mirror. Architecture, which in the past has been an imitative art, a description of nature, now seems to be so again, but this time *with architecture itself as a model.* Architecture is indeed an imitative art, but now imitative of itself, reflecting a fragmented and discontinuous reality.

The architecture of Rossi initially seems to stand against this discontinuity. For here the unifying formal structure of type disappears. In spite of Rossi's strenuous defense of the concept of type in the construction stage of his work, a subtle formal dissociation occurs and the unity of the formal structure is broken. This dissociation is exemplified in Rossi's house, where the almost wall-like structure of the plan is connected with the pilotis below and the vaulted roof above. There is an almost deliberate provocation in this breakdown and recombination of types. In a highly sophisticated manner, Rossi reminds us of our knowledge—and also our ignorance—of types; they appear broken, but bearing unexpected power. It might be said that a nostalgia for an impossible orthodoxy emerges out of this architecture. In the work of Rossi, and even that of Venturi, a discomforting thought arises: was it not perhaps at the very point when the idea of type became clearly articulated in architectural theory—at the end of the eighteenth century—that the reality of its existence, its traditional operation in history, became finally impossible? Did not the historical awareness of the *fact* of type in architectural theory forever bar the unity of its practice? Or to put it another way, is not the theoretical recognition of a fact the symptom of its loss? Hence the extreme difficulty of applying the concept of type to current architecture, in spite of our awareness of its value in explaining a historical tradition.

Changes in techniques and society—and therefore in the relationship between an institutionalized profession and its architectural product—have led to a deep transformation in the old theoretical patterns. The continuity in structure, activities, and form which in the past allowed for the consistent use of types has been seriously broken in modern times. Beyond this, the general lack of faith which characterizes the present world in any collective

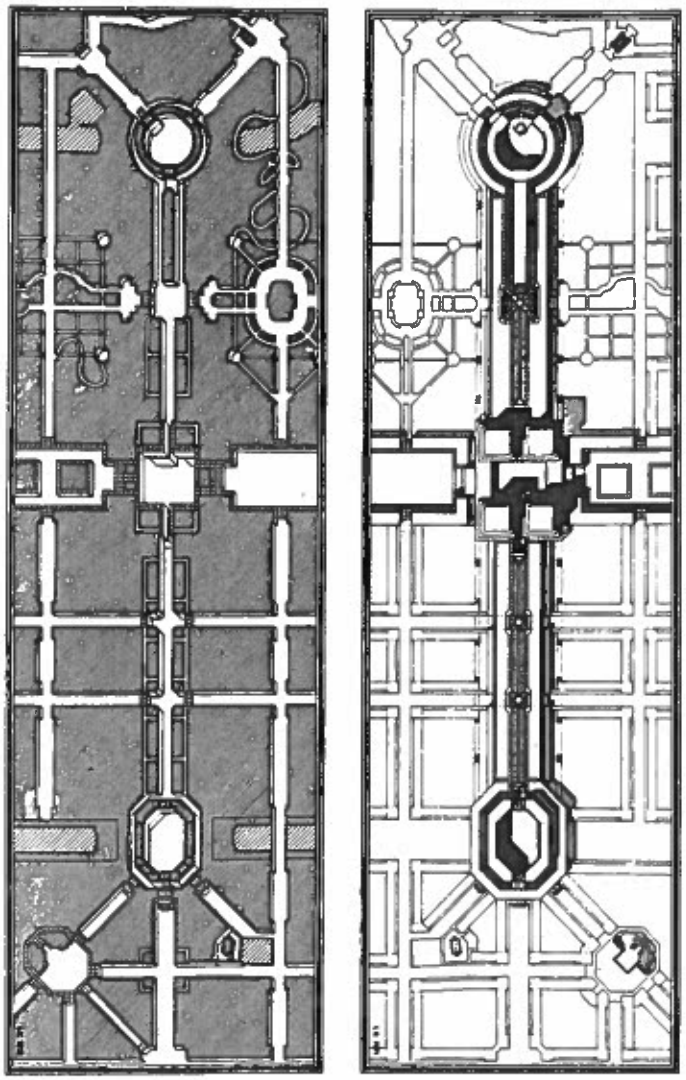
25 Leinfelden project. Leon Krier, 1971.

and widely shared opinion naturally does not support the fixing of types.

It seems that type can no longer define the confrontation of internal ideology and external constraints. Since formal structure must now support itself without the help of external circumstances (techniques, uses, etc.), it is hardly surprising that architecture has taken heed of itself and looked for self-protection in the variety of images offered by its history. As Hannah Arendt has written recently, "something very similar seems at first glance to be true of the modern scientist who constantly destroys authentic semblances without, however, destroying his own sensation of reality, which tells him, as it tells us, that the sun rises in the morning and sets in the evening."[23] The only sensation of reality left for architecture today resides in its history. The world of images provided by history is the only sensible reality that has not been destroyed by scientific knowledge or by society. The broken types are the "authentic semblances" of this reality, broken through the long process that has been described briefly in these pages. Fragmentation seems to be in these days the concomitant of type; it is, in the end, the only remaining weapon left to the architect after having given over to the architectural object its own single identity, while forgetting, very often, the specificity of the work of architecture.

The object—first the city, then the building itself—once broken and fragmented, seems to maintain its ties with the traditional discipline only in images of an ever more distant memory. Thus, the culmination of the process beginning in a classic, post-Renaissance condition of form-type is its total destruction. The traditional typological approach, which has tried to recover the old idea of architecture, has largely failed. Thus, perhaps the only means architects have to master form today is to destroy it.

Ultimately, the question which remains is, does it make sense to speak of type today? Perhaps the impossibility of directly applying old definitions to new situations has been demonstrated, but this does not mean, however, that the



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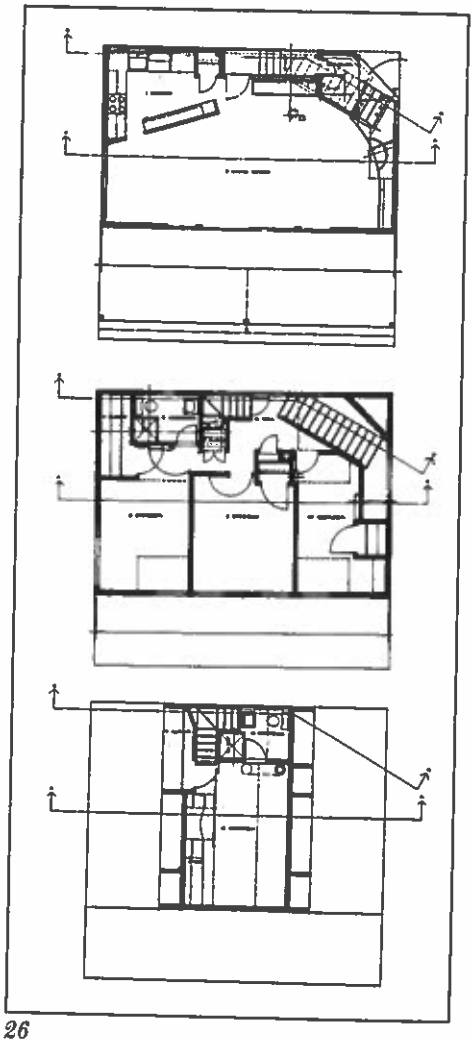
26 Trubeck house, plans. Venturi and Rauch, 1970.

27 Trubeck and Wislocki houses, Nantucket, Massachusetts. Venturi and Rauch, 1970. Elevations of Trubeck house.

28 House project, "Casa Baj." Aldo Rossi, 1970.



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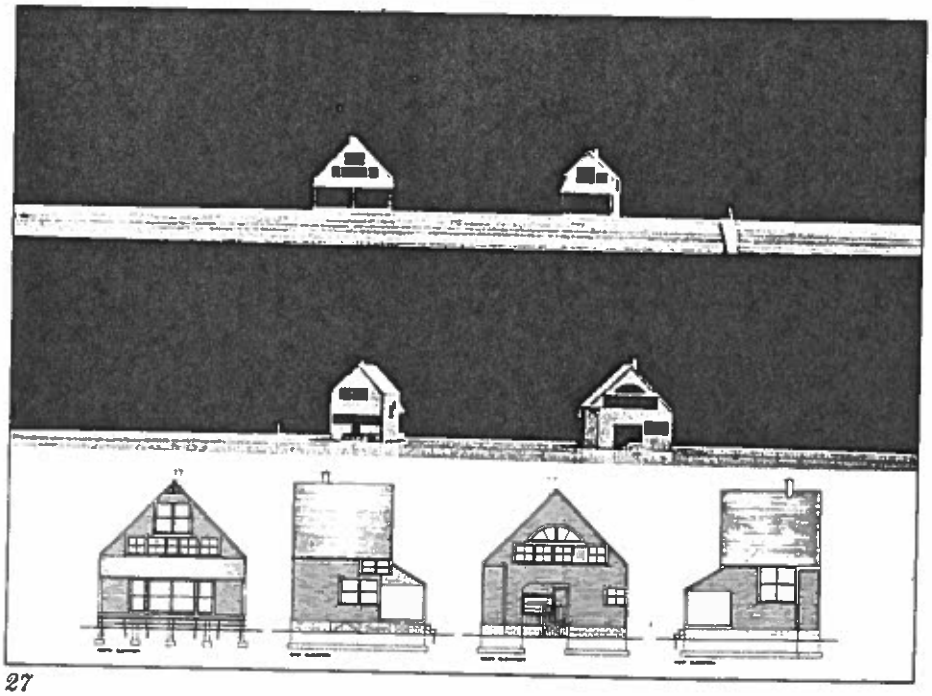

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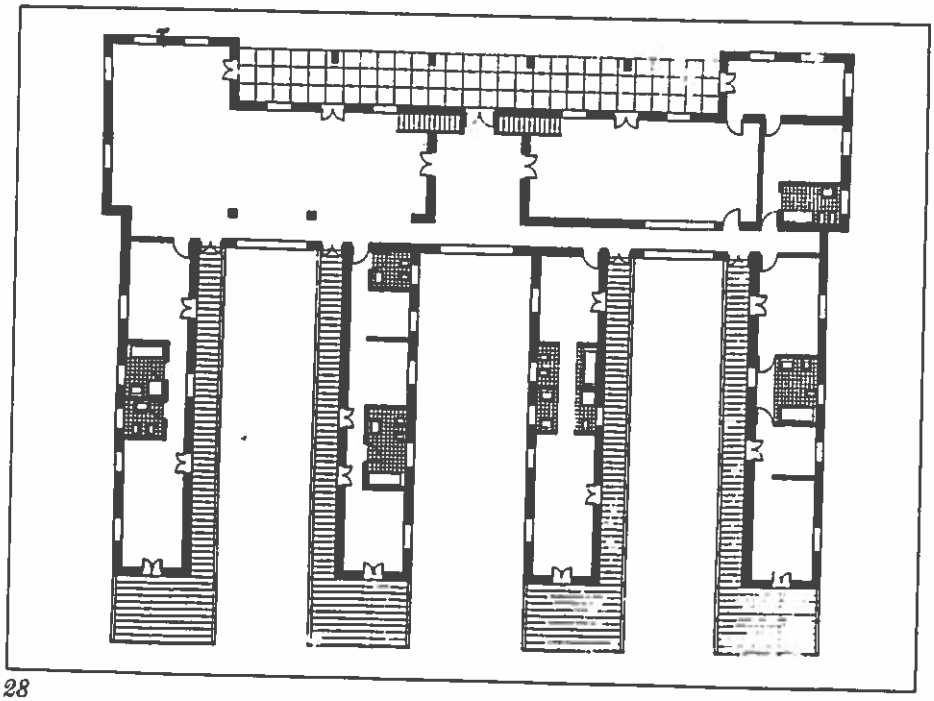

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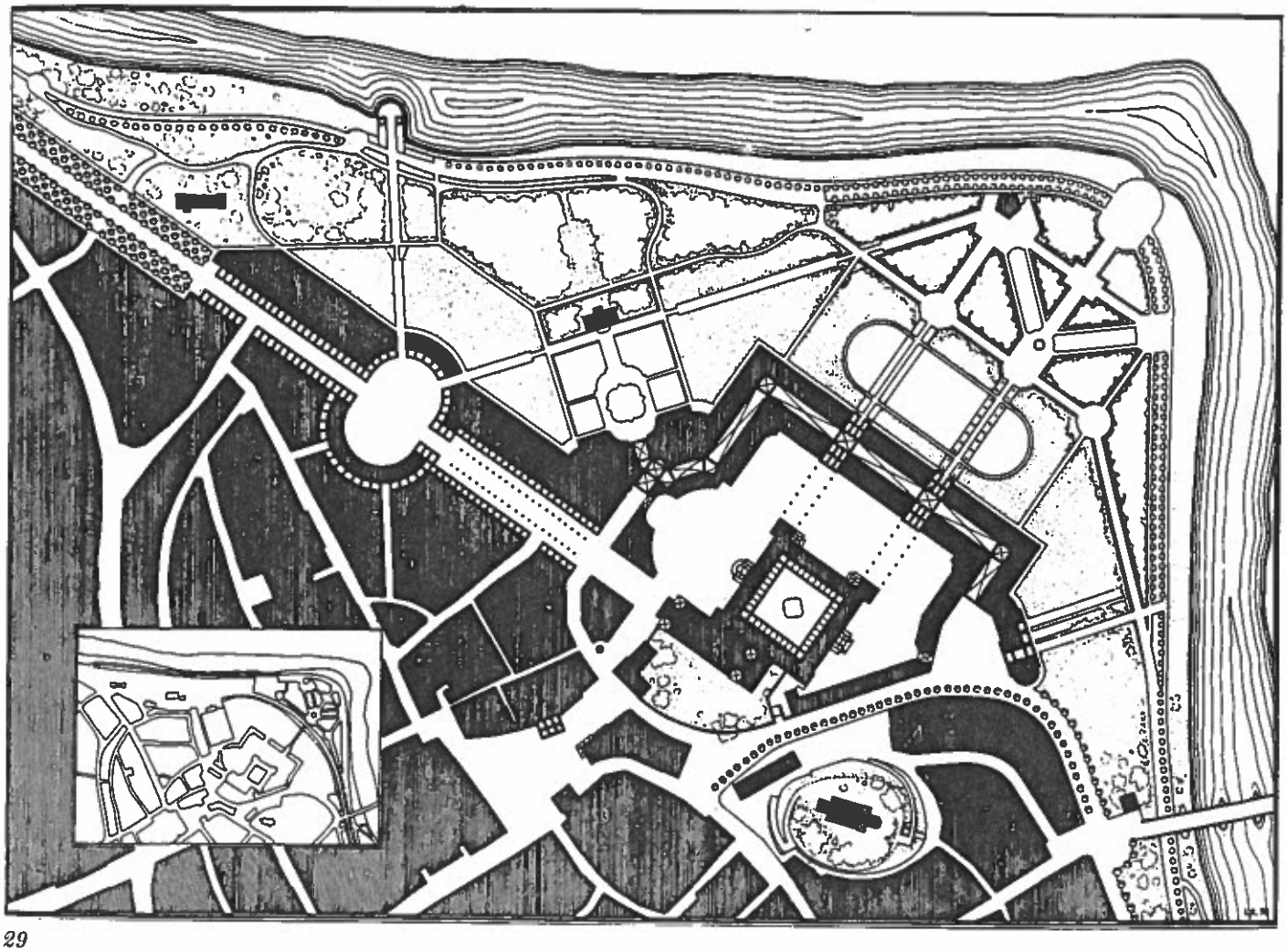
29 Echternach project. Leon Krier, 1970.



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interest and value of the concept of type is thereby denied completely. To understand the question of type is to understand the nature of the architectural object today. It is a question that cannot be avoided. The architectural object can no longer be considered as a single, isolated event because it is bounded by the world that surrounds it as well as by its history. It extends its life to other objects by virtue of its specific architectural condition, thereby establishing a chain of related events in which it is possible to find common formal structures. If architectural objects allow us to speak about both their singleness and their shared features, then the concept of type is of value, although the old definitions must be modified to accommodate an idea of type that can incorporate even the present state, where, in fact, subtle mechanisms of relationship are observable and suggest typological explanations.

Notes

1. See the way in which skyscrapers have been grouped by W. Weisman in his article "A New View of Skyscraper History," *The Rise of an American Architecture*, Edgar Kaufmann, Jr., ed. (New York: The Metropolitan Museum of Art, 1970).
2. Such an approach can be found in the work of C. Norberg-Schulz, *Intentions in Architecture* (Cambridge, Mass., 1963) and *Existence, Space, Architecture* (London, 1971). For him "centralization is the factor common to all domes."
3. There are no substantial differences between Renaissance and nineteenth century domes. They must be considered as single types because of their relatively similar image.
4. See Bruno Zevi's arguments in *Architettura in Nuce* (Venice, 1960), p. 169.
5. Brunelleschi's intervention in Santa Maria del Fiore, Florence, is an evident example.
6. Quatremère de Quincy, *Dictionnaire Historique de l'Architecture* (Paris, 1832), pp. 629–30. A complete study of Quatremère's definition and its relationship with the social and ideological background can be found in Anthony Vidler's article in *Oppositions*, 8, Spring 1977.
7. Ibid., p. 630.
8. J. N. L. Durand, *Précis des Leçons d'Architecture*, XIII (Paris, 1805).
9. J. N. L. Durand, *Recueil et Parallèle des Edifices de Tout Genre, Anciens et Modernes*, IX (Paris, 1801).
10. See Walter Gropius, *Scope of Total Architecture* (New York, 1955).
11. Bruno Taut, *Modern Architecture* (London, 1929).
12. F. R. S. Yorke, *The Modern House* (London, 1934); *The Modern Flat* (London, 1937).
13. Alexander Klein, *Das Einfamilienhaus* (Stuttgart, 1934). The renewed interest in current years by the typological problem has been responsible for a certain rediscovery of Klein's works. A clear example of this trend would be the book by G. Grassi, *La costruzione logica dell'architettura* (Padua, 1967).
14. Saverio Muratori, *Studi per una operante storia urbana di Venezia* (Rome, 1960). Although Muratori worked on the subject in the fifties, the essay was not published until later, first in the magazine *Palladio* in 1959, and later as a book by the Istituto Poligrafico dello Stato (Rome, 1960). Muratori's thoughts were based on a typological idea as the key concept for understanding the growth of the city, but his own intellectual approach, rather idealistic and obscure, did not facilitate the formation of a school. Muratori understood the rationality implicit in the concept of type, but he failed to produce a systematic explanation of it. In spite of his efforts it remained an intuition born from an imprecise and spiritualistic way of thinking. Muratori's role and a clear introduction to many of these problems can be found in an article by Massimo Scolari, "Un contributo per la fondazione della scienza urbana," *Controspazio*, no. 7–8, 1971.
15. The already classical "Quatremère quotation" comes from G. C. Argan, who introduced the subject in his article on "Tipologia" in the *Enciclopedia Universale dell'Arte* published by the Istituto per la Collaborazione Culturale, Venice. Later the text was reprinted in the book *Progetto e Destino* (Milan, 1965).
16. See E. Rogers, "Esperienza di un Corso Universitario," *La Utopia della Realtà* (Bari, 1965). See also Oriol Bohigas's article "Metodologia y Tipologia," *Contra una Arquitectura adjetivada* (Barcelona, 1969) which follow Rogers's paths.
17. There exists a large body of writing on Rossi's work and his idea of type. One complete book with a key to both the writings and the criticism about it is Rossi's *Scritti, scelti sull'architettura e la città*, ed. Rosaldo Bonicalzi (Milan, 1975). Although a direct reading of the texts is always the best way to know the work, I believe that the articles of E. Bonfanti, "Elementi e Costruzione. Note sull'architettura di Aldo Rossi," *Controspazio*, no. 10, 1970; and M. Scolari, "Un contributo per la fondazione della scienza urbana," are of particular interest; also the book of Vittorio Savi, *L'architettura di Aldo Rossi* (Milan, 1976) is of value to Rossi students. Moreover it is also important in studying Rossi to pay attention to the work of people close to him, like Carlo Aymonino (see, for instance, Aymonino's contributions to *Considerazioni sulla morfologia urbana e la tipologia edilizia* (Venice, 1964); *Rapporti tra morfologia urbana e tipologia edilizia* (Venice, 1966); *La formazione del concetto di tipologia edilizia* (Venice, 1965); *La città di Padova* (Rome, 1970). On Giorgio Grassi, see L. Semerani, G. U. Polessello, et al., *La Costruzione logica dell'architettura* (Padua, 1967). Finally a good introduction to the problems surrounding Rossi and the *Tendenza* is Massimo Scolari's article "Avanguardia e Nuova Architettura," *Architettura Razionale* (Milan, 1973).
18. Alan Colquhoun, "Typology and Design Method," *Arena, Journal of the Architectural Association*, June, 1967; republished in Charles Jencks and George Baird, *Meaning in Architecture* (London, 1969).
19. It is not surprising that an architect as preoccupied with communication as Robert Venturi has paid special attention to Colquhoun's article. Cf. *Learning from Las Vegas* (Cambridge, Mass, 1972).

20. George Kubler, *The Shape of Time* (New Haven, 1962), p. 32.
21. Cf. his lecture, "Form and Design," *Architectural Design*, April, 1961.
22. Very often the typological analysis is used primarily as a term of reference to underscore the virtue of the proposed design.
23. Hannah Arendt, "Reflections: Thinking," *The New Yorker*, November 21, 28, and December 5, 1977.

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9 Reprinted from Sir Arthur Evans, *The Palace of Minos at Knossos*, Vol. I (London: MacMillan & Co., 1921).
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24 Reprinted from *Controspazio*, 10, October 1970.
26, 27 Reprinted from Denise Scott-Brown, Steven Izenour, Robert Venturi, *Learning from Las Vegas* (Cambridge, Mass.: The MIT Press, 1972).
28 Reprinted from *Arquitecturas Bis*, 4, November 1974.