

A Journal for Ideas and
Criticism in Architecture

Published for The Institute
for Architecture and Urban Studies

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Francesco Dal Co

Translation by Diane Ghirardo

The will to power as knowledge

Criticism of the concept of the 'true world' and the 'apparent world'. Of the two, the first is merely fictitious, formed out of merely imaginary things.

'Appearance' belongs also to reality: it is a form of its being; that is, in a world in which there is no one being, it is possible to create a certain, calculable, world of identical cases only through semblance: a rhythm in which observation and confrontation, etc., are possible.

'Appearance' is a world accommodated and simplified, which our practical instincts have developed . . .

The world, if our condition of living-in-it is left out of consideration—the world that we have not reduced to our own being, to our own logic and psychological prejudices—this world does not exist as a world 'in itself'; it is essentially a world of relationships: in particular circumstances it has a different face from every different point of view; its being is essentially diverse in every point.

F. Nietzsche, "Posthumous Fragments, 1888–1889" Opere, Vol. VIII.¹



1 G. Grosz and J. Heartfield at the Dada Exhibition, Berlin 1920.

Part One

“Appearance,” wrote Nietzsche, “belongs also to *reality*; it is a form of its being,” allowing identical events to be calculated through their “semblance.”²

The study of contemporary architecture might well take this text as its motto. For by asserting the “reality of appearance,” Nietzsche allows us to see that the formal “images” produced by the act of designing might be separate entities in themselves, autonomous from, yet equally valid as the procedures that engendered them. The traditional way of analyzing the development of architectural culture has emphasized a “reality” that has to be sought beneath the “surface” of events, or has seen the architectural form as a determined response to another reality based in economics, politics, or society; in all cases it has tried to tie an appearance back to its presumed cause. Following Nietzsche’s argument, however, it should be possible to concentrate on just this appearance—the *image* of architectural design—as a reality of its own. Such a “reading,” carefully conducted, of the images or formal manifestations of architecture might provide a more certain account of how architectural culture exists than any reconstruction of how that form was produced by the various modes of design activity.

If Nietzsche’s proposition raises these historiographical questions, it has no less serious implications for understanding the activity of architectural design itself. In fact, it opens the possibility of overturning the ideological mechanisms by which form and content are commonly related. At the same time it indicates the scope of a new and different critical responsibility toward design.

Such a new criticism is urgently required, not so much as a response to the comprehensive transformation of architectural culture in the recent past, but more fundamentally because of the backwardness of the different branches of activity that comprise this culture. These branches—criticism, history, design, and so on—have, through the vicissitudes of the avant-garde, ever sought to reinforce their own internal, stabilizing ties. In this process a mutual dependency has been developed between *criticism* and the *work* of architecture. The backwardness

of criticism can be traced to this relationship, which has insured the absolute impermeability of architectural culture in the face of an increasingly specialized critical function. Further, the complete interdependence of criticism and design has meant that it has been impossible to identify any autonomous “appearance” by which to measure the history of contemporary design practice; all the images we possess of its development, rather than clarifying its processes, end up by simply *representing* already determined values. These values are themselves determined by the creative and designing will. Thus the images which architecture provides of itself coincide precisely with these values, as their extensions and projections; they possess no autonomy of their own, and therefore no *appearance*. In this sense, Nietzsche’s understanding of “appearance” is very close to the meaning which Wittgenstein gives to the word “*bild*” or “image,” in the *Tractatus*: “the image represents what it represents, independently of its own truth or falsity, by means of the form of representation.”³ Here the word “*bild*” and the word “*bilden*” are related, as the “form” or “image” is to the “process of formation.” The *bild* or appearance of the thing, then, can never be a microcosmic metaphor for the entire world, never a total reflection of all the values of this world (as traditional idealistic aesthetics would have it). It can represent only the precise moment in which form is given to one small particle of this world. The appearance of a thing, rather than revealing mechanically the ideology of its production, exists simply as the place where its absolute autonomy from the act which produced it is revealed. Image and act of production are separate, but equal. Whereas idealism, and some forms of deterministic economism propose that the world is a unity, and its meaning is divulged in the unitary images that are produced out of it, both Nietzsche and Wittgenstein see the world as fundamentally *divided*; in such a world all acts—of production, of formation, of appearance—can only express their “own” reality, never those of others. This is what is meant then, by Nietzsche’s statement that “appearance” belongs to reality; neither caused by, nor an effect of, reality, appearance is simply one reality among all realities. Accordingly it can only be measured, read, and *known*, if it is seen as autonomous of all those “realities” to which

traditional historiography in general, and architectural ideology in particular, have always tried to tie it back. Thus when the form of representation is simply seen as a process that mechanically represents ideology it becomes unreadable for itself, and thereby unreadable as its own form of reality. 3

While this argument might seem extremely abstract in the context of an architectural discourse, it becomes important in questioning the tie between the act of production (designing) and the form of representation (the image) which has bound architectural criticism and history for nearly two centuries. No forms of historical analysis have, up till now, been able to resist the tendency to identify basic processes, phenomena which are in fact no more than the visible manifestations of the detritus left in the wake of a whole complex of different processes.

Previously, the study of contemporary architectural development has fallen into two equally dangerous modes: the first has tended to recognize only quantitative measurements and statistically demonstrated trends which deny the validity of any variations in appearances as superficial. The second has been content to “enrich” the work of architecture by critical allusion and explanation, confirming a solidarity between design and criticism. The problem is more complex. If anything it demands a step backward to inquire into the relationship that exists among the “forms of representation” and the infinite multiplicity of “appearances.”

In such an inquiry, the first question to be asked is whether the process of the development of modern architecture was not in fact coincidental with a reinforced attempt to destroy any autonomy of the “image,” or better, with an attempt to mystify the nature of architecture as a representation of a reality that might “represent a possibility of the existence or non-existence of things.”⁴ That is, the “images” of modern architecture were directed toward reaffirming a causal link with the act of designing, thus confirming its “truth.” Through criticism, this mechanism has been extended to apply to the entire realm of production and its products. Thus as modern architecture

4 has proposed successive “images” of itself, through a process that has concretized its own projected will, so in the end architectural objects have been denied any real autonomy; their life has been concealed within the act that produced them; in this act the object has been “privately” dissolved. So conceived, the architectural image no longer explains the complexity of the process that has carried all the passages of production to their fulfillment; rather it becomes the place where contradictions are concealed. Architecture has thus developed as a struggle against the measurability of its own appearances; the form it produces is a tangle of “images” calculated to mythicize its own origins. In the grand, extreme syntheses of “radical” modern architecture, even as in the more ambitious projects of the avant-garde, the relation between *image* and *object* has undergone a definitive transformation, an explicit artistic sublimation: the “image” is a complex form constructed to lay a false trail.

Is it possible to come to terms with this situation, to overturn it without resorting to any crude operations of critical leveling? Do we have at our disposal any instruments of historical analysis with which to reconstruct the process of modern architectural development, or any critical tools sufficiently evolved to disassemble its mechanism? The reply is necessarily negative: criticism and history seem to have conspired to create a situation entirely hostile to such an act. Criticism has too often done no more than prop up with theory the process of architectural development, depriving it in this way of any real liberty. To think of constructing a *genealogy* of the products of contemporary architecture is thus difficult. Yet it remains a worthwhile undertaking; especially if begun modestly, with limited studies, resisting the temptations of “the big picture,” the laying out of which has so often led criticism to blunt its own analytical weapons.

The problem, then, is to re-establish critical *distance*, and to recognize the specificity of the undertaking; to break, both in the domain of history and of criticism, these alliances which were so firmly cemented in the “age of manifestos.” If the architectural image has as its predominant concern “construction in order to conceal,” it can in fact

be analyzed from two parallel points of view: on the one hand, as a historical construction in itself, that is to say, as a process of specialization, the solution and perfection of always more refined instruments of camouflage; on the other hand, as the history of concealed objects, of unacknowledged secrets. The genealogy of images would thus coincide with the practice of these two histories, the one speaking of the resistance of architecture to revealing the modes of its own projective activity, the other of the struggle to preserve such activity outside the multiple realities of production. Interweaving these two histories, while at the same time placing them side by side with the specificity of architectural products, should also enable us to understand how the objects that architecture produces are themselves destined to respond, not to any “state of things” as they are, but exclusively to the design activity that contains them. They do not enjoy a public life: the more they struggle against the inevitable loss of meaning and of values, the more they are revealed as destined for a private existence, to remain prisoners of the creative act that formalized them.

Obviously such a hypothesis is only valid for a few distinct points in the modern tradition; but the closer we come to the present, the more appropriate it seems as a description of the enigmatic experimentation of those rare but original episodes of architectural “research” in Italy and the United States—a “high” research that both resists that tendency of current work to borrow its rationale from production and “marketing” and at the same time falls easily into subjectivity, speaking only of the relationship between what remains of design as artistic creation and the impossibility for any product to display an autonomous function in reality. In both cases architecture seems to have lost the way of pursuing a *real* specialization of its own function and its own role.

Critical lucidity alone is not enough to clarify such a situation. First there must be an indictment of the complicity, cemented by tradition, between criticism and design. This complicity has succeeded in making the limits of architecture the same as those of criticism—they share the same crisis. A preliminary act of separation is there-

fore necessary, detaching architecture from the diverse places whence it comes “already spoken,” interposing a screen against the reverberations alternatively set up by criticism and design. Not that this is an especially original demand: it is enough to follow and radicalize an intuition that is already found in Adolf Loos, when he maintains that the proper organization of labor coincides exactly with the definition of a modern style. Any *research* into that coincidence, or into the fact that criticism replaces design with theory, is useless: “we already possess the style of our time. We have it wherever the artist, which is to say every member of this association [the Werkbund], has not yet thumbed his nose . . . Are these things beautiful? Do not ask me that question. They are in the style of our time and consequently proper.”⁵

In the “modern tradition” the Werkbund represents only one of the moments in which the complicity that prevails over the development of architectural research was undermined. But at the same time with the Werkbund was extinguished one of the most radical hopes of contemporary culture: that of endowing its own artistic images, its own objects, with some power over reality. As Loos himself warned, the definition of an organic mode of production does not reside in an organic stylistic project, or vice versa. The division of labor and the process of specialization contain within themselves rationales of a different kind: they both deny criticism as a theory of the specificity of architectural work as well as a dream of artistic “autonomy.” If criticism tends, as it develops the theory of the discipline, to attribute universal values to something which is only a “product of its time,” in the same way, the history of the development of contemporary avant-garde architecture has proposed similar values for itself through an increasingly intimate appropriation of its own products, denying them autonomy in the world of commodities, while subsuming them exclusively within the private domain of the creative game. In the face of this situation, Loos’s words sound almost prophetic: “no one has yet attempted to insert his hands clumsily into the rapid wheel of time without having them torn off.”⁶

Seen in these terms the problem of the relation between

design and criticism can now be posed in a different way: it is a question of separating the act of *thinking* from that of *understanding*, although, in the end, the one can never be true “thinking-designing,” nor the other true “understanding-explaining.” Both moments are characterized by profound limits, limits that must be rediscovered precisely because tradition is so busily engaged in erasing them. This implies a re-thinking of the specific languages of criticism and design: those languages at present so confused, and even more so now that architectural reasoning seems to coincide exclusively with a re-thinking of modern languages in general. Both require a specialization that leads to their *incommunicability*.⁷ Only such a specialization of critical language can clearly place contemporary architecture before its own responsibilities; only a condition of incommunicability can guarantee the clarification of all the implications of the continual return of contemporary architecture to a mediation on the tradition of modern language. Such a mediation is in fact the true *image* of the nostalgic condition of architecture, and it is exactly this that criticism at present tends to mystify. In reality, of course, nostalgia is the instrument used by design against its own *decadence*—a refuge against the historical destiny of its own products. Historiography has further transformed nostalgia into a theoretical weapon against decadence, thus helping to separate architecture *from* history. The history of the continuity of the “tradition of the new,” the great historical syntheses of Victorianism or neopositivism, have constructed a veritable bastion against the recognition of this state of decadence, a state that we can define in Nietzsche’s terms: “at a certain point, with decadence, an *inverse difference*, a diminution, enters the consciousness: the memory of strong moments in the past depresses any feelings of present pleasure—this confrontation now *enfeebles* pleasure. . . .”⁸

Secure, then, behind its wall, nostalgia becomes “revival” and “isms,” the ideology of the organicity of labor and design—once again the search for style in the strongest sense of the word. Under cover of this same wall lives the avant-garde: and, more often than not, its contribution raises nostalgia to the level of morality. Indeed, the his-

6 tory of the avant-garde is that of the struggle against the “weakening of pleasure” by the revival of the moral imperative—a struggle that finds its mature expression in those modern versions of the “theory” of the death of art, a road repeatedly traveled by criticism and the militant arts. Such a theory represents at once the culmination of the nostalgic condition and the most radical expedient for removing art from its own historical determination: to postulate the very death of art not only reveals all the vitality of art itself but also expresses the strongest nostalgia for a pure, original condition, for the mythical fullness of an artistic activity able to reconcile, by exorcism, the opposites of beginning and ending. It is, besides, an act of rebellion against that profound component of modern culture that still develops outside the realm of the avant-garde; and an act aimed at removing all the tragedy from that desperate desire for pleasure which finds its ultimate expression in Kafka, where “pleasure—that which pleases without calculation, against every calculation, being the attribute or emblem of sovereign being—has death as both its means and its sanction.”⁹ The death of art thus becomes the radical form of a nostalgic pleasure. This can be said only by criticism; architecture can speak of it neither in architectural language nor in terms of pleasure. This explains the contemporary “return” to the avant-garde and its languages; the myth of that state is the false past of today, even while, in reality, the epoch of the avant-garde appears ever more distinctly an era of decadence, of the sublimation of the critical turning point in the parabola of modern art.

The development of a different critical attitude implies, then, the refusal of that sublimation and the unveiling of the mechanisms of nostalgia. Nothing could be further removed from the attitudes of those critics who would assemble new “catalogues” to fix the consoling image of modern architecture as the result of structural continuity. Nor is there any longer a place for new “isms.” With the knot that binds criticism to design finally untied, and without the aid and support of historiography, the route taken by modern architecture will probably look very different; less reassuring perhaps, but certainly richer in implications. The development of contemporary architecture

might well have to be confronted not as an *Ursprung* but a *Herkunft*: not as an “origin” but as a “stock,” torn, divided, and broken.

In architectural culture, writing and language have tended to establish themselves for reasons of self-defense, to reinforce their own certainties, to conceal their own irreconcilable differences: indeed to avoid an internal fight. Tradition has presented itself as a bounded and finite stage set, a reassuring space in which architectural culture can move, a backdrop against which the culture can aspire to see itself, as if respecting an ancient pact of alliance. In reality, however, the space in which we are now obliged to move is quite different: for us, “the world, has once more become *infinite*; we can no longer escape the possibility that it *contains within it infinite interpretations*.”¹⁰ From this stems that perennial insecurity where criticism simply reflects the infinite variability of the data organized by history, and the impossibility of taking refuge in it. In Michel Foucault’s words, “‘Effective’ history differs from traditional history in being without constants. Nothing in man—not even his body—is sufficiently stable to serve as the basis for self-recognition or for understanding other men . . . Necessarily we must dismiss those tendencies that encourage the consoling play of recognitions. Knowledge, even under the banner of history does not depend on ‘rediscovery’, and it emphatically excludes the ‘rediscovery of ourselves’. History becomes effective to the degree that it introduces discontinuity into our very being—as it divides our emotions, dramatizes our instincts, multiplies our body and sets it against itself. ‘Effective’ history deprives the self of the reassuring stability of life and nature, and it will not permit itself to be transported by a voiceless obstinacy toward a millennial ending. It will uproot its traditional foundations and relentlessly disrupt its pretended continuity. Knowledge is not made for understanding but for cutting.”¹¹

It was not by chance that we spoke of a “critical insecurity” earlier: precisely because the problem is to “uproot” and to “relentlessly disrupt” every pretense to historical continuities, even those of criticism itself. Only this kind

of “effective history” can catch the “reality of appearances,” measure and calculate what the image represents or hides, clarifies or mystifies, through the “form of representation” at the moment in which it becomes a private end, locked in the myth of creativity.

Part Two

Until now we have insisted principally on two concepts: the need to reconsider the relation between criticism and work, and the significance of the architectural “image.” The discourse has remained at a general level; but it is of course possible to disentangle some of its aspects in *practice*. To this end, we will consider two objects side by side: the architecture of Aldo Rossi, and the criticism of that architecture presented in the recent book by Vittorio Savi on Rossi’s work.¹² Both the character of Rossi’s work as well as the implications of Savi’s criticism exemplify an attitude that is substantially different from the “tradition” we have outlined above. Yet ambiguities remain. In the first place, Savi’s book constitutes a kind of “written extension” of the architecture that it examines. We are again presented with a situation of osmosis, where the boundaries between work and criticism are not easy to identify, although it must be said that the specific way in which the connection is made is no less original for this. Secondly, Savi’s book does not fall easily into a predetermined *genre*: valuable enough as literature, it nevertheless occupies a place halfway between essay and biography. And the obvious question is to what extent does this trespassing between genres clarify the critical position? This question is neither entirely formalistic nor in any sense marginal: for, according to which stance is taken by the writing there results a *different* relation with history and, more importantly, with the object under consideration. Thus biography privileges the place of (we are tempted to say, the relationship with) the author, while criticism turns its attention primarily toward *images*. Criticism is confronted with the autonomy of these images, it investigates *appearances*. Biography, as a part of a concrete history, calls for different analytical instruments, although it still requires distance. Both genres nevertheless belong to the realm of “effective history” to the extent that they present themselves as separate and distinct modes of analysis.

In the case of Savi’s book and Rossi’s work we are therefore faced with a double ambiguity: an apparent “ambivalence” on the part of the critic, which seems to be a typical consequence of what we have defined as the reciprocal reverberations between work and criticism; and a mixing of genres within the writing itself. These two questions are of course inevitably related; thus we might almost say that for Savi it is the architecture of Rossi itself which has erased the borders between the two critical attitudes, overcoming distinctions between genres. This complicity is well understood by Savi; rather than offering any “real” conclusion to his book, he is content to end on a methodological note: “the successes of the critic are the same as those of the author,” he writes, “but, equally, they share the same shortcomings.”¹³ To what extent then does this book clarify the intrinsic characteristics of Rossi’s work, its implications and motivations, and, conversely, to what degree does Rossi’s architecture condition Savi’s text? Can we discuss both works with the intention of isolating their implications for those “general laws” we spoke of earlier? To answer these questions, the objects of our consideration must first be clearly separated: on the one side, the written text; on the other, the architectural text. The superimposition of the two will then help us to understand their basic coincidence.

The work of Aldo Rossi displays in a very particular way the relation of the architect to his own intellectual condition. And what is important here is not so much how this relationship might clarify the more general historical condition that distinguishes such a sector of intellectual work as the architectural, but its basic *subjectivity*. Certainly Savi tackles it in this way, as he traces the “traumatic” journey of the architect. But precisely as a result of mingling biography and criticism, Savi seems to lose sight of the basic reasons for focusing attention on that relationship in the first place. As a result, while the complexity of the subjective motivations that inform Rossi’s design activity is well delineated, and while the psychological links between existential conditions and artistic activity appear clearly, an important difficulty remains. Only the reconstruction of the relation between architect and work as process would have allowed the most relevant problem

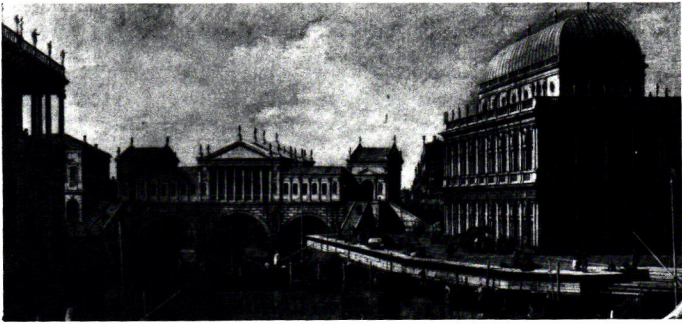
8 for architectural criticism to have been raised: that is, the problem of the cutting of the umbilical cord between architect and completed design, between invention and the work. This is the moment that signifies the acquisition of full autonomy on the part of the “Bild,” when the *image* opens itself to a multiplicity of interpretations, willingly running the risk of assuming “innumerable meanings.”¹⁴ The individual “traumas” of the architect can then be considered rather as the consequences, on a subjective level as well, of this detachment; they do not produce it but are in some way its product. It is this distinct fracture, then, which seems to be the true *form* of the relation between the architect and his creation. In the case of Rossi’s work this affirmation can be stimulating and rich in its consequences for critical understanding: in one direction it can help to explain the problem of the linguistic *simplification* that seems to characterize his architecture; in another it can help to clarify his *narrative vocation* and the vein of *nostalgia* in his work, themes which are not always so clearly in evidence.

The architecture of Rossi makes use of an equivocation that is difficult to isolate: this consists in a *redundance of simplicity*.¹⁵ What does this superabundant will toward simplicity signify? It is above all ambiguous, and beyond this, it *insists* on demonstrating and alluding to something that does not itself precisely coincide with the essence of simplicity. And indeed Rossi himself affirms, “in my architecture progress does not and indeed cannot exist; there is only a process of descriptive clarification of my idea of architecture.”¹⁶ We can thus think of the clarity or “simplicity” of Rossi’s language as the product of this basic attitude, a will to “narrate in clear terms.” His simplicity is therefore the way in which the ambiguous nature of such a will manifests itself: ambiguous, because it is based on a “renunciation” as a means of affirming a more fundamental “possession.” His renunciation consists in negating any possibility of progress in favor of the simple description of the eidetic process; his possession consists in affirming—also through “narrative” elements—the radical *unity of meaning* in the products of his artistic activity.

Architecture, then, is the narration of this relation between design and the work—the clarification of the one through the meaning of the other. The work *freezes* in design; its “image” is the direct result of what this freezing is intended to represent. The architectural language thus becomes the instrument which communicates simplicity, but which in reality preserves the union between design and work: the original idea expresses thereby its own renewal, communicating it in the simplicity of the language. And it is therefore consistent that the architecture should exclude reference to its own progress, since, although endowed with these rigid internal concatenations; it can in the end recognize neither fractures nor divisions.

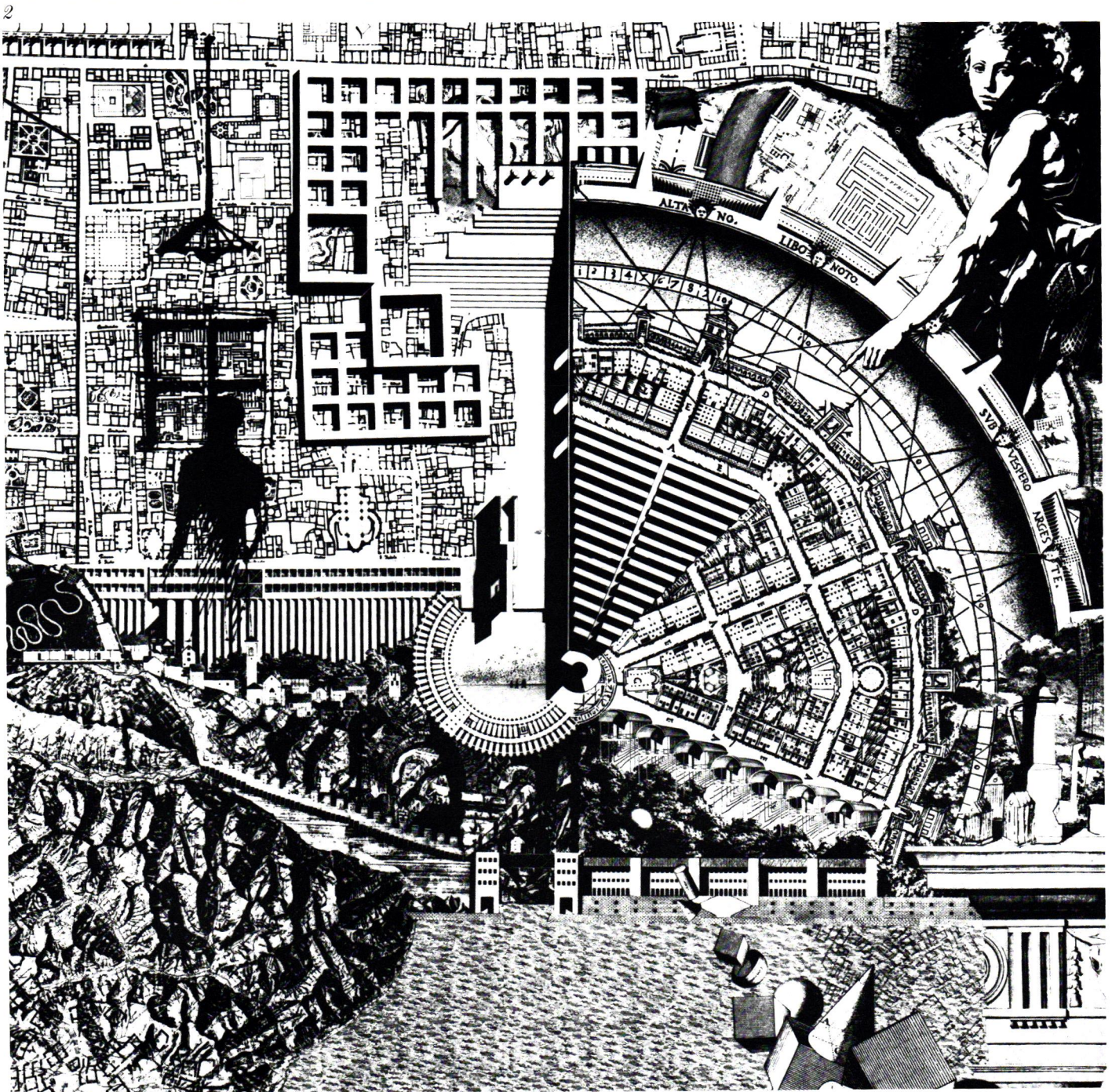
The hidden but speculative and necessary side of this attitude can only be *nostalgia*. Rossi affirms, “architectural discourse maintains its validity precisely at the point where its liberty is complete, where the motivations of form belong solely to that of architecture itself.”¹⁷ Here nostalgia is manifested as the will to reconstitute a condition of “fullness” for design. The memory of an *age* of perfect coincidence between product and producer revives “the fetish of the creative life.”¹⁸ It is the events of this life that architecture desires to narrate; its language will then be “simple” but fully allusive. It will describe the wanderings of the sign, of the archetype that appears in the activity of designing: to this activity the language is indissolubly bound—and it can in this sense never be fully autonomous.

Rossi’s architectural language speaks of the original relation between the sign and the artistic idea—it narrates this relationship “clearly”—and places this idea in relation to the values of the architect. Its function is twofold: it is the instrument for the narration of the making of the architectural “image,” and it alludes to the possibility of re-establishing a place of perfect liberty for this making. Its internal spirit of geometry reveals only its ultimate function: to pose clear principles capable of resisting the attacks of time. Thus it is the nature of Rossi’s language which explains the “absence of progress” in his architecture; its relation to time is reduced to an act of *resistance*. This Savi has perfectly understood: “Time stabilizes an



2 Antonio Canal (Canaletto),
Architectonic Fantasy with the
Rialto Bridge and the Basilica of
Vicenza. National Gallery, Parma.

3 Collage for the "analogous city"
by Aldo Rossi (with E. Consolascio, B.
Reichlin, and F. Reinhart).



10 inverse relationship between the complex of the city and its parts: while the city expands, so its buildings age in the accelerated course of its transformations . . . design gathers its forces to resist time.”¹⁹ This explains why the monument assumes so much importance in Rossi’s thought. And the theoretical problem of the relationship between design and the monument is in fact the key to understanding how Rossi poses the question of the relations between architecture and the city.

The monument has a twofold nature: it is at once a sign of order and at the same time of memory and connection. In Rossi’s terms it both denotes and entralls. As such it constitutes the essential element of the “analogous city,” the place where the power of architecture extends from the monument to the entire surroundings. But we have said that designing is “resistance”—a resistance also against the estrangement of the surroundings from architecture. Thus architecture is condemned to appear as an *art of the fragment*: the work appears as a splinter of the world in perfect liberty, flung into unfree surroundings. But what is the monument if not a splinter of the past, a fragment still endowed with a language of the highest clarity and allusiveness? The project for the “analogous city” comprises this sense of the monument; but the implications are deeper. “Analogous city” is the very place where monuments express mourning for the lost order to which they allude; it recognizes the specificity of the monument, overthrowing anguish for the hope of a “completely designed city,” an ordered montage of fragments. From this point of view Savi is perfectly correct to identify an archaeological attitude in Rossi, one which gains its theoretical force by reaffirming an ideal order for the city; only an ordering principle can deliver its *parts* from being condemned as fragments. The result is to exalt the concept of design, in its fullest sense: “this project for a modern city,” writes Rossi, “made up out of parts and monuments gathered together in a unitary design, all designed in their multiformal aspects so that, as in all great collective acts (revolution, for example), different personalities emerge with their experiences and their myths, represents a great hope and alternative.”²⁰ This also clarifies the nature of the individual instruments identified by

Rossi to understand the city and to intervene within it: the building type is studied as the simplest ordering element of urban phenomenology, while typology becomes the first step in a global project of redefining the form of the city.²¹ The formal organizers of the urban plan thus constitute an alternative “through design” to the progressive *Verlust der Mitte* that stresses the development of the city in history.

For Rossi, Savi notes, the city becomes “the locus of collective memory”:²² the architectures of which it is composed are strongly conditioned, able to play only a limited role. They are never able to rise to the status of true “Bild,” precisely because they are the signifying parts of a whole constrained to express and communicate a determined memory. Such a condition is also naturally valid for Rossi’s own work: his architectures are themselves ambivalent in their *reduction*. Thus in the project for the Cemetery of Modena the fact that architecture is, in Savi’s words, “preparing itself to become a skeleton” expresses a maximum simplification which corresponds to the most powerful fullness of a narrative plot developed with architectural forms to shape an enchanted space animated solely by memory.²³

But the fragments themselves cannot be received as such; they inevitably return to the status of parts, almost negating by this the historical moment in which, detaching themselves from the *work*, they first assumed the condition of fragments. Thus they become the freely available materials for an assembling and designing will that reveals itself in the “analogous city.” This project raises *montage* to the level of principle: that practice which can narrate the silence of relationships, but yet which must always follow a relational logic. It is therefore no coincidence that, glancing through the work of Rossi, one very often perceives a metaphysical atmosphere, in some cases made explicit by obvious references to De Chirico. But the reproduction of such an atmosphere has nothing to do with the possible revival of the “tradition of the new”: it is much more the product of an attempt to archaïcize the montage, rediscovering its oneiric valences. This procedure is isolated by Savi in respect of the “analogous city”;

quoting from Jung he writes: “‘analogous’ or fantastic thought is sensitive, figurative, and mute, not a discourse, but a material rumination on the past, an act of turning inward. Logical thought is ‘thinking through words.’ Analogical thought is archaic, unconscious, and unexpressed: it is practically inexpressible in words.”²⁴ The search for linguistic purity in Rossi’s architecture does not exclude the oneiric, but its true vocation consists in trying to *find words* for that condition. While logical thought brings clarity to the problem of “Bild” (in respect of which it can nourish no hopes—“the image is a fact”),²⁵ the analogical construction moves on different ground. As Jung affirmed, the act of its motivating thought is “turned inward” and therefore the construction that derives from it cannot be presented as pure exteriority, as *image*.

Rossi’s architecture is a continuous construction of *internal* relations. Because of this it cannot share in the paligenetic myths of the avant-garde, and likewise it is critical with respect to the mechanisms of radical culture. It neither follows the canons of environmentalism, nor does it suffer the myths generated by the numberless theories of “applied art.” It exalts particularity and diversity because only through confrontation with multiplicity can any general ordering principle be reached, because design can only live as the ordering of plurality. It is therefore no search for immediate compromise intended to confirm the need for general principles. The “non-relationship” that Rossi codifies in his building for the Gallarate quarter in Milan is an explicit demonstration of this attitude; it validates, in this sense, the “exceptions” or the “scraps” that he inserts in his enmeshed buildings, the “strong” images that punctuate their structure. This principle is completely realized in the “analogous city,” the place where the multiplicity of memories is exalted, where differences are only itemized in order to be *reconciled*.

To explain the matrix of the “analogous city” Savi takes Rossi’s suggestion of investigating his fascination with the fantasies of Canaletto. The reading that Rossi makes of these fantasies is a final confirmation of how decisive the intertwining of memory and dream is for the understand-

ing of his work. In reality the Canaletto fantasy, transferring the Palladian order to the scene of a Venice so unreal as to appear as pure stage setting, radically deconstructs the image of the traditional ideal city²⁶ by making its *decadence* explicit. For Rossi however the pictures by this great Venetian convey a very different message; the effective lesson of Canaletto in Rossi’s words is expressed in the “collage of Palladian architecture that configures a new city and which in its reunification is itself reconfigured.”²⁷ What thereby emerges is a capacity for architecture to autogenerate through confrontation with itself; what is revealed is precisely the representation of a state of decadence. In reality, through Canaletto, Rossi carries on a dialogue with Palladian classicism, with that *classical condition* defined in the scenography of the Teatro Olimpico. From this stems the nostalgia of the “analogous city.” This “city” can have no relationship with that representation on which the avant-garde foundered, of the city as a realization of chaos, because, as a project, it is the affirmation of the supreme abstract power of creative fantasy confronted with the shipwreck of life—such, after all, is the precise nature of classical utopia (see figs. 2, 3).²⁸ In this way Rossi liquidates, so to speak, the banality of the “tradition of the new,” but at the same time finds himself precluded from following the analytical route of Paul Klee, who, probing the fundamental laws of representation, found multiplicity to be possible only as *difference* and as *separation*.

Rossi’s architecture avoids *difference* precisely because it postulates that the most extreme evidence of multiplicity which can be narrated by the design is the memory of an organic relationship between the parts of the city. His design wants to be able to speak with clarity, with “simple techniques,” of a regenerated classical condition of living, of the being of man within a city reconciled to memory: “‘The ancients felt, with no other distractions, at ease within the harmonious confines of the world’ [Goethe, *Winckelmann und seine Jahrhundert*]. Thus appeared the form of the classical: nostalgia for being-at-home—for being reconciled in the beautiful earthly abode. . . . Modern man is a wayfarer, not an inhabitant. The classical expresses man as inhabitant—the essence of being, for

12 the classical consists in inhabiting, in possessing dwelling.”²⁹ The dwelling of man is designed multiplicity, *reconciled* in all its diversity. Such is the condition of the “analogous city”; but also in the project for the Student Home at Chieti, *dwelling* is presented as a reduction of the house to its own essence. After all, it is no coincidence that the project for the Student Home at Trieste is called by Rossi *La calda vita* (“The hot life”).

This explains the obstinacy of Rossi in the face of his own projects: “motionless things help obstinacy,” affirms Savi.³⁰ The act of design is a continual return to solutions already elaborated, not so much to test their validity as to verify the availability of design itself, the instrument of their definition. And in effect, it is design which is obstinate, itself almost synonymous with rigorous discipline or moral stance. In fact, design permits the isolation of the *built fragment* as a pregnant element of a possible new order, an isolation beyond artifice, as Savi suggests when he points to Rossi’s difficulties in the face of perspectival representation. In such a *place*, as we have said, complexity appears without dissimulation. The image of the outskirts of the city is, in the designs of Rossi, “carried” by references to the paintings of Sironi, while suggestions of manufactured objects and anonymous but necessary works are continually re-elaborated to shape a remembered complexity;³¹ this multiplicity throws the individuality of the architectural design into relief, heightening the strong, *speaking* “images”—those “passages” where forms are composed and functions integrated. “The function of a public building,” writes Rossi, presenting his project for the *Palazzo della Regione* at Trieste, “must be that of the cathedral in the old city, and especially in its nature as both covered piazza and forum . . . architecture must be passed through with the same interest as is the city.”³² The obstinacy of the design is a function of its pregnant “imagery”: there is a close continuity between the act of projecting-designing and the architectural project that insures the clear manifestation of subjective choice, guaranteeing “the word” to objects, their capacity to *evoke* in terms similar to those noted by Socrates in Valéry’s *Eupalinos*: “but Music and Architecture make us think of everything but themselves . . . they seem

dedicated directly to recall to us, the one, the formation of the universe, the other, its order and stability.”³³

The obstinacy which guides the hand to retrace lines already drawn confirms that design must eschew the *decline of pleasure* and recognize itself in decadence. At the same time the “image” remains bound to the process of creation which itself incessantly reinterprets the secrets of the image. Design is then the sacralizing threshold of architectural creativity and the labor by which it is realized. Moreover, this sacred quality is transferred to built fragments, to the buildings that speak of the memory and feelings of the collective, exactly in the terms that Phaedrus uses in *Eupalinos*.

At this point the problem of the interconnection between obstinacy and design reveals its true significance, returning us directly to our initial question with regard to the work of Rossi: that concerning the relation between the architect and his intellectual condition. Here the discussion necessarily turns “political,” and criticism must abandon its attempt to find the right path through the labyrinth of subjectivity. The entire research of Aldo Rossi now appears, in fact, to be a progressive testing of the possibility of *specific knowledge*; an attempt to rediscover the original limits of a disciplinary activity, in order to preserve the mechanisms for its subjection to the inevitable reproduction of those ties that, in Foucault’s terms, act as “transversals from knowledge to knowledge, from one place of politicization to another.”³⁴ The discourse on design is therefore also a political discourse, since “the act of designing,” as the sacralization of the “fetish of creative activity,” implies the resolution of the more general question posed by Walter Benjamin to intellectual work: “before asking what position a poem has with respect to the relations of production in any era, I would like to ask, what its position is *within* them. This question directly concerns the function of the work within the literary relations of production of an epoch. In other words it is directly addressed to the literary *technique* of the works.”³⁵ This is the equivalent, but posed in more fundamental terms, of the question around which Foucault’s own discourse turns.

We can go so far as to affirm that in Rossi's architecture design presents itself as "technique"; but what meaning can we attribute to this? It is not a question of a technique turning toward clarifying its own existence within the relations of current production, but rather of confirming the necessary separation between these productive relations and the creative will represented by technique. It is not by chance that Rossi's work tends to turn in on itself, that his design inclines toward self-motivation. It tends to become *picture*, the last threshold of the sacred; in this course is contained the narration of an infinite nostalgia for the lost world of architecture, and for its effectiveness. In the transformation of the project into pure graphics, maximum liberty coincides with the *exposition* of a fully nostalgic condition.

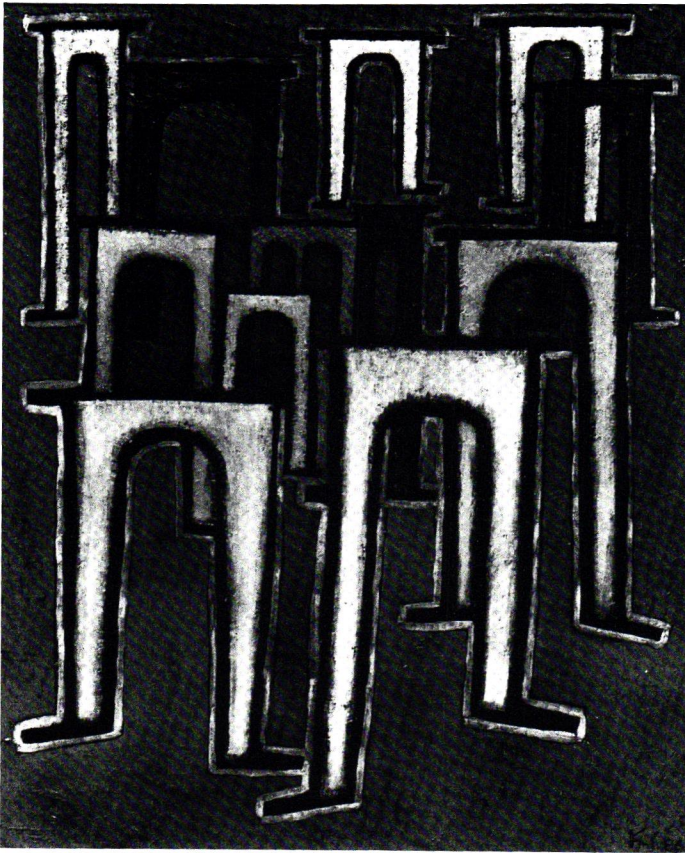
Part Three

Nevertheless, among contemporary architects, Rossi is one of the few who has insistently confronted in theoretical and non-instrumental terms one of the basic questions of modern architecture—a question that we have inherited in completely degenerated terms from the radical tradition. It concerns the *general* problem of the relation between architecture and technique.

Rossi's highly original dialogue with the history of architecture demonstrates the particular relevance of this problem to his own theory. It is no accident that his attention has been focused on certain aspects of the culture of the Enlightenment, and, closer to our own period, on those "anomalous" personalities of contemporary architecture—Adolf Loos, Hans Schmidt, Hannes Meyer. And in his reading of such historic episodes he has not been preoccupied with characterizing obvious tendencies, but with throwing into relief the ignored but underlying structure of their theoretical difficulty."³⁶ At first sight it might seem to contradict what we have already argued to affirm now that Rossi warns us against the dangers that beset architecture in direct proportion to the extent of its self-isolation; but nevertheless he poses the question clearly, and specifically in relation to the connection between architecture and engineering. Having posed the problem, however, he immediately confronts it from a

single, determined direction. In fact he does not raise the general question of the relation between architecture and technical development, but tackles the problem in the form of the relation between two *defined* disciplines. For this reason his discourse offers no different solutions from those we have previously indicated. As Savi writes, "he thinks of technique as a *degree zero* which architects, out of the confusion of their ideas, hide from, but which for him, on the contrary, represents an unthought 'virtuality'."³⁷ We should not be surprised then at the original but extremely reductive way in which Rossi resolves the question: "there is no longer any ideological shield for ugly architecture, even as for the bridge which collapses . . . we too affirm that architecture is next-of-kin to engineering and thus to physics: the bridge should not collapse"³⁸ . . . and this in a tone reminiscent of a manifesto!

The bridge thus takes its place logically as a recurrent element in Rossi's architecture. As Heidegger explains, the bridge unites, and ties, and in tying explains the specificity of what it joins together. A metaphor also frequently used by Heidegger, the bridge for him signifies a union. In the architecture of Rossi, curiously, the bridge is always placed at the center of a multiplicity that it at times determines or artificially creates. The bridge is the built place that guarantees the possibility of "living poetically"; it is the physical image of the architect's reconciliation of architecture and engineering—it explains their kinship. For Rossi the problem is not to reduce the relationship of architecture and technique to the question of applied art—his familiarity with Loos prevents him from entering such a one-way street. He rather emphasizes this link of kinship—the bridge that unites architecture and engineering, and in uniting them exposes them both in their specificity. In this, however, he expresses his refusal to confront the absolute and incessant development of that division which is the mainspring of technique; his bridge is a form of *protection* against the division, his architecture wants to guarantee the possibility of "living-in-the-world." In reality of course technique is much different. It is indeed "that fruit of the self-imposition of man, and the integral realization of unconditional being, without protection, based on the separation . . . of that



pure *Bezug* (“relationship”) according to which the silent center attracts to itself all pure forces. Technical production is the organization of pure separation.”³⁹ The meditation of architectural culture on technique is an attempt to erase this condition. Rossi’s project, the return to a degree zero of architecture, and his affirmation of the necessity for design to resume the practice of its own parental discipline are, in the end, tied to the diverse results of that traditional meditation.

These kinships also guarantee the stability of the city. The bearing structures of the “analogous city” are precisely continuous bridges which, in recomposing the multiplicity, reveal its infinite affinities. But these invisible bridges are very different from those that Paul Klee represented in his *Revolution des Viaduktes* (fig. 4), where any affinity is rather denounced as *appearance*. Instead, Rossi’s “analogous city” insists on the possibility of coherently organizing real affinities, where the *table of values* that reassures man as to his power to be at home in the world is once again reflected. Architecture will give man a protected life in the city and preserve his memories. Of such *values* it speaks; but in so doing it is destined to remove itself from the relations of production, continuously overturned as they are by technique.

Can this attitude guarantee effective freedom for the act of designing? Perhaps; but how is designing able to know the world? or its becoming? Because the world and technique are *bound together*, architecture must renew itself *in* technique. “The essence of technique emerges into the light of day with extreme slowness. This day is the night of the world, mystified in technical light. Here we are dealing with the shortest day of all, wherein the threat of a single interminable winter is raised. Meanwhile, not only is man shorn of every protection, but darkness enfolds the integrity of his whole being. Every salvation [*Heile*] is denied. The world then becomes boundless [*heillos*].”⁴⁰

Architecture nourishes the fear of the “night of the world,” and spreads this fear by the threat of an “interminable winter.” Its task, however, is probably something

other: to help man learn to live *without protection*. Art casts a veil over this state of *impiety*, feeds the terror of this “lack of freedom” for which we know no alternatives. The artist uses his own *design* as a “technique” for concealing this ever-present reality of technique—his work is a subtle cobweb which tends to enfold the world. Criticism must resist the attractions that make the prospect of entering more deeply into that resistant and flexible web so enticing; it too must learn to live *in* a boundless world, knowing that there is no salvation. For this it is necessary to know the infinite paths that lead to *decadence*, that most luxuriant plant in the woods of modern art. It must learn to recognize that plant, for the promise of leading the modern wayfarer back to his dwelling is a powerless nostalgia in the face of the real *impiety* of the world. Decadence, in fact, “betrays itself in this preoccupation with ‘happiness’ (that is, with the ‘health of the soul’, which is to say in feeling its *own state* as dangerous). Its fanatical interest in ‘happiness’ demonstrates the pathology of its foundation.”⁴¹ The title of this fragment by Nietzsche, from which we have been quoting, and which proposed the theme of this essay is: *Criticism*.

1. F. Nietzsche, “Frammenti postumi, 1888–1889,” *Opere*, vol. VIII, t. 3 (Milan: Adelphi, 1974), p. 60–61, fragment, 14 (93).
2. *Ibid.*, p. 61.
3. L. Wittgenstein, *Tractatus logico-philosophicus* (London: Routledge and Kegan Paul, 1961); Italian translation (Turin, 1964), p. 11 (2.22).
4. *Ibid.* (2.203).
5. A. Loos, *Parole nel vuoto* (Milan: Adelphi, 1972), pp. 212–213.
6. *Ibid.*, p. 211.
7. Cf. the full text of Loos, “Come entrai in scena con la Melba,” *ibid.*, pp. 142ff.
8. Nietzsche, “Frammenti postumi, 1888–1889,” *Opere*, vol. VIII, t. 3, p. 68.
9. G. Bataille, *La littérature et le mal* (Paris: Gallimard, 1957); Italian translation (Milan, 1973), p. 150.
10. Nietzsche, “La gaia scienza,” *Opere*, vol. V, t. 2, p. 254.
11. M. Foucault, “Nietzsche, la généalogie, l’histoire,” *Hommage à Jean Hyppolite* (Paris, 1971); Italian translation (Turin, 1977), p. 43; English translation, “Nietzsche, Genealogy, History,” *Language, Counter-memory, Practice*, selected essays and interviews by Michel Foucault, edited, with an introduction by D. F. Bouchard (Ithaca, N.Y.: Cornell University Press, 1977), pp. 153–154.
12. I refer to the book by Vittorio Savi, *L’architettura di Aldo Rossi* (Milan: Angeli, 1976), henceforth referred to as Savi, *Aldo Rossi*.
13. Savi, *Aldo Rossi*, p. 153.
14. “Is it after all still necessary to place the interpreter behind the interpretation? Already this is invention, hypothesis. Insofar as the word “knowledge” has meaning, the world is knowable; but this can be *interpreted* in different ways, it has behind it, not one meaning but innumerable meanings. ‘Perspectivity’. It is our needs that interpret the world,” Nietzsche, “Frammenti postumi, 1885–1887,” *Opere*, vol. VIII, t. 1, p. 300.
15. See the interesting observation by E. Bonfanti, “Elementi e costruzione,” *Controspazio*, n. 10, October 1970; see also the comment in Savi, *Aldo Rossi*, pp. 53–54.
16. Savi, *Aldo Rossi*, p. 54.
17. *Ibid.*, p. 137.
18. “The fetish of the creative life”: the expression is used precisely in the sense indicated by Walter Benjamin in his essay, “Karl Kraus,” *Schriften II* (Frankfurt am Main: Suhrkamp, 1955); Italian translation in *Avanguardia e rivoluzione* (Turin, 1973), pp. 101–133.
19. Savi, *Aldo Rossi*, p. 34.
20. A. Rossi, “Introduzione” to L. Quaroni, *La Torre di Babele* (Padua, Venice: Marsilio, 1967), p. 16.
21. Cf. Savi, *Aldo Rossi*, p. 63.
22. *Ibid.*, p. 67.
23. *Ibid.*, p. 40.
24. The letter of Jung to Freud is found in *Lettere tra Freud e Jung* (Turin: Boringhieri, 1974), p. 321. For the discussion of the “analogous city” of Rossi, see Savi, *Aldo Rossi*, *passim*, but in particular pp. 105ff. that are among the most brilliant pages of the book.
25. Wittgenstein, *Tractatus*, p. 9 (2.141).

26. I am indebted to Professor Michelangelo Muraro for an introduction to Canaletto's *Capricci*.

27. This quotation from Aldo Rossi is in Savi, *Aldo Rossi*, p. 106.

28. For a definition of such a "classical condition," see M. Tafuri and F. Dal Co, *Architettura contemporanea* (Milan: Electa, 1976), pp. 104ff.

29. M. Cacciari, "Dialettiche classico-romantiche," in the catalogue of the exhibition *Classici e romantici tedeschi in Italia* (Venice: Alfieri, 1977), p. 7. But, more generally, the two conferences of M. Heidegger in 1951 are fundamental for this argument. See "Costruire pensare abitare" and "poeticamente abita l'uomo . . .," in *Vorträge und Aufsätze* (Pfullingen: Verlag G. Neske, 1954); Italian translation (Milan, 1976).

30. We cannot repeat in full the meaning of the different historical allusions developed by Savi from Adolf Loos to Aldo Rossi. Nonetheless, this comment seems significant: "progressively, in the architecture of Rossi, abstinence, entirely Loosian in the way in which his architecture confronts life, which is to say it withdraws itself from technique in the face of consoling signs and reformist messages (even if not from exterior form), becomes an 'ordering of the gaze.' That gaze which falls on unmoving things. Unmoving things are an aid to obstinacy and, from the project for the Cemetery of Modena on, they are the key to his work," Savi, *Aldo Rossi*, p. 77. For the discussion of the problem of "architectural technique," see the last pages of this article.

31. "The well-known urban landscapes of Sironi, painted in the twenties and revised after 1940, are reduced to a repertory of forms and lines; cylinders, parallelipeds, truncated cones, circles, the squares of the windows: empty eye sockets. . . . Sironi's painting plays a role similar to that of the dream: it is a form of history that carries materials along with it," Savi, *Aldo Rossi*, p. 19. Little needs to be added to these observations save that it would be interesting to discuss the possibility of similarly identifying, in Rossi's work, the appearance of formal references to the representation of the urban environment in the work of Georg Grosz.

32. These extracts are drawn from the commentary by Aldo Rossi on the project presented for the competition for the Regional Palace at Trieste (1974); quoted in Savi, *Aldo Rossi*, p. 242.

33. P. Valéry, *Eupalinos ou l'Architecte* (Paris: Gallimard, reprinted 1970), p. 46. There are numerous passages from *Eupalinos* that would be interesting to place side by side with Rossi's words. For example, there is a passage in which Phaedrus compares "buildings which, neither speaking nor singing, merit only disdain," with "monuments which only speak and which, if they speak clearly, I esteem. Here, prisoners groan. Here, lovers debauch. . . . These mercantile characters, these tribunes and these prisons, have within them, when those who build them know how to draw it out, the clearest language"; this could be compared with this affirmation of Rossi: "architecture will be less and less occupied with the housing problem. Houses respond to well defined technical and economic requirements: their lifespan and their position will be rigidly predicted. Commercial centers, universities, cultural centers, public buildings will re-

gain their formal importance; they will be the monuments of a much vaster metropolitan territory furrowed by an impressive transportation network capable of augmenting and multiplying movements, contacts, and the participation of every man in the spirit of the new city. Traffic, today a symptom of congestion, will become the ardent and regulating pulse of a dynamic and ordered society," A. Rossi, "Nuovi problemi," *Casabella*, n. 264, 1962, now in *Scritti scelti sull'architettura e la città* (Milan: CLUP, 1975), pp. 191-192; English translation in *Ekistics*, n. 87, 1963.

34. "Intervista a Michel Foucault," in M. Foucault, *Microfisica del potere* (Turin: Einaudi, 1977), p. 21.

35. W. Benjamin, "Der Autor als Produzent," in *Versuche über Brecht* (Frankfurt am Main: Suhrkamp, n.d.); Italian translation, *Avanguardia*, p. 201.

36. Cf. for example, Rossi's interpretation of the research undertaken by the group united around the journal *ABC* in A. Rossi, "Introduzione," in H. Schmidt, *Contributi all'architettura, 1925-1964* (Milan: Angeli, 1974).

37. Savi, *Aldo Rossi*, p. 25.

38. A. Rossi, "Introduzione," *Architettura razionale* (Milan: Angeli, 1973), p. 13.

39. M. Heidegger, *Holzwege* (Frankfurt am Main: Klostermann, 1950); Italian translation (Florence, 1968), p. 271.

40. *Ibid.*, p. 272.

41. Nietzsche, "Frammenti postumi, 1888-1889," *Opere*, vol. VIII, t. 3, p. 60.

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1 Courtesy the author.

2 Courtesy Edizioni Ugo Marzini, Parma.

3 Reprinted from Aldo Rossi (with E. Consolascio, B. Reichlin, F. Reinhart), "La città analoga," *Lotus*, 13, December 1976.

4 Courtesy Hamburger Kunsthalle, Munich.

Postscript

Anthony Vidler

The “history” of modern architecture, written out of the very climate which so strongly rejected “history” in architecture, has until recently enjoyed an uneasy half life, somewhere between an overtly ideological demonstration of origins and inevitable processes and an idealistic rediscovery of eternal truths in form and content. The former mode was based on an Enlightenment model of progress joined to a Darwinian arrow of time; the latter was doomed to repeat, in neo-Platonic terms, a litany which in itself was profoundly antihistorical and a-temporal. The progressive model led to a story which although satisfying to partisans of engineering and mechanical evolution was extremely weak in its capacity to explain or even to admit events and ideas such as academicism and eclecticism which were not within its scope. A predetermined judgment had to be called in to bury these unwanted occurrences under the label of “retrogressive.” In the idealist model, even though the attempt to explain history was ostensibly more profound—the uncovering of the “deepest” level of cause from a symptomatic analysis of its effects—inevitably resulted in a lament for a world irrevocably lost, a world of meaningful symbols and socially bonded forms. History in these terms was seen either as the inevitable progress toward a better world—its forms selected according to evolutionist principles—or as eternally the same, with its forms carrying unchangeable meanings whatever the specific circumstances of their occurrence. 17

Modern architecture thus emerged in the light of such historical constructs according to the “happy prognosis” of Sigfried Giedion, or the “unhappy pathology” of Hans Sedlmayr. For Giedion, modernism was seen as an inevitable end of progress—the final result of the gradual unveiling of abstract form from beneath its historicist covering; while for Sedlmayr modernism was the reverse—it was the symptomatic form of a diseased epoch, sharing with other similar ages a “loss of center.” More recent attempts to refine the history of modernism, whether Marxist or phenomenological in orientation, have simply succeeded in modifying these two primary forms of history: Marxism by stressing the contradictions inherent in progressive development; phenomenology by trying to situate the eternally true in the context of the knowing subject.

Francesco Dal Co has attempted to resolve this ambivalence with the proposition that it is necessary to recognize history, criticism, and design as a number of distinct practices that make up the field of “architecture.” He says that each of these practices possesses its autonomous mode of operation, its own questions and proper objects; and that, finally, each has to be sufficiently detached *from* its object in order to fully realize its own potential. This is to say that history and criticism should examine on their own terms the fragments of experience they purport to narrate and

comprehend rather than attempt to explain current design practice. History in this sense is not reducible to any unitary model of cause and effect but is rather envisaged as a series of separate fragments. In Dal Co's argument this could be seen as a reworking of the Enlightenment model, a perfecting of specific and separate "professional" practices. However, his proposition amounts to more than a simple "specialization" of a traditional professional kind. Indeed his argument, on the surface at least, is the very opposite of a positivistic boundary marking. Rather he sees the world in Nietzschean terms, as a non-sequential set of ever shifting relationships which can only be expressed and known—indeed can only exist—by means of linguistic forms: metaphors, metonymies, and allegories. In these terms, design can be divorced from its complicity with criticism and history by the very fact that it manifests itself in a set of images, which, immediately upon arrival in the world, divorce themselves from their makers, from intentions, from applied or implied contents to be seen as merely the images they are. Within this structure it becomes possible to challenge entrenched notions of the relations between form and content—*functional* relations—and to "read" images as having a life of their own.

This attitude toward an idea of "form in itself" detached from any positive meanings might be construed as a return by Dal Co to an idealistic mode. But Dal Co attempts to escape not only the positive, progressive model of truth in form/content relations for he also eschews (from his own political conviction) any assumption of the inner "life of forms." He is in this sense following that "new Nietzsche" who, in the rereading that has taken place over the last ten years, has emerged as a semiologist of purposes, and etymologist of linguistic traces.

According to this reading, Nietzsche in *The Birth of Tragedy* and later, and more definitively in the *Genealogy of Morals*, proposes that all visions of progress, all ideologies of cause and effect are simply the masks of a general, pervasive *will to power*. By reducing all historical causation at one stroke to this fundamental will, he reduces or reveals all supposed "purposes," "functions," "causes" that were claimed by philosophers and historians as the origins of the things they spoke of, to be no more than words impressed more or less lightly on events. The "truth" of history and phenomena is thus reduced to linguistic forms, which simply mask the will to power in all its various manifestations.

Using as his "text" a fragment of Nietzsche's own criticism, and as his subtext the argument of the *Genealogy of Morals*, Dal Co throws into question the entrenched ideology of *relations* between theory and practice, criticism and theory, history and criticism in order to counter the progressive

structure within which most Marxist history has been written. At the same time he maintains his leftist opposition to the idealist model. Dal Co explodes the relations—seen as entirely *natural* through the lenses of nineteenth century functionalism—between form and function, image and idea, just as Nietzsche exploded the assumed “truth” of relations between presumed causes or origins and their “effects” or ascribed purposes.

In selecting the work of Aldo Rossi as a “case study” for the working out of a possible critical method—an “effective history” in Nietzsche’s terms—Dal Co has given himself an especially willing subject. Rossi’s architecture is evidently informed not only by his own rereading of Nietzsche, but by the work of Loos and by his critical awareness of the pitfalls of the modernist avant-garde. He has always sought to escape from the conditions of purposefulness laid down by the modern functionalists. At the same time, Rossi’s work has tried to retain a *place* for itself *as* architecture in a world that can no longer be simply defined by the humanist projection of the will of the designer to make shelter. But for Dal Co, the idea of “autonomous” architecture which results does not come about through the simple *removal* of function from form. Like the epistemological void proclaimed by Nietzsche, which allows thought to operate but which does not itself demand to be filled, so the architecture of Rossi tries to refer to itself—which is to refer to one of those *semiological sign-chains*—“architecture”—that Nietzsche identified as so hard to decipher. The delimiting of the vast scope of this “architecture” for Rossi means the building of the “city”—“analogous city”—which contains only certain elements of a very specific kind, selected by the architect, elements which are the *signs* of a coherent and willed unity: the ideal city. However, as Dal Co emphasizes, this unity is, by virtue of its nostalgic condition, forced to meditate on its own historical death—its fragmentation. It becomes an instrument of memory that links otherwise unrelated pieces of the past to the fabrics that Rossi designs in the present.

The question that Dal Co asks is to what extent the physical fragmentation of this architecture really escapes the conditions of its forebears: to what extent is the act of design always and inevitably a will to power masked by comforting images? Are we looking at a true alternative to the progressive forms of modernism or simply at the metaphorical “imitation” of a new and more complex version of history? If the former, then we should be forced to confront an entirely different philosophy of the world in order to decipher the artifacts that have been produced within it; if the latter, we should rather be students of rhetoric, of figures of speech, to uncover the levels of reference, the layers of memory that Rossi seeks to recuperate. In either case one would have to ask—in front of the image, the “literal fragment”—

to what extent is the image of a fallen and ruined power—the image of a fragment—the most successful mask for the continued operation of that power? Memory, after all, was seen by Nietzsche as one of the most potent and brutal acts of the will to power: “There is perhaps nothing more terrible in man’s earliest history than his mnemotechnics . . . that instinct which divined pain to be the strongest aid to mnemonics.” Attended first with plain brutality, then with subtler “ascetic” means, the *institution of memory* was incessantly enforced; “the individual was finally taught to remember the five or six ‘I won’ts’ which entitled him to participate in the benefits of society.” The asylums, the schools, the prisons, and the factories of which Foucault speaks are, in the end, so many similar acts of memory institution. Does the analogous city, even as it shatters the premises of a functional memory, remove itself entirely from complicity in the power of such a memory function, or “mnemotechnics”? If so, then a truly a-significant architecture has been born in the void, one that allows for architecture to discuss its own genealogy without fear. If not, then a greater divorce between the object and its criticism than is apparent in Dal Co’s text will have to be made in order to uncover the masking procedures of Rossi himself.

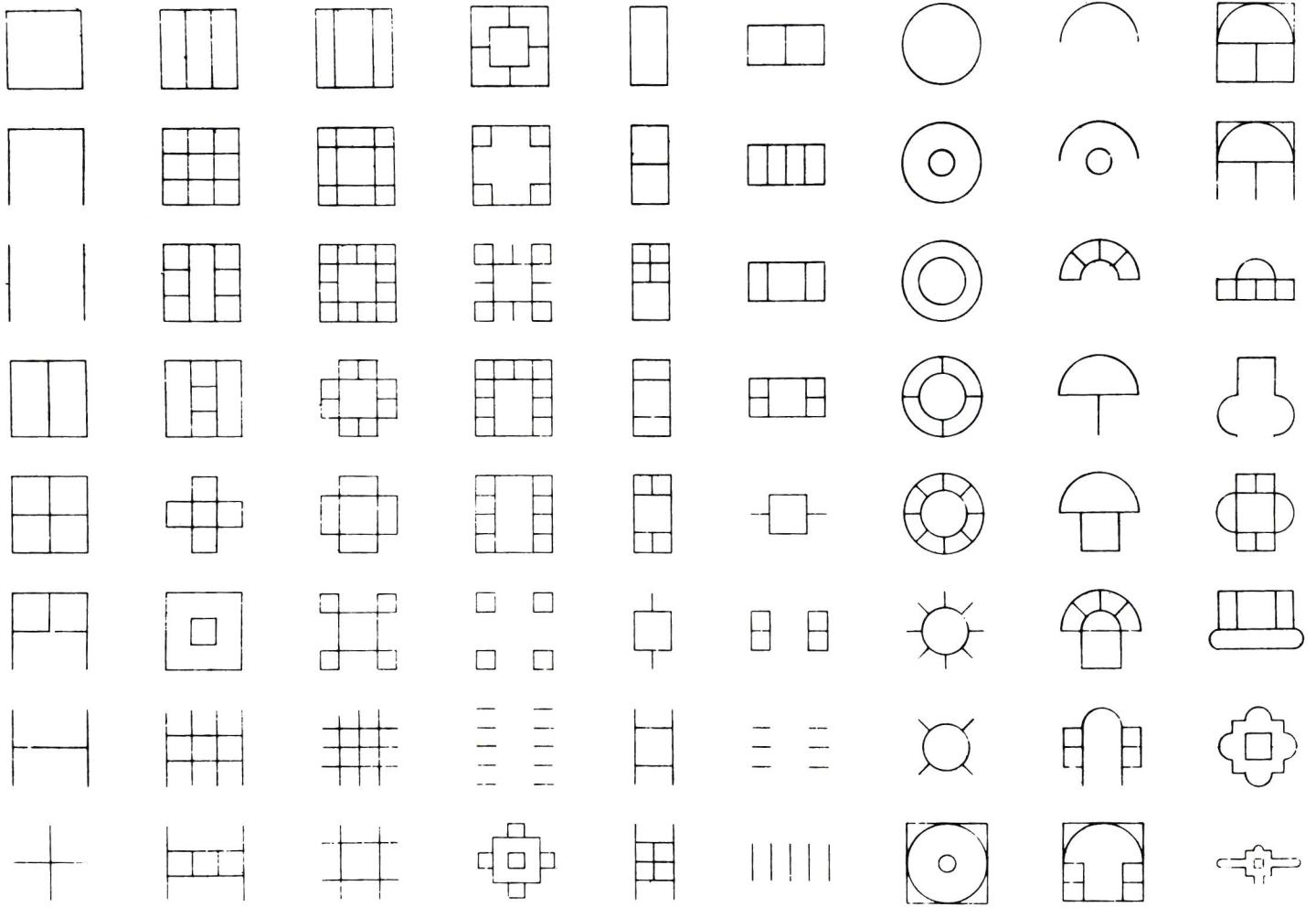
But with historical motivation thus projected onto a linguistic “surface,” the method of the historian, and especially the critical historian, has become extremely problematic. No longer can he be satisfied with a strict revelation of economic determinations (although that would or could be useful in certain contexts); no longer can he simply rely on revealing the inner connections between a theory and a design (although as a preliminary indication of masking procedures, this too would sometimes be useful); nor can he be happy placing a series of objects in a row with some innate, implicit or explicit causation joining them in time (although the establishment of large-scale shifts or breaks might sometimes require this). And while the search for “origins” (as in “the origins of the Modern Movement”) is revealed as largely futile, and is itself part of the process that is to be unmasked by any critical history, the gap between the “linguistic etymologies” of a Nietzsche and the etymologies of form they replace is narrow.

Behind the new approach suggested by Dal Co are still many dangers: the danger of reducing the object in history to a self-replicative series of words, themselves outside of time and without cause, and which, unable to be “explained,” ask only to be *re*-presented—the danger, that is, of an “archaeology” that rests only on the surface of language; the danger of a nihilism on the part of the critic, a negative posture so complete that every act of design charged with so much “will to power” becomes unacceptable,

and the intellectual alienation of the historian is rendered passive, or worse, mere sophistry; finally, the danger of the primacy of the *text* which, *unseeing*, would deny to images the special kind of reading that is due to them. 21

Perhaps the most troublesome is the last. In the search for new models of history and criticism the attention of the architectural historian has often been drawn to philosophies of literature which seem to offer modes of analysis more sophisticated by far than those existing within architectural circles. Hence the 'linguistic analogies' of the last two hundred years, and the attempt to merge architecture with poetry of the late seventeenth and early eighteenth centuries. But it is especially important now to distinguish between analytical models that are appropriately applied to their objects, and the mere terminology of such models applied outside their range to objects which in the end remain unanalyzed, wrapped in an "aura" of dissection, but in fact intact under the wrapping. Here one would not only caution against the use of linguistic analogies—an already well known caution—but also against the eclectic use of fragments of philosophical discourse in order to develop a seemingly new criticism in architecture. Ultimately the discourse of Nietzsche is entire in itself—not autonomous but complete according to its own terms of reference. To transform Nietzsche's statements on criticism and history into armatures for the understanding of something other than criticism and philosophy—to make of them, that is, proper instruments for the analysis of architectural design—is a task that itself demands an authentic philosophical approach, not to the texts that surround architecture, but to architecture itself.

22



1

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.

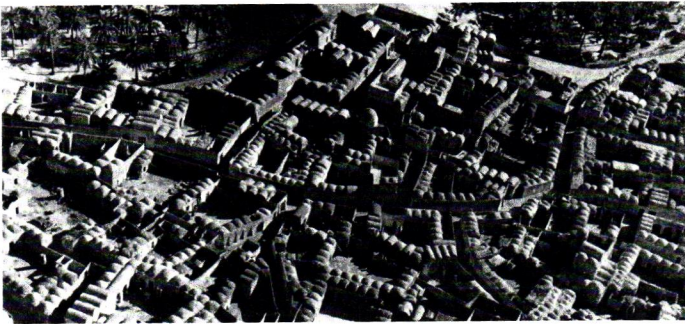
On the other hand, a work of architecture can also be seen as belonging to a class of repeated objects, characterized, like a class of tools or instruments, by some general attributes. From the first hut to the archaic stone construction, primitive architecture conceived of itself as an activity similar 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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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.

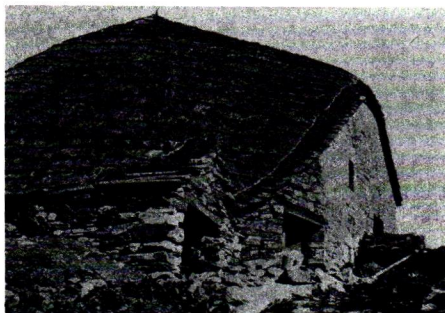
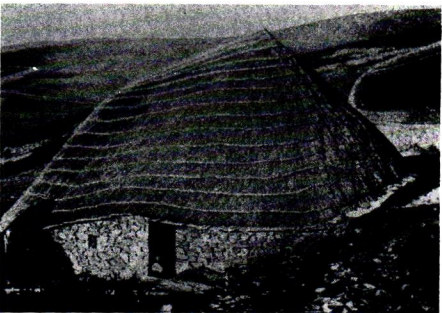
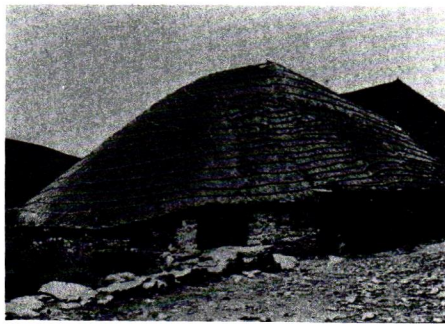
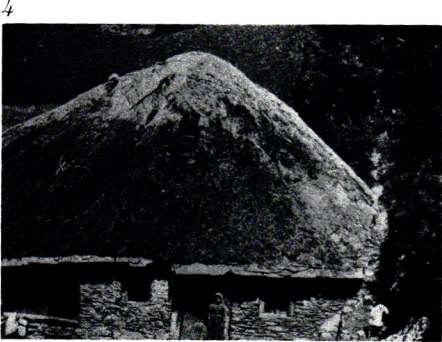
This leads directly to the concept of a typological series that is generated by the relationship among the elements that define the whole. The type implies the presence of elements forming such a typological series and, of course, these elements can themselves be further examined and considered as single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

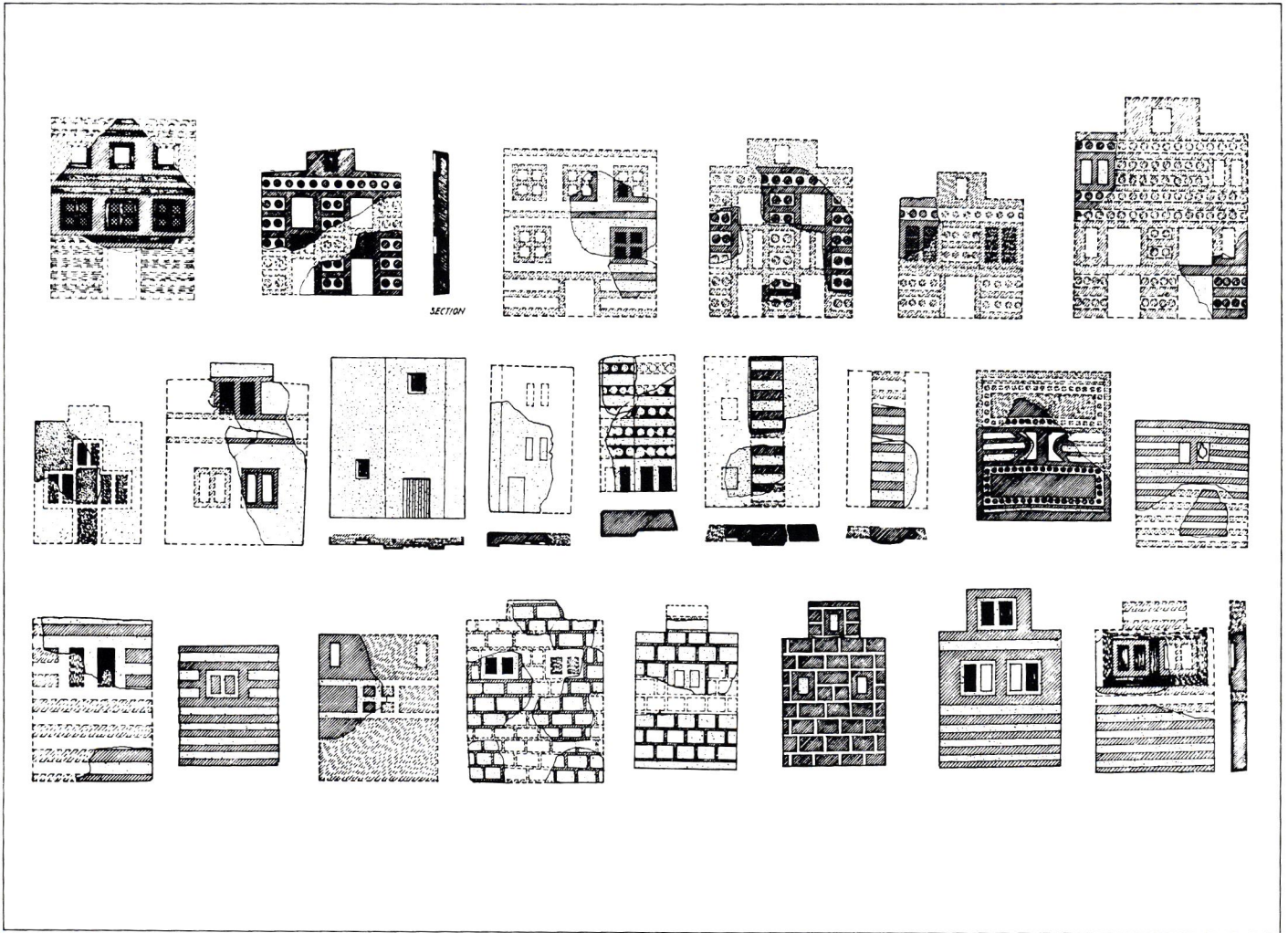


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9 Faience tablets representing houses and towers. The Palace of Minos, Knossos, Crete.

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

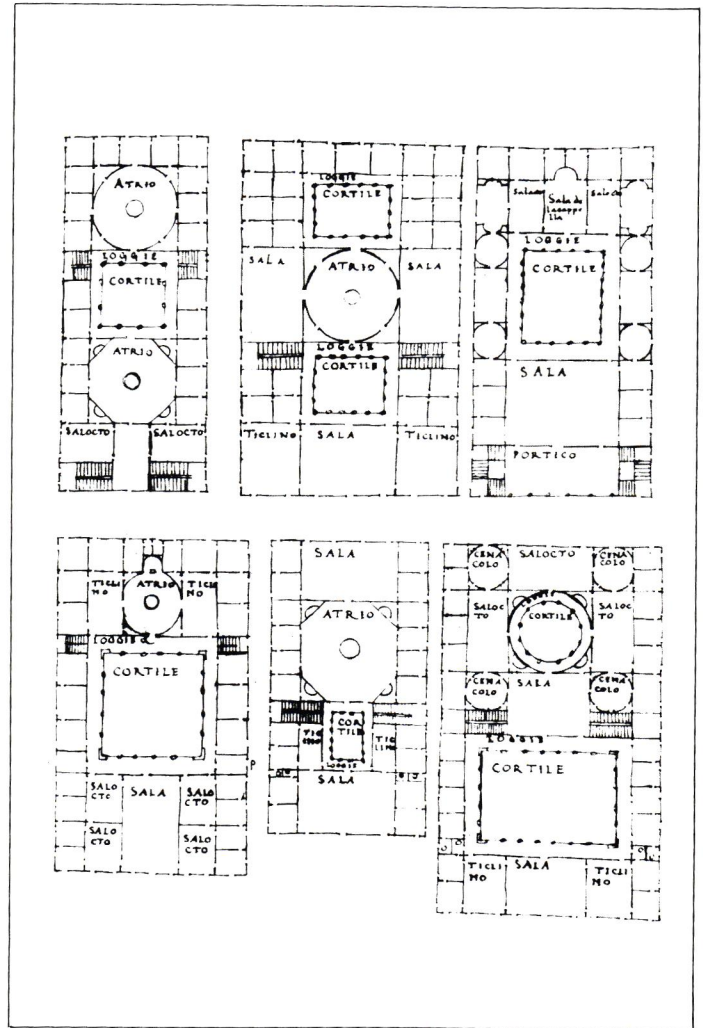


does not necessarily imply mechanical reproduction. Of course, the typological approach per se does not demand constant change; and when a type is firmly consolidated, the resultant architectural forms preserve formal features in such a way as to allow works of architecture to be produced by a repetitive 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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28 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 assumed 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.

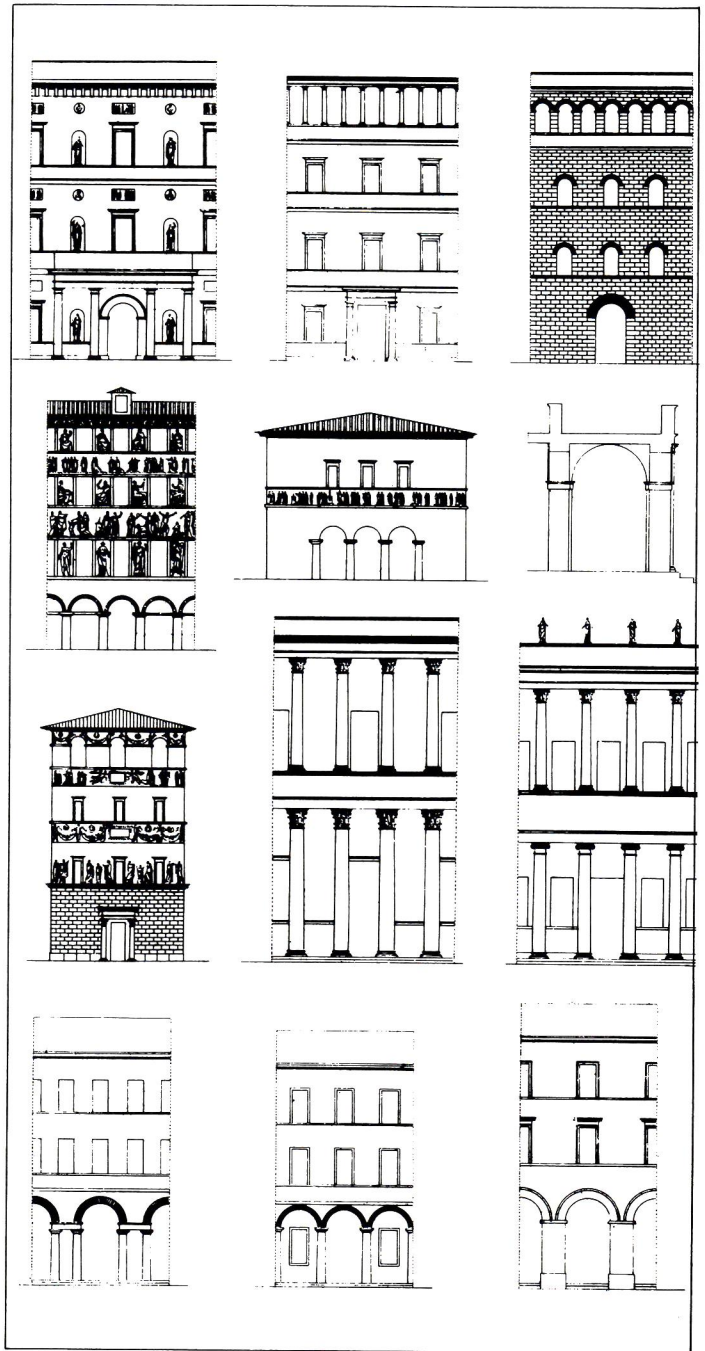
For Durand, the first aim of architecture is no longer the imitation of nature or the search for pleasure and artistic satisfaction, but composition or “disposition.” This idea of composition is directly related to needs; its relevant criteria are, accordingly, convenience and economy. Convenience seeks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

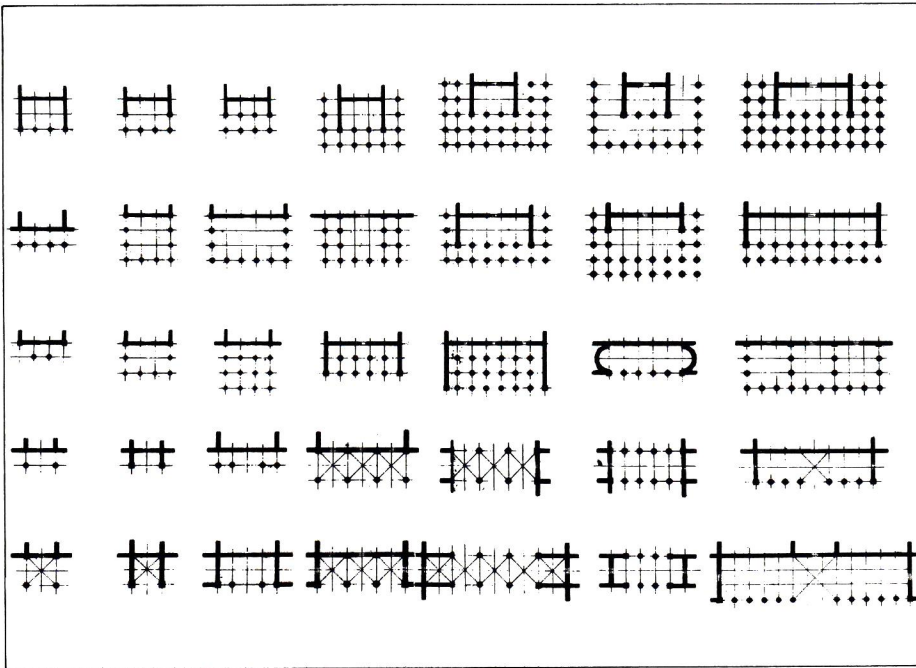
According to Durand, the architect disposes of elements—columns, pillars, foundations, vaults, and so on—which have taken form and proportion through their relationship with material and with use. These elements, argues Du-

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 Quatre-mère'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.

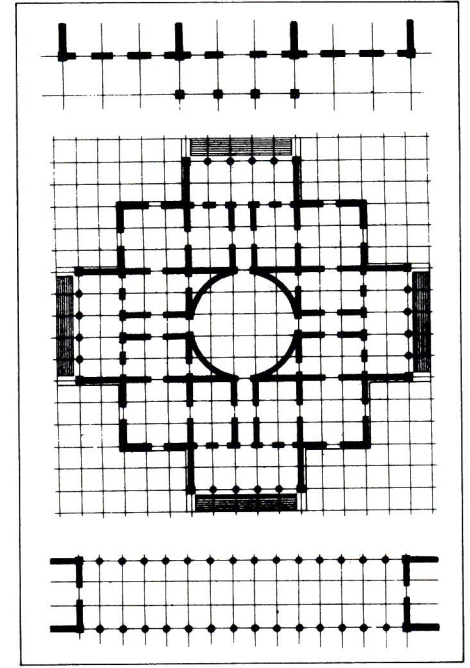
Durand himself avoided the idea of type; he used the word *genre* when, in the third part of his book, he described the variety of buildings classified according to their programs. He collected, and sometimes even invented, hospitals, prisons, palaces, libraries, theaters, custom houses, barracks, town 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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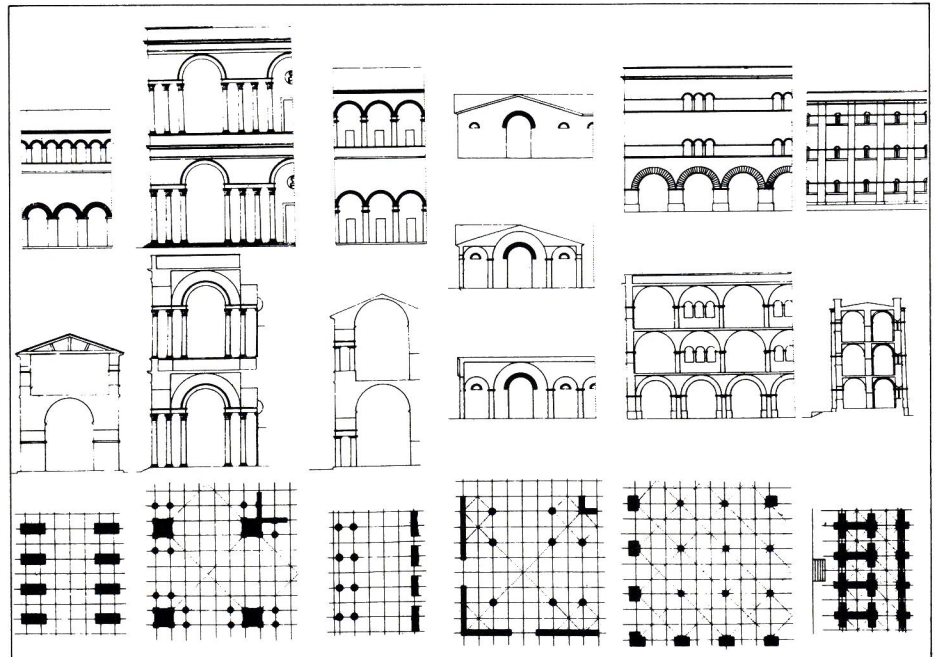
12 Plans for porches. J. N. L.
Durand, 1809.



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

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



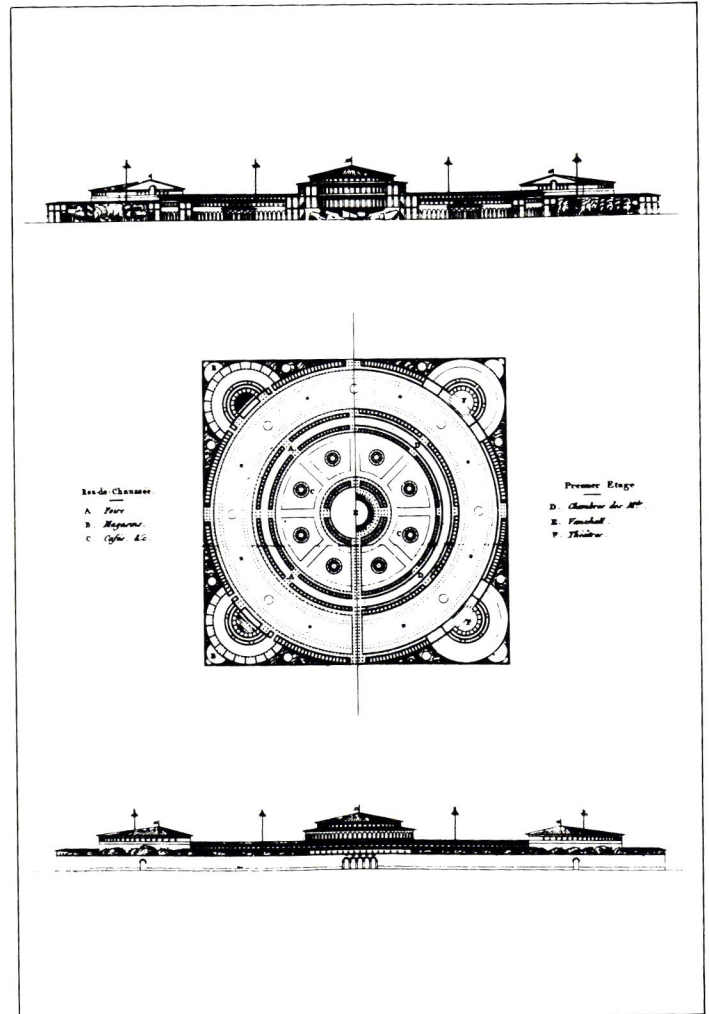
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*Recueil et parallèle des edifices de tout genre . . .*⁹ in which temples, churches, squares, and markets were categorized according to their program or use—categories which interested him more than their forms and more than any related questions of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

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



32 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.

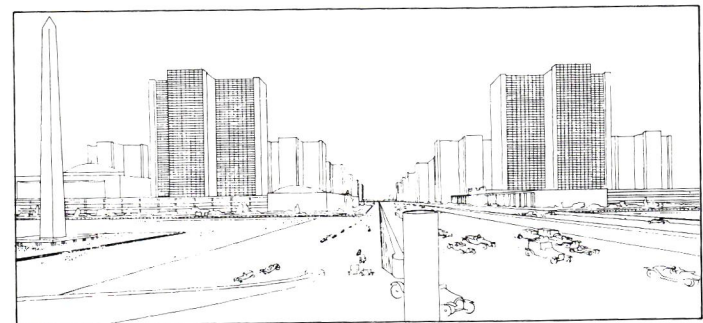
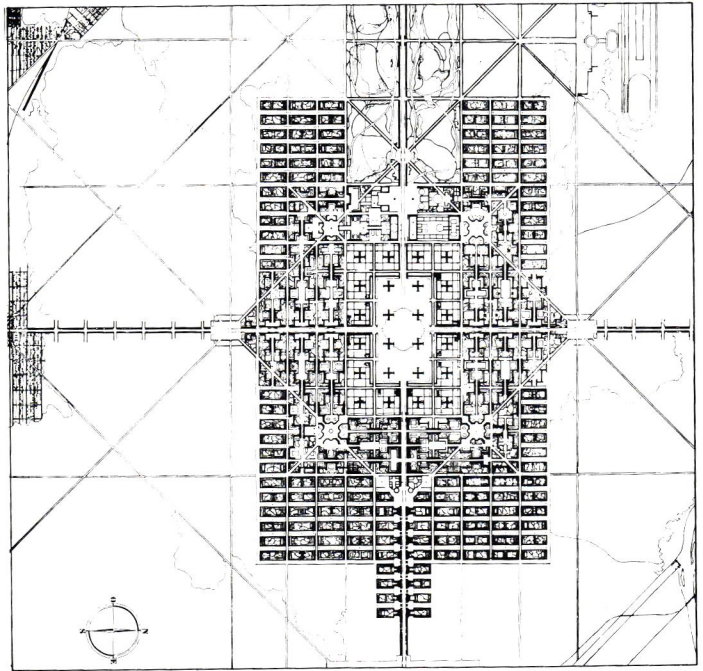
Even when he designed a number of houses with the generic and quasi-typological designation of “courtyard houses” (fig. 17), the designation was more an allusion to a well-known type than a reduplication of it. These houses are in the end defined by the way in which the architect has materialized space; 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 architectural 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.

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 typical 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



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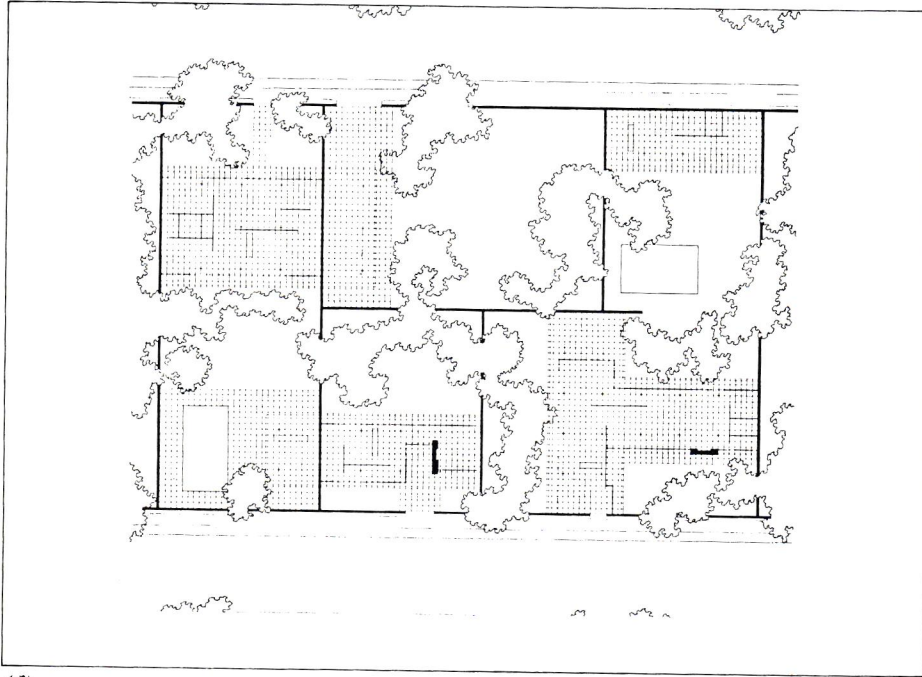
17 Courtyard houses, plan. Mies van der Rohe, 1938.

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

20 Analysis of building plans. Alexander Klein, 1934.

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

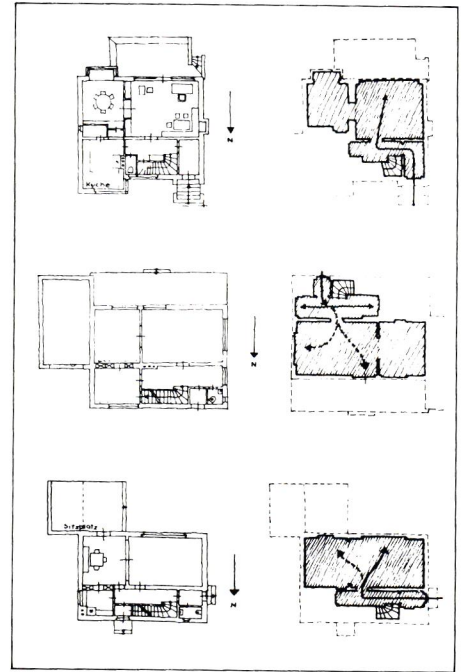
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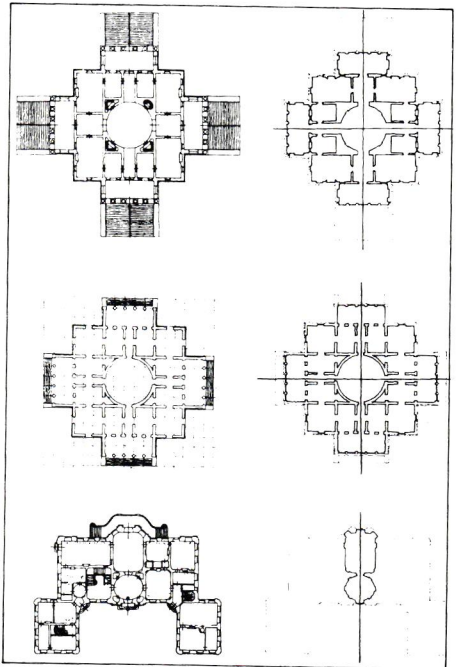
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provide the rules for architecture without recourse to precedents, without need for the historical concept of type. And, although functionalist theory was not necessarily coincident with the other two attitudes already described, all three had in common 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 city¹⁴ 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

36 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 methodology—and not the result of method as was previously understood. In this sense, Er-

nesto 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

to the program of an individual house and to a student residence or a school.

Because the city, or its builders, has lost its own memory and forgotten the value of these primary and permanent types, according to Rossi, the task of architects today is to contribute to their recovery. Thus the city Rossi, the silent witness, pictures is one in which time seems to be frozen. If it is unrecognizable as any specific place, this is because for him there is only one ideal city, filled with types (rather impure types, but types nonetheless), and the history of architecture is none other than its history.

Within the city are contained the principles of the architectural discipline, and the proof of their autonomy is given by the permanence of types through history. Yet the very silence and autonomy of Rossi's images of these types within the ideal city that encloses them graphically raise the question of their relation to reality—to a real society—and thereby the question of their actualization and contextualization. Rossi's types communicate only with themselves and their ideal context. They become only mute reminders of a more or less perfect past, a past that may not even have existed.

But another critic, Alan Colquhoun, has suggested that the possibility of a real communication between architecture and society is not necessarily precluded by the idea of type.¹⁸ Indeed, a certain level of reality—which is necessary if communication is desired—is centrally concerned with types, because it is through the concept of type that the process of communication is made possible. Thus, denying the possibility of an architecture unrelated to intelligible forms of the past—that is unrelated to types—Colquhoun understands architecture as a discipline of conventions; but precisely because of its conventionality, it is arbitrary and therefore susceptible to voluntary changes. In other words, the architect masters meaning and, through it, he is able to enter into the process of society's transformation.

Colquhoun's definition of type as a support of intelligibility presents another possibility from which typology can be

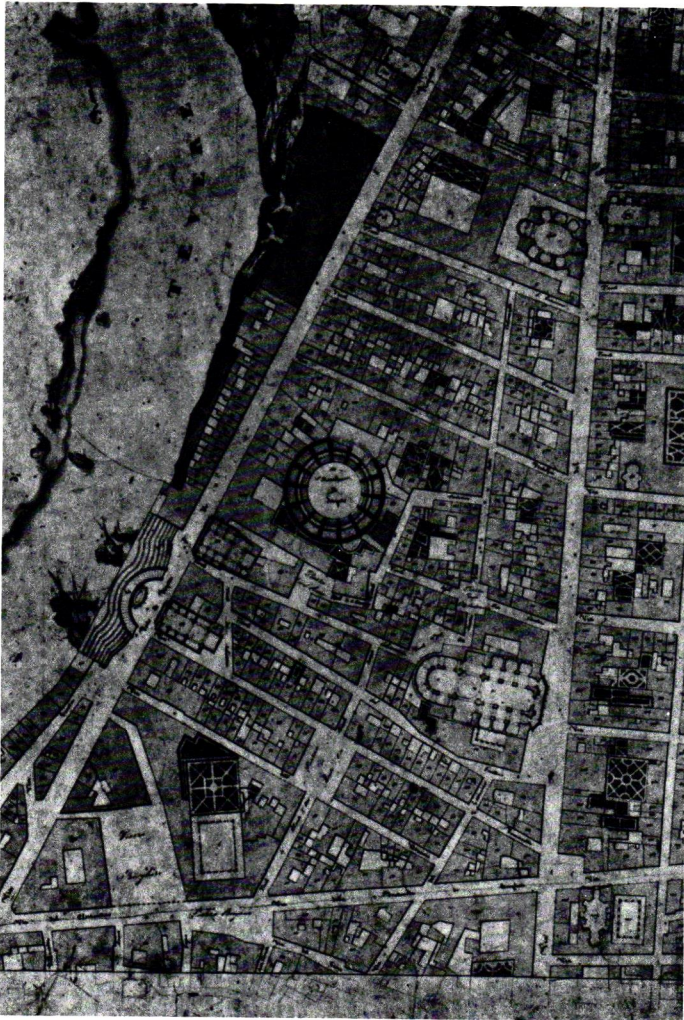
observed, and in a sense rediscovered: that is, as an explanation of architecture from an ideological point of view. This would allow for the establishment of links between architecture and society.¹⁹ Within this other view, the architect has, whether he likes it or not, the obligation and the duty to deal with ideological content. The types—the materials with which the architect works—are seen to be colored by ideology and assume meaning within the structural framework in which architecture is produced. In accepting a type, or in rejecting it, the architect is thus entering into the realm of communication in which the life of the individual man is involved with that of society. The architect thus makes his "voluntary decisions" in the world of types, and these "voluntary decisions" explain the ideological position of the architect. As he works with types, his thought and his position are incorporated into them. If a work of architecture needs the type to establish a path for its communication—to avoid the gap between the past, the moment of creation, and the world in which the architecture is ultimately placed—then types must be the starting point of the design process.

Such an attitude toward typology proposes a new level of meaning for architectural objects in history, one that relates to their place in the public realm and their integral position in society, not as autonomous objects but as elements given life by the process of history itself. Thus, in the words of George Kubler, "the time of history is too coarse and brief to be an evenly granular duration such as the physicists suppose for natural time; it is more like a sea occupied by innumerable forms of a finite number of types."²⁰ The history of art, and therefore the history of architecture, would be the description of the "life" of these types.

V

But despite this rediscovery of the concept of type in recent years, it is perhaps not so easy to find it accepted as an active fact in contemporary architecture. We are continually being presented with ideas and images of type which seem to be in complete disjunction with their supposed realization. Thus while Louis Kahn's search²¹ for origins as a primary condition of architecture allowed us

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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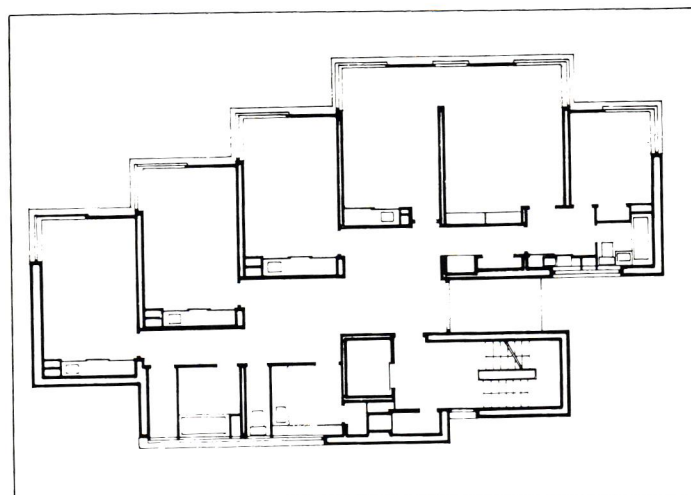
to think in terms of a possible rebirth of Quatremère's ideas, this attitude was not necessarily present in the work of his followers. They merely imitated the language of this attempted return to origins without respecting the search itself. While it is also true that the impact of the structuralist 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

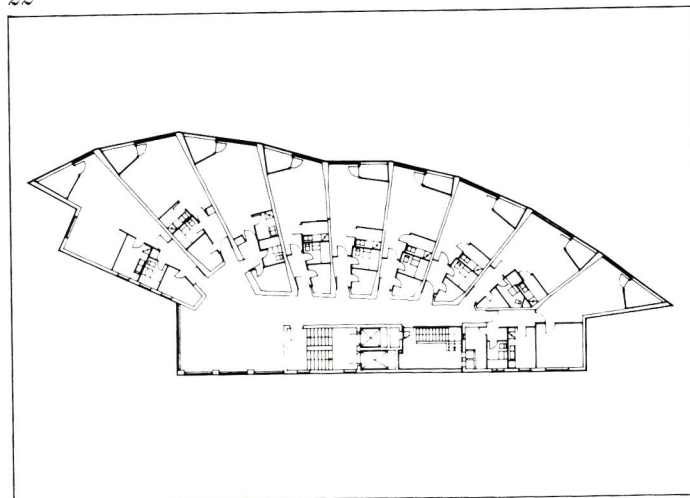
22 *William Stone Building, Peterhouse College, Cambridge. Sir Leslie Martin and Colin St. John Wilson, 1963. Typical floor plan.*

23 *Apartment tower, Bremen, West Germany. Alvar Aalto, 1958-1962.*

underlined by the renewed emphasis on communication—on meaning and signification in architecture. An example of this can be found in the work of Robert Venturi. For example, in his houses in Nantucket the typical image of the wooden American house is clearly sought (figs. 26, 27). Nevertheless, while Venturi seems to have tried to maintain the image of the vernacular house on the outside, the inner structure lacks any resemblance to or memory of the old. Only the outer image remains, and into this image Venturi introduces as many elements as he needs—windows, staircases, etc.—without much concern for his original model. Thus, these houses defined by image contain a great variety of elements characterized only by their generality, and while these elements are almost standard, they are lacking in any kind of explicit relationship with the formal structure. The architect handles them as known materials, entities in themselves, without feeling the necessity to establish any linkage to a continuous formal structure. Moreover, in spite of the generality of the elements, the houses are very precise and singular events and can be considered neither the expression of a known type nor a potentially bold appearance of a new prototype.



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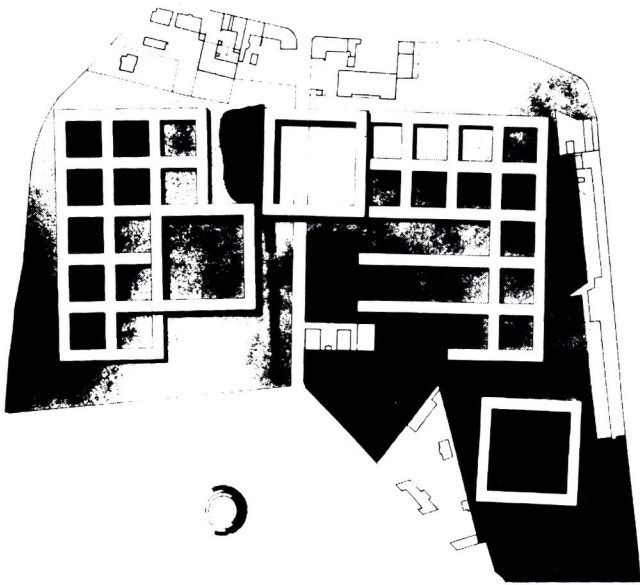
For Venturi, type is reduced to image, or better, the image *is* the type, in the belief that through images communication is achieved. As such, the type-image is more concerned with *recognition* than with structure.

The result is an architecture in which a unifying image is recognized whose elements belong clearly to architectural history, but in which the classic interdependence of the elements is definitively lost. The type as inner formal structure has disappeared, and as single architectural elements take on the value of type-images, each becomes available to be considered in its singleness as an independent fragment.

Here, in fact, one is confronted with a broken structure, shattered into formally autonomous pieces. Venturi has intentionally broken the idea of a typological unity which for centuries dominated architecture. He finds, however, and not without shock, that the image of architecture

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 discomfiting 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.

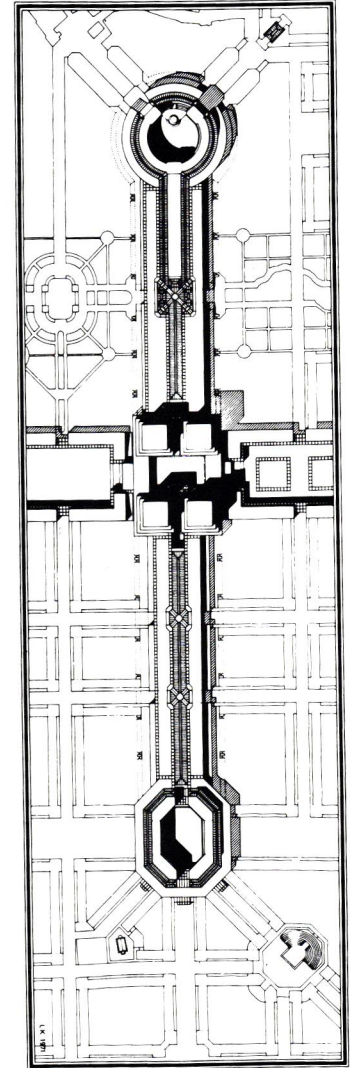
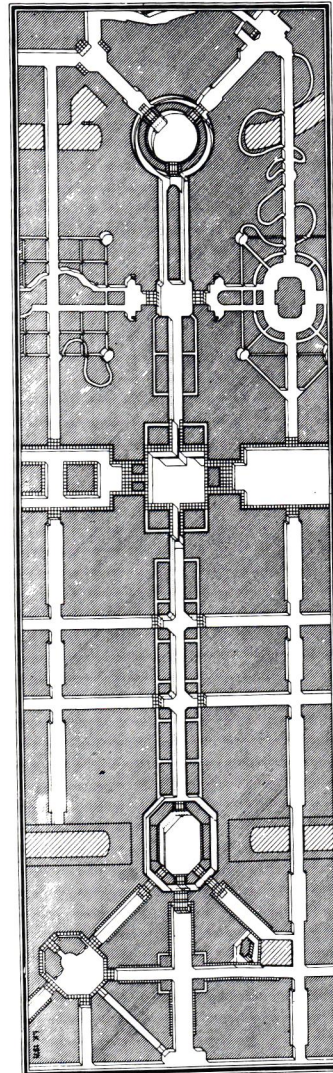
Changes in techniques and society—and therefore in the relationship between an institutionalized profession and its architectural product—have led to a deep transformation in the old theoretical patterns. The continuity in structure, activities, and form which in the past allowed for the consistent use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

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

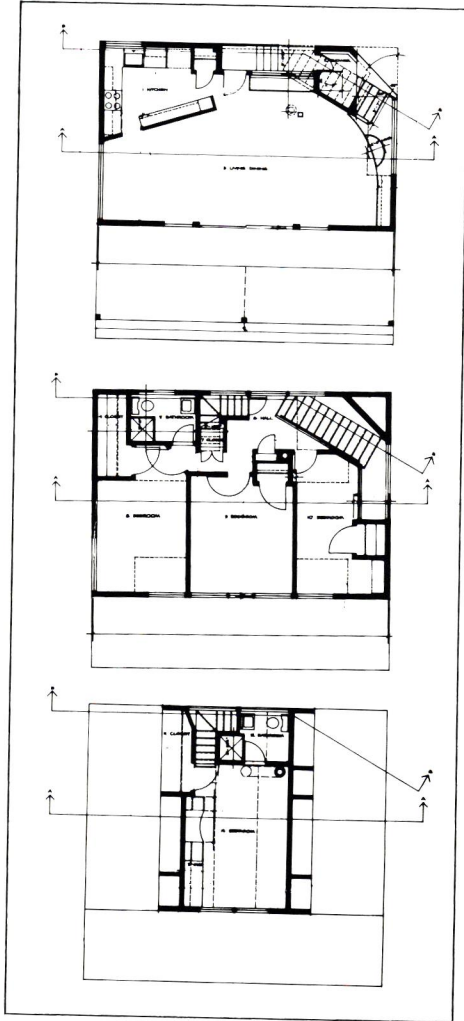


26 Trubeck house, plans. Venturi and Rauch, 1970.

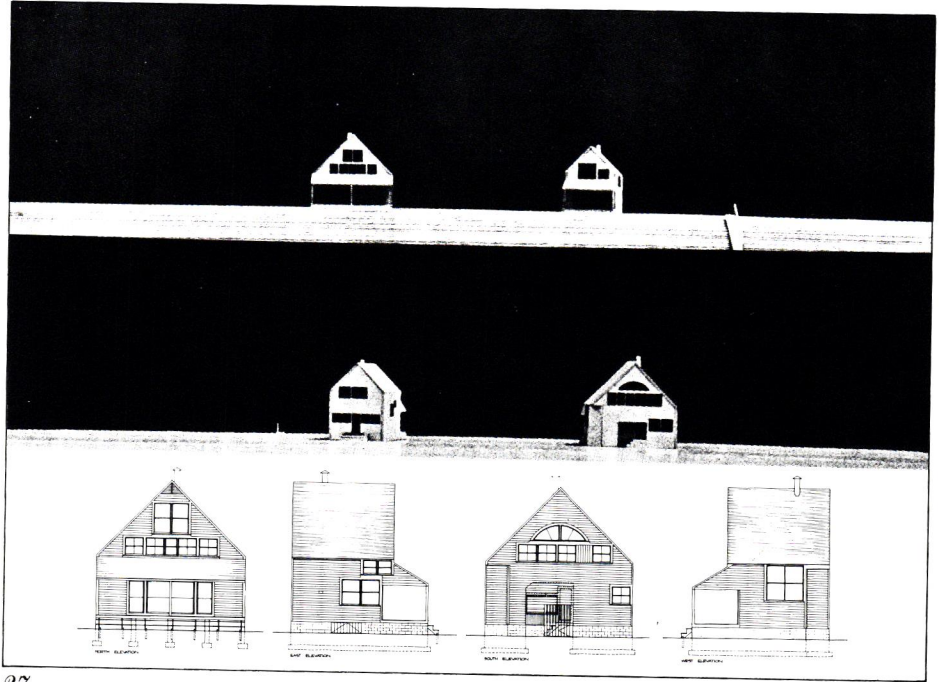
27 Trubeck and Wislocki houses, Nantucket, Massachusetts. Venturi and Rauch, 1970. Elevations of Trubeck house.

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

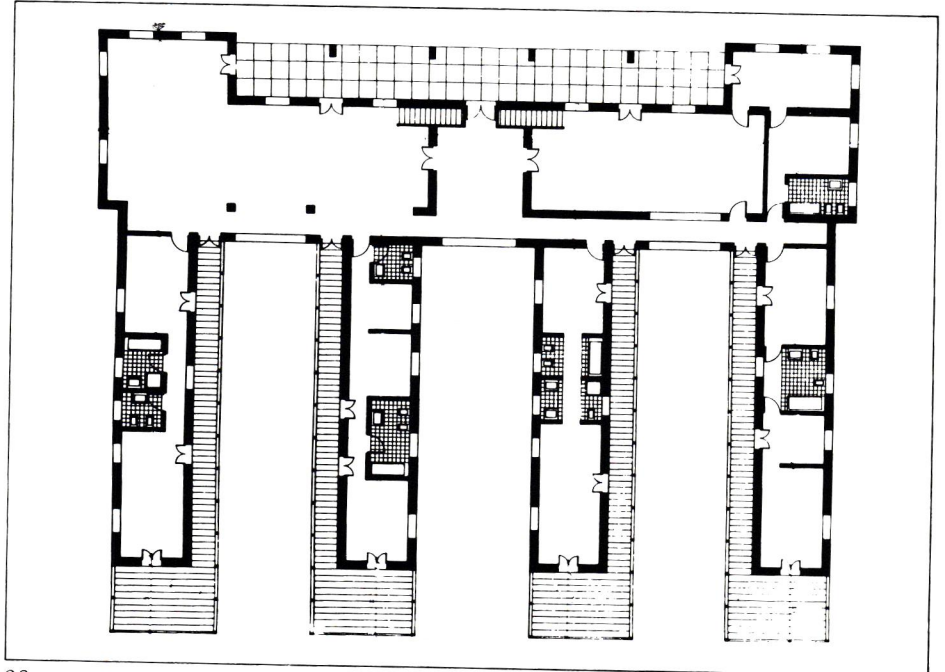
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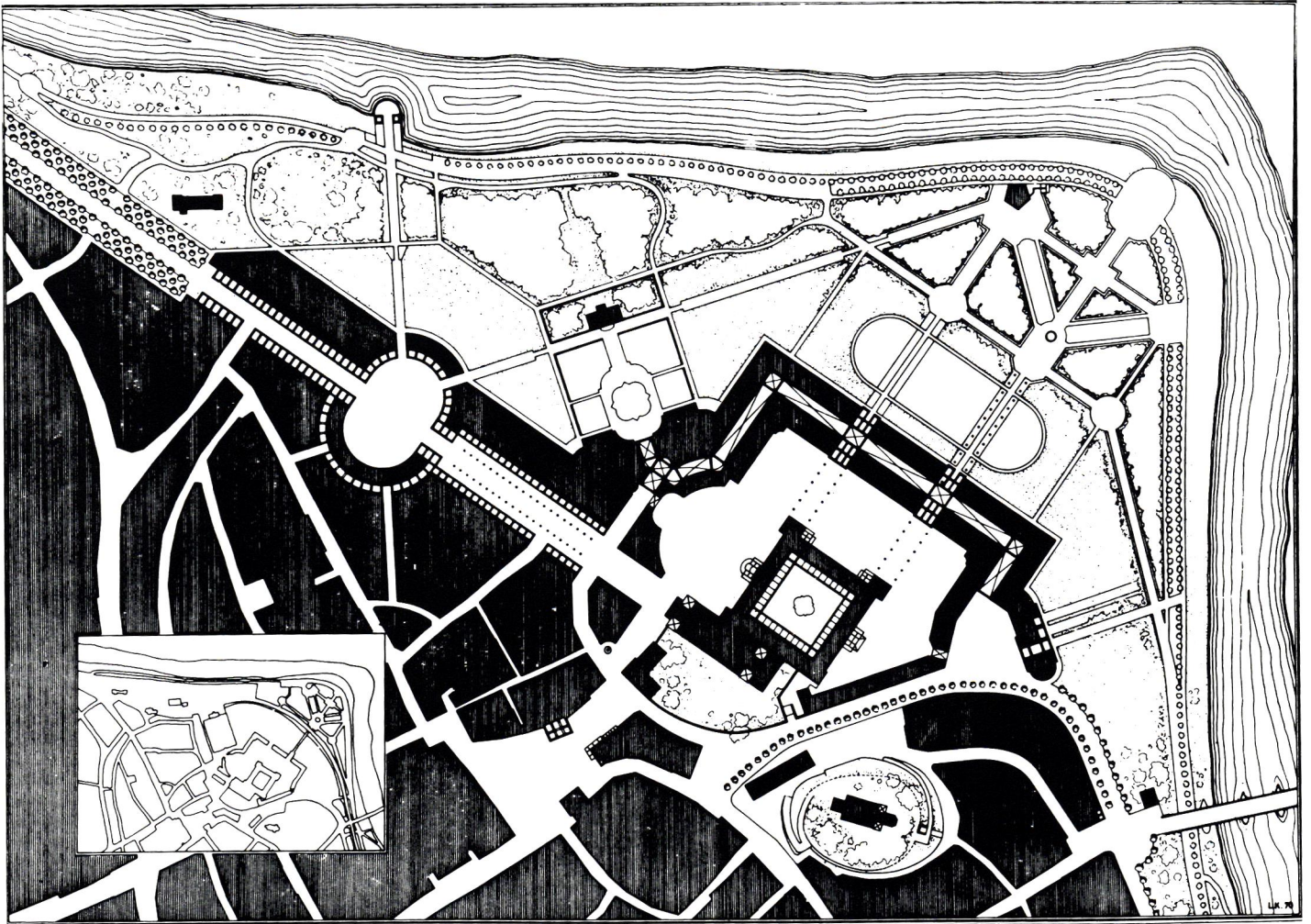
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44 interest and value of the concept of type is thereby denied completely. To understand the question of type is to understand the nature of the architectural object today. It is a question that cannot be avoided. The architectural object can no longer 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 prob-

lem 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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Emil Kaufmann and the Architecture of Reason: Klassizismus and “Revolutionary Architecture”

Georges Teyssot

Translation by Christian Hubert

Can one claim today, following Emil Kaufmann, that *L'Architecture* of Claude-Nicolas Ledoux constituted the summit of architectural research in the age of the Enlightenment?¹ Is it true, as we read in Kaufmann's *Von Ledoux bis Le Corbusier*, that the teaching of Jacques François Blondel “has value only for the period ‘before’ the Revolution,” while that of Jean-Nicolas Durand embodies the architectural thought of “after the Revolution?” Can the interpretation of Ledoux's architecture be limited to that image which he wished to convey in *L'Architecture*?²

These questions return us directly to the rewriting of history undertaken by Le Corbusier in his *Oeuvre Complète*. Here we find one of the principal sources for the eternal *rapprochement* between Ledoux, *l'architecte maudit* (“the ill-fated architect”), and Le Corbusier, *l'architecte du bonheur* (“the architect of happiness”).³

Kaufmann, by proposing the ambiguous notion of “revolutionary architecture,” knew that he was reopening the much debated question of the relation between cultural innovation (the avant-garde) and political revolution.⁴ Did not Le Corbusier himself in 1923 formulate this painful choice: “Architecture or revolution, revolution can be avoided”?⁵ Ten years later, with the rationalist aspirations of European constructivism badly battered the weakness of the ideological foundations of the avant-garde was revealed. Kaufmann's desire to establish a historical continuity between the rational geometrism of the architecture of the eighteenth century, the purism of *L'Esprit Nouveau* in France, and the neo-primitivism of the European constructivist movements was thereby a contribution to the re-anchoring of the architecture of the Modern Movement in history. The operation was a paradoxical one, for the avant-garde—from Kandinsky to Gropius—had asserted itself as anti-historicist and had exaggerated the break with the “old art.” This same attempt at anchoring would be carried out in different forms by Nikolaus Pevsner in England (“Von Morris bis Gropius”) and by Sigfried Giedion, general secretary of CIAM from 1928 to 1956 (*Space, Time and Architecture*).⁶

I

Among the numerous questions raised by Kaufmann's writings, we have chosen to concentrate on those raised by the concept of *Klassizismus* (usually translated as “Neoclassicism”) within the framework of periodization more than that of philology. As early as 1920, Kaufmann had published an article, “The Architectural Theory of French Classicism and Neo-Classicism”⁷ in which he argued that the “Classic” (*Klassik*) and the “Neoclassic” (*Klassizismus*) share a common concern for clarity and truth; but while the first term designates a period which favors a pictorial fusion of elements (sculpture with the wall for example), the second establishes a harmonic coexistence among the parts.⁸ On the basis of such formal notations Kaufmann risks an attempt at periodization: the partial concordance between Classic and Neoclassic sensibilities is of extreme importance for French architecture. It is proof of the absence of a true Baroque period. Thus it has been possible to confer a unity on the period from the middle of the seventeenth century to the beginning of the nineteenth by giving it the name of “classicism” in general. But, continues Kaufmann, once one has understood the true essence of the Neoclassic spirit, one cannot deny the distinct difference between French Classicism and Neoclassicism. The first extends from the middle of the seventeenth century to approximately 1750; the second continues to the beginning of the nineteenth century.⁹

How is this distinction established? Kaufmann proposes two levels of interpretation: one “formalist” (we will examine the sense of this word), the other seeking to link the analysis of form to the “spirit of the age.” The formal explanation is developed thus: “Classicism demands of architectural form a harmony pleasing to the senses and a clear and easy reading. The material has to be treated as its essence requires; the form has to find an image reflecting its use, a signification reduced to the intrinsic qualities of the subject and their expression. Neoclassicism is at the opposite pole. For it, matter is dead. Form has no other function than to be the support for thought, to transmit impressions, to provoke sensations which, beyond the plasticity of the material, do not express the qualities of the material itself. The symbol of Neoclassi-

48 cism is the stone without sensuality, the stone inhabited by a 'genius'." ¹⁰

Thus, the Classic exploits the sensuous potential of material while the Neoclassic, art dematerialized, makes the genius "speak" in the stones. While Kaufmann's method is of "formalist" origin, one also senses in this brilliant analysis the concept of "empathy" (*Einfühlung*) developed by the Vischers and by Lipps, which is at the center of the psychological current in the history of art. "Empathy" in the definition of R. Vischer is the symbolic sympathy which links the sensible to the spiritual by animating the real. Kaufmann seems here to want to relate the concept of "empathy," that representation which produces the emotive values in things, with that of *architecture parlante* as it was understood at the end of the eighteenth century. ¹¹

Kaufmann's second level of interpretation is expressed in this way: "For Classicism, clarity is an aesthetic category. For Neoclassicism, it becomes an ethical one." ¹² The problem which arises here concerns, of course, Kaufmann's use of the concept of clarity, of verisimilitude (*Wahrhaftigkeit*). For the clarity of geometric definition of volumes and the purity of surfaces, which appear without a doubt in the plates of Ledoux's *L'Architecture* or in the "fantastic" projects of Etienne-Louis Boullée and in the Grands Prix, seem in reality to be entirely contradicted by the profuseness and richness of Ledoux's ornaments for the Hôtel de Hallwyl and for the grand salon of the Hôtel d'Uzès, as well as by the preciousness of the domestic architecture of Boullée, like the Hôtel de Brunoy.

In reassessing Kaufmann's analysis we must first ask where and how, from a *historical* rather than from a formal point of view, "Neoclassicism" was formed. ¹³ Today the thesis which sees Paris and Rome as the two centers where the new current was formed, and which emphasizes in particular the influence of two masters, Jacques-François Blondel and Giovanni-Battista Piranesi, is well enough accepted. The studies of L. Hautecoeur, those of Kaufmann and of J. Fleming, and later of John Harris have shown that the beginnings of the movement

took place in Rome as a result of the meeting of such outstanding personalities as Jean-Laurent Legeay, Ennemond-Alexandre Petitot, Piranesi, Jacques-Louis Clérisseau, Sir William Chambers, and Robert Adam, and through the activity of such institutions as the Académie de France and the Accademia di San Lucca, where a reading which was at once systematic and mythic of certain examples of Roman antiquity led to the foundation of new bases for architecture. ¹⁴

Nevertheless, the hypothesis—set forth by Kaufmann in his *Three Revolutionary Architects* and developed more recently by Harris—which attributes an overwhelming influence to the teachings of Legeay on the artistic formation of Parisian architects from 1742 to 1748, and in particular the hypothesis which places Legeay's graphic works anterior to those of Piranesi have been called into question. ¹⁵

For other authors, the origins of "Neoclassicism" are to be discovered as much in the schematicism of "neo-Palladian" or "neo-Scamozzian" compositions of the Venetian architects of the beginning of the eighteenth century as in the "neo-Palladian" or even "neo-Jonesian" productions of the circle of artists around Lord Burlington after 1715 in England. Some have gone even further: D. Watkin, developing certain ideas of John Summerson, has recently claimed in a well-documented argument that one must see the "neoclassic idea" as an essentially picturesque and *romantic* tendency. ¹⁶ This assertion, implying a historical periodization, is based on a study of the important personality of Thomas Hope, one of the protagonists of the "neo-picturesque" aesthetic and promoter of the various revivals—the stylistic renaissances—of the beginning of the nineteenth century in England. Watkin wishes to establish an effective continuity between the theories of Sir John Vanbrugh as expressed in a text of 1709, his architecture (such as it is represented in certain watercolors of Blenheim Palace), and all the "picturesque" creations of the beginning of the nineteenth century such as Deepdene (1818–1823), the country house of Hope and John Soane's Dulwich Gallery (1811–1814).

“Romantic architecture” is a traditional concept in artistic historiography. Friedrich von Schlegel was the first to make the distinction (in 1809) between “the theory of the classic and that of the romantic,”¹⁷ a distinction which was popularized throughout the nineteenth century. Kaufmann, in his first article, defined the relations between *Klassizismus* and *Romantik* and opened the way to that ambiguous term “romantic Neoclassicism” which has invaded the texts of architectural history: “In Neoclassicism . . . several currents converge. One of these, deriving from the scientific and literary tendencies of the period, is manifested in the taste for the antique, or, in general, by a return to the forms of the past, in particular those of the medieval period—Neoclassicism and Romanticism go together. Other currents have their source in the new ethic; they are founded on the requirement to produce a spiritual effect (this effect corresponds to the universe of sentiment in Romanticism), but also on the almost opposed demand for verisimilitude of architectural appearance.”¹⁸

Numerous German publications insist on the Romantic character of Neoclassicism. This is essentially the thesis developed by Sigfried Giedion in 1922 in his *Spätbarocker und romantischer Klassizismus*.¹⁹ This study is concerned with German architecture from the end of the Baroque to the birth of “Romanticism.” It attempts to define and locate the point of rupture between two periods whose formal heterogeneity is clear to the author. Thus, in the historical space which unites these two strong poles—Baroque and Romantic—he recognizes a period of transition which “goes from one to the other [and] can either confuse their boundaries or else describe quite clearly their contours through the different utilization of antique form.” Giedion calls this later tendency “Romantic Neoclassicism” (*Romantischer Klassizismus*), and its first concretization in Germany was the Monument to Frederick the Great designed by the young architect Friedrich Gilly in 1796.

This tendency is opposed, continues Giedion, to that of “late Baroque neoclassicism” (*Spätbarocker Klassizismus*) whose most remarkable spatial realization is the

Church of Sainte Geneviève in Paris by Jacques-Germain Soufflot, begun in 1757. It is difficult to capture the sense of these periodizations, which at first sight can seem unnecessarily complicated. To judge their usefulness, one must for a moment return to the work of the “founders” of modern art history: Alois Riegl and Heinrich Wölfflin. Riegl had suppressed, or at least displaced, the concept of “decadence” in his analysis of *Spätromische Kunstindustrie* (*Late Roman Industrial Art*, published in 1901) and Roman Baroque art.²⁰ The decadence of the “late period” is no more than historic divergence between the work of art and the truth of the “classic” (Greek art, the age of Augustus in Rome, the Florentine Renaissance), but it is the moment of transition where art (all the arts) continues to be “produced.” Its value is measured in relationship to the techniques and processes applied, to the immanence of the labor contained in it, to the transformation of the spatial models imposed by time. By attaching himself to the idea of the “autonomy of art,” an approach introduced by Konrad Fiedler, the Viennese critic, denies all possible identification of art with the demands of the search for ideal (or “classic”) beauty.

Setting its own limits by the autonomy it has given itself, the new discipline of the history of art denies itself the possibility of constructing an aesthetic *system*: art is an immanent and temporal production, the expression of a *Wollen* characteristic of a period. The techniques of form-making which are the “language” of art are conventional and thereby equivocal, subject to transformation.²¹ Once the *limits* of a period are set—late Roman art/paleo-Christian, Classic/Neoclassic, Baroque/Romantic, etc.—one must determine its structure, that is to say, using Riegl’s concept, its *Kunstwollen*, its “artistic will,” the principle which *informs* the work on the formal level in the domain of pure visibility (*Sichtbarkeit*), where only “contour and color, in the plan or in space” enter into play.

It is in effect by a “formalist” analysis that Giedion defines *Romantischer Klassizismus*. In this period the overall volume tends to circumscribe itself in order to be materialized in independent and discrete units, playing on the plasticity of cubes. It is the mass, the block which in-

50 spires. One can thus think of Gilly's Monument to Frederick the Great as a crystalline system. Subsequently, with Schinkel: "Romantic Neoclassicism emerges in its purest form when it expresses itself freely in all its plasticity and gives birth not to space but to volume."²² Finally, in the "Romantic" plans, there is no longer, according to Giedion, the distinctly marked rhythm of Baroque spaces; one finds instead an intangible slowing down. The different parts become individual entities that align themselves independently of the whole, and one can invert their order without changing anything of decisive importance.²³

In this analysis one can discern not only the application of the methods of Viennese *Sichtbarkeit*, methods dear to Giedion (who began his studies in Vienna), but also that of the "formal categories" of Wölfflin, his thesis adviser in Munich.²⁴ The *Einheit* (unity and uninterrupted movement) of the Baroque is opposed to the *Vielheit* (multiplicity and articulation) of the Neoclassic. This opposition reappears in the distinction which Kaufmann establishes between *Barock-Verband* and *Pavillonsystem*, the former displaying a unitary, "heteronomous" principle of spatial organization, the latter the multiple and fragmented, "autonomous" nature of Neoclassicism.

With Kaufmann, as with Wölfflin, formal oppositions are the basis for the distinction between heteronomy and autonomy. But Kaufmann adds to this an idealist attempt to link these formal analyses to the spirit of the age, to the *Zeitgeist*. This appears clearly in a text of 1933 where the aesthetic categories are intimately tied to moral categories: "At the time when Kant rejects all the moral philosophies of the past as heteronomy and decrees the 'autonomy of the will as the supreme principle of ethics', an analogous transformation takes place in architecture. In the sketches of Ledoux these new objectives appear for the first time in all their clarity. His work marks the birth of autonomous architecture."²⁵

The anchoring of aesthetics in ethics, the moralization of the "artistic intentions" of "Neoclassic" architecture, allows Kaufmann, by means of a rapid and hazardous shift,

to affirm that "autonomous" architecture is a "revolutionary" architecture. This is a most paradoxical analysis, for it reintroduced, by a purely immanent and automatic determination, notions of *content* within a method (the "formalist" criticism of art) which attempted on the contrary to eliminate such interferences.²⁶ The return to mimesis and to a "homotype" of architecture does not allow one to overcome the difficulty, apparently impossible to resolve, raised by a narrow formalism.

In *Architecture in the Age of Reason*²⁷ Kaufmann takes up anew the term *Spätbarocker Klassizismus* which he calls "frozen baroque." Similarly, the idea of "Romanticism" applied by Giedion to the architecture of Friedrich Gilly, Peter Speeth, Karl Friedrich Schinkel, and Leo Klenze, is extended to all the architecture of the second half of the eighteenth and the beginning of the nineteenth century. For Frederick Antal between 1935 and 1943, for Fiske Kimball in 1944, for Vincent Scully in 1961, and more recently for J. Mordaunt-Crook or D. Lewis, "the concept of 'romantic classicism' in architecture . . . henceforth confirmed the essentially romantic character of the movement which previously carried the title of 'neo-classic'."²⁸ Without dwelling unnecessarily on this tautological affirmation, it seems to us that the main fault stemming from the application of the idea of Romanticism to the architecture of the second half of the eighteenth century lies in the lack of an analysis of the very concept of "Classicism" which one wants to oppose it to. In effect, to take a few examples, if the Richmond capitol built by Thomas Jefferson between 1785 and 1789 is "Romantic," one must ask whether the work of Clérissseau—who inspired Jefferson—is equally so. Should one not then take into account the *Antiquités of France* (1778), or the false ruin of the room "of the parrot" which Clérissseau painted before 1766 in the convent of Trinità dei Monti in Rome (fig. 2)?²⁹ And if Clérissseau and his followers (such as Robert Adam) are "Romantics,"³⁰ then Piranesi, master of all of them, must be as well. . . . Pevsner's thesis proposes on the other hand to include in the forms of the Rococo not only Piranesi's *Chimneys* of 1769, but also his "most grandiose visions of Rome,"³¹ thus posing the *Rokokoproblem* described by Kaufmann,³² a problem never truly elucidated

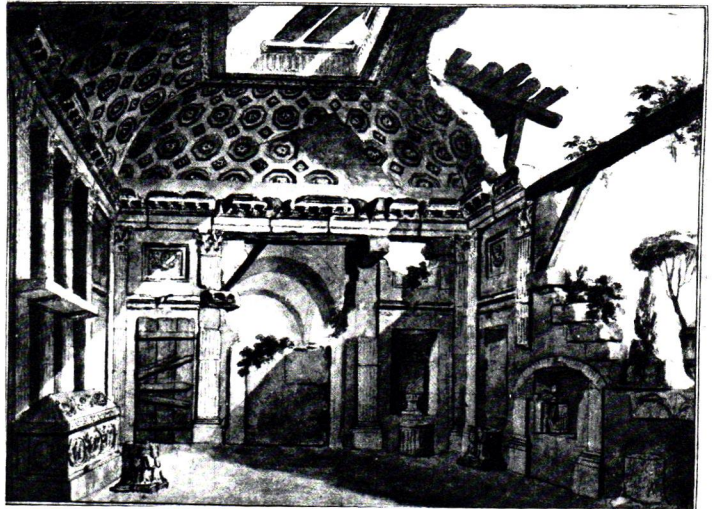
and which still tends to obscure the historical schema of *Klassik/Klassizismus*.

II

A simple dispute over words. . . . One must, however, discern the complex and often contradictory articulations of this period of history: barely had the architecture of the period of the Enlightenment elaborated its form-making techniques than a “crisis” appeared—we use the term in a first level of analysis—that one could situate approximately between 1750 and 1790. This “crisis” once past, one witnesses the collapse of *utopia*, the explosion of its unity and its universality into a thousand tendencies, and its recuperation at every level—to the point of being taken up by the spirit of the *Romantik*.

In the architecture of the eighteenth century, *utopia* is an “anxious utopia”: it is “negative” to the extent that each of its “inventions” could also be the cause of its disappearance. Thus, the introduction of the Greek order, simpler than the “Classical” order, risked a formal reduction, a prelude to the denegration of the trades and professions (draftsmen, architects, entrepreneurs, etc.). Every uncontrolled innovation which effected a *tabula rasa* could provoke the annihilation of the discipline—and hence of the profession (fig. 3).

Thence, the violent reactions of Piranesi, in the *Magnificenza*, to the publication of the drawings of Greek architecture by David Le Roy; the reaction of Chambers against Greek taste;³³ or again, the polemics of Piranesi against the tendency for formal simplification and rigor in construction—a tendency particularly strong in France, from the *Traité* of the Abbé de Cordemoy to the *Essai* and *Observations* of the Abbé Laugier.³⁴ The same disquiet appears in the *Cours* of Jacques-François Blondel, who had a formative influence on almost the entire generation of architects who attempted to “realize” the utopia of architecture: Jacques Gondoin, Jean François de Neuforge, Ledoux, Louis Jean Desprez, Charles De Wailly, Chambers, Jacques Guillaume Legrand, Jacques Molinos, Alexandre Théodore Brongniart, and Boullée. Blondel feared the appearance of relativism in the choice of



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3 “La vivandière à la grecque.”

E. A. Petitot.

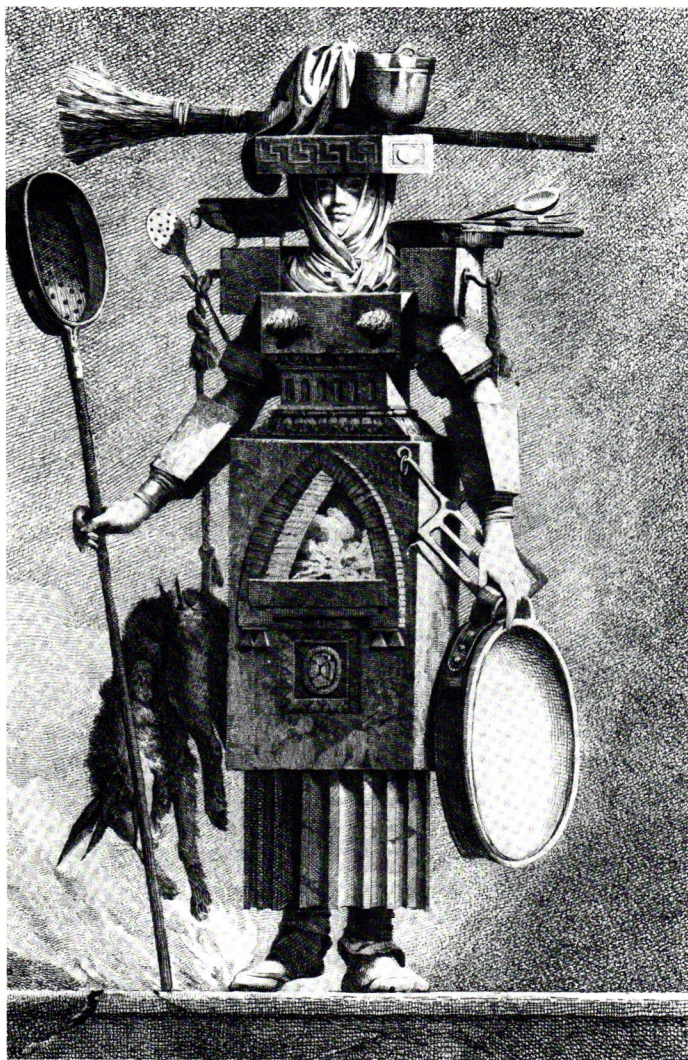
4 Machine for raising stones.

Claude Perrault.

5 Palais de la Malgrange, second

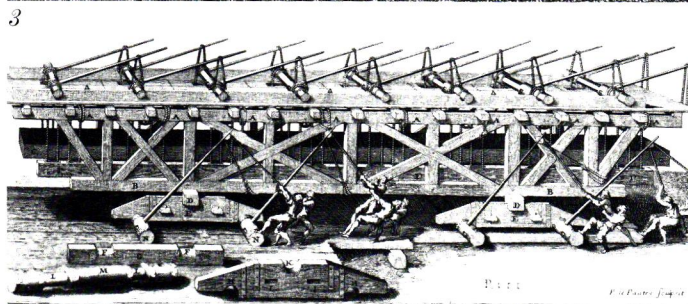
project. G. Boffrand, 1712–1715.

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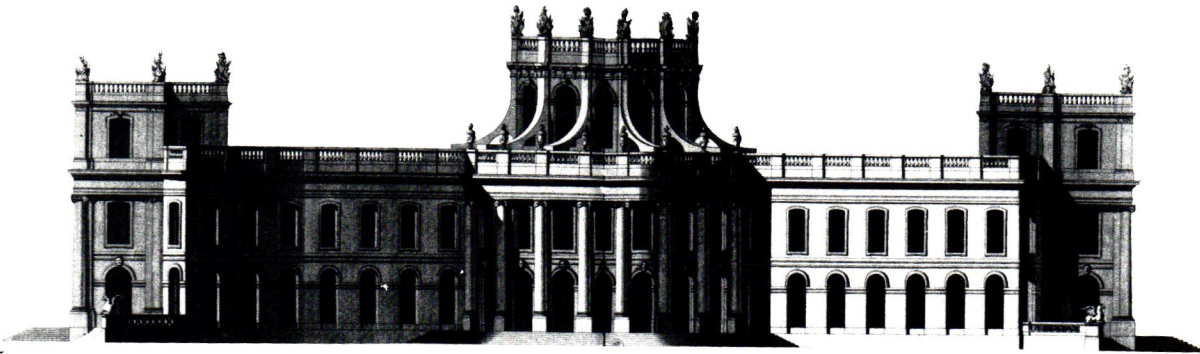
sources would compromise the future of the discipline by shaking the foundations of the fragile synthesis which had begun to be developed in Europe. “Without reflecting too much,” he said, “we claim that other nations subject themselves to the use of our manner of decoration, or that we imitate, in our apartments, the bizarreness of the ornaments of Peking, or that we bring back, in the exterior ordering of our buildings, the heavy taste of the first inventions of Memphis (. . .) all that remains is for us to introduce the Gothic taste into our architecture, and perhaps we are not far from this.”³⁵

Blondel’s rejection of the *tabula rasa* (which would entail the introduction of the Greek order) hence brings him closer to Piranesi. The latter nonetheless felt the impulse to follow the direction of pure invention, of that constant renewal which leads inevitably to *Stilpluralismus*.³⁶ But more than “stylistic” renewal—which would imply an evolution, a concept absolutely foreign to the thought of the Enlightenment—one should speak of a *reconstruction* of the global corpus of architectural signs. The architectural utopia of the eighteenth century is inseparable from that of the “Classical age”—no longer in Kaufmann’s accepted sense (“Classic” as opposed to “neoclassic”), but according to the terminology of Michel Foucault and Denis Richet.³⁷ The cohesion of the Classical Age—on the epistemological level—rests on the projection of a system which organizes the permanent—though still perfectible—space of representations in their ordered relations. The “classical” utopia is one of a *system of signs* (“arbitrary” because it is conventional and universal) where there are no longer multiple stratifications of meaning between the word and the thing, no more “opacity” between sign and content, so that the things can themselves “speak” in a universe that has become henceforth transparent.³⁸



At the precise moment when the future founders of the Royal Society attempted to set down the bases for a *universal language*—a requirement laid down by Francis Bacon in his empirical criticism of the imprecision of traditional language—Inigo Jones delved into the Palladian corpus for fragments of architecture which he reintroduced, as Rudolf Wittkower has shown, in a system of

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simple relationships whereby architecture seeks to be universally readable, to the point where it is possible to define it as a “system of certainties.”³⁹

Toward the second half of the seventeenth century, the theoretical researches of Christopher Wren in England and of Claude Perrault in France clearly defined that which we call the “arbitrary” or conventional quality of the sign. Both participated in their own countries in the foundation of an academy of science: Wren, a physicist and astronomer, in the foundation of the Royal Society, and Perrault, an anatomist, in that of the Academy of Sciences of Paris (founded in 1666) (fig. 4). Wren defined “customary beauty” at precisely the moment that Perrault, opposing himself to the neo-platonic theory of the oratorian Ouvrard, the King’s musician at Sainte Chapelle, of a *harmonic architecture*, affirmed in his edition of *Vitruvius* and in his *Ordonnances* that the principles of analogy and anthropometricism can, at most, serve to distinguish the three architectural orders, but can in no way explain their proportional rules.⁴⁰ Perrault thus desacralized the concept of Nature which traditionally served as a justification for the “rules of taste.” The idea that the structure of the microcosm is the reflection of the harmony of the macrocosm is replaced by the recognition of an essentially social justification for taste. The only beauty which might, at the extreme, be conceded to be musical is “positive beauty” which refers uniquely to the statics of the building—determined by natural laws and in no way concerning proportions.⁴¹ In his *Vitruvius* Perrault had already spoken of this positive beauty, perceptible for instance, in Gothic constructions whose effect of light and logic of construction—or rather, as he called it, *dégagement* of structure—he admired. Perrault thus opened the way to the numerous treatises on construction that would stand out as landmarks in the history of architecture in France;⁴² the polemic between Pierre Patte, Jean Rondelet, and others concerning Soufflot’s church of Ste. Geneviève⁴³ would mark one of the high points. Besides this *positive* principle, Perrault discovered a *conventional* principle of beauty, depending either on Authority (institutions) or on “Custom” (*accoutumance*). Stated otherwise, the principle of beauty which conditions judg-

ment is set neither by Nature nor by Reason; it is based on knowledge—that of the expert—or on custom:⁴⁴ “because beauty has no other basis than that fantasy by which things please according to their conformity to the ideas which each individual has of their perfection, one needs rules which form and rectify this idea, and it is certain that these rules are so necessary to all things, that if Nature has denied them to some—such as to language, to the characters of writing, to clothing, and to all that depends on chance, will, and custom, then the institutions of man must furnish them, and for that a certain authority is necessary which takes the place of positive reason.”⁴⁵

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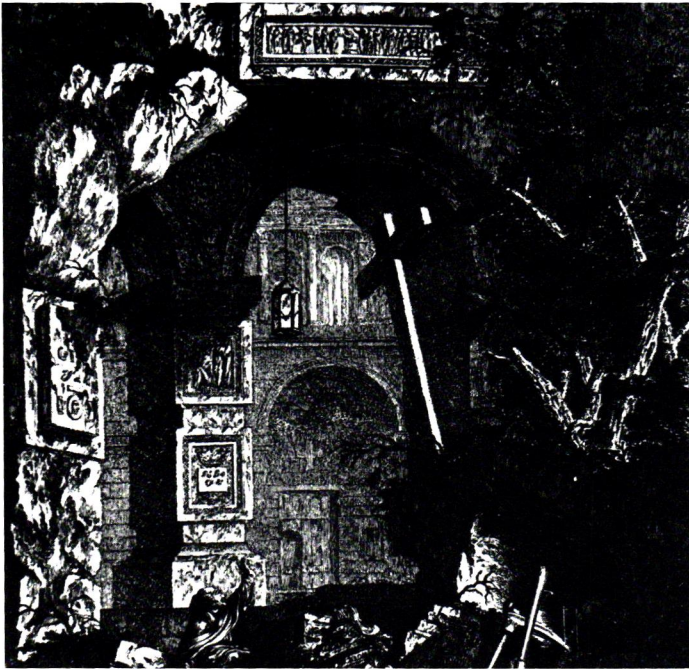
For the architect at the end of the seventeenth century, beauty—that is to say, the correct organization of the plan and the configured or constructed space—is *like* a language, since the world is an *analogon* of language. Even as the “arbitrary” nature of the linguistic sign and the possibilities of perfecting and guaranteeing it through “institutions” were discovered (cf. the works of the Royal Academy, or the *Logic* of Port Royal), so the purely *conventional* character of the architectural sign was evinced. No beauty affects the senses if it is not in accord with the idea that everyone has of its perfection. It is the role of the institutions, precisely, to determine the *idea* of this perfection, which is based on knowledge. As knowledge, in classical utopia, superimposes itself upon language, one can know only by *naming*, by *representing*. In classic thought, the perception of space as determined by the practitioner and the discursive reflection of the academic tend to become indistinguishable. The precise aim of the discipline then becomes to institute a *universal discourse*, within which architectural signs are inscribed as a function of laws determined only by the reciprocity of their relations.

In the *Querelle*, the “moderns” do not defend the concept of the invention of new forms, still less a concept of the *evolution* of the canons of taste. They want to reorganize knowledge according to a universal order, ideologically static. From this, for Perrault and most of the artistic avant-gardes of the end of the seventeenth century, arises a disinterest in history as a sacred value: for history, seen

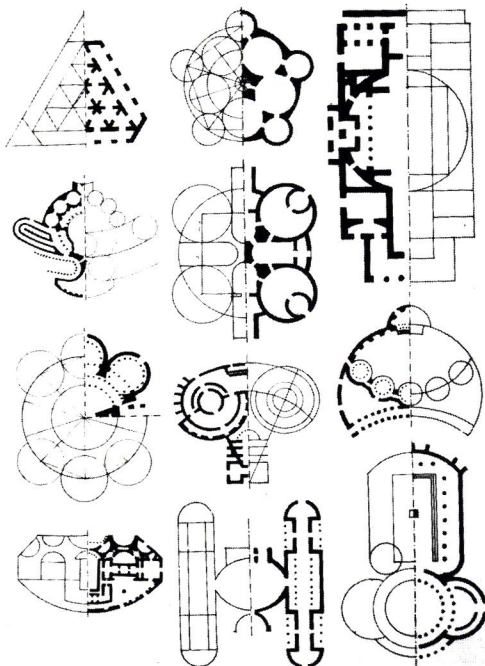
6 Plate from the series of tombs.
J. -L. Legeay.

7 Typologies of Campo Marzio.
G. B. Piranesi.

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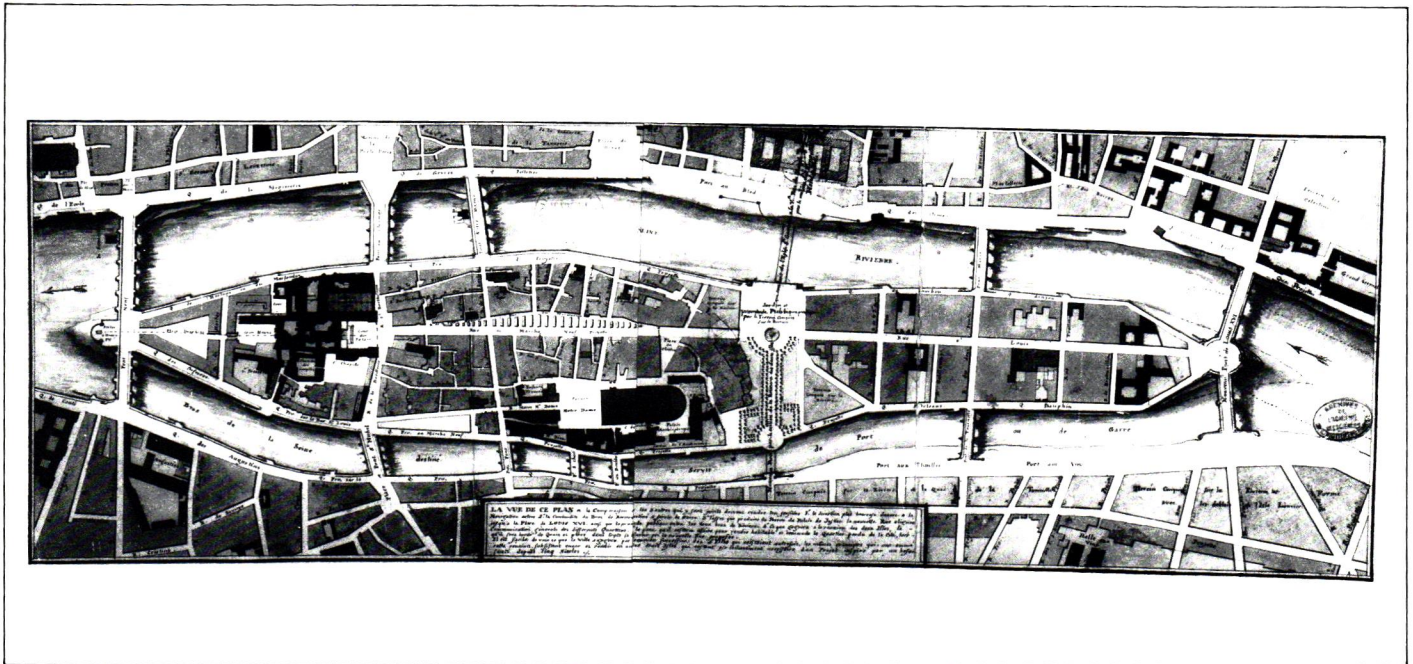
as the origin of knowledge, as revelation, is substituted a simple *typology*. The *discourse* of architecture, in the future, has to stand equidistant between an *ars combinatoria* and an *Encyclopédie*.

III

There is in the most highly developed European countries (England and France), in the milieus most receptive to the ideology of Reason, no true break between the researches of the seventeenth century and those of the eighteenth. If one wants to discern with precision the historic context of the architecture of a given period, one must also take into account the cultural factors particular to each region involved. But in order to understand in a more synthetic way the continuous process of “destruction-construction” that characterizes the discipline of architecture in the Age of Reason, one must isolate its most prominent elements.

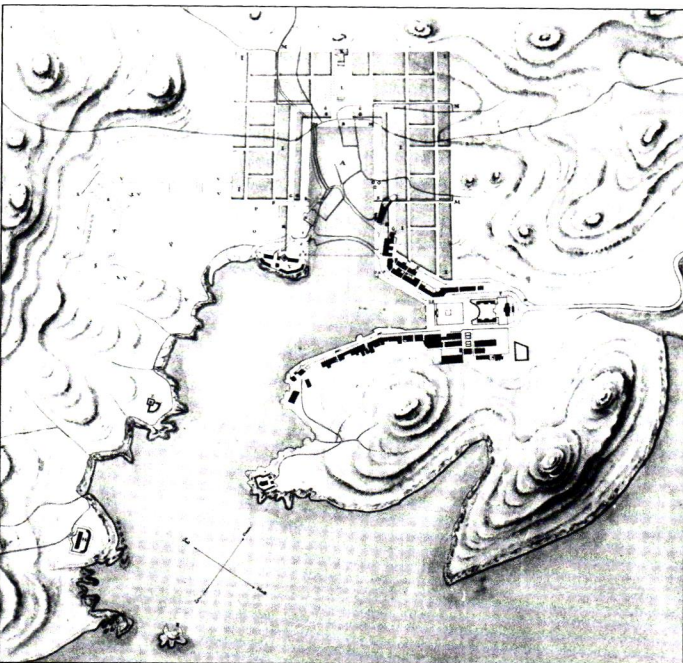
The most significant of these elements are the “experimentalism” of the English avant-gardes (from Inigo Jones to Wren) and the reductivist “elementarism” of the neo-Palladian circle of Lord Burlington (in particular the decomposition of architecture into simple geometric figures by Robert Morris in his lectures from 1734 to 1736).⁴⁶ Similarly in France, even though the formal framework established is still marked by the taste for *Rocaille*, the typological studies of Germain Boffrand (in his hunting lodge at Bouchefort of 1705 and in his second project for the Château of Malgrange of 1712–1715 [fig. 5], which has been aptly compared to the Stupinigi of Juvara)⁴⁷ are the prelude to the studies of “architectural combinations” developed during the second half of the eighteenth century.

It is impossible here to analyze in detail the architectural corpus established between the fifth and seventh decades of the eighteenth century; but one can at least indicate the principle themes around which the debate on architecture is articulated in the countries where it is most lively. In Italy, the role of Piranesi is essential, even if it manifests itself mainly at the theoretical level (fig. 7). In England, the recent re-evaluation of the work of Chambers (thanks to the efforts of Harris),⁴⁸ has brought to



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8 Project for the linking of the Ile Saint Louis and the Ile de la Cité. Charles De Wailly, 4 June 1788.



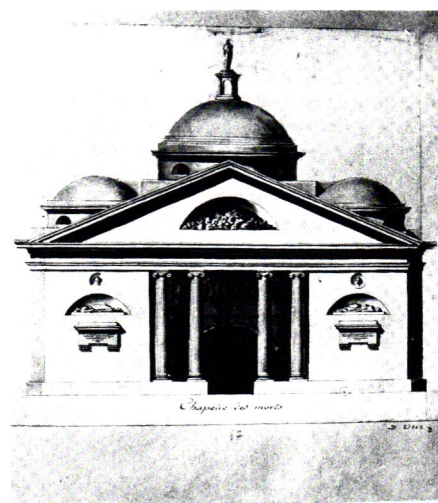
9 Plan of Port Vendres, a military port. Charles De Wailly. On this plan, drawn by the Département des Ponts et Chaussées, are: in black, buildings of 1778–1779 around the esplanade; in grey, a project for the extension of the port.

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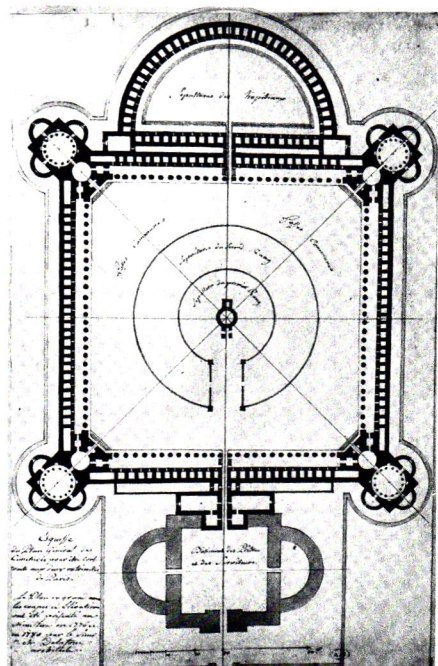
light the catalytic role of this high official, political conservative, confirmed cosmopolitan, and friend of Piranesi, Legeay (fig. 6), Soufflot, Patte, David Le Roy, and Charles De Wailly. It was Chambers, along with George Dance the Younger, who guided the architectural studies of John Soane. In the case of France, it is necessary to analyze the exemplary case of De Wailly. The projects and construction of the Château de Montmusard in Dijon (from 1764), the Château des Ormes in Tourraine (ca. 1772)—both built for the Marquis d'Argenson—as well as the house on the rue de la Pépinière in Paris (with its clever solution of the central cylindrical stair) illustrate his research into spatial geometry. A large part of his activity is devoted to urban problems: his planning of the streets around the new theater of the Odéon (designed and built in collaboration with Marie-Joseph Peyre from 1767–1782); his plan for the military city of Port Vendres of 1778–1779 (fig. 9); his “plan for the embellishment of Paris” of 1778 (fig. 8); his project for the improvement of the Quartier des Capucines in Paris (presented to the Directory in the year VI) and his participation, with Verniquet, in the Plan des Artistes.⁴⁹

Following the way paved by the late Mannerists—Baldessare Peruzzi, Giovanni-Antonio Dosio, Giovanni-Battista Montano—an entire generation of architects considered the study of geometry to be one of the surest means of ordering space. The large geometrical structures designed by Peyre in Rome (fig. 10), the Colisée of Louis-Denis Le Camus built in Paris (fig. 11), the systematic studies of Soane before and during his trip to Italy, and the projects of Jean-Charles Delafosse (figs. 12, 13), Nicolas-Marie Potain, and Ledoux provide good examples of this.

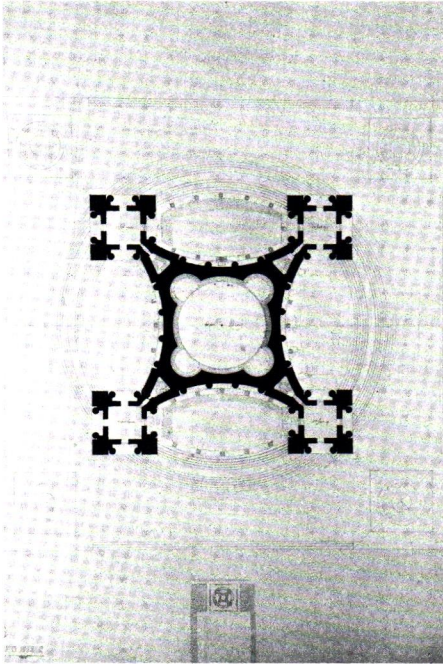
Soane's series of typological *inventions* on the problem of the monument and of the “Castello d'Acqua” (fig. 14) should be compared to the architectural “machines” studied by Francesco di Giorgio Martini, just as the abstract series of Peyre should be compared to the architectural objects of Montano. Peyre, De Wailly, and the entire French architectural milieu applied this experimentalism to urban programs. Certain typological formulas met with



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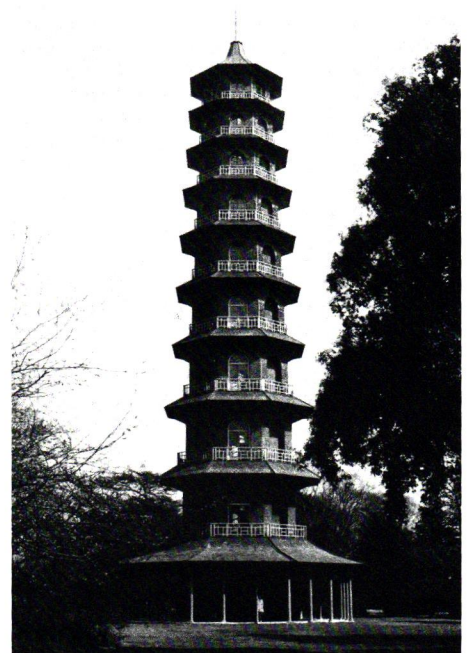


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14 Plan of a design for a Castello d'Acqua. John Soane.

15 Church of the Capucines, Marseilles. J.-J. Lequeu.

16 Pagoda in Kew Gardens, near London (present state). William Chambers, 1757–1763.

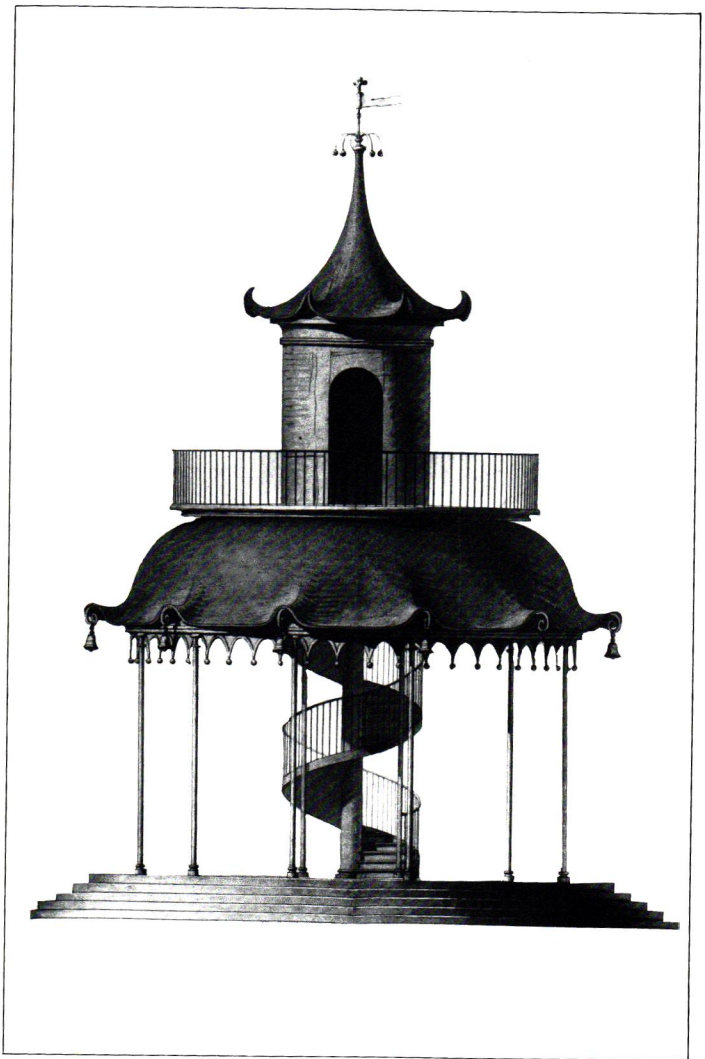


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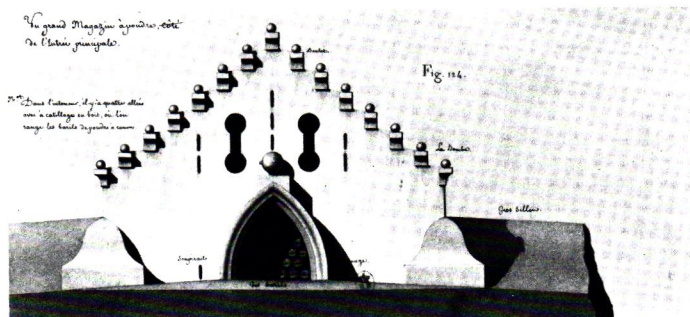
astonishing success. The circular or semi-circular solution, inspired by the round temples of antiquity, is found in the project (attributed to Jacques Denis Antoine) for a theater on the Quai de Conti (1770),⁵⁰ in the first project for the Odéon of De Wailly and Peyre (1767–1769),⁵¹ in the project for the Théâtre de L'Opéra of Boullée (1781), and in the sketches of Lequeu for the church of the Capucines in Marseilles (fig. 15).⁵²

This typological reasearch (which tends to constitute a science of spatial organization whereby the architectural organism is structured according to a geometry confirming or denying the imitated model), this demand for order and for a more controlled codification of signs encountered a problem increasingly difficult to resolve. In effect, the problem of *genesis* raised that of creation, of invention itself.⁵³

Recent studies have shown that the works of De Wailly, Potain, Michel-Barthélémy Hazon, and Louis François Trouard (like those of Chambers) possessed a sort of “hidden face,” as manifested in the Chinese *fabriques* designed between 1767 and 1775 for the garden of Monsieur de Marigny at the Château de Menars (fig. 17).⁵⁴ Burlington and Robert Castell searched for traces of the original garden of antiquity by studying prints of Chinese gardens; William Kent was convinced, as he was drawing Chiswick around 1725, that he was reconstituting the garden of Pliny's villa. But the park for Kew designed by Chambers (fig. 16), the Park of Menars, that of Chanteloup drawn by Le Camus, as well as the Désert de Retz show that already by the second half of the century the *synthesis of opposites* previously experimented with by Burlington had exploded.⁵⁵ The different antique sources (Egyptian, Chinese, Greek, Etruscan, Roman) were henceforth ordered in a horizontal and no longer in a diachronic manner. The necessity for inventing a new, universal “language” confronted the architect with the paradox—so energetically resisted by Perrault—of the “freedom” of invention. The “arbitrary” nature of Perrault's architectural rules elicited two kinds of answers. The first, that of Blondel, Boullée (as attested in his *Architecture: Essai sur l'art . . .*), Jean-Nicolas Sobre, and Antoine-Laurent Vaudoyer,



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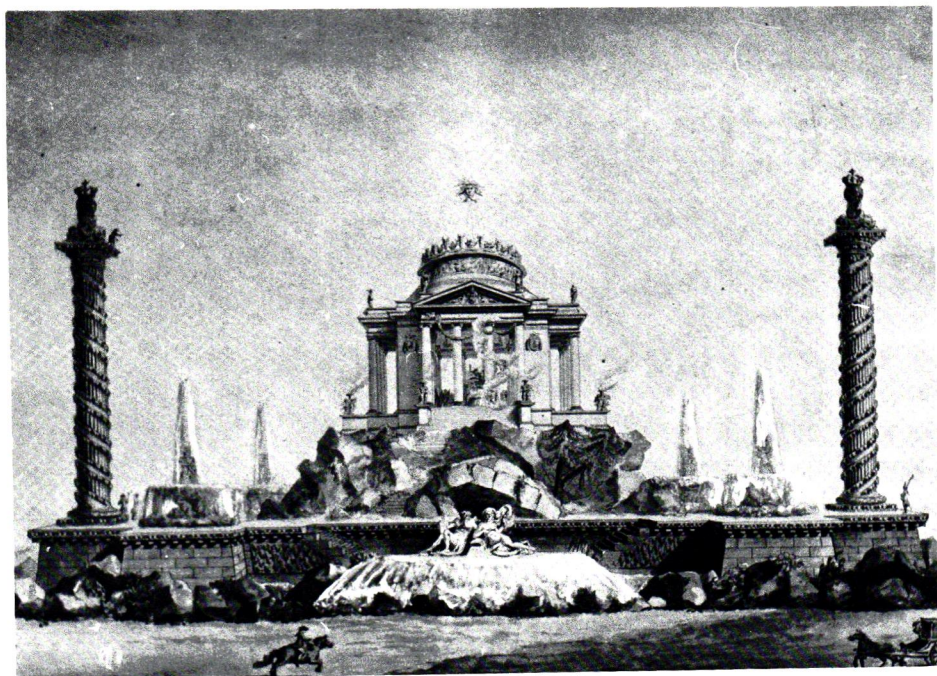
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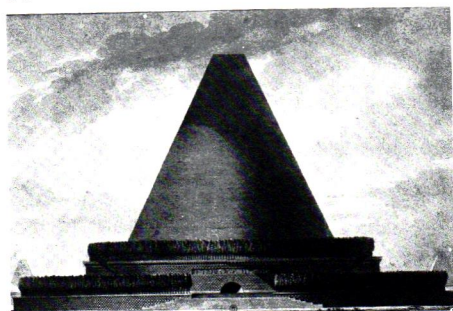
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was conservative or “restorative”: it tried to restore a symbolic dimension to the architectural sign. This led to symbolism, or rather to a secular and “functional” allegorism (which referred to the social and institutional function of the building). This characterized the works of Ledoux and of the younger Dance,⁵⁶ but also the “ideologism” of Boullée, whose drawn work tended to exalt the immutable values of a society in which the permanence of institutions had to be confirmed by their “spoken” representation (figs. 19, 21). Of this logocentric utopia, where the discursive tends to impose itself on the represented or figured, only the definition of the concept of “character” remained, a concept which acquired great force in the theory of the Beaux-Arts. The second response refused to evade the problem posed by the paradox of Perrault; it violently opposed the purism which smoothed out differences (the desire for freedom, the freedom of the power of the imagination). These were the two poles of the tragic dialectic personified by the two protagonists of Piranesi’s *Parere*.⁵⁷ Architecture, in order to reinvent its own foundations had to fuse these two contradictory levels of research: on the one hand those which tended to associate archaeology with the project by relying on a return to historic sources, and on the other hand those which aimed to abolish any recourse to tradition, instituting a *tabula rasa* on which to reconstruct the bases of architecture by returning to the “primitive” and natural sources of knowledge (geometrical forms as are found in nature). This dialectical contradiction—apparently impossible to resolve—between historicism and primitivism overlapped in part the contradiction between the “irregular”—from the picturesque and sublime *fabriques* to the “bad taste” of Lequeu (fig. 18)—and the “regular”—from Boullée to Durand.⁵⁸

The enclosing of oneself within the classical order rendered control of the new “liberty” more and more difficult. The sudden unleashing of the *senses*, that “despotism of genius and the imagination,” was condemned by eighteenth century criticism but had to be endured.⁵⁹ The subversive forces of license and of the “irregular” were not threatening when they were deployed in the context of the sublimity of princely parks (such as Kew or Menars),



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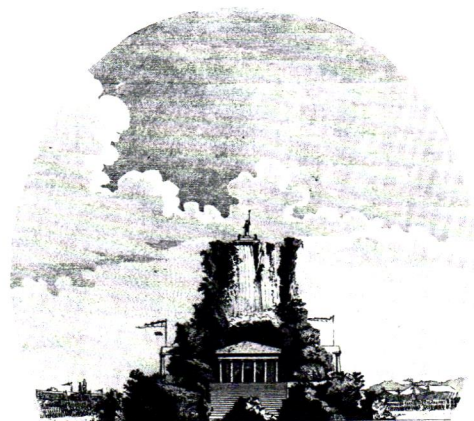


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18 "Magasin à poudre." J.-J. Lequeu.

19 Conical tower. E.-L. Boullée.

20 Temple of Hymen, projected for the Place de Grève in Paris for the festival of 21 January, 1782, in honor of the Dauphin's birthday. P.-L. Moreau-Desproux.



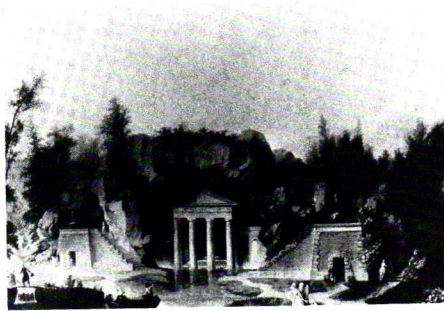
VUE D'UN ROCHER

Élevé dans le centre du Camp de Fédération sous le nom de *Temple de la République*.
 Exécuté sous le Commandement de Monsieur D'ARVILLE, Directeur de l'Ordre Royal et Militaire de Saint Louis et Général de l'Armée Française
 et de Monsieur l'Officier de l'Etat Major. D'après les dessins
 conduits et inspectés de M. Cochet, le Jeune.
 Architecte.

23

21 Conical cenotaph. E.-L. Boullée.

22 The "Rocher," the garden of the Folly of Saint James, Neuilly. F.-J. Bélanger, 1778-1785, after a painting by C.-L. Chatelet.



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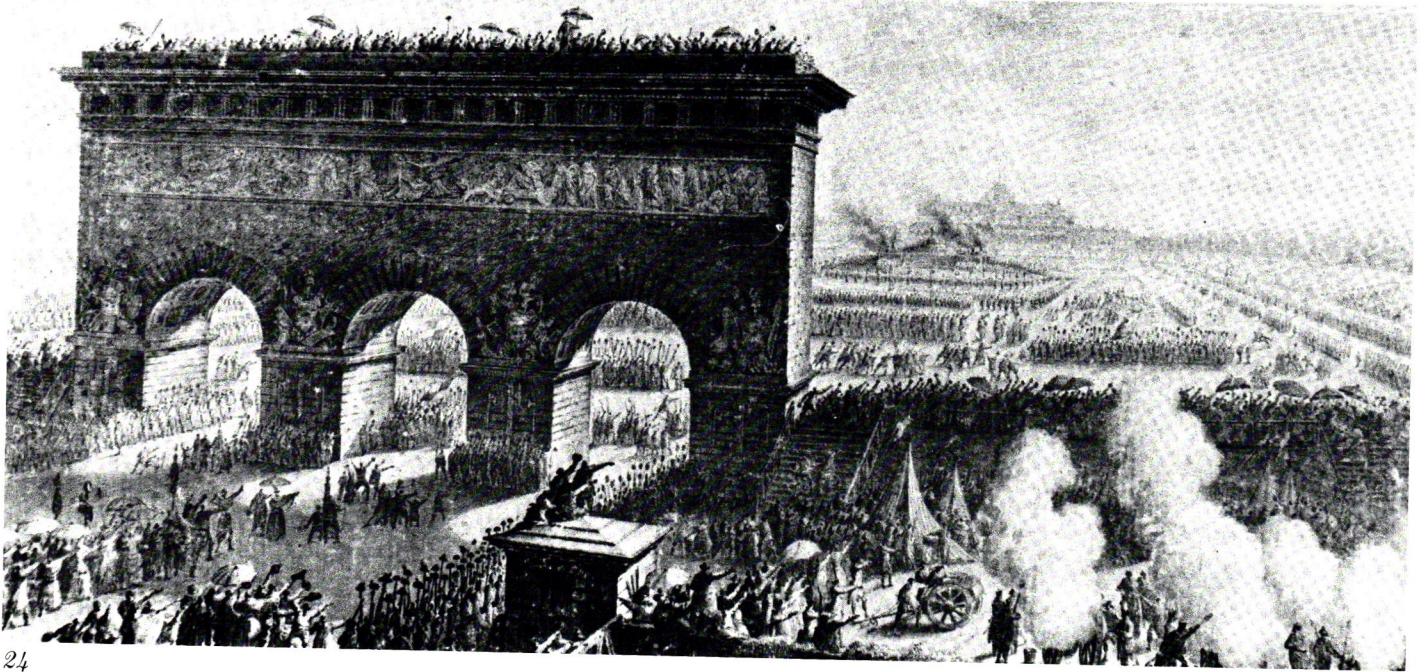
23 View of a "rocher" erected in the middle of the Camp de Fédération, Lyon. Claude Cochet the younger.

24 Triumphant arch designed for the Fête de la Fédération, Champ de Mars, Paris, 14 July 1790. Jacques Cellierier.

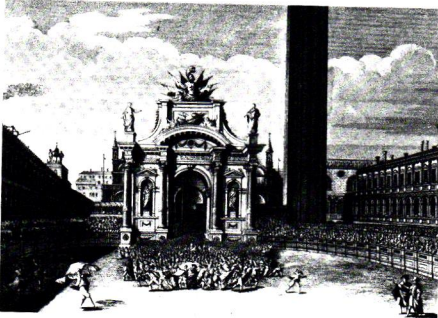
25 Triumphant arch, Piazza San Marco, Venice, showing the "entrée du Peuple." A. Codognato, 1782.

26 "Vue de la grand place de Venise dans le jour qu'on a dressé l'arbor de liberté (sic)," 4 June 1797.

27 Project for a "mountain" in the cathedral of Saint André de Bordeaux for the Fête de la Liberté et de la Raison, 10 December 1793. A. T. Brongniart.



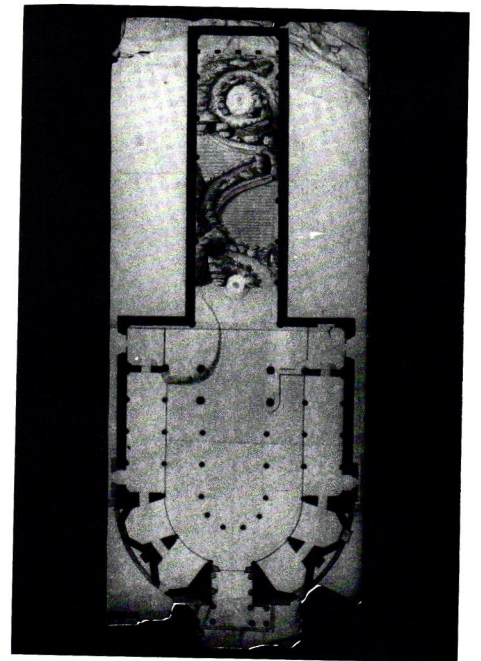
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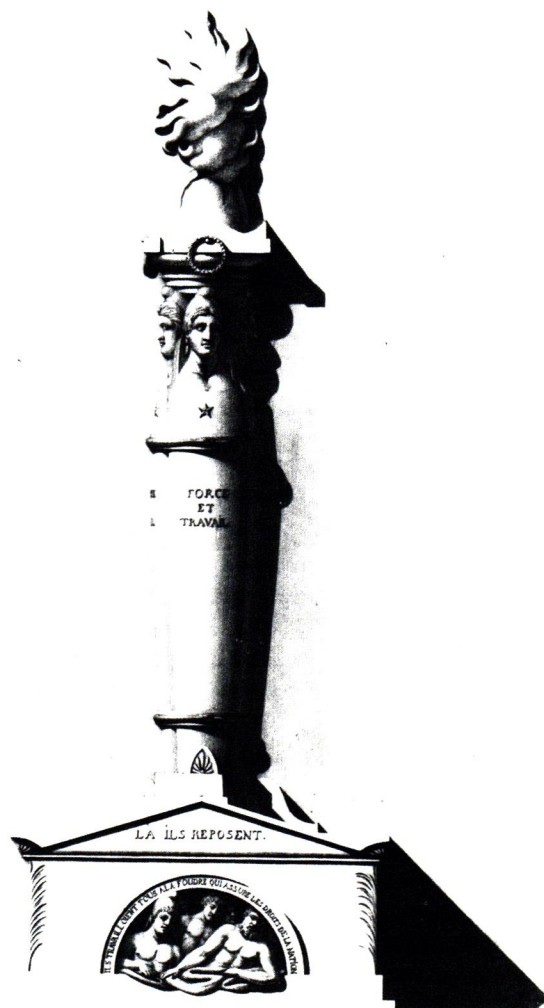
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but they exploded when they penetrated into the city, where they offered themselves to the new “public” of citizens. Despite the transformation of aesthetic theory through the invention of the sublime (which attempted to control the uncontrollable, that is to say, the subjective)⁶⁰ the “tableau” of Classical order was decomposed.

IV

Should one see here a “crisis” (which would presume a sudden break) or a development? By confronting the two spheres of art and of the new processes of urban and national planning, one can understand the play of relations between “freedom”—in architecture—and “rationalization”—in communication in general, technics, and technology⁶¹—or in other terms, between “liberty” and “realization.” Quoting Leibniz, Max Bense has pointed out the ontological difference between the technical object (instruments, machines, equipment) which determines a sphere of interrelations in which each part finds a necessary place and possesses a function, and the aesthetic object which is a free entity, more or less autonomous. In effect, the work of art *exists* but does not *function*. Its modality of realization is not only necessary, it is completed by a causal modality (*zufällige Mitrealität*).⁶²

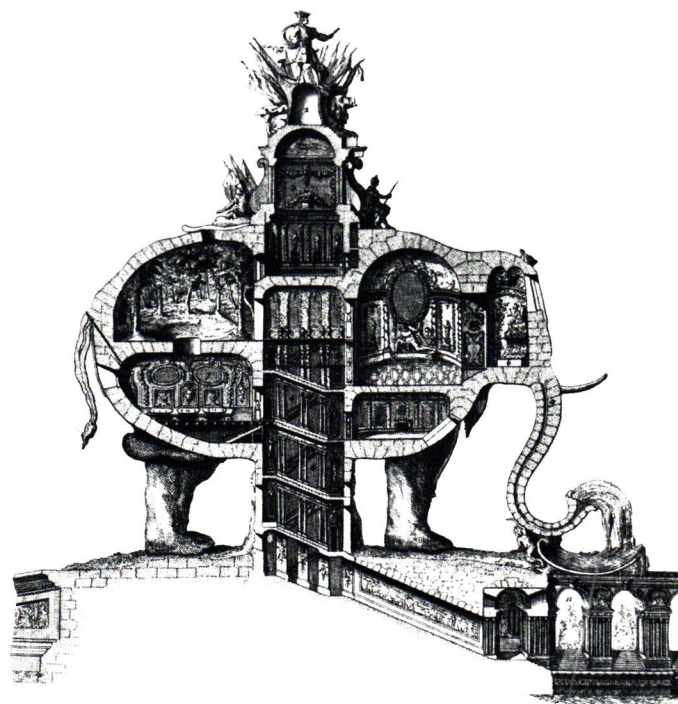
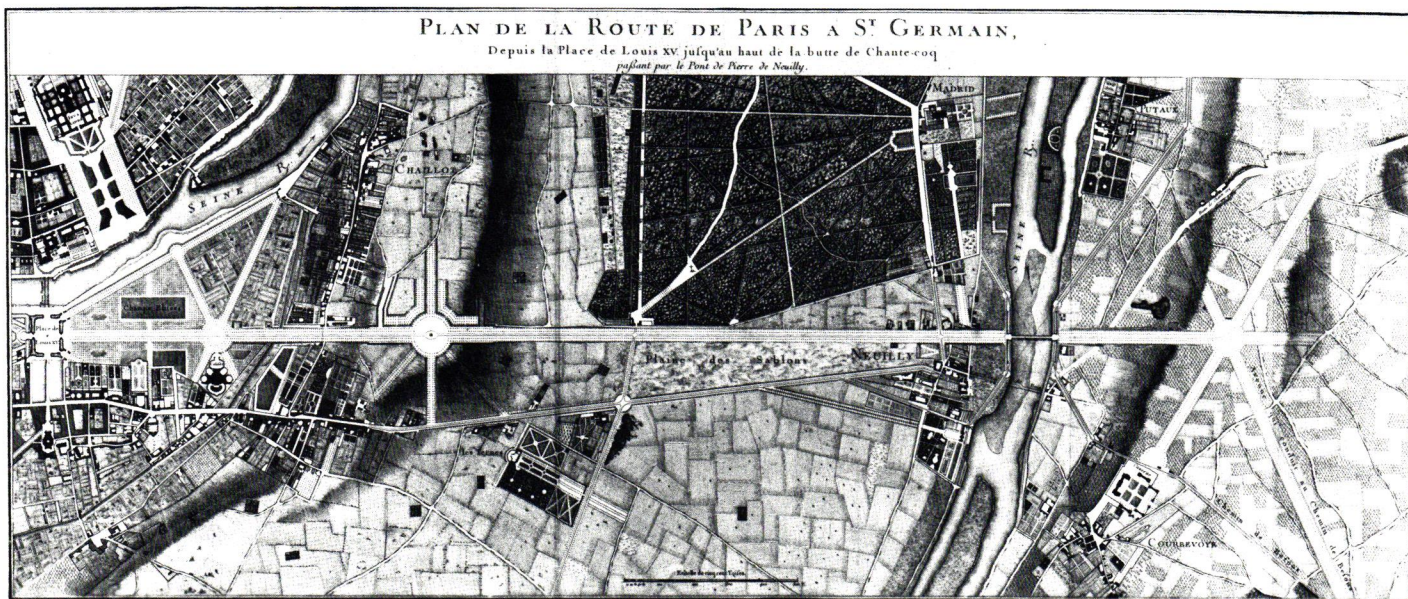
A “freedom of choice” (as with Leibniz) presides over the decision to realize, to pass from limited possibility to reality, but realization “in no way changes the manner in which things are made.” They remain in the same state “where they were already to be found as possibility.”⁶³ In other words, if one cannot invent a language (its “conventionality” determining its collective use), one can at least transform it by “speaking” it. A relation of *probability* is thus established between the “free choice” of the decision and the realization, a relation which excludes all “romantic” spontaneity, all intuitive creativity in the Promethean sense of the word. So far, however, we have only described the production of a technical object. What causes the object to pass from the condition of product to that of work of art is an accidental process, a *function of transformation* within the modal schema. Establishing a link between the “probabilism” of Leibniz and the modern theory of information, Bense risks the following state-



28 Monument in honor of several citizens, Place d'Arsenal. J.-J. Lequeu.

29 J. R. Perronet, diagram of the center of the urban development in the west of Paris. Left to right: La Place Louis XV; the intersection of the Champs-Élysées and the "Colisée de Paris"; the site for the future Place de l'Étoile; the village of Neuilly with the bridge over the Seine.

30 Project for a "triumphal" elephant, to be built to the glory of the King in the future Place de l'Étoile. M. Ribart, 1758. Engraving by Pierre Patte.



ment: "The work of art, prior to its existence, is a system of probability placed, as it were, before an infinity of possibilities. When the aesthetic object is realized, it introduces into the absolute, originating disorder a series of orders defining zones of relative probability. The structure of the work of art is thus indeterminate and ambiguous. This relative indeterminacy allows for displacements of *meaning* and offers an autonomous space for the game to be played."⁶⁴ The freedom of decision is the freedom *for* realization. The relation between these phases is by nature "statistical" (insofar as the relative margin of indeterminacy in the "message") and "ludic."

Let us illustrate a few examples of these considerations by attempting to clarify the relations between the realization of technical and aesthetic objects. The Colisée built on the Champs-Élysées (see fig. 11) by the architect Le Camus was one of the most prestigious Vauxhalls of Paris. Here is what an anonymous "artist" writing about this place of pleasure desired at the time of its construction in 1769: "The State has as yet done nothing nor ordered anything of permanence built for the pleasures and amusements of the People. Let us bring together the two portions of the Public, let us cause them to mix together in a common spectacle."⁶⁵ One cannot help but think here of the mass media: once transformed into a "public," the "people" will present itself as a spectacle for itself. What should be emphasized is that the place of pleasure and festival will also become the place of architectural "license." Recent studies have shown how, through the construction of the Vauxhalls, of places of pleasure and temporary scenographies (built first for royal festivals and later for revolutionary ones), this "heresy" penetrated into the city. It is clear on the other hand that there is no formal specificity to "revolutionary art," no break between the scenography erected by Pierre-Louis Moreau-Desproux on the Place de Grève in Paris (fig. 20) on January 21, 1782, to celebrate the birth of the Dauphin (which recalls the project of Louis de Lorraine for the festivals of China in Rome in 1747); the landscape of the "Rocher" built by François Joseph Bélanger for a treasurer of the Royal Navy in the garden of the Folly of St. James in Neuilly, begun in 1778 (fig. 22); the decor of the "Rocher"

designed by Claude Cochet and erected in the Camp de Fédération in Lyon on March 30, 1790 (fig. 23); the "mountain" erected by Brongniart inside the cathedral of Saint-André in Bordeaux for the festival of 20 frimaire, year II (fig. 27); and the assemblage of pavilions on the Piazza San Marco in Venice built on June 4, 1797, for the celebration of the tree of liberty (figs. 25, 26). Jacques Cellier, who was building Vauxhalls before the Revolution, designed the triumphal arch (fig. 24) and participated in the overall planning of the ensemble of the gigantic amphitheater built on the Champ de Mars in Paris for the Fête de la Fédération of the fourteenth of July, 1790.⁶⁶

These forms lend themselves to every emblematic content. Utopia, for the "revolutionary" as well as for the "ornamentalist" architects (such as Piranesi, Petitot [see fig. 3], Delafosse [see fig. 1], Lequeu [fig. 28]), does not consist in the transmitted ideological message, but in the demiurgic will to completely control production at the level of images, from the decoration of furniture to the embellishment of the entire city. License and irregularity, the expressions of the subjectivity of the artist (and of the client), have to be realized in the city, the locus of exchange and communication par excellence. Morphological invention has to become *vulgar*, invest the city, transform itself into a "technique" of persuasion, integrate the citizens into the image of their own spectacle: in sum, reorganize communication in order to pass into a further stage of domination. The "crisis" of the Classical order is thus a seizure of power.

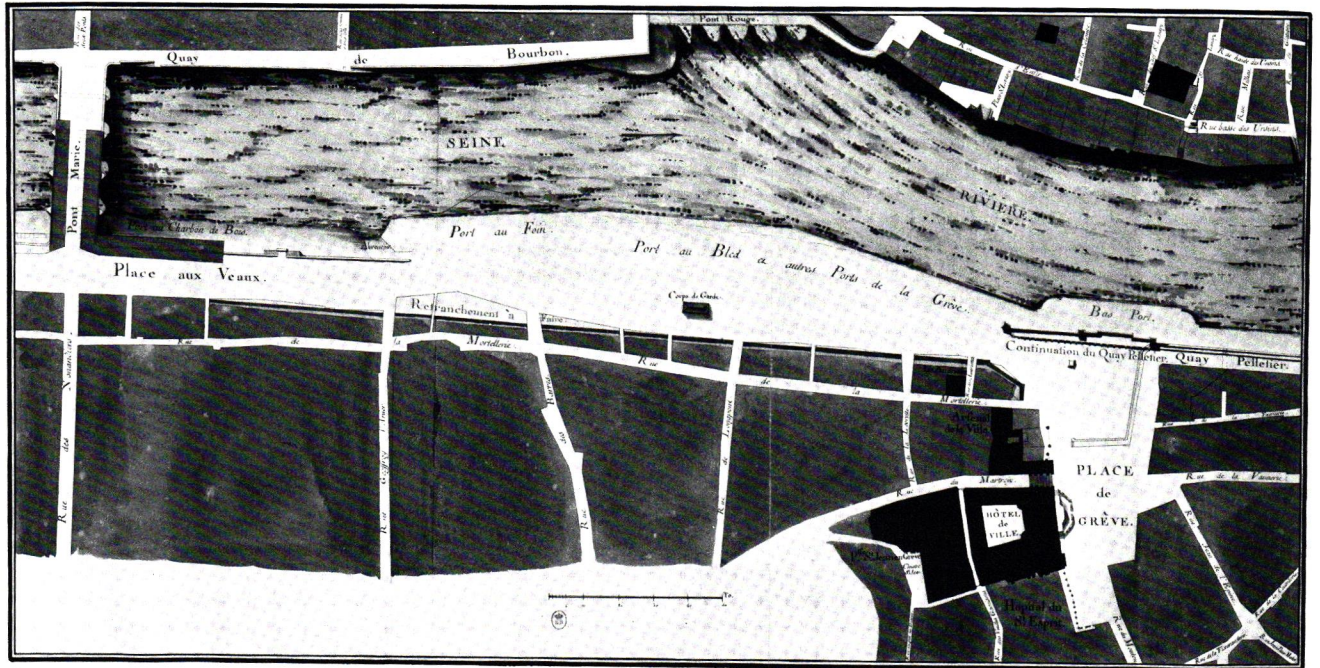
Thus Pierre Patte, the theoretician of urban planning of the eighteenth century, can defend the construction of the project of an "elephant-fountain-private home" (fig. 30), designed by the engineer M. Ribart for the Place de l'Etoile in Paris, invoking the aesthetic category of the sublime: "The canal of Languedoc, this superhuman enterprise (was) of an altogether different order of difficulty from this one, and (its) execution made evident that it is only in freeing oneself from vulgar rules, and never imitating, that one attains grandeur and the sublime."⁶⁷

The signification of the sublime is clearly stated. Rejection

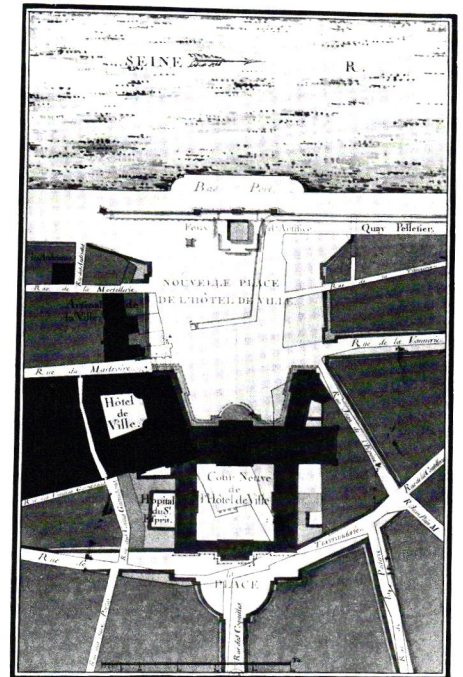
31 Construction of the quays of the Seine around the Place de Grève. P.-L. Moreau-Desproux.

32 Project for the re-siting of the Hôtel de Ville. P.-L. Moreau-Desproux.

33 A machine for cutting back underwater piles. Pierre Patte.



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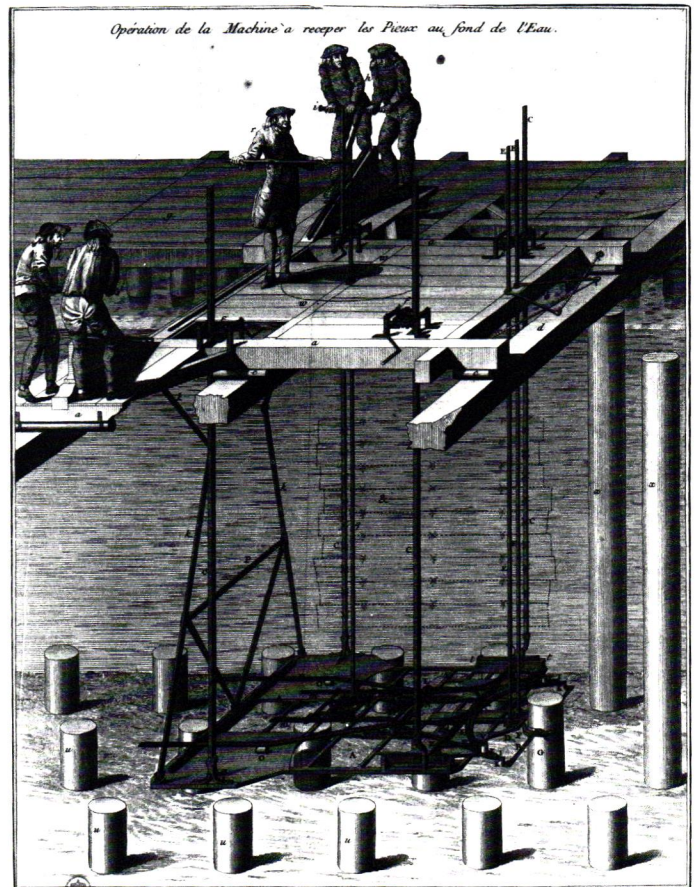


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of rules and of “imitation” and the demand for subjective “liberty” are not invoked only in order to conceive the new “art,” the new nature—that of the city and of the territory—and even less to announce a “pre-romantic” era or a “romantic classicism,” but to prepare for the *material* conditions of a formal rationalization. “Liberty” must allow for a greater domination of the process of the realization of form.

Pierre Patte is the theoretician of the *embellishment* of Paris, as we have said, comparable to John Gwynn, who describes at the same period methods of *improvement* for the city of London.⁶⁸ Patte was associated with the group of physiocratic economists, and was the author of the *Traité de la Construction*, the technical part of the *Cours* of Blondel. From 1757 to 1759, he was charged with overseeing the execution of the pages of the *Encyclopédie* and, in 1760, the *Description des Arts et Métiers*, a work undertaken by the Academy of Sciences and directed by the famous physiocrat Duhamel du Monceau.⁶⁹ It was Patte himself who established the relationship between technique—for example, the construction of large-scale territorial infrastructures such as the canal of Languedoc—and the breaking loose from “vulgar rules” to reach the “sublime.” To abandon rules (those of “classical” architecture) signifies, for the architect and engineer of the eighteenth century, the accession to a liberty which must not be understood simply as a freedom to conceive reality, but above all to develop “new rules” which, taking into account a greater number of givens, have more possibility of dominating the real. Liberty is then freedom *for* technique. In which case, technique organizes the world according to the rules of subjective liberty. The limits of the system become the limits of communication, as Technique par excellence, insofar as it is a more refined and global instrument. And since communication becomes information and information is “language,” the limits of the power of a fully developed subjectivity become the limits of language.⁷⁰

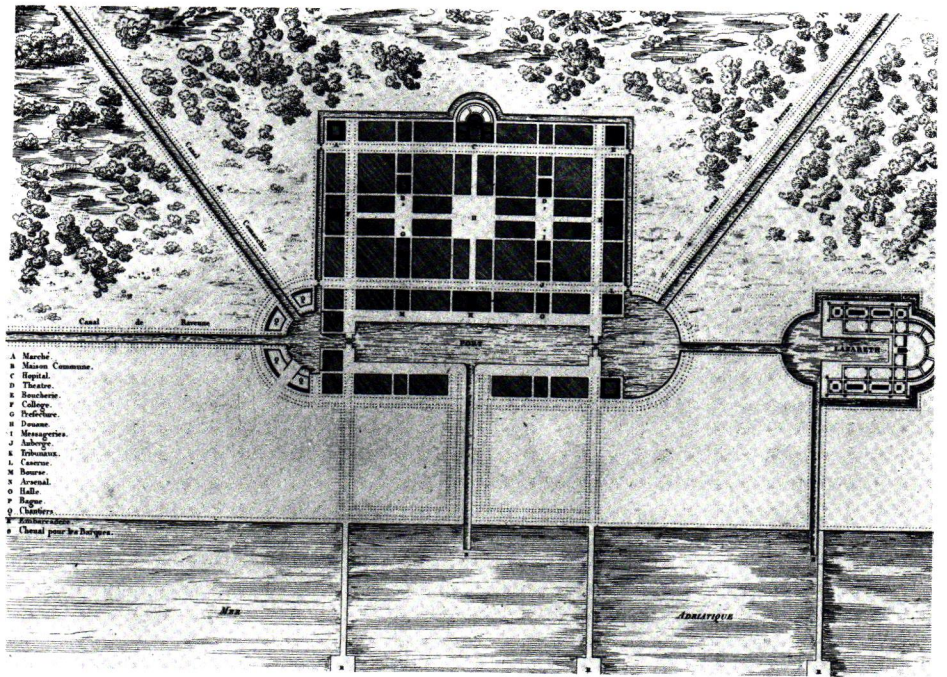
“Architecture,” belonging at once to the sphere of technical and aesthetic objects, as we have described above, is realized according to a double modality. Insofar as it is



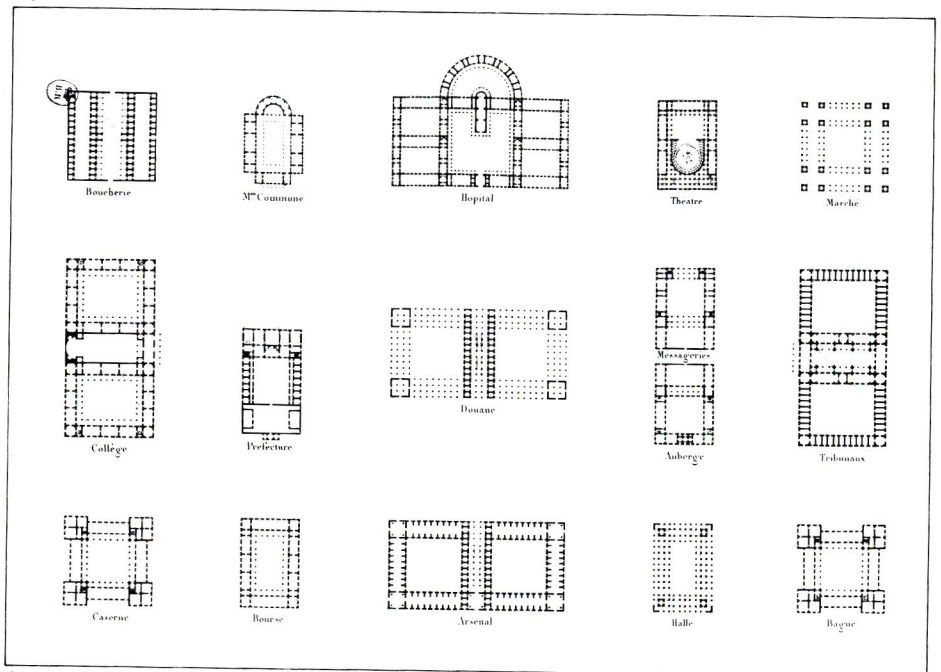
68 34 Project for a port and town near Comacchio on the Adriatic Sea.
Louis Bruyère, May 1805.

35 Plans of public buildings for the projected town near Comacchio.
Louis Bruyère, May 1805.

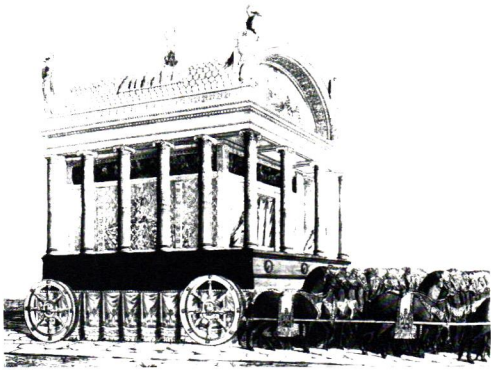
36 Restoration of the funeral chariot that carried the body of Alexander from Babylon to Egypt. A.-C.
Quatremère de Quincy.



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an aesthetic object, the modalities of its realization hold primarily to “ludic” or “frivolous” signification, a function in which the communicative indeterminacy (ambiguity) of the object can *play*. Insofar as it is a technical object, “post-Classical” architecture must measure itself against the law of innovation. The “creativity” of Classical *invention* only postulates conditions for the reflection of reality: the *ars combinatoria* tirelessly articulates the same *paroles* or “words.” Innovation, on the other hand, introduces a dynamic and unlimited field which has only one direction: the system must become development.

Such innovation, which shakes the traditional sphere of architecture, then has to be *applied* (inasmuch as it is a rationalization of the channels of communication) to the city and to the territory (fig. 29).

“*Technique* and *urban planning*” in the eighteenth century are the two inseparable themes that must be developed⁷¹ and about which we can only give a few general directions: The nascent “science” of urbanization and territorialization is at once a technique for the exploitation and the control of urban land and national territory. Every “project” of a city is reduced at best to a “figurative utopia,” a nostalgia for form, a thought which remains “unrealized.”

Never again can architecture control both the formal and the technical levels save in utopia: that of Patte, for instance, when he describes in his *Mémoires* of 1769 a project for an ideal city which functions as rationally as the machines which he has drawn.⁷² A boundary (hexagonal or octagonal) is imposed upon the city; this is surrounded by a canal and boulevards; all the institutions (hospitals, cemeteries, factories, etc.) are transferred to the countryside, and the latter is in perfect syntony with the anti-urban theories of physiocracy and with the numerous projects for the decentralization of institutions and the insularization of the urban fabric, so that the heterotopic regularity of the architectural object can be developed far from the urban chaos, which one touches as little as possible except to open up a few monumental spaces.

Patte truly *innovates* not when he dreams of the form of the city but when he introduces technical solutions to certain urban problems: the illumination of streets; the construction of sidewalks, sewers, and public fountains; and the new method for the construction of quays (fig. 33), solutions furnished at the same time that Moreau-Desproux, the architect of the city of Paris (from 1763), was planning the straightening out of the banks of the Seine (figs. 31, 32).⁷³

In the field of construction, Patte disseminated through his writings the “constructive” tendency of French architectural thought from Jean-François Féliben to Constant d’Ivry.⁷⁴ An admirer of Perrault and Wren, and student of Boffrand (the inspector general of *Ponts et Chaussées*), he tended to neglect the theory of proportions in favor of that of construction technique and calculation: “The true manner of building,” he writes in 1775,⁷⁵ “consists of proportioning columns to the loads that they must support, a principle which is in accord with judgment, which is a kind of touchstone upon which to test everything in the arts, and without which everything degenerates into bizarreness and confusion.” It is thus *judgment* (which is the calculation of structure) “and not optics” which leads to *variety* in proportions. In his *Mémoires* of 1769 Patte published the experiments of Jean-Rudolphe Perronet on the strength of materials in compression.

Thus the way is opened not only to the new “science of construction” but also to the work of the spatial “typification” of buildings, as realized in *L’Art des Constructions* (1823–1828) of Louis Bruyère, a student of Perronet and Director of Public Works in Paris from 1811 (figs. 34, 35); and in *L’Art des Ingénieurs* (1821–1825) of Barnabé Brisson, who after having been a student of Gaspar Monge (the inventor of descriptive geometry) became in 1798 one of the first graduates of the newly founded Ecole Polytechnique.⁷⁶ Thus the way is opened for the “urbanist” Edmé Verniquet, architect, surveyor, “gardener,” and one of the most active protagonists, along with De Wailly, of the Commission des Artistes (created in 1793); who, already in 1774, understood that one could only intervene in the city of Paris with the aid of an exact trigonometric

70 plan.⁷⁷ We have in effect a “revolution,” but not the one which Kaufmann studies throughout his lifetime. August 1791: the universities are closed; the academies and teaching are reorganized. 1793: the Convention suppresses the Academy of Architecture. 1794: the Committee on Public Instruction is created. 1795: the Institute.

It is this “open field” upon which science and “art” are reconstructed. At the same time, anxiety is born in bourgeois thought. The world, reduced to its own processes of realization, reveals itself as only *one* world. The future academician, Quatremère de Quincy (fig. 36), in a text of 1791, raises this cry of alarm, born of a “romantic consciousness” which, confronted with “the death of genius,” killed by the “spirit of calculation,” revolts: “The inevitable effect of the experience [of “sociable” societies]⁷⁸ which introduced the spirit of calculation and of system, the empire of rules and of teaching, is to produce this revolution which we observe in more than one order of things. This spirit, spread among all the tributary parts of the genius, produces the same effect as that of machines in factories where, as one knows, individual industry is stricken with inertia. . . . Invention can never be replaced and the rules which are killing it substitute nothing for it. Either I am quite wrong, or the customs, the civilization, the experience, and the progress of the spirit of calculation have brought matters in France to a point which seems to have gone well beyond that of an epoch favorable to inventions in the arts.”

1. C.-N. Ledoux, *L'Architecture considérée sous le Rapport de l'Art, des Moeurs, et de la Législation* (Paris, 1804), which constitutes the first volume projected by Ledoux. It was completed by the posthumous edition of 1847, *Architecture de C.-N. Ledoux*, edited by D. Ramée, where, however, only 70 of the 124 plates of the 1804 edition were reused.
2. Cf. W. Herrmann, “The Problem of Chronology in C.-N. Ledoux’s Engraved Work,” *Art Bulletin*, XLII, no. 3, September 1960, pp. 191–210.
3. Cf. the two films of Pierre Kast, *L'Architecte Maudit*, produced in 1953, France, and *Le Corbusier, Architecte du Bonheur*, produced in 1957, France; 16mm, black and white, 20 min. length.
4. Emil Kaufmann, “Three Revolutionary Architects: Boullée, Ledoux, Lequeu,” *Transactions of the American Philosophical Society*, no. 42/43, 1952, pp. 431–564.
5. In *Vers Une Architecture* (Paris: Ed. Crès and Cie, 1923), p. 243.
6. N. Pevsner, *Pioneers of the Modern Movement from William Morris to Walter Gropius* (London: Faber & Faber, 1936). In the 1949 American edition the title was changed to *Pioneers of Modern Design*; and S. Giedion, *Space, Time, & Architecture, the Growth of a New Tradition* (Cambridge: Harvard University Press, 1941). Cf. on this subject the article of M. Manieri-Elia, “Il Complesso d’Enea,” *Casabella*, no. 423, March 1977, pp. 60–68.
7. E. Kaufmann, “Die Architekturtheorie der Französische Klassik und des Klassizismus,” *Repertorium für Kunstwissenschaft*, LXIV, 1924, pp. 197–237 (written in 1920).
8. *Ibid.*, p. 211.
9. *Ibid.*, p. 224.
10. *Ibid.*, p. 226.
11. This is only one step from saying that this architecture attracted the attention of Viennese art historians because they could, by means of the bias of “formalist” (Riegl) and “empathetic” (Vischer, Worringer) theories, conceive of relationships between it and the art of *Expressionismus*. Cf. Hermann Bahr, *Expressionismus* (Munich: Delphin Verlag, 1916), esp. the chapter “Wer ist Riegl,” pp. 75–82. Nevertheless, the interest aroused by the theory of *architecture parlante* is to be compared, more than to *Expressionismus*, to the “expressiveness” of the Viennese Secession, an artistic movement of which Bahr was the most brilliant critic.
12. “Die Architekturtheorie der französische Klassik und des Klassizismus,” *Repertorium für Kunstwissenschaft*, p. 224.
13. The problems of periodization appear clearly in the conception of the catalogue of the exhibition, “The Age of Neo-Classicism” (Arts Council of Great Britain, London, Sept.–Nov. 1972), in the introduction by H. Honour and Wend von Kalnein. A general definition of “neoclassicism” is attempted by H. Honour in *Neo-Classicism* (Harmondsworth: Penguin Books, 1968). Concerning painting, cf. R. Rosenblum, *Transformations in Late Eighteenth Century Art* (Princeton: Princeton University Press, 1967, 1; 1970, 3), which underline certain problems posed by the definition of “neoclassical art.” See also *Neoclassicismo* a publication for the international congress held by the International Art History Committee, London, September 1971 (ed.

the University of Genoa, 1973).

14. Cf. L. Hautecoeur, *Rome et la Renaissance de l'Antiquité à la fin du XVIIIe siècle* (Paris: Fontemoing Ed., 1912); J. Fleming, *Robert Adam and his Circle in Edinburgh and Rome* (London: John Murray, 1962); and J. Harris, *Sir William Chambers* (London: Zwemmer, 1970).

15. The theses proposed by Emil Kaufmann on Jean Laurent Legeay (in "Three Revolutionary Architects . . .") have been taken up and developed by John Harris in his study "Legeay, Piranesi, and International Neo-Classicism in Rome (1740-1750)" in *Essays in the History of Architecture presented to Rudolf Wittkower* (London: Phaidon Press, 1967), Vol. I, pp. 189-196. New facts concerning the life and work of this architect have been subsequently brought to light by J.-M. Pérouse de Montelos, *Etienne-Louis Boullée 1728-1799, de l'architecture classique à l'architecture révolutionnaire* (Paris: Arts et Métiers Graphiques, 1969), pp. 39-46; and Jens Erichsen, *Antique und Grec. Studien zur Funktion der Antike in Architektur und Kunsttheorie des Frühklassizismus*, a mimeographed thesis presented in 1975 to the University of Cologne. These studies shed a new light on the biography of Legeay; they lead to a requestioning of the directions taken by Kaufmann and Harris, invalidating in particular the idea that "it may be that the famous Piranesi style could better be termed the Legeay style." A more complete study of the life and work of Legeay, undertaken by Gilbert Erouart is now in progress. By the same author: "Jean-Laurent Legeay," in the catalogue of the exposition *Piranèse et les Français 1740-1790* (Rome, Dijon, Paris, 1976), pp. 179-200, and "Jean-Laurent Legeay, Recherches," a lecture given in May 1976, and published in *Piranèse et les Français 1740-1790* a symposium held at the Villa Medici, Académie de France in Rome, edited by G. Brunel (Rome: Edizione dell'Elegante, 1978), p. 199 and ff.

16. D. Watkin, *Thomas Hope (1769-1831) and the Neo-Classical Idea* (London: John Murray, 1968), p. 125. Certain of these hypotheses have been taken up by R. Middleton and D. Watkin in *Architettura Moderna* (Milan: Electa Editions, 1977).

17. Cf. J. Guillerme, "Classicisme et répétition, une approche philologique," *Recherches Poétiques*, IV (Paris: Klincksieck, 1979). See also J. Rykwert, "Classic and Neo-Classic," *Oppositions*, 7, Winter 1976, pp. 39-54; P. Szondi, *Poésie et Poétique de l'idéalisme allemand* (French translation. Paris: Les Editions de Minuit, 1975).

18. E. Kaufmann, "Die Architekturtheorie der französische Klassik und des Klassizismus," *Repertorium für Kunstwissenschaft*, p. 224.

19. S. Giedion, *Spätbarocker und romantischer Klassizismus* (Munich: F. Bruckmann A.G., 1922).

20. A. Riegl, *Spätromische Kunstindustrie* (1901), Italian translation, *Industria artistica tardoromana* (Florence: Sansoni, 1953), with an introduction by Sergio Bettini, and A. Riegl, *Die Entstehung der Barock-Kunst in Rom*, ed. A. Burda and M. Dvořák (Vienna: A. Schroll, 1908); cf. H. Zerner, "L'Histoire de l'art d'Alois Riegl: un formalisme tactique," *Critique*, Nos. 339-340, 1975, pp. 948-952; on the Viennese *Sichtbarkeit* see R. Salvini, *La Critica d'arte della pura visibilità e del formalismo* (Milan: Garzanti, 1977), anthology of texts. On German

aesthetics in general, consult G. Morpurgo-Tagliabue, *L'esthétique contemporaine, une enquête* (Milan: Marzorati, 1960); and more specifically E. K. Mundt, "Three Aspects of German Aesthetic Theory," *Journal of Aesthetics and Art Criticism*, XVII, March 1959, pp. 287-310. On Fiedler, refer to P. Junod, *Transparence et Opacité* (Lausanne: L'Age d'Homme, 1976). On the followers of the "Vienna School" in the twenties and thirties, M. Schapiro, "The New Viennese School," *Art Bulletin*, Vol. XVIII, No. 2, 1936, pp. 258-266.

21. Cf. M. Cacciari, "Di alcuni motivi in Walter Benjamin," *Nuova Corrente*, 67, 1975, in particular pp. 228-235, and by the same author, "Loos-Wien," *Oikos, da Loos a Wittgenstein* (Rome: Officina Ed., 1975), pp. 13-60.

22. Giedion, *Spätbarocker und romantischer Klassizismus*, Chap. II on "The Meaning of Space in late Baroque Classicism and in Romantic Classicism."

23. *Ibid.*, Chap. III: "The Sequence of Spaces."

24. Cf. *Hommage à Giedion, Profile seiner Persönlichkeit* (Basel and Stuttgart: Birkhäuser Verlag, 1971).

25. "Die Stadt des Architekten Ledoux," *Kunstwissenschaftliche Forschungen*, II, 1933, p. 153. The reference to Kant will again be quoted in: E. Kaufmann, *Von Ledoux bis Le Corbusier, Ursprung und Entwicklung der autonomen Architektur* (Vienna-Liepzig: 1933-1934), p. 76 of the Italian translation (Milan: Mazotta, 1976).

26. Cf. "Architektonische Entwürfe aus der französischen Revolution," *Zeitschrift für bildende Kunst*, LXVIII, 1929-30, pp. 38-46, whose hypotheses on "revolutionary" architecture are taken up in Kaufmann's "Three Revolutionary Architects: Boullée, Ledoux, Lequeu."

27. *Architecture in the Age of Reason, Baroque and Post-Baroque in England, Italy, and France* (Cambridge: Harvard University Press, 1955).

28. Cf. antal whose articles published in the *Burlington Magazine* from 1935 to 1941 are collected in F. Antal, *Classicism and Romanticism with other Studies in Art History* (London: Routledge & Kegan Paul, 1970); F. Kimball, "Romantic Classicism in Architecture," *Gazette des Beaux Arts*, XXV, Feb. 1944, pp. 95-111; V. Scully, *Modern Architecture* (New York: Braziller, 1961), see p. 41; J. Mordaunt-Crook, *The Greek Revival: Neoclassical Attitudes in British Architecture, 1760-1870* (London: John Murray, 1972), passim. The quote is from D. Lewis, "Il Classicismo romantico in America: il tempio nella sua forma completa," *Bolletino C.I.S.A. "A. Palladio"*, XIII (Vicenza, 1971).

29. T. J. McCormick and J. Fleming, "A Ruin Room by Clérissimeau," *Connoisseur*, CXLIX, 1962, pp. 239-243. New information is in: *Piranèse et les Français (1740-1790)*, symposium ed. by G. Brunel, op. cit.

30. D. Stillman, "Robert Adam and Piranesi," *Essays in the History of Architecture . . .*, op. cit., pp. 189-196.

31. N. Pevsner, "The Egyptian Revival," *Architectural Review*, CXIX, 1956, reprinted in Pevsner's *Studies in Art, Architecture and Design*, vol. I (London: Thames and Hudson, 1968), p. 216.

32. Cf. "Die Architekturtheorie des Französische Klassik und des Klassizismus," *Repertorium für Kunstwissenschaft*, pp. 236-237.

33. Cf. G. B. Piranesi, *Della Magnificenza ed Architettura de' Romani* (1761), p. XCIII; see also the *Parere su l'Architettura* (Rome, 1765). Also refer to the study of M. Tafuri, "Giovanni-Battista Piranesi: l'utopie négative dans l'architecture," *L'Architecture d'Aujourd'hui*, No. 184, March-April 1978, pp. 93-108. For the ideas of Chambers, see N. Pevsner, S. Lang, "Apollo or Baboon," *Architectural Review*, CIV, December 1948, pp. 271-279; and E. Harris, "The Treatise on Civil Architecture," in J. Harris, *Sir William Chambers*, p. 140.
34. Cf. J. L. de Cordemoy, *Nouveau Traité de toute l'Architecture* (1706, 1: 1714, 2); M. A. Laugier, *Essai sur l'Architecture* (Paris, 1753, 1; 1755, 2); *ibid.*, *Observations sur l'Architecture* (Le Haye, 1765). See also W. Herrmann, *Laugier and the Eighteenth Century French Theory* (London: Zwemmer, 1962).
35. J. F. Blondel, *Cours d'Architecture: Les Leçons données en 1750 et les années suivantes . . .* (Paris), vol. III, p. LVIII, quoted by N. Pevsner, *The Egyptian Revival*, pp. 216-217 and by E. Kaufmann in the "Three Revolutionary Architects," see note 114 of the chapter on Boullée.
36. See V. Vogt-Göknil, *Giovanni Battista Piranesi's Carceri* (Zurich: Origo Verlag, 1968).
37. For a definition of the "classical age" cf. M. Foucault, *Les mots et les choses, une archéologie des sciences humaines* (Paris: Gallimard, 1966), pp. 86-91; and D. Richet, *La France Moderne: l'esprit des institutions* (Paris: Flammarion, 1973).
38. Let us quote on this matter the *Logique de Port Royal*: "In this manner the sign contains two ideas: one that thing which represents; the other that which is represented; and its nature consists in exciting the latter by the former." The authors clarify further the transparent nature of the doublet "figuring/figured": "One can conclude that the nature of the signs consists in exciting in the senses, by the idea of the figuring object, that of the figured object; and as long as this effect subsists, that is to say, as long as this double idea is excited the sign subsists, even if this object (thing) is destroyed in its own nature. Thus it is of no import that the colors of the rainbow, which God has taken as a sign that he will never again destroy the human race by flood, are real and true as long as our senses always have the impression that they are, and that they use this impression to think of God's promise," in A. Arnaud and P. Nicole, *La Logique ou l'art de penser* (first part, Chap. IV, added in the 5th edition in 1683).
39. Cf. P. Rossi, *Clavis Universalis* (Milan: Ricciardi, 1960); L. Formigari, *Linguistica ed empirismo nel Seicento inglese* (Bari: Laterza, 1970); R. Wittkower, "Inigo Jones, Architect and Man of Letters," *R.I.B.A. Journal*, LX, No. 3, Jan. 1953, pp. 83-90. On "Classical" architectural thought, see the thesis developed by M. Tafuri, "Alle origini del palladianesimo: Alessandro Farnese, Jacques Androuet Du Cerceau, Inigo Jones," *Storia dell'Arte*, July-Sept. 1971, p. 150ff.
40. Cf. C. Perrault, *Ordonnances des Cinq Espèces de Colonnes selon la Méthode des Anciens*, Preface to Book I (Paris, 1683), p. 1, and R. Ouvrard, *Architecture Harmonique ou application de la doctrine des Proportions de la Musique à l'Architecture* (Paris, 1679). On the aesthetic theory of Wren and Perrault, see M. Tafuri, "'Architectura artificialis': Claude Perrault, Sir Christopher Wren e il dibattito sul linguaggio architettonico," in *Barocco europeo, Barocco italiano, Barocco salentino* (Lecce: ed. "L'Orsa Maggiore," 1969), pp. 375-398. Cf. also the studies of W. Herrmann, *The Theory of Claude Perrault* (London: A. Zwemmer Ltd., 1973), and of P. Gresset, *L'écart du système* (Paris: C.O.R.D.A., 1977).
41. Perrault, *Ordonnances*, p. XV. On the *Querelle* between F. Blondel and C. Perrault, see W. Herrmann, *The Theory of Claude Perrault*, pp. 131-138, and D. Nyberg, "La Sainte Antiquité—Focus on Eighteenth Century Architectural Debate," *Essays in the History of Architecture presented to Rudolf Wittkower*, pp. 159-169.
42. C. Perrault, *Les Dix Livres d'Architecture de Vitruve corrigés et traduits* (Paris, 1673), second edition 1684, pp. 78-80. We also refer to the treatises of J.-F. Féliben, A. F. Frézier, etc.
43. Cf. M. Petzet, *Soufflot's Sainte Geneviève* (Berlin: W. de Gruyter, 1961); A. Braham, "Drawings for Soufflot's Sainte Geneviève," *Burlington Magazine*, CXIII, 1971, pp. 582-590; and P. Chevallier and D. Rabreau, *Le Panthéon* (Paris: Caisse Nationale des Monuments Historiques et des Sites, 1977).
44. Perrault, *Ordonnances des Cinq Espèces de Colonnes selon la Méthode des Anciens*, p. VI; and *Les Dix Livres d'Architecture de Vitruve corrigés et traduits*, p. 12.
45. *Les Dix Livres d'Architecture de Vitruve corrigés et traduits*, p. 1. Compare Perrault's analysis with that of the authors of the *Logique de Port Royal*. By establishing a "division of signs," the authors discover "that there are natural [signs] which are independent of man's fantasy, as an image which appears in a mirror is a natural sign of the one it represents; and there are other [signs] which stem from institution and establishment, which either have a distant relation to the figured object or do not have any at all. Thus words are the signs of the institution of thoughts and of the characters [signs] of words" (first part, Chap. IV).
46. On English "experimentalism" we must refer back to our own *Città e Utopia nell'illuminismo inglese*, George Dance, *il giovane* (Rome: Officina Ed., 1974).
47. Cf. his *Livre d'Architecture* (1745), and W. Kalnein, N. Levey, *Art and Architecture in the Eighteenth Century in France* (Harmondsworth: Penguin Books, 1972).
48. Harris, *Sir William Chambers*.
49. On Charles de Wailly (1730-1798), in the absence of a monograph, consult J. Lavallée, *Notice historique sur Charles de Wailly, Architecte*, year VII; L. Hautecoeur, *Histoire de l'Architecture classique en France*, IV (Paris: Picard, 1952), pp. 71-72 and pp. 232-242; L. Réau, "La décoration du Palais Spinola à Gènes," *L'Architettura*, XXXVII, 1923; G. Gaillard, "Projet de Charles de Wailly pour la conservation d'un théâtre sur l'emplacement du couvent des Capucines," *Bulletin de la Société de l'histoire de l'Art Français*, for the year 1954 (Paris, 1955), pp. 80-84; S. Pressouyre, "Un ensemble néo-classique à Port Vendres," *Les Monuments Historiques de France*, nouvelle série, IX, 1963, pp. 199-222; M. Gallet, "Un projet de Charles de Wailly pour la Comédie Française," *Bulletin du Musée Carnavalet*, no. 1, 1954, pp. 3-13; A. Gruber, "L'Opéra de Versailles (. . .)," *Revue de l'Art*, no. 13, 1971, pp. 87-97; D. Rabreau,

- "Charles de Wailly dessinateur," *L'information de l'histoire de l'art*, no. 5, 1972, pp. 219–228; A. Braham, "Charles de Wailly and Early Neo-Classicism," *The Burlington Magazine*, CXIV, October 1972, pp. 670–685; M. Steinhäuser, D. Rabreau, "Le Théâtre de l'Odéon de Charles de Wailly at Marie-Joseph Peyre, 1767–1782," *Revue de l'Art*, no. 19, 1973, pp. 8–49, and M. Mosser, "Charles De Wailly," in the catalogue of the exhibition *Piranesi et les Français 1740–1790* (Rome, Dijon, Paris, 1976), pp. 132–140.
50. Published by J. M. Pérouse de Montclos, *Etienne-Louis Boullée 1728–1799, de l'architecture classique à l'architecture révolutionnaire*, pl. 73 and p. 150. On Antoine, see the synopsis of the master's thesis of M. Mosser, "L'hôtel de Monnaies à Paris, oeuvre de J.-D. Antoine," *L'information d'histoire de l'Art*, no. 2, 1971, pp. 94–101.
51. Cf. M. Steinhäuser, D. Rabreau, "Le Théâtre de L'Odéon de Charles de Wailly et Marie-Joseph Peyre," Project A.
52. Cf. figures 24, 25, 26 of E. Kaufmann, "Three Revolutionary Architects; Boullée, Ledoux, Lequeu."
53. Cf. M. Foucault, *Naissance de la Clinique, une archéologie du regard médical* (Paris: P.U.F., 1963): "the equilibrium is precarious [of the clinical experience] because it rests on a formidable postulate: that the entire visible world can be formulated in words and that it is entirely visible because it is entirely capable of verbal formulation . . . Condillac never elaborated a universal theory of this element—whether this element is perceptual, linguistic, or calculable; he incessantly hesitated between the two operational logics: that of genesis and that of calculation." Cf. J. Derrida, for whom this "oscillation" of Condillac is also a "lever of disorganization": *L'archéologie du frivole*, introduction to Condillac, *Essai sur l'origine des connaissances humaines* (new edition edited by C. Porset, Editions Galilée, 1973), pp. 27–28.
54. Cf. M. Mosser, "Monsieur de Marigny et les jardins, projets inédits de fabriques pour Menars," *Bulletin de la Société d'histoire de l'Art français* (Paris, 1973), pp. 269–293.
55. On Chiswick, see R. Wittkower, "English Neo-Palladianism, The Landscape Garden, China and the Enlightenment," *L'Arte*, no. 6, June 1969, pp. 18–35; cf. also on French gardening and landscaping *Jardins en France 1760–1820, Pays d'illusion, Terre d'expériences* (Paris: Caisse Nationale des Monuments historiques et des Sites, 1977).
56. Cf. M. Tafuri, "Simbolo e ideologia nell'architettura dell'illuminismo," *Comunità*, nos. 124–125, Nov., Dec., 1964.
57. Cf. G. B. Piranesi, *Parere su l'architettura, con le osservazioni . . . sopra le lettere di Monsieur Mariette* (Rome 1765).
58. Cf. J. Guillerme, "Notes pour l'histoire de la régularité," *Revue d'esthétique*, no. 3, 1970, pp. 383–394; J. Guillerme, "Lequeu, entre l'irrégulier et l'éclectique," *Dix-Huitième Siècle*, no. 6, 1974, pp. 167–180.
59. Cf. especially F. M. Lecreux, *Discours sur le goût, appliqué aux arts et particulièrement à l'architecture* (Nancy, 1778), pp. 17–18.
60. Cf. E. Burke, *A Philosophical Enquiry . . . of the Sublime and the Beautiful* (London: Boulton 1958, the first edition 1756); see also G. May, "Diderot et Burke," *Publication of the Modern Languages Association*, 1960, pp. 527–539, and S. Monk, *The Sublime: A Study of Critical Theories in 18th Century England* (Ann Arbor: Michigan University Press, 1960).
61. In the eighteenth century technology proceeds from the will to legislate technique on the basis of production and social needs: cf. J. Guillerme and J. Sebestik, "Les commencements de la technologie," *Thalès*, for the year 1966, XII (Paris: P.U.F., 1968).
62. We quote from Max Bense, *Aesthetica* (Baden-Baden, 1965); Italian translation (Milan: Bompiani, 1974), pp. 50–51.
63. *Ibid.*, p. 322. Max Bense applies information theory to the study of aesthetic creation, clearly establishing the difference between the technical project and the aesthetic project. It hardly seems necessary to point out that only this specific analysis concerns us here and that the underlying project of this author, concerning the "technological aesthetic," remains foreign to us. The interaction between the institutional framework and technical power has been studied by J. Habermas, who tends to confer on the "freedom" preliminary to any "realization" (or work) no longer a "statistical" existence, but a political value: "the rationalization on the level of the institutional framework can only take place within the milieu of the interaction mediated by language itself, that is to say, thanks to a liberation of communication," in *La Technique et la science comme "idéologie"*, French translation (Paris: Gallimard, 1973), p. 67 (italics are the author's).
64. Max Bense, *Aesthetica*, pp. 105–107 and 410–422. The concept of "language game" is taken up by Wittgenstein. One can find a good introduction to the thought of M. Bense in G. Pasqualotto, *Avanguardia e tecnologia* (Rome: Officina Ed., 1971).
65. Anon., *Réponse d'un artiste à un homme de lettres, qui lui avait écrit sur les Vaux-Halls* (Amsterdam, 1769), quoted in A. Gruber, "Les Vauxhalls', parisiens au XVIIIème siècle," *Bulletin de la Société d'Histoire de l'Art français*, 1971, pp. 125–143.
66. Cf. A. Gruber, *Les grandes fêtes et leurs décors à l'époque de Louis XVI* (Geneva: Librairie Droz, 1972). On Bélanger, see J. Stern, *A l'ombre de Sophie Arnould, Francois Bélanger. . . .* (Paris: Plon, 1930), 2 vols. On Cochet, see R. Rosenblum, *Transformations in Late Eighteenth Century Art*, p. 127. On the Chinese festivals, R. Wunder, "A Forgotten French Festival in Rome," *Apollo*, May 1967. See also A. Gruber, "Les Fêtes de Parme in 1769," *Gazette des Beaux-Arts*, December 1971, pp. 355–370; *Les Fêtes de la Révolution*, catalogue of the exhibition at the Bargoin Museum, Clermond-Ferrand, 1974; J. Starobinski, 1789, *Les emblèmes de la Raison* (Paris: Flammarion, 1973); and M. Ozouf, *Le fête révolutionnaire, 1789–1799* (Paris: Gallimard, 1976).
67. Cf. M. Ribart, *Architecture Singulière; l'Eléphant triomphal. Grand Kiosque à la gloire du Roi* (Paris), "Chez M. Patte, Architecte et Engraveur," 1758; we quote from the "Préface du graveur," p. 4.
68. Cf. J. Gwynn, *London and Westminster Improved* (London, 1776).
69. Cf. *Traité de la Construction de toutes Espèces de Bâtimens, ainsi que des principes de tous les Arts qui y ont rapport, la maçonnerie, la charpenterie, la menuiserie, la serrurerie, etc., . . .* 3 vol. (Paris, 1777). These volumes constitute volumes V

- and VI of Blondel's *Cours d'Architecture*, and vol. III of the plates. Cf. M. Mathieu, *Pierre Patte, sa vie et son oeuvre* (Paris: P.U.F., 1940); and Wilhelm Weber, *Pierre Patte* (n.d.).
70. Cf. M. Cacciari, "Vita Cartesii est simplicissima," *Contropiano*, 2/1970, p. 390 and 392, which quote M. Bense, *Einführung in die informations—theoretische Aesthetik* (Hamburg, 1969), pp. 123–129.
71. Cf. J.-C. Perrot, *Genèse d'une ville moderne, Caen au XVIIIe siècle* (Paris: Mouton, 1975); B. Fortier, et al., *La Politique de l'espace parisien [à la fin de l'ancien Régime]* (Paris: C.O.R.D.A., 1975), and J.-M. Dudot, B. Flouzat, M. Malcotti, D. Rémy, *Le Devoir d'embellir* (Paris: C.O.R.D.A., n.d.).
72. Pierre Patte, *Mémoires sur les objets les plus Importants de l'Architecture* (Paris, 1769).
73. Cf. P. Patte, *De la manière la plus avantageuse d'éclairer les rues d'une ville pendant la nuit* (Amsterdam, 1766). Patte was well acquainted with Moreau-Desproux (*Mémoires sur les objets les plus Importants de l'Architecture*, p. 216) and Perronet (*ibid.*, p. 230). See the plan of Moreau (Paris: B.N., Cabinet des Estampes): *Plan général des différents projets d'embellissement . . .* (Paris, 1769).
74. Cf. R. Middleton, "The Abbé de Cordemoy and the Graeco-Gothic Ideal," *Journal of the Warburg and Courtauld Institutes*, I, XXV, 1962, pp. 278–330, and *ibid.*, LVI, II, XXVI, 1963, pp. 90–123.
75. *Etudes d'Architecture* (Paris, 1755). Quoted in M. Mathieu, *Pierre Patte, sa vie et son oeuvre*, p. 112. Like Soufflot, Patte recommends the study of the construction methods of the "Goths": "The great art of architecture consists in giving only that thickness as required for solidity. . . . It can only be through ignorance that one gives more rather than less of it," *Mémoires*, *op. cit.*, p. 99.
76. Cf. L. Bruyère, *Etudes relatives à l'art des constructions* (2 vols., Paris, 1823–28); and B. Brisson, *Nouvelle collection de dessins . . . relatifs à l'art de l'ingénieur* (2 vols., Paris, 1821–25).
77. Cf. G. Bardet, *Naissance et Méconnaissance de l'Urbanisme* (Paris: S.A.B.R.I., 1951), pp. 355–384; J. Simpson, "Town Planning in the French Revolution," *Essays and Memorials* (London: The Architectural Press, 1923).
78. Cf. Quatremère de Quincy, *Considérations sur les arts du dessin en France* (Paris, 1791), p. 45; see also the *Suite aux considérations* (1791) and *Seconde Suite* (1791).
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 33 P. Patte, *Mémoires sur les objets les plus importants de l'Architecture* (Paris, 1769).
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Figure Credits

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2 (After T. J. McCormick, see Note 29), Direzione Civici Musei, Venice.

3 E. A. Petitot, *Mascarade à la Grecque* (Parma, 1771).

4 *Les Dix Livres d'Architecture de Vitruve* (2nd ed., 1684).

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10 M.-J. Peyre the elder, *Oeuvres* (1765).

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1 (frontispiece) Map of Vienna showing the location of the Superblocks. 1) Karl Marx-Hof; 2) Sandleitens; 3) Bebelhof, Liebkneczhof, Lorenzhof, Fröhlichhof; 4) Fuchsenfeldhof, Am Fuchsenfeld; 5) Metzleinstaler-Hof,

Reumannhof, Julius Popp-Hof, Herwegghof, Matteottihof; 6) George Washington-Hof; 7) Rabenhof; 8) Beerhof, Janecekhof; 9) Otto Haas-Hof, Winarskyhof, Gerlhof; 10) Engelsplatz; 11) Paul Speiser-Hof; 12) Karl Seitz-Hof



Sima Ingberman

The hateful unsuitable Mietskaserne. . . .

Walter Gropius,

Rationelle Bebauungsweisen¹

. . . that is ultimately responsible for the deterioration of our urban population's health. . . .

Ernst May,

Die Wohnung für das Existenzminimum²

Gropius and May characterized the *Mietskasernes* as large-scale tenement *Baublocks* or perimeter blocks whose facades enclosed a sequence of multi-story interior courts. By the late twenties versions of this type had emerged in urban cores throughout Germany and Austria as a result of the laissez-faire housing policies of the industrial revolution, which had made it necessary to support a certain level of 'progress' in the housing sector. Throughout the end of the nineteenth century their substandard conditions were tolerated for lack of any better solution to the problem of accommodating labor. After 1910, however, the *Mietskasernes* created an urban dilemma that demanded a resolution.

As Leonardo Benevolo has stated, "the problems of modern town planning could be approached either by drawing up, as an alternative to the existing towns, a complete ideological model, to be created experimentally, *de novo* and independently from the original it set out to correct, or by tackling the various technical needs connected with the growth of the industrial town and attempting to cure its individual defects."³ The *Mietskasernes*, as primarily nineteenth century type-forms, had the effect of provoking resolutions based on both approaches. In Germany they inspired a housing 'revolution' which rejected the models and their urban environs. In Vienna, they conversely led to a progressive upgrading of those existing block forms which capitalized on the format of the city and the street. By the middle of the 1920s, both courses of action had produced viable mass housing prototypes.

Germany: The Normative Solution

Early German *Baublock* prototypes were introduced within Duke Frederick IV's master plan of 1622 for the

city of Mannheim (fig. 2). There, consecutive grids of perimeter blocks—macrocosmic versions of the actual fortified city—provided citizens with access to both public and protected communal places. The Mannheim blocks proved popular, and by the end of the seventeenth century similar housing types had been erected in Karlsruhe, Düsseldorf, Darmstadt, and Kassel.

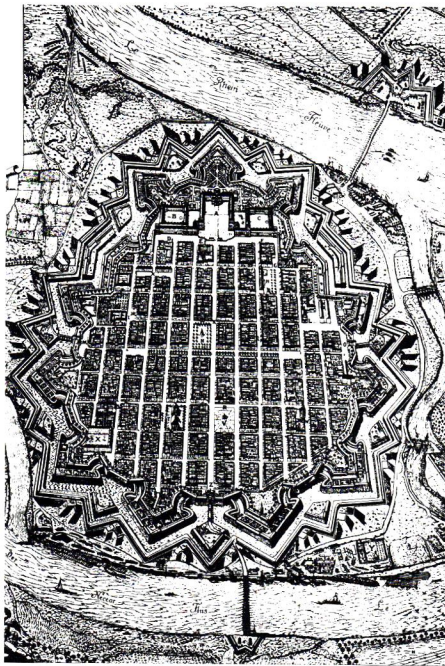
Major changes within this *Baublock* format did not occur until the middle of the nineteenth century, when increasingly larger versions were designed to house the newly established working class. Mid-century examples still included the large open courtyards, but after 1850, additional multi-story housing filled these open spaces, leaving only deep wells of shadow within the densely configured sections. By the turn of the century this type, now referred to by the term *Mietskasernes*, was found in many German cities and especially in Berlin. A typical Berlin model of 1902 housed from forty to fifty families in each section (fig. 3). Apartments were small (fig. 4), kitchens averaging 2.50 meters by 4.90 meters and adjacent rooms 3.70 meters by 5.80 meters. As rooms D1, E1, F1, and G1 indicate, layouts of this kind failed to provide many rooms with adequate natural light and air. This unhealthy situation was further aggravated by extreme overcrowding, by a lack of adequate sanitary facilities, and the inadequate provision of means of escape.⁴ Despite these factors, *Mietskaserne* rents remained high and uncontrolled, a situation largely owing to the fact that the official authorities regarded mass housing with little interest and were thus content to leave it within the hands of its main beneficiaries, namely the private speculators and landlords.

By the early twenties German reformists such as Otto Haesler, Gropius, and May felt that a housing 'revolution' was in order. They were prepared to "fight the fervent war against the *Mietskaserne*." The generic alternative they proposed was the *Siedlung*, whose low-rise suburban plan could offer workers "light, air, and space for movement and self-expression," as well as a means of escape from such urban diseases as tuberculosis.⁵ Rents were to be kept within the reach of the workers through a com-

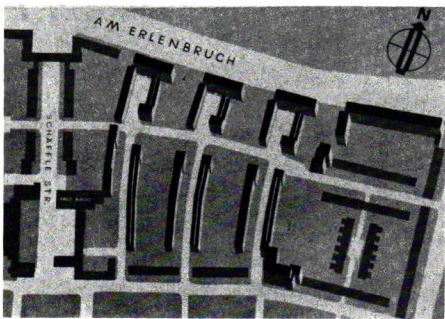
2 Mannheim master plan, 1622.

3 Berlin Mietskaserne, 1902.

4 Mietskaserne floor plan.



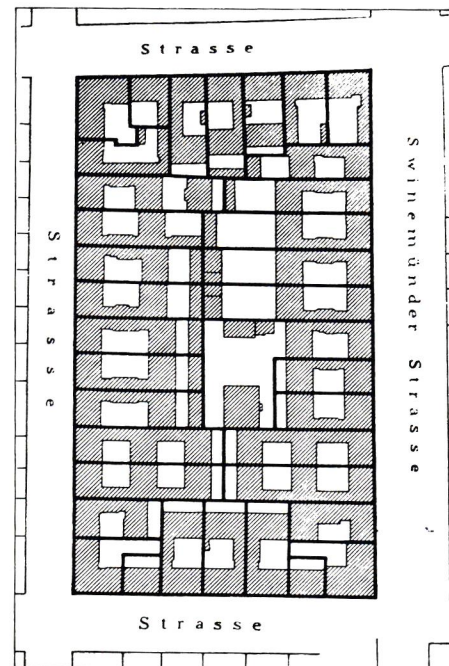
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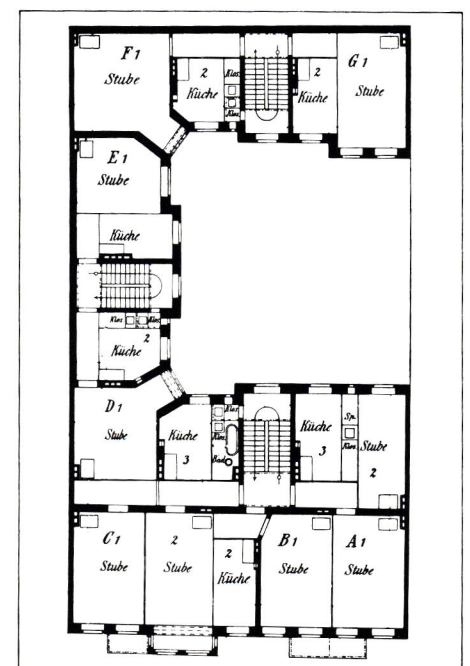
5 Riederwald scheme. Ernst May, 1926-1927.

6 Das Neue Frankfurt, Nov. 1929. A journal devoted to urban housing, edited by the Frankfurt City Architect Ernst May from 1926-1931.



3

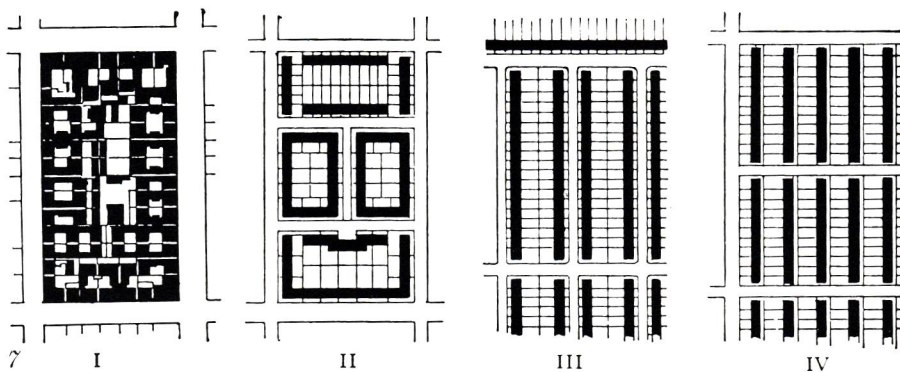
7 Diagram of the evolution of the Siedlung plan. I. Typical 19th-century block with rear buildings; II. Smaller blocks with buildings around the perimeter; III. Open-ended rows facing each other across traffic streets; IV. Diagram of Zeilenbau, with the rows endward to the street and all facing in the same direction.



4



6



7 I II III IV
 combination of municipal control and guaranteed subsidies.

The militancy of this position not only led to a rejection of the *Baublock* model, but also to the elimination of such traditional urban references as the street and the square. The process by which this was to be achieved was of course gradual. May documented the desirable form of this evolution in *Das Neue Frankfurt* (fig. 6), using the *Siedlungen* that he himself had designed for Frankfurt-am-Main as examples of the general principles involved.⁶

May's diagram commenced with the *Mietskaserne* block and its urban dimensions (Stage 1) (fig. 7). The second stage of development consisted of an early *Siedlung* pattern of which his Riederwald scheme of 1926–1927 was a representative solution (fig. 5). Here, the *Baublock's* singular mass was replaced by a series of smaller enclosed and semi-enclosed courts which still retained certain elements of the primary type-form. In the second stage of the *Siedlung* type, perimeter blocks still bordered on the public street while the courtyards remained generic spaces whose right angles helped to establish places within the larger complex. The Praunheim (1926–1927) and Romerstadt (1927–1928) *Siedlungen* both included such semi-enclosed sections, but their freestanding housing rows already indicated the next stage of the evolution. By 1926, efforts to afford residents both maximum privacy and optimum exposure to green space led to the third stage of *Siedlung* development. This consisted of smaller rectangular grids in which each grid block was occupied by a residential row house on its eastern and western borders. A large shared garden took up the rest of the area. The buildings no longer fronted onto the street, but met it at right angles instead. The tenants in any two rows shared only their garden and a common means of access to the private side lane. This limited sense of community, however, was soon dispelled by the fourth stage of the *Siedlung*. In the representative layouts of this stage, such as Goldstein (1930), the grid block was further subdivided into a series of smaller blocks, each of which was only sufficient for a single small row house unit together with its adjacent private garden and unobstructed exposure to the side lane. By this stage the 'reformist'

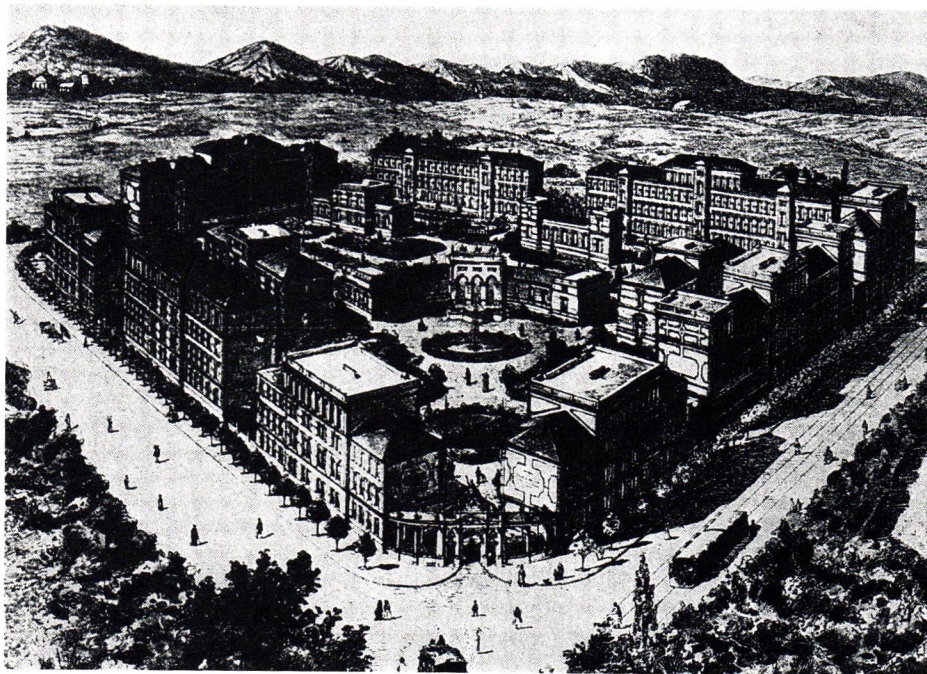
liberation could be considered a success since any communal structure in the physical form had been virtually eliminated.

Vienna: The Evolutionary Alternative

If *Mietskaserne* conditions provoked a mass housing 'revolution' within Germany, then a similar reaction could have been expected in Vienna. The Viennese blocks closely paralleled their German counterparts in their lack of adequate sanitary facilities, safety standards, and effective rent controls. And according to Rudolf Eberstadt's studies of the Vienna *Baublocks*, life in their midst was perhaps even more distressing.⁷ One deleterious feature was certainly the ubiquitous interior corridor which was common to virtually all turn-of-the-century housing blocks, its position invariably robbing the kitchen of all natural sources of light and air (fig. 10). In theory, the tenants were allowed the use of the hallway windows, but these often remained locked or boarded up. The ensuing lack of ventilation aggravated the already congested conditions of the living units where kitchens averaged little more than 2.50 by 3.00 meters and adjacent rooms (or room) 4.00 by 5.00 meters.

Despite these adverse conditions, a housing 'revolution' did not occur in Vienna largely because of the fact that the city had already decided to upgrade its *Baublocks* at the end of the nineteenth century, although the initial guidelines for *Mietskaserne* improvement and reform had not been implemented by the time of World War I. By 1919, however, the Social Democrats had already recognized the socio-economic and political advantages that this type afforded. Their newly established regime incorporated the earlier reform proposals into an official housing program that legitimized the *Baublocks* by establishing them as the models for the "Superblocks," that is, for the large scale *Baublocks* that the city was to erect between 1922 and 1934.

These "Superblocks" represented the final stage of Austrian perimeter block development. Examples had been in existence since the Baroque *Hof*, a self enclosed aggregation of units grouped around a courtyard and entered



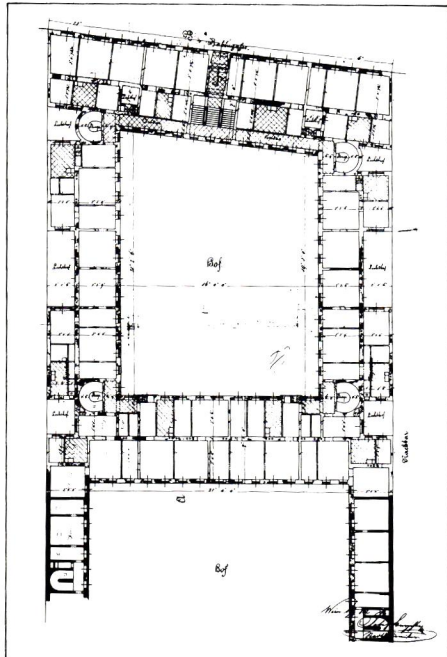
8 *Competition for People's Housing and Welfare Establishments, 1896.*
O. Thienemann, second prize winning entry.

9 *Sielerhaus III, plan.* Joseph Kornhausels, 1896.

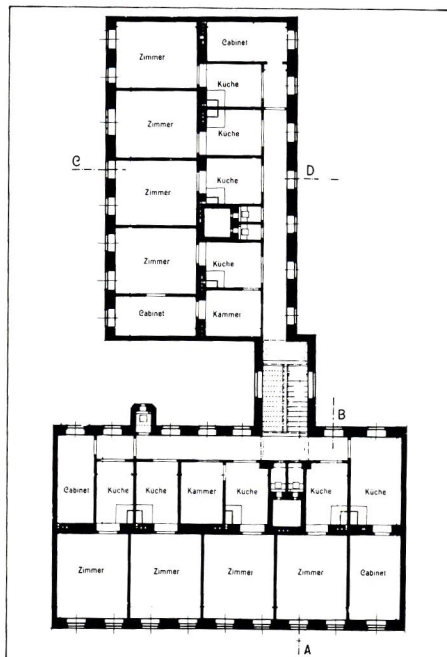
10 *Viennese Mietskaserne plan, c. 1900.*

11 *Melker-Hof VIII, plan.*

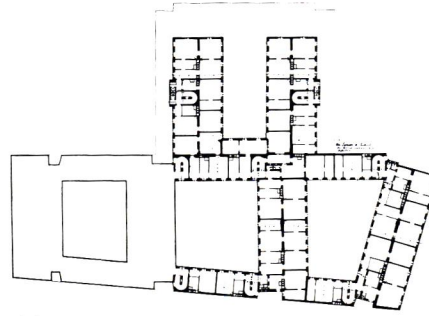
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through a large portal. Joseph Kornhausels adapted the traditional *Hof* format to multi-storied accommodation for middle class families in the Sielerhaus III (1826 [fig. 9]) and Schottenhof Kornhausels (1826–1832). Between 1840 and 1860 these buildings were to inspire larger bourgeois-oriented *Hof* complexes such as the Melker Hof VIII (fig. 11). As in Germany, the industrial revolution converted the perimeter block into the primary available type for the economic accommodation of workers. After 1860, early residential clients included skilled workers, among them members of the First General Office Workers Union which commissioned Theophil Hansen to design the forty-two unit Rudolfshof block which was completed in 1872. Between 1870 and 1890 patronage shifted to the large manufacturing and railroad companies, who increasingly built larger complexes for the housing of workers near their plants. As these blocks grew in scale living conditions consistently deteriorated. The housing situation further declined after an 1892 law exempted the owners of workers' housing from real estate taxation. An era of widespread speculation followed in which the *Baublocks* became the properties of investors who manifested their lack of interest in their acquisition through continued neglect. By the end of the century, the once optimistic post-Biedermeier *Baublock* type deteriorated into a master plan for slum living.

While late century *Mietskaserne* conditions proliferated, the signs of a reform-oriented counter-trend were already discernible. One example of this was the Emperor Franz Joseph Jubilee Competition for People's Housing and Welfare Establishments of 1896 which had the aim of inspiring the design of low-cost prototypical mass housing solutions according to improved hygienic living standards. The entry stipulations were quite specific. All kitchens and other rooms were to have direct access to light and air. The cooking space was to measure at least eight square meters while the adjacent rooms were to attain an average size of no less than sixteen square meters. In addition, each apartment had to have a private entry foyer and a W.C. The competition also called for communal recreational and service facilities. Submitting architects were advised to plan for children's centers, playgrounds, bathing areas,

game spaces, meeting rooms, etc. O. Thienemann's second prize winning entry (fig. 8) enclosed these facilities within a design based on the original seventeenth century *Hof*. His project which consisted of a monumentally proportioned perimeter block with a grand gateway and a large open court comprising specially designated communal and garden spaces may well have served as the prototype for the Socialist *Baublocks* of the twenties.

The Jubilee Competition was followed by an accelerated interest in mass housing reform, much of it on the part of the newly established reformist party, the Social Democrats. 1897 saw the creation of the Central Office of Housing Reform. Three years later, Franz Schumeier published *The Principles of Social Democratic Activity for the Community*, a document which formed the basis of Vienna's housing policy after it was re-issued in 1914 under the title *What Do the Social Democrats Demand for Vienna; The Social Democratic Communal Program*. In 1910 Heinrich Goldemund, later to become the city's Director of Building Affairs, authored the *Proposals for the Improvement of Vienna's Housing Conditions*. Additional frameworks for reform were later recommended by the nine housing congresses that convened in Vienna between 1910 and 1914.

Naturally these reforms had little effect on Vienna's pre-World War I housing situation. The pressures for improvements had not yet gathered sufficient momentum despite the increasing signs of discontent. In 1911, the existent living conditions, a housing shortage, and escalating rents led to working class riots. This volatile mood was further aggravated by the by-products of World War I—widespread unemployment and food shortages. By 1917, the militant Bolsheviks had provided Austria's laborers with a radical role model. In attempting to emulate their successful example, the Austrians engaged in a series of crippling national strikes throughout 1917 and 1918. These acts had the effect of further broadening the polemical gap between this group and the reactionary upper and middle classes. In the subsequent political situation, parties of both sides were unable to retain power for any extended period of time. Vienna's compromise solution to

82 this stalemate was the election in 1919 of a new city government dominated by the members of that party which had promised “reform through evolution, not revolution”—the Social Democrats.⁸

Once in power the Social Democrats proceeded to enact the premise on which their platform had been based, the construction of new mass housing. Party officials remained faithful to their ‘evolutionary’ ideals by selecting as their models the familiar *Baublocks*. Their formats, once enlarged and improved upon, seemed an economically viable means of housing large segments of the population under the guidelines of the *Kompensationspolitik* program that sought to create a classless society via compensations within the housing sector. By virtue of their ‘modern’ apartments, desirable facilities, and expansive outdoor spaces, the *Baublocks* offered a residential alternative whose popularity created a self-perpetuating base for Socialist communal housing.

The massive complexes, or “Superblocks,” as they were later named, provided the new regime with a means of physically extending its sphere of influence throughout Vienna. In their fortificatory imagery and their transcendence of conventional urban scale, these *Baublocks* projected a series of defiant stances which could not go unnoticed, even within a city already accustomed to the excesses of Wagnerian monumentality. They thus assumed the nature of political monuments recognizable within the context of the city region. By bracketing Vienna on east-west and north-south axes (see fig. 1), they functioned as the omnipresent watchtowers of the Socialist sphere of influence, placing the entire municipality under their constant surveillance. On a communal level, their presence designated places of intense Socialist activity which, despite offensive and defensive implications, never failed to remind one of the fact that here an ideal concept had been successfully translated into an actual working system.

Notes

1. Walter Gropius, “Flach, mittel- oder hochbau?” *Rationelle Bauungsweisen*, Les Congrès Internationaux D’Architecture Moderne (Stuttgart: Julius Hoffman Verlag, 1931), p. 30.
2. Ernst May, “Die Wohnung für das Existenzminimum,” *Die Wohnung für das Existenzminimum*, Les Congrès Internationaux D’Architecture Moderne (Stuttgart: Julius Hoffman Verlag, 1929), p. 10.
3. Leonardo Benevolo, *The Origins of Modern Town Planning*, trans. Judith Landry (Cambridge: MIT Press, 1978), pp. 35–36.
4. Rudolf Eberstadt documented the evolution of the German *Mietskasernes* in *Handbuch des Wohnungswesens und der Wohnungsfrage* (Jena: Gustav Fischer, 1910), 2nd ed., pp. 46–67 and 229–243.
5. Gropius, “Flach, Mittel- oder hochbau?” *Rationelle Bauungsweisen*.
6. Ernst May discussed the development of the Frankfurter *Siedlungen* in volumes 2–4 of *Das Neue Frankfurt- Internationale Monatschrift für die Probleme Kultureller Neustaltung* (Frankfurt-Am-Main: Verlag Englert und Schlosser, February–May 1930). The diagram appeared on p. 34.
7. Rudolf Eberstadt, “Wiener Wohnverhältnisse,” *Neue Studien über Stadtbau und Wohnungswesen*, Vol. I (Jena: Gustav Fischer, 1912).
8. Karl Mang, “Architektur einer Sozialen Evolution,” *Kommunaler Wohnbau in Wien Aufbruch 1923–1934 Ausstrahlung* (Presse und Informationsdienst der Stadt Wien).

Figure Credits

- 1 From *Die Wiener Superblocks*, ed. Prof. O. M. Ungers (Berlin: T. U. Berlin, n.d.).
- 2, 3, 4 From Rudolf Eberstadt, *Handbuch des Wohnungswesens* (Jena: Gustav Fischer, 1910).
- 5, 6 Courtesy Sima Ingberman.
- 7 From Catherine Bauer, *Modern Housing* (Boston, New York: Houghton Mifflin Co., 1934).
- 8, 9, 11 From *Kommunaler Wohnbau in Wien: Aufbruch 1923–1934 Ausstrahlung* (Vienna: Presse und Informationsdienst der Stadt Wien, n.d.).
- 10 Rudolf Eberstadt, *Neue Studien über Stadtbau und Wohnungswesen* (Jena: Gustav Fischer).

The Vienna Superblocks¹

Foreword by O. Matthias Ungers

Translation by Sima Ingberman

The twenty-three municipal housing blocks documented in this text represent a cross-section of Vienna's housing program in the twenties. Fourteen thousand apartments were constructed during this period. Sandleiten Hof, the largest complex, alone had 1587 units. Hardly smaller was the well-known Karl Marx-Hof. About fifty thousand tenants were to live in these housing projects, a figure equal in population to that of a medium-sized town. ("Markisches Viertel" and "Berlin Buckow-Rudow," two contiguous Berlin *Siedlung* areas [settlement areas], built during the sixties are approximately of this size.) During the period under discussion, these municipal structures housed about one-tenth of Vienna's population.

These projects were built with a remarkably small number of auxiliary facilities. These were essentially limited to stores, medical offices, kindergartens, and central laundries. To this day they remain as they were originally designed and built and it is rather surprising that the need for additional facilities has hardly increased after nearly thirty years of use.

The projects do have notable shortcomings. Connections to major traffic arteries are inadequate and remain unresolved. Their position within the city's overall plan is questionable. Courtyards are often too narrow and many units are in constant shade. Apartment layouts meet minimal requirements and barely satisfy tenants' needs. The architecture is often banal and borders on the inferior. The methods of structural engineering employed are almost primitive and below the progressive standards of that era. The highly praised "new materials"—glass, steel, and concrete—were not used. In terms of their technical planning and construction these housing complexes could hardly be considered experimental. Only by pre-World War I standards do they seem advanced. However, the extent to which they fulfilled their social and political objectives is another matter, and this will be discussed in the following article.

Despite their faults, these Viennese "Superblocks" have not turned into slums over the past thirty years. They have withstood this negative development far better than

many more recent small *Siedlungen*, which, both in theory and practice, fulfilled the necessary requisites for "healthy living"—small massing, low density, green zones, and private ownership. This fact may be a result of the limited and concentrated space within the complexes, which affords no possibilities for the kinds of uninhibited behavioral activity which leads to chaotic conditions. The prevention of slum conditions can also be attributed to the actual behavior of tenants, who come from various strata of the population. Opponents of mass housing originally labeled the Superblocks the "slums of tomorrow," but these premature prognoses have proved to be cases of unreflected polemic.

The Vienna Superblocks essentially resulted from a definite architectural program and not a mere emergency solution. They represented a trend which countered the garden-city movement of the early twenties, which flourished once again in the thirties—this time in reaction to mass housing. Along with the ideology of *Blut und Boden* ("blood and earth") such counter-reactions continued.

But early examples of mass housing seen as the "typical symbol of socialistic building" (Jiri Gacar) can be found throughout Vienna on a broad and uniquely consistent basis. These complexes, though badly built, provide one important solution to this century's housing problems.

Two outstanding programs resulted from the Viennese concept. The first program viewed the apartment as a mass product. Examples of this policy stand in sharp contrast to the individualistic, prestigious *Siedlungen* of the *Neues Bauens* ("new building") movement—the *Werkbundsiedlung* in Vienna, the *Weissenhofsiedlung* in Stuttgart, and the later *Hansaviertel* in Berlin. Under the second program, the city transformed social welfare housing into socialistic housing. Housing was removed from the realm of public and private speculation and placed within the public domain.

Vienna's programs clearly underscore the fact that social welfare housing is a feature of our time and a major concern of our society.

Economic and Political Aspects of Social Housing in Vienna between 1922 and 1934

Joachim Schlandt

Translation by Sima Ingberman

84 The social democratic majority of the Vienna city council pursued a housing policy which, despite an economic depression, allowed for the construction of sixty-three thousand apartments between 1922 and 1934. Under this program, housing was eliminated from the capitalist economic system and was included within governmental welfare as were the intra-structural departments of transportation, education, health, and community services.

The social housing program financed new housing with tax revenues. Older buildings were placed under the auspices of the housing department, which reduced rents to the levels required for maintenance and operation. This resulted in a temporary but *de facto* expropriation of landlords.

Privately financed new buildings were not subject to the apartment requisition and rent control laws. However, once in competition with city-administered units, these apartments could hardly be rented at a profit, even with tax privileges. As a result, private construction came to a standstill and municipal building activity followed as a direct consequence.

The Superblocks, both in architectonic and functional terms, were the building program's most representative output. Although these large-scale projects represented a new prototype, they were actually based on the traditional Viennese tenement house. The Superblocks incorporated the workers' dwellings and provided for communal services, upgraded technical and sanitary conditions, and established new facilities.

These massive projects soon developed an autonomous character. Their self-containment and isolation from nearby neighborhoods encouraged tenants to participate along socially homogeneous lines to protect their political interests. It is difficult to determine if this outcome was planned by the city council, since these housing blocks counted as important voting blocs in elections and ultimately played a supportive role in the workers' anti-Fascist rebellion of February 1934.

Government Intervention in the Private Housing Sector
During World War I, official intervention within the private housing sector was not unusual in the belligerent nations. In Austria rent increases were prohibited by a 1917 Rent Control Decree. That decree was amended two years later by the Apartment Requisition Decree, which permitted the city to house people in vacant or underoccupied apartments. In 1922 this decree was passed by the National Rat (Congress) as the Rent Control Act. The Act limited the right to give notice and fixed rents at about one percent of their prewar value. Operating and essential maintenance costs had to be paid in addition. Maintenance work was rarely done since it had to be pre-financed by the landlord and could only be charged to the tenants in small installments. Attempts at renovation were minimal, since capital invested in housing paid little interest (prewar securities and war loans were affected by almost fifteen thousand-fold inflation and rents were also low). The situation did not change substantially when the Maintenance Levy was introduced in 1923. A lump sum levy, it was based on twelve percent of the prewar rent, including base rent, and was enacted to counter the deterioration of buildings.

The Economic Justification for Low Rents

Despite the housing sector's negative reaction to rent control, its advocates considered it an economic necessity. "Our competitiveness can only be maintained by relatively low wages, which are lower than . . . those of other industrial nations. The quotas for food, clothing, education, and the small portion for entertainment, cannot stand reduction. There is only one component that can be eliminated from the worker's wages without the necessity of stepping up his productivity. That is rent. In the prewar years rent absorbed twenty-five percent of the worker's wages. With rent control its cost has become negligible, averaging only about two percent of the wages. When rent control ends, wages must rise. Our export industry, on which the fate of this country depends, cannot, in light of the described unfavorable production conditions, accommodate any such wage increases."¹

The Allocation of Apartments according to Qualification
 Apartments were allocated by the housing department. Since only a portion of those seeking housing could be accommodated, a point system was instituted to determine priorities. Evaluations were made on the basis of urgency and justification. Such special emergencies as uninhabitability or overcrowded conditions of a present apartment, eviction notices, and sublet conditions were taken into account. Preference was given, however, to established families, and protective immigration laws were enacted. Right of residence and family laws received priority, and special emergency evaluations were considered on a relative basis. Despite the ensuing social inequities, it was maintained that "classification of the applicants according to the point system"² resulted in the allocation of apartments according to need rather than paying power, as was once customary.

The Necessity of Communal Housing

The fact that private building activity did not develop, though new buildings had been almost completely exempt from rent control since 1917 and from all municipal taxes for thirty years, was not due solely to the rents that were demanded. There was a general lack of private capital for investment in housing since those profits accumulated during the inflationary pre-World War I period had been used to finance wartime activities. Remaining available funds were funneled into industrial production to offset a widening trade deficit.

Other factors contributed to the housing shortage between the World Wars. Apartments were extremely overcrowded. This situation resulted from the period of housing speculation during the pre-World War era of entrepreneurship. In 1917 small apartments represented seventy-three percent of the available units; consisting of one to two rooms, and accommodating households which averaged four persons. With the Rent Control Decree the number of apartment seekers increased, since low rents decreased subletting. By 1920 the average number of persons per household dropped to 3.35, but numerous post-war marriages added another forty thousand families to the market. The situation was further exacerbated when

office space was increased at the expense of residential area.

The Use of Taxation to Finance Residential Construction

Rent control brought privately financed housing to a near halt. As a result, housing had to be financed by public funds. "The city administration of Vienna considered housing a duty to the community, as it had long considered the construction of schools and hospitals the duty of the municipalities or the state."³

Various taxes were employed to finance this large-scale effort. The original "Rent Levy for Financing Housing" was suspended in 1923 and replaced by a more productive new home construction tax. It covered only a part of the necessary expenses. Other taxes financed much of the new housing.⁴

To maximize the effectiveness of the tax revenues, the city attempted to control construction costs. Existing technical plants were modernized and additional building material factories were purchased. (Although production could not cover local demands, these endeavors did give the city insight into production costs). Many construction materials were transported by Vienna's *Strassenbahn* (trolley car system) and by municipal trucks. 1,257,000 tons of material were brought to the sites by such means in 1925.

In 1923, twenty-two hundred apartments were financed by taxation. In view of the demand, the city considered the number insufficient. The city council therefore resolved to build five thousand units annually as of 1924. That goal was met the following year and exceeded in 1926, when construction on twelve thousand new apartments was begun. By 1934, 63,754 units had been built. This municipal activity accounted for seventy percent of the total building volume between the World Wars.⁵

Building Sites and Construction Methods in Accordance with the Cost-Saving Standard

Vienna was able to buy land cheaply during the Depression years. The unusual post-World War I economic con-

86 ditions also allowed for those expropriations the city considered necessary for the unhampered execution of its general plan. Thus more than one thousand hectares of land were acquired between 1919 and 1925. "Within the past several years the city of Vienna has displayed a generous investment policy in the area of land acquisition. However some limitations became necessary, as a result of the building up of areas within Vienna's innermost districts and a lack of forceful and compulsory legal measures which would provide for the land acquired to be used in the public's interest."⁶

Without taking public property into account, the city's real estate holdings at the end of 1925 amounted to 6,690 hectares or about twenty-five percent of the total area of Vienna. Concerning the city's aims of housing the lower strata of the population, "the distribution of communal real estate in 1926 clearly reveals a tendency to attempt to gain a foothold in the workmen's districts."⁷ "The city administration thus opportunistically used the housing blocks to fill topographical gaps, especially those on the fringes of Vienna's urban core."⁸

Building activity was not restricted to any specific locale. Instead it was sited near various already developed areas of prewar housing, thereby saving the city the cost of constructing those new infrastructural facilities that large complexes of this type would have required. Existing ownership conditions were therefore not the main cause of this policy. "Even if the city administration had immense continuous building tracts available, the necessity of building schools, public buildings, roads, and transport installations, with their necessary underground facilities, would soon prove to be financially impractical. Foregoing considerations clearly point out that the housing facilities should consist of multiple story buildings (rather than single story) and should adjoin city regions that already have the essential public supply networks and facilities. . . . At a comparable cost, far more units could be built in multi-story dwellings than in single story buildings. The construction of multiple story municipal apartment houses adjacent to existing residential areas thus proved to have a great cost advantage."⁹



1

Maintenance Rent for New Apartments

Although the new housing projects were not subject to rent control, their rental rates were still comparable to those of the older apartment houses. Rents met only the maintenance and operating costs, while production, amortization costs, and interest on expended capital were waived. On their completion, the new buildings' profits were written off. Still, some initial profits did accumulate and efforts were made toward their fair distribution. "Since there are naturally no maintenance costs in new buildings, surpluses are accumulated in a separate fund for future use. This is to prevent a situation in which the first tenants pay disproportionately little while those residing in the building at a later date when major repairs are necessary are required to pay for the entire period of the building's existence. . . . Rents are graded according to the building's location, and its proximity to the city, public transportation, and facilities."¹⁰

Conclusion: The Housing Projects as "Gathering Places for Anti-Social Elements"

Advocates of garden city communities were continuously critical of Vienna's municipal building policy. The city's publications printed occasional public apologies for their economically sound but less than ideal approach. Single family houses set within a *Siedlung* were the desired communal alternative, since they were hygienically superior and tended to be more stable in a social sense because of the private ownership of property within such settlements. Josef Frank, the architect, claimed that his work on municipal housing was an act against his conscience: "Despite all this we must never give up on our ideal, the *Siedlung* house, an ideal to which we were once closer than we are today. One cannot stress often enough that the single family house is the basis of our city planning and our approach to modern architecture. . . . The moral force . . . radiating from a piece of land . . . cannot be replaced by anything . . . that feeling of independence is essential. . . ."¹¹

Conservative national groups also advocated *Siedlung* housing. They saw a certain risk in the large concentration of wage earners within the municipal complexes. These

fears were later confirmed. The Republican Schutzbund used the Superblocks as organizational bases for their 1934 rebellion. Reumannhof, Fuchsenfeldhof, Bebelhof, Rabenhof, Goethehof, Sandeleiten, and especially Karl Marx-Hof played major roles in the battles fought between February 12 and 15, 1934. (Their roles were of greater importance than those of the pre-World War I working class quarters.)

Superblock opponents maintained that the complexes were distributed along strategic lines. "He who wants to study the distribution of the apartment complexes within the city plan will immediately notice that they have been erected like fortresses at every major point of communication, every avenue, and near all railroads and bridges."¹² The fortificational implications of the Superblocks did not go unnoticed. "[The Superblocks'] barely guarded inner courts afford places of assembly for rebellious groups which are out of the range of local police."¹³ "The real purpose of these municipal compounds is revealed in their design. They are like garrisons. Any veteran can readily point out the projected location of machine guns. The housing shortage is hardly responsible for these structures."¹⁴

One can counter such arguments by pointing out that such intimidating features as small windows, protruding bays, and balustrades were also indigenous to the contemporary architecture of other countries. One can also point out that these "buildings which gave a fortress-like appearance . . . were no longer being built during the critical years before 1934. These municipal apartment buildings were hardly suitable fortresses and no match against modern weaponry. This fact became only too apparent during February 1934."¹⁵ The projects' subversive actions confirmed their threat to civic welfare. "These large municipal complexes will always be as I originally predicted: assembly points for militant anti-social elements. They are centers of unrest within our beautiful city. In view of the fact that the buildings are designed for military purposes, the tenants, if allowed to remain together, have the opportunity of banding together to fight the authorities."¹⁶

The *Siedlung*, again, was the solution. "I have not criticized these municipal structures without offering a better alternative. The only security we can give the Viennese worker is a small parcel of land on which he can build his own home and which would protect him from extreme need. But this is only possible in and around Vienna on a large scale and only for those who are willing to make corresponding labor sacrifices. If these modest homes are built and the authorities do their share, as they do in other countries, there will be enough work, the people will be calm and satisfied, and the grass will grow over the graves of February 1934."¹⁷

Municipal construction ended with the Austro-Fascist takeover. "After the political turn of events in 1934 Vienna ceased her building activity. Mayor Schmitz then directed his attention to the paralyzed private sector."¹⁸

Notes

1. No author, *Die Wohnungspolitik der Gemeinde Wien* (Vienna, 1926), p. 31.
2. Anton Weber, "Wiener Wohnungs- und Sozialpolitik," *Das neue Wien* (Vienna, 1926), Vol. 1, p. 235f.
3. *Ibid.*, p. 193.
4. Hans Bobek and Elisabeth Lichtenberger, *Wien* (Cologne/Graz, 1966), p. 138.
5. *Ibid.*, p. 142.
6. No author, "Sozialpolitik und Wohnungswesen," *Das neue Wien* (Vienna, 1928), Vol. 2, p. 201.
7. Bobek and Lichtenberger, *Wien*, p. 137f.
8. *Ibid.*, p. 142.
9. Franz Musil, "Wohnbausteuer und Wohnbauprogramm," *Das neue Wien* (Vienna, 1927), Vol. 3, p. 52f.
10. No author, "Die Wohnungspolitik der Gemeinde Wien," p. 42f.
11. Josef Frank, "Der Volkswohnungspalast," *Der Aufbau* (1926), Book 1, p. 110f.
12. J. Schneider and C. Zell, *Der Fall der roten Festung* (Vienna, 1934), p. 6.
13. *Ibid.*, p. 10.
14. *Ibid.*, p. 7.
15. Helfried Kodre, "Die stilistische Entwicklung der Wiener Gemeindebauten," p. 13. Manuscript in abstract form in *Der Aufbau*, Book 9, 1964.
16. Schneider and Zell, *Der Fall der roten Festung*, p. 45f.
17. *Ibid.*, p. 47.
18. No author, "Der Einfluss des Stadtbauamtes auf die baukünstlerische Entwicklung Wien," *Hundert Jahre Wiener Stadtbauamt* (Vienna, 1935), p. 157.

Karl Marx-Hof, 1927

88 **Karl Marx-Hof, 1927**

Heiligenstädter Strasse, Vienna 19

Architect: Ehn

Facilities: central laundries, baths, kindergartens, maternity care facilities, youth center, library, dental clinic, health insurance facility, pharmacy, post office, shops

Number of apartments: 1,382

Dwelling Types:

1 room 213

1½ room 984

2 room 159

2½ room 99

3 room 16

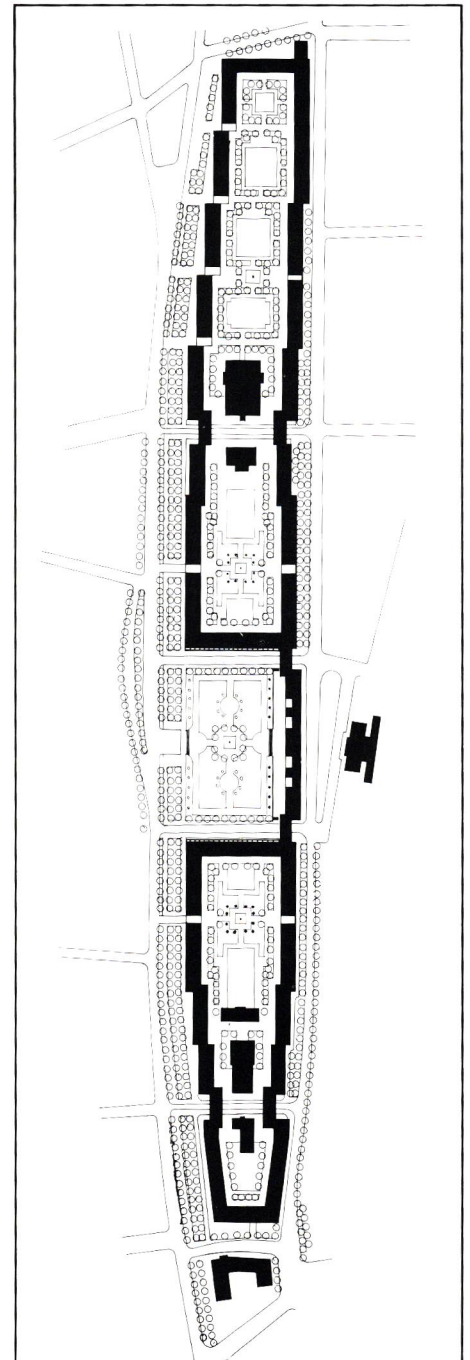
3½ room 11

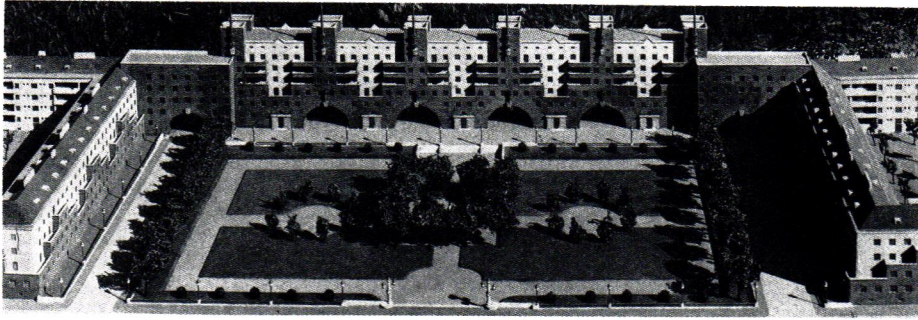
Figure Credits

1, 3 Redrawn by John Hathaway and Charles Youngblood.

2, 4-7 From Kommunalen Wohnbau in Wien: Aufbruch 1923-1934

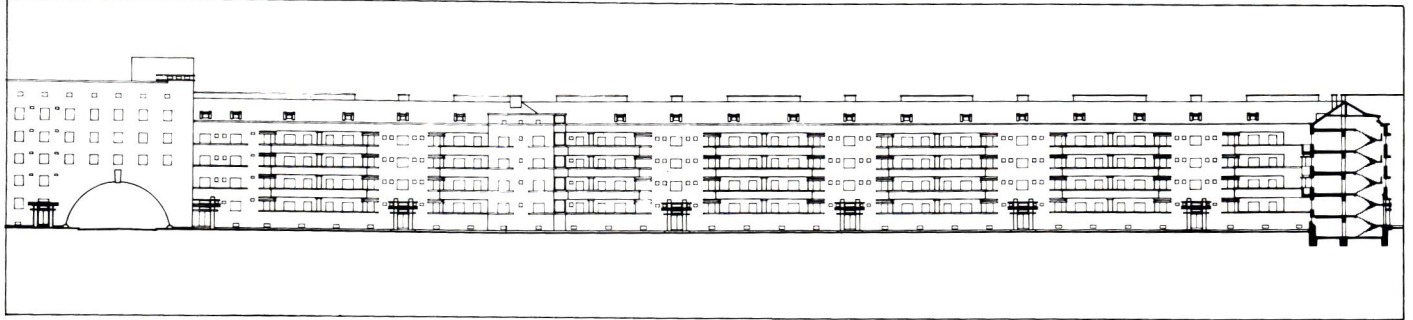
Ausstrahlung (Vienna: Presse und Informationsdienst der Stadt Wien, n.d.).





- 1 Karl Marx-Hof, Vienna 19. Ehn, 1927. Site plan.
- 2 Model, west view.
- 3 Elevation.
- 4 Courtyard view.
- 5 Door detail.
- 6 Gate detail.
- 7 Door detail.

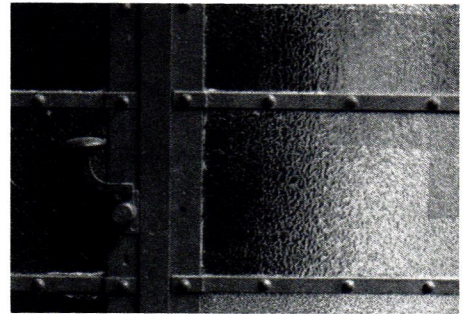
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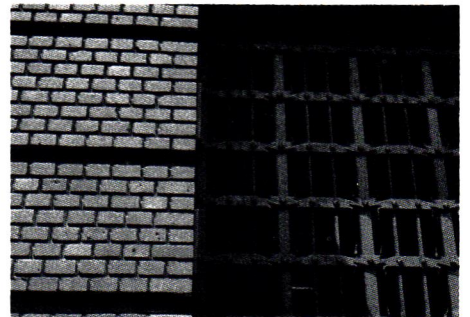
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Sandleiten, 1934

1 Sandleiten, Vienna 16. Hoppe, Schönthal, Matuschek, Theiss, Jaksch, Krauss, Tölk, 1924. Site plan.

2 Sketch of a 12-person apartment house.

90 Sandleiten, 1934

Sandleiten Gasse, Vienna 16

Architects: Hoppe, Schönthal, Matuschek, Theiss, Jaksch, Krauss, Tölk

Facilities: central laundries, baths, kindergartens, library, pharmacy, cinema and theater, cafe, studios, workshops, storage areas, post office, shops

Number of apartments: 1,587

“The architects . . . designed loosely built-up streets, thereby insuring a uniform distribution of light and air. They wanted to eliminate conventional interior lanes and thus placed squares and courtyards throughout the project. An axial arrangement was deliberately avoided for reasons of city planning. It was feared that an axial complex would too easily assume the character of a large institution, like many of those which already existed within Vienna’s environs. The closed nature of such a scheme could also create a situation in which adjacent new buildings would be designed without regard for the existing autonomous complex.”

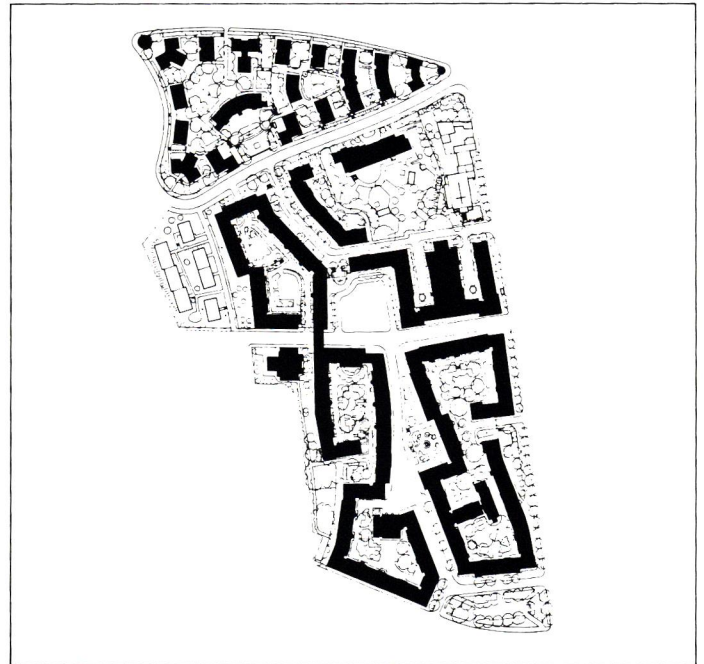
Franz Musil,

“Die Volkswohnungen der Gemeinde Wien,” *Das neue Wien*, vol. 3 (Vienna, 1927), p. 96.

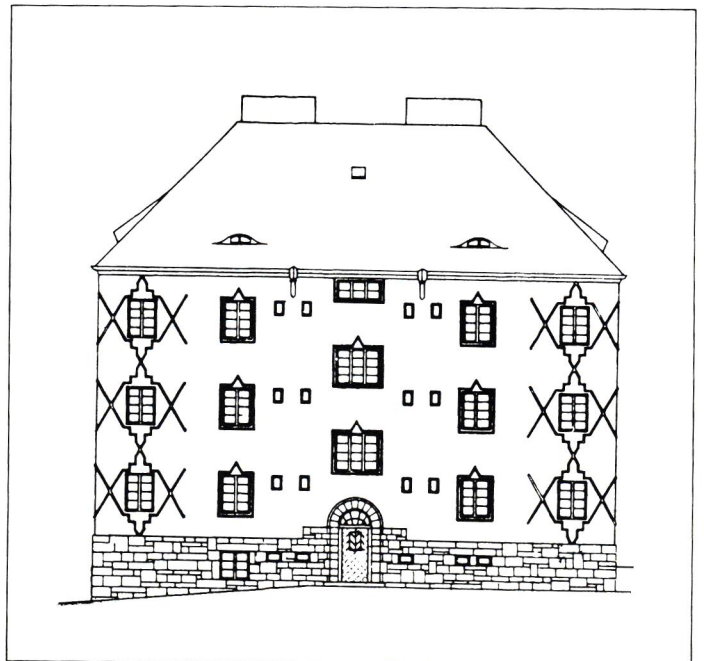
Figure Credits

1, 3 From *Die Wiener Superblocks*, ed. O. M. Ungers (Berlin: T. U. Berlin, n.d.).

2, 4–6 From *Kommunaler Wohnbau in Wien*.



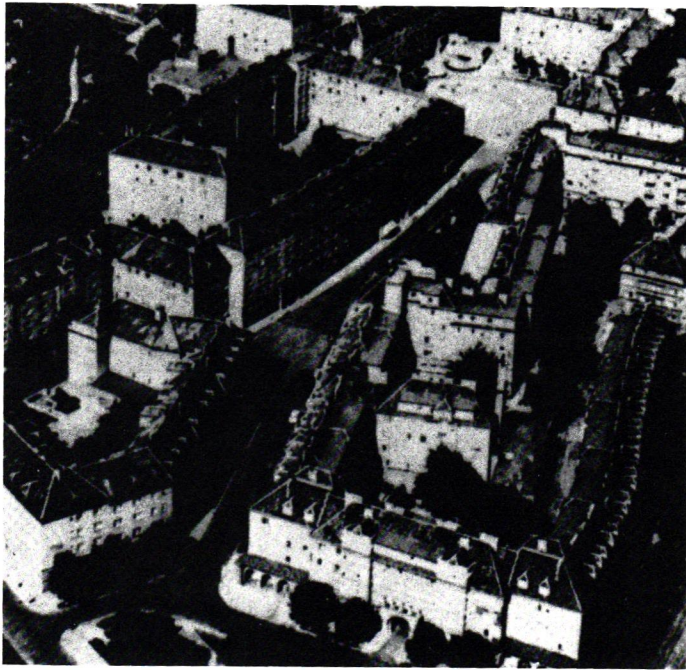
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3 Aerial view.
4 Street facade.

5 Stairway to courtyard.
6 Exterior wall detail.



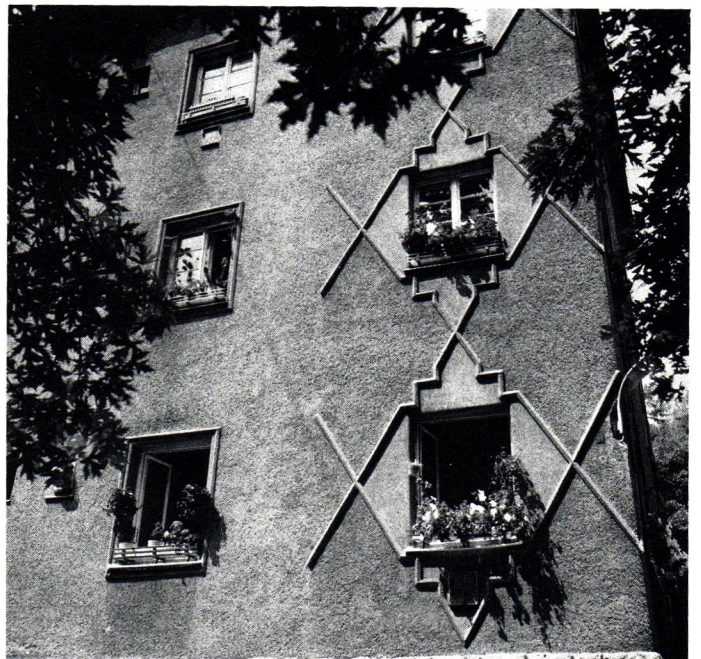
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Bebelhof Group, 1925–1928

92 Bebelhof, 1925

Steinbauergasse 36, Vienna 12

Architect: Ehn

*Facilities: tuberculosis care facility,
workshops, shops*

Liebknechthof, 1926

Längenfeldgasse 19, Vienna 12

Architect: Krist

Number of apartments: 428

Lorenzhof, 1927

Längenfeldgasse 14–18, Vienna 12

Architect: Prutscher

Number of apartments: 146

Fröhlichhof, 1928

Malfattigasse 1–5, Vienna 12

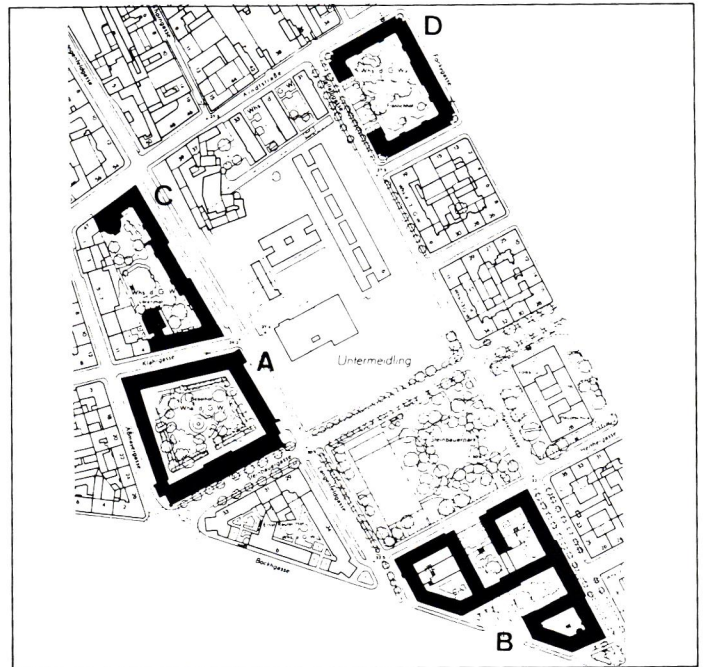
Architect: Mang

Number of apartments: 149

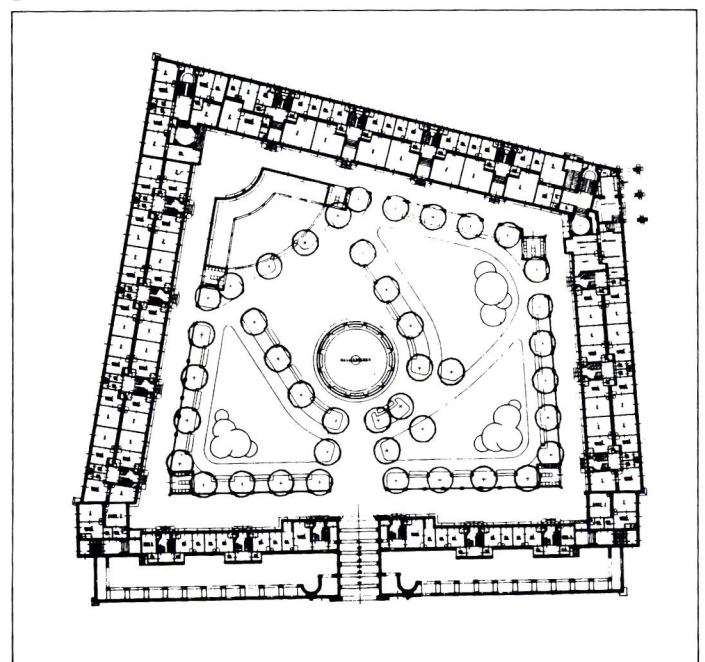
Figure Credits

1–3 From Die Wiener Superblocks.

*4 From Kommunalen Wohnbau in
Wien.*



1



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- 1 *Bebelhof Group, Vienna 12. Site plan: A. Bebelhof. Ehn, 1925; B. Liebknechthof. Krist, 1926; C. Lorenzhof. Prutscher, 1927; D. Fröhlichhof. Mang, 1928.*
2 *Bebelhof, ground floor plan.*
3 *Bebelhof, south view.*
4 *Bebelhof, courtyard view.*

3



93

4

94 **Fuchsenfeldhof, 1922**

Längenfeldgasse 68, Vienna 12
Architects: Schmid and Aichinger
Facilities: kindergarten and play area, workshops, shops
Number of apartments: 481

Am Fuchsenfeld (Reismannhof), 1924

Am Fuchsenfeld 1–3, Vienna 12
Architects: Schmid and Aichinger
Facilities: central laundries, baths, kindergarten, maternity care facility, gymnasium, pharmacy, workshops, shops

“The eleven hundred apartments built on the site of the old ‘Fuchsenfeldes’ between 1922 and 1925 do not represent a single master plan. Their design and construction spans three separate stages.

“Initially, only that section which encloses the first garden court, the ‘Fuchsenfeldhof’, was planned. During the second phase, buildings were constructed around courts 2, 3, and 4. The area between Längenfeld-, Rotkirch-, and Murlingengasse was built up throughout the final period. The exterior lines of the first two sections basically remained unchanged. On the Neuwallgasse, however, apartments were constructed for about forty meters beyond the parameters of the sidewalk, which also passed beneath a portico. This granted the facade a greater sense of architectonic division, and increased the depth around the second garden court. . . . “Before examining the floor plan,

one must note that Section 1 was the municipal housing program’s first effort. The glass roofed courts and stairwells so common in that period were here eliminated. All rooms, with the exception of foyers, faced either the street or the garden court, and thereby had direct and ample light. . . .

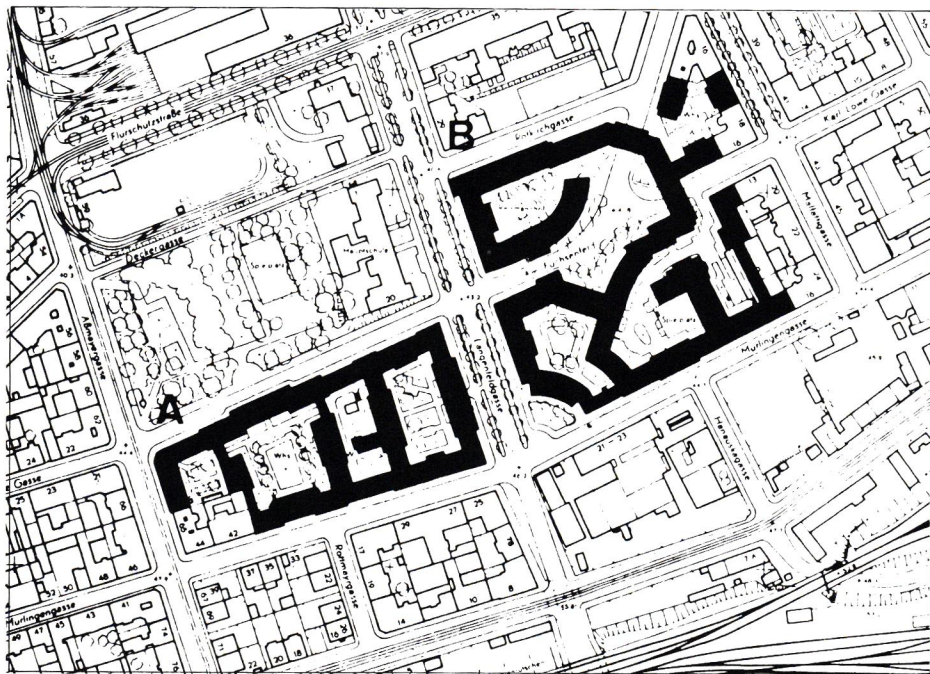
“Fuchsenfeld’s public facilities were innovative not only in the Viennese context but also for mass housing in general. Especially notable were the central laundries.”

Franz Musil,
“Die Volkswohnungen der Gemeinde Wien,” Das neue Wien, vol. III (Vienna, 1927), pp. 83–86.

Figure Credits

*1 From Die Wiener Superblocks.
2, 3 From Die Bauten der Gemeinde Wien: Am Fuchsenfeld (Berlin: Friedrich Ernst Hübsch Verlag, 1927).*

- 1 Fuchsenfeldhof Group, Vienna 12.
 Site plan: A. Fuchsenfeldhof.
 Schmid and Aichinger, 1922; B. Am
 Fuchsenfeld (Reismannhof). Schmid
 and Aichinger, 1924.
 2 Am Fuchsenfeld (Reismannhof),
 north view.
 3 Fuchsenfeldhof, north view.



1



2



3

96 **Metzleinstaler-Hof, 1919**

Margaretengürtel 90–98, Vienna 5
Architects: Kalesa, Gessner
Facilities: central laundries, baths, kindergartens, library workshops, shops
Number of apartments: 252

“These buildings were added to the original 105 unit complex which the architect Kalesa built on the Margaretengürtel. Their addition required the extension of the entire housing block. Given the extensive projection of the first section into the courtyard, a round building with a common garden court seemed the best solution. The height, the number of stories, and the cornice line of the latter were all designed in accordance with those of the older buildings. Connections to the old buildings were satisfactory, despite existing height differentials within the surrounding streets.”

*Franz Musil,
“Die Volkswohnungen der Gemeinde Wien,” Das neue Wien, vol. III (Vienna, 1927), p. 69.*

Reumannhof, 1924

Margaretengürtel 100–110, Vienna 5
Architect: Gessner
Facilities: central laundries, kindergarten, studios, guest house, shops
Number of apartments: 478

“The project’s original site was divided by streets perpendicular to Margaretengürtel’s axis. These streets were abandoned so that a generous and uniform plan could be

developed. . . . At the center of the complex is a street court with landscaping and architectural elements. It terminates in an elevated residential section, which creates an effective contrast. . . .”

*Franz Musil,
“Die Volkswohnungen der Gemeinde Wien,” Das neue Wien, vol. III (Vienna, 1927), p. 70.*

Julius Popp-Hof, 1925

Margaretengürtel 76–80, Vienna 5
Architects: Schmid and Aichinger
Number of apartments: 402

Herweghof, 1926

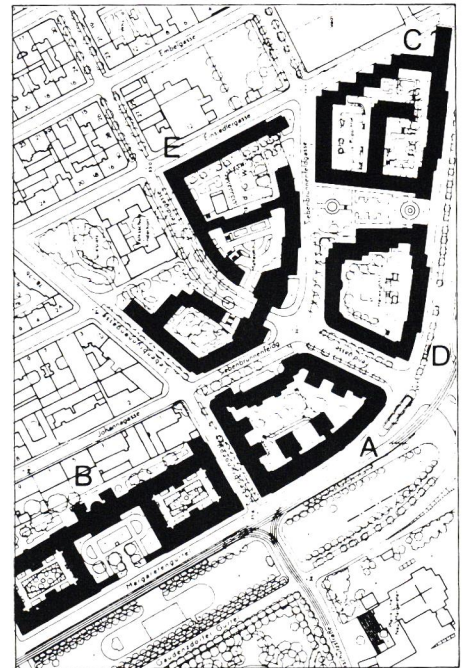
Margaretengürtel 82–88, Vienna 5
Architects: Schmid and Aichinger
Number of apartments: 220

Matteottihof, 1926

Siebenbrunnenfeldgasse 26–30, Vienna 5
Architects: Schmid and Aichinger
Number of apartments: 452

Figure Credits

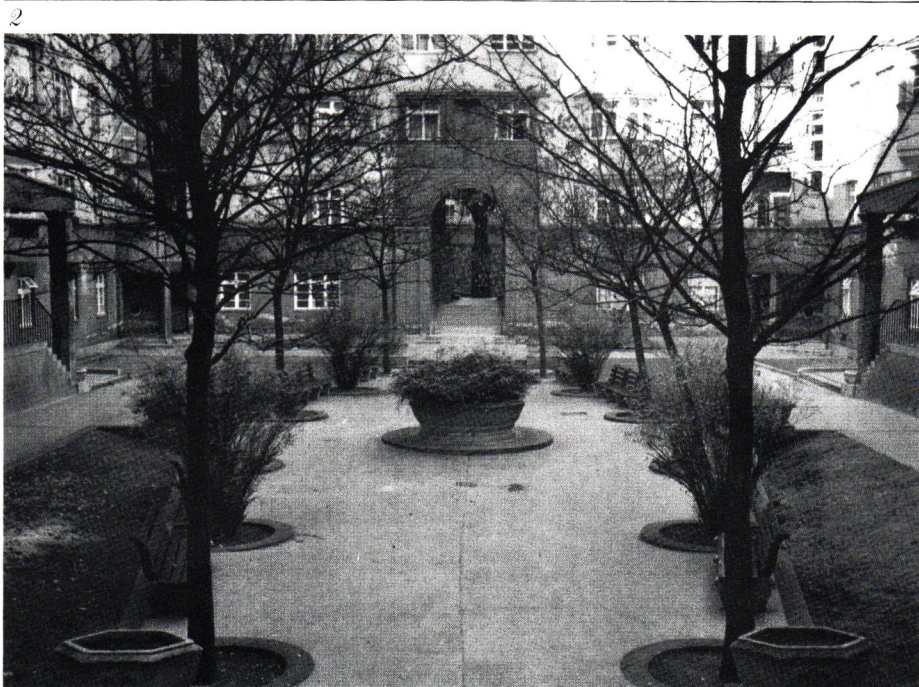
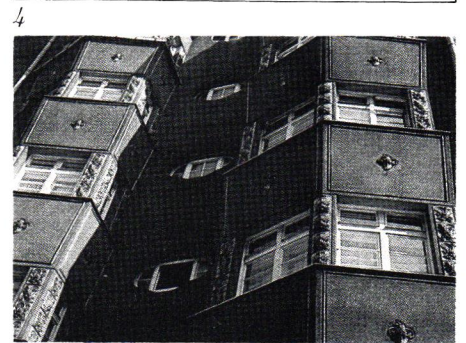
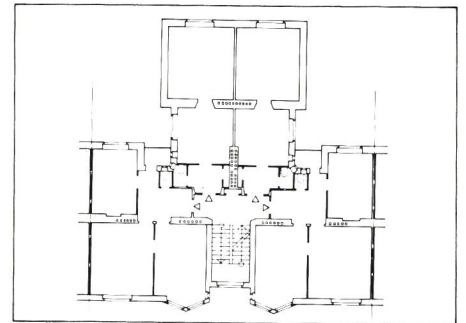
*1, 7 From Die Wiener Superblocks.
2–6 From Kommunalen Wohnbau in Wien.*



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1 Metzleinstaler-Hof Group, Vienna
 5. Site plan: A. Metzleinstaler-Hof.
 Kalesa, Gessner, 1919;
 B. Reumannhof. Gessner, 1924;
 C. Julius Popp-Hof. Schmid and
 Aichinger, 1925; D. Herweghof.
 Schmid and Aichinger, 1926;
 E. Matteottihof. Schmid and
 Aichinger, 1926.

2 Metzleinstaler-Hof, elevation.
 3 Reumannhof, courtyard view.
 4 Metzleinstaler-Hof, floor plan.
 5 Metzleinstaler-Hof, detail.
 6 Reumannhof, detail.
 7 Matteottihof, courtyard entrance.

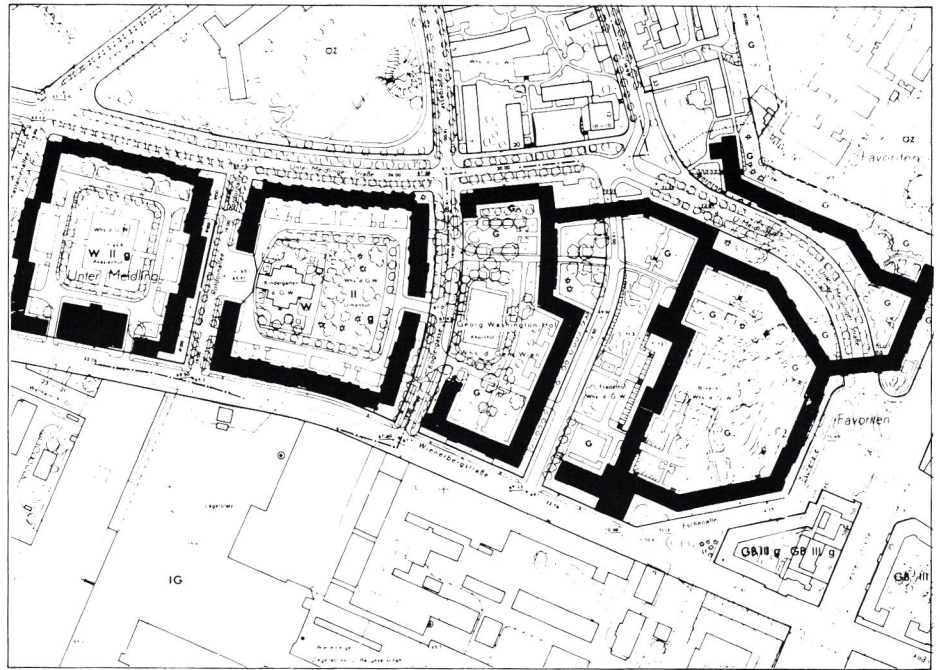


George Washington-Hof, 1927

- 98 **George Washington-Hof, 1927**
Unter-Meidlinger Strasse 1-12,
Vienna 12
Architects: Krist, Oerley
Facilities: central laundries,
kindergarten, maternity care
facility, day care center, library,
cafe, shops
Number of apartments: 1,085
Dwelling types:
1 room 138
1½ rooms 843
2 rooms 12
2½ rooms 84
3 rooms 8

Figure Credits

- 1, 3 From Kommunalen Wohnbau in*
Wien.
2 From Die Wiener Superblocks.





2



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1 *George Washington-Hof, Vienna*
 2. *Krist, Oerley, 1927. Site plan.*
 2 *Building over interior passage.*
 3 *Facade.*

Rabenhof, 1925

100 Rabenhof, 1925

Baumgasse 29–41, Vienna 3

Architects: Schmid and Aichinger

Facilities: central laundries, kindergartens, children's dental clinic, health insurance facility, lecture rooms, library, shops

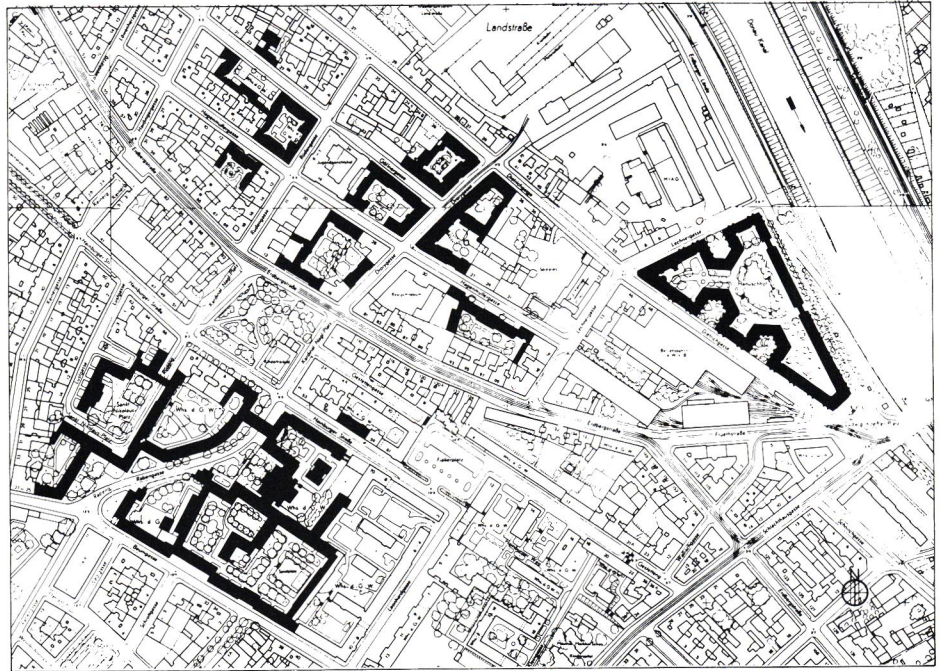
Number of apartments: 1,109

"This project was initially designed by the architects as a total and uniform composition. These plans were hampered by the fact that the city lacked the necessary expropriation laws, and could therefore acquire the land only on a gradual basis. As a result, Rabenhof had to be built in stages. Building plans had to allow for this fact and for the many exterior objects, some of which were to be acquired at a later date. . . .

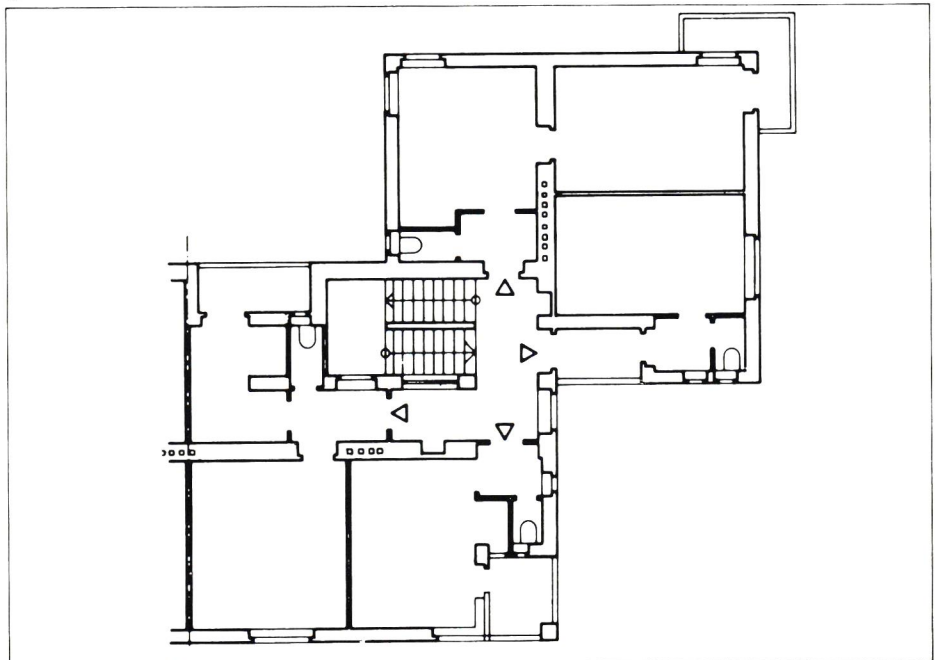
"It was of fundamental importance to the building plan that Rabengasse be maintained as a diagonal connecting street . . . Originally intended as a straight street, it was now curved. . . .

"The backbone of the project is an elevated square along the Rabengasse where the assembly hall and secondary kindergarten rooms are located. Rabengasse then leads to a powerful arch at the square's northeast corner and from there to Hainburgerstrasse."

Wiener Stadtbauamt, Die Wohnhausanlage der Gemeinde Wien auf dem Gelände der ehemaligen Krimskykaserne (Vienna, n.d.), pp. 5–6.



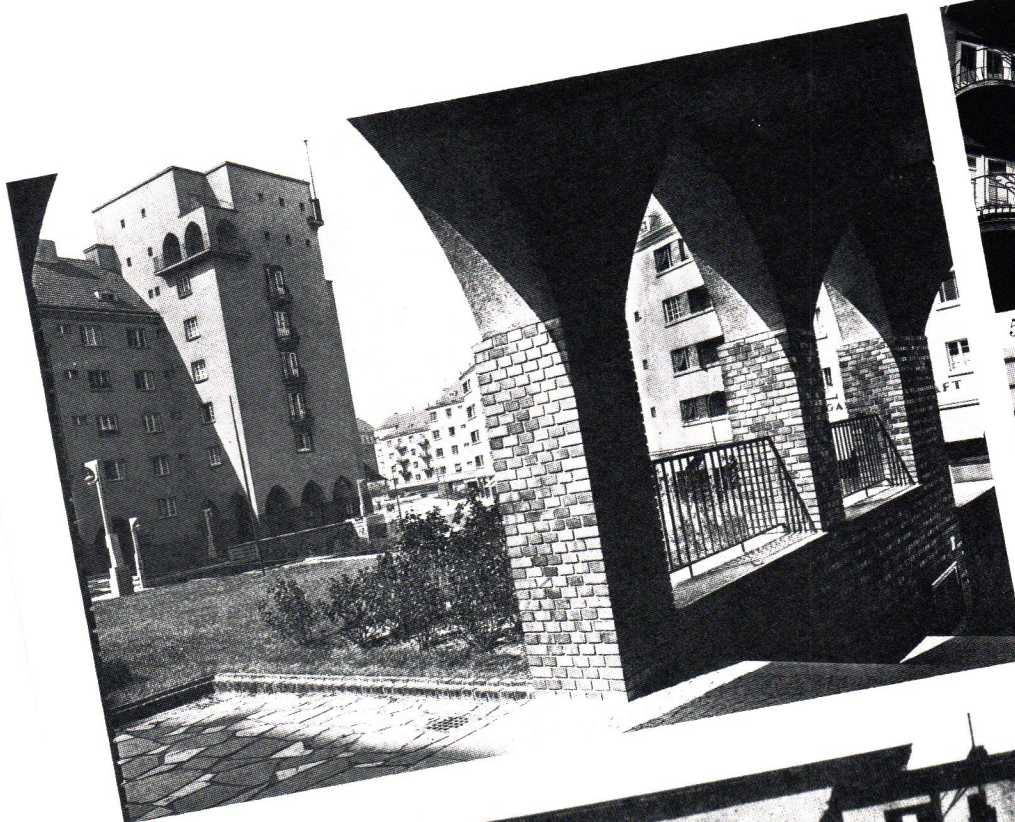
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1 Rabenhof, Vienna 3. Schmid and
Aichinger, 1925. Site plan.
2 Floor plan.
3 Courtyard view.
4 Exterior view.

5 Balcony detail.
6 Gate detail.
7 Light fixture.
8 Wall detail.



3



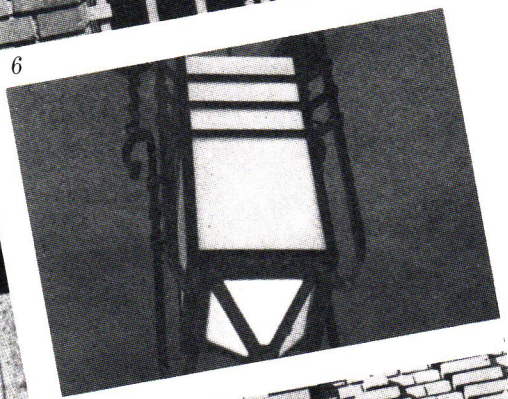
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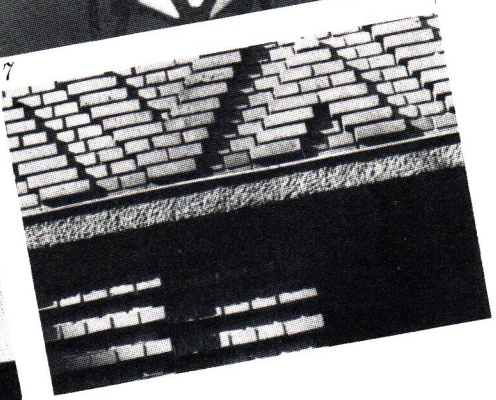
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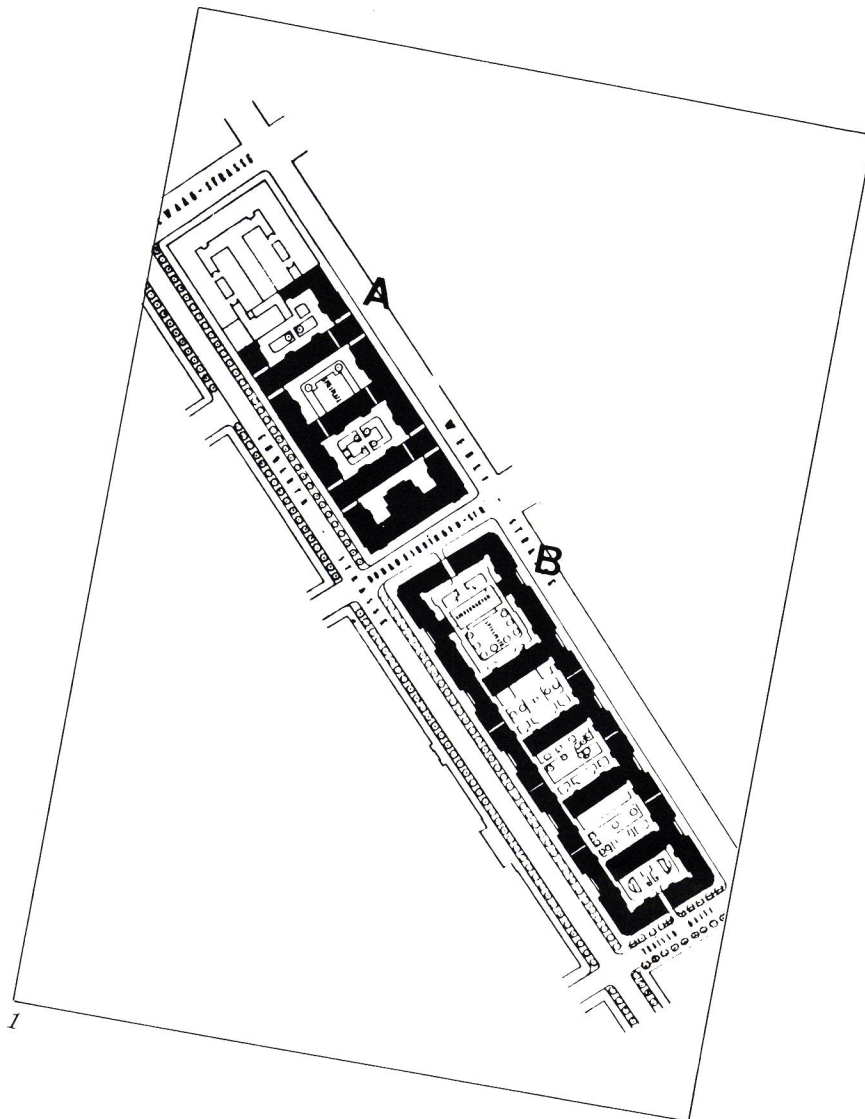
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Beerhof Group, 1925

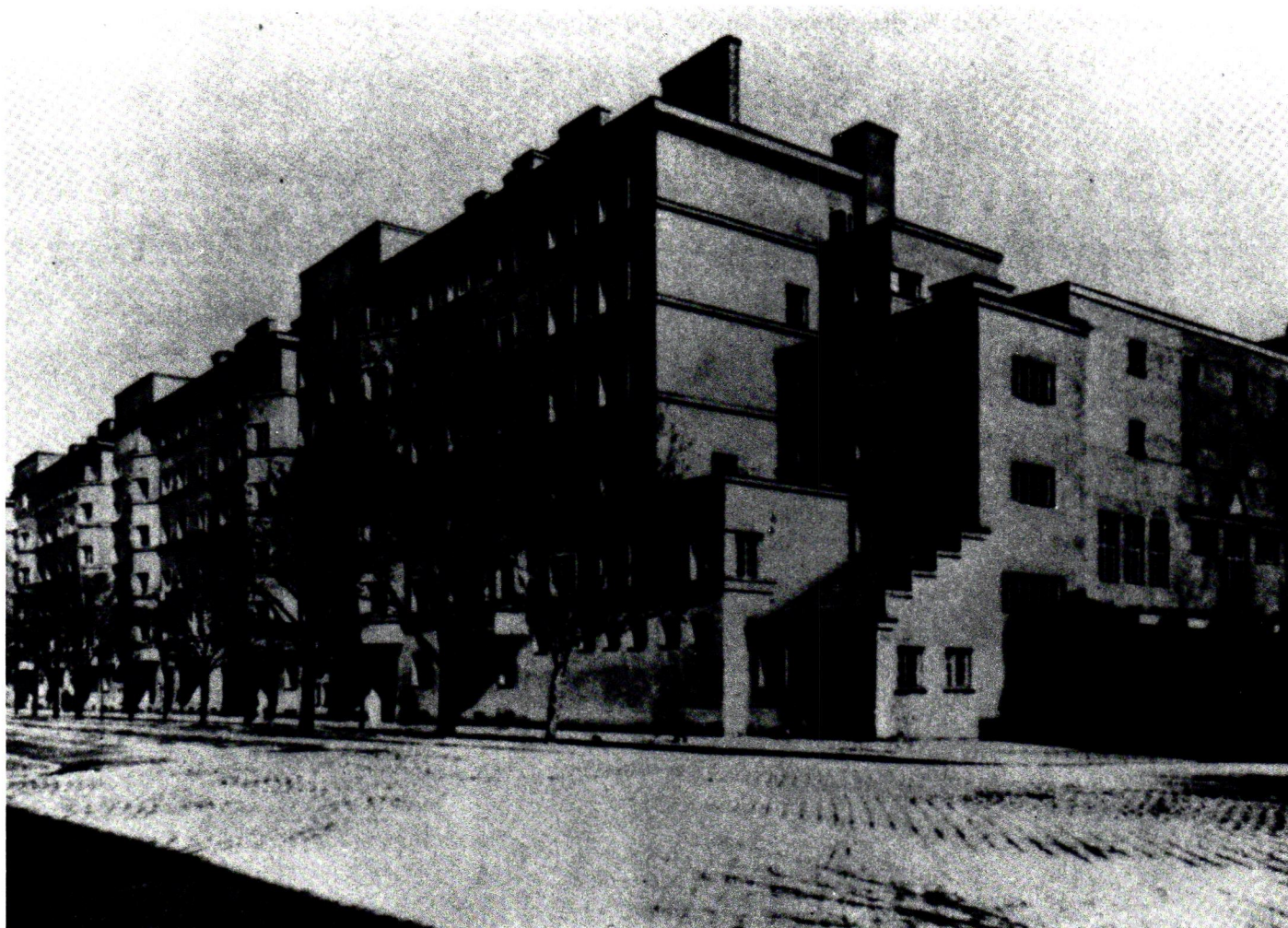
102 **Beerhof, 1925**
Wehlistrasse 72-86, Vienna 20
Architect: Schmalhofer
Facilities: central laundries, baths,
kindergarten, meeting rooms, shops
Number of apartments: 476

Janecekhof, 1925
Wehlistrasse 88-98, Vienna 20
Architect: Peterle
Facilities: kindergarten
Number of apartments: 841

Figure Credits
1, 2 From Die Wiener Superblocks.



1 *Beerhof Group, Vienna 20. Site plan: A. Beerhof. Schmalhofer, 1925; B. Janecekhof. Peterle, 1925.*
2 *Beerhof, south view.*



2

104 **Otto Haas-Hof, 1924**

Pasettistrasse 47–61, Vienna 20
Architects: *Dirnhuber, Schuster,*
Loos, Lihotzky
Number of apartments: 273

Winarskyhof, 1924

Stromstrasse 36–38, Vienna 20
Architects: *Behrens, Frank,*
Hoffmann, Strnad, Wlach
Facilities: *kindergarten, assembly*
hall, library, studios, workshops,
shops
Number of apartments: 534

“The outstanding features of this project are the four bridges on the Leystrasse. They allow for the two hundred meter long housing wall on Kaiserwasserstrasse and its monumental central portal. Its front consists of three nested facades. An interior court runs the length of the street frontage. On its south side it widens into a spacious square park surrounded by walls of greenery.”

Franz Musil,

“Die Volkswohnungen der Gemeinde Wien,” Das neue Wien, vol. III (Vienna, 1927), p. 107.

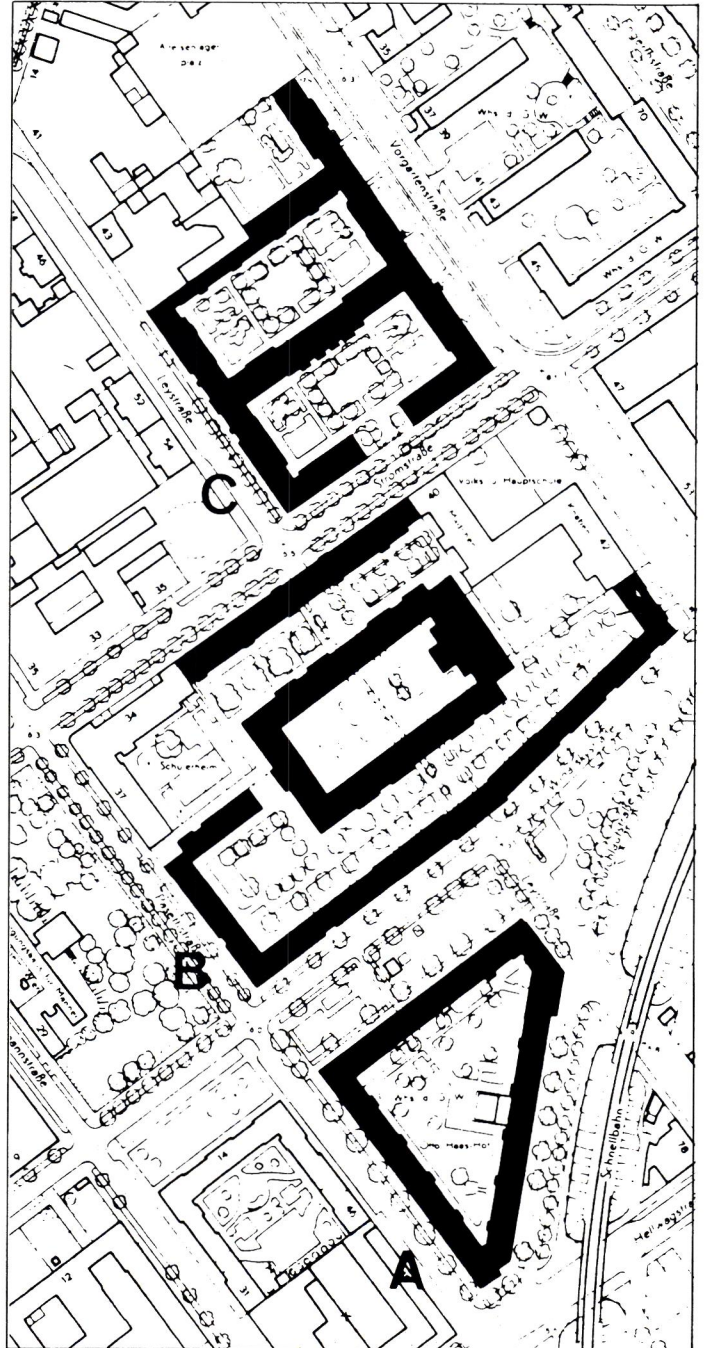
Gerlhof, 1930

Stromstrasse 39–45, Vienna 20
Architect: *Reid*
Number of apartments: 402

Figure Credits

1, 2, 4 From Die Wiener Superblocks.

3, 5 From Kommunalen Wohnbau in Wien.

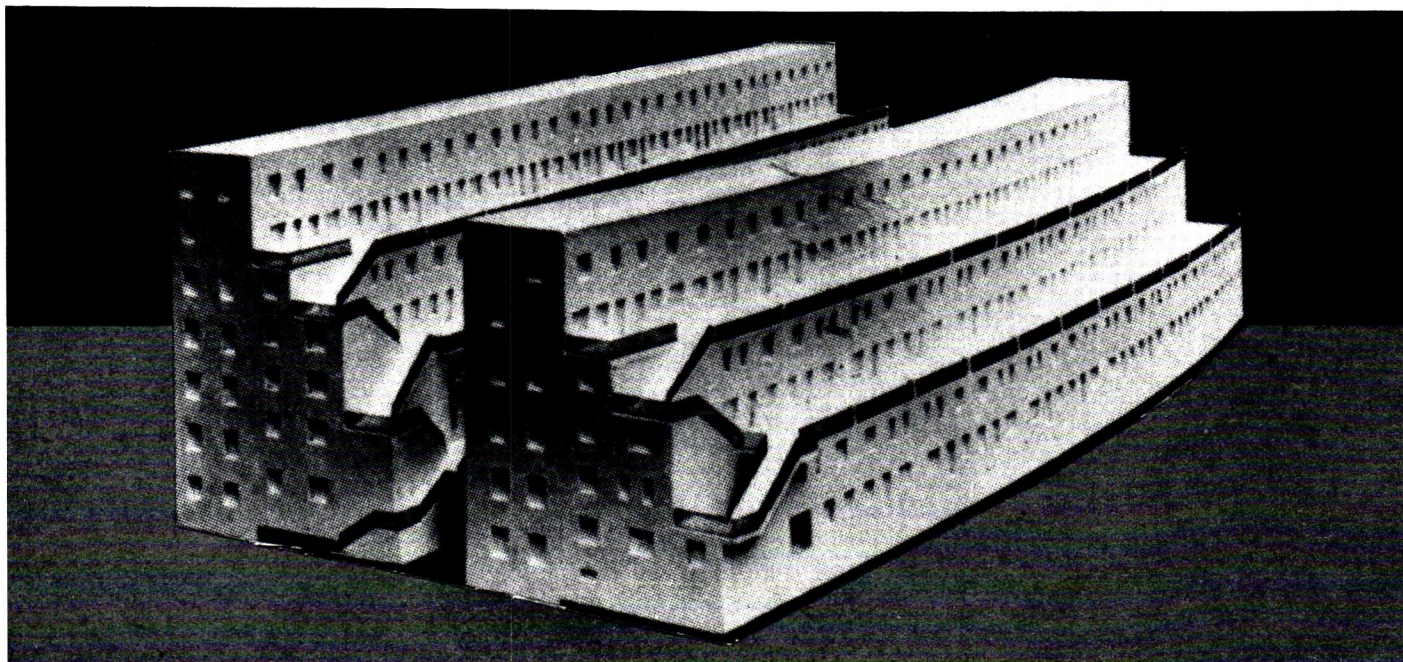


1 Otto Haas-Hof Group, Vienna 20.
Site plan: A. Otto Haas-Hof.
Dirnhuber, Schuster, Loos,
Lihotzky, 1924; B. Winarskyhof.
Behrens, Frank, Hoffmann, Strnad,
Wlach, 1924; C. Gerlhof. Ried, 1930.

2 Otto Haas-Hof, model, competition
entry.

3 Winarskyhof, building on
Leystrasse.

4 Winarskyhof, interior courtyard.



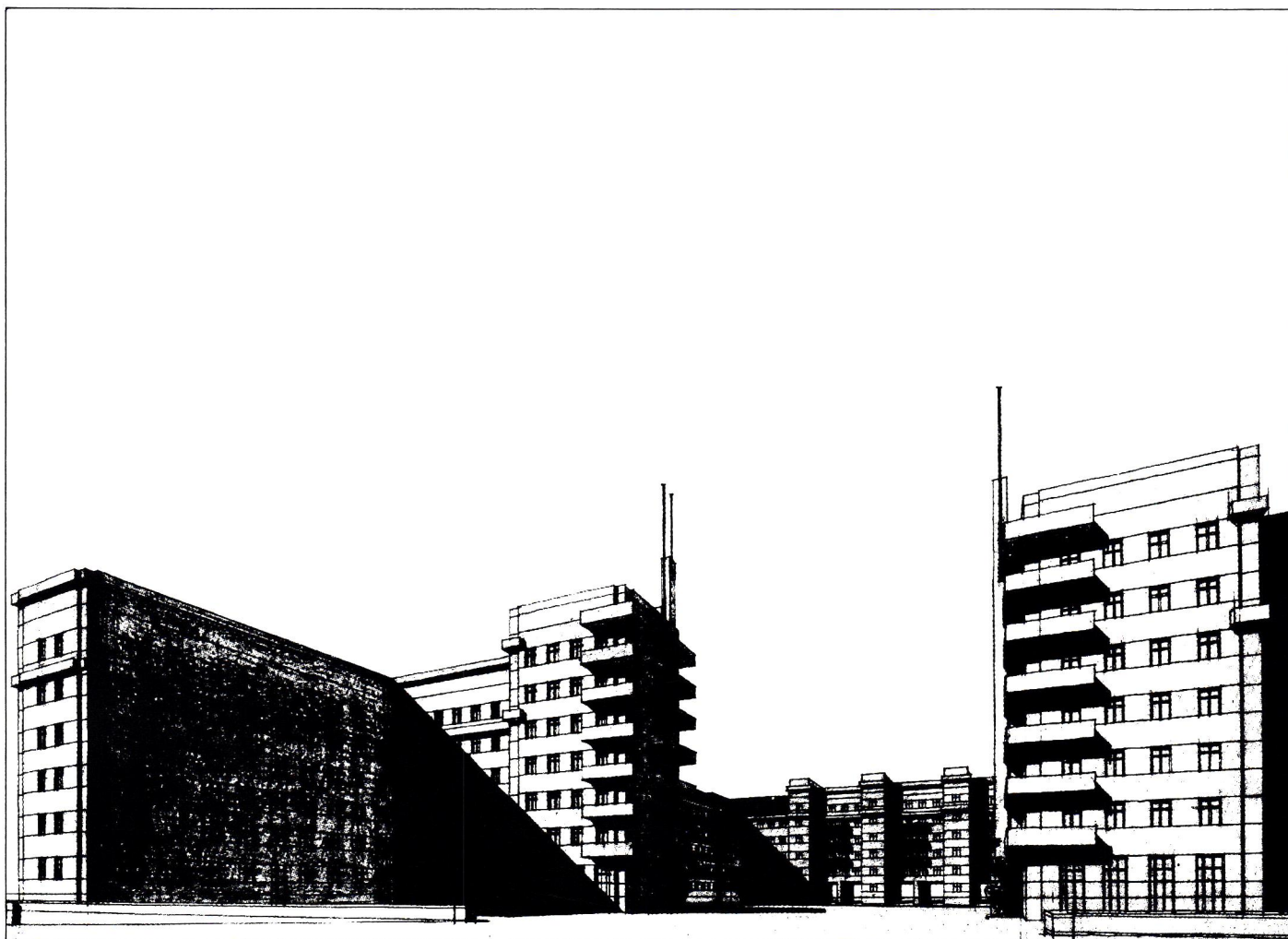
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1 Engelsplatz, Vienna 20. Perco,
1930. Site plan.
2 Perspective.

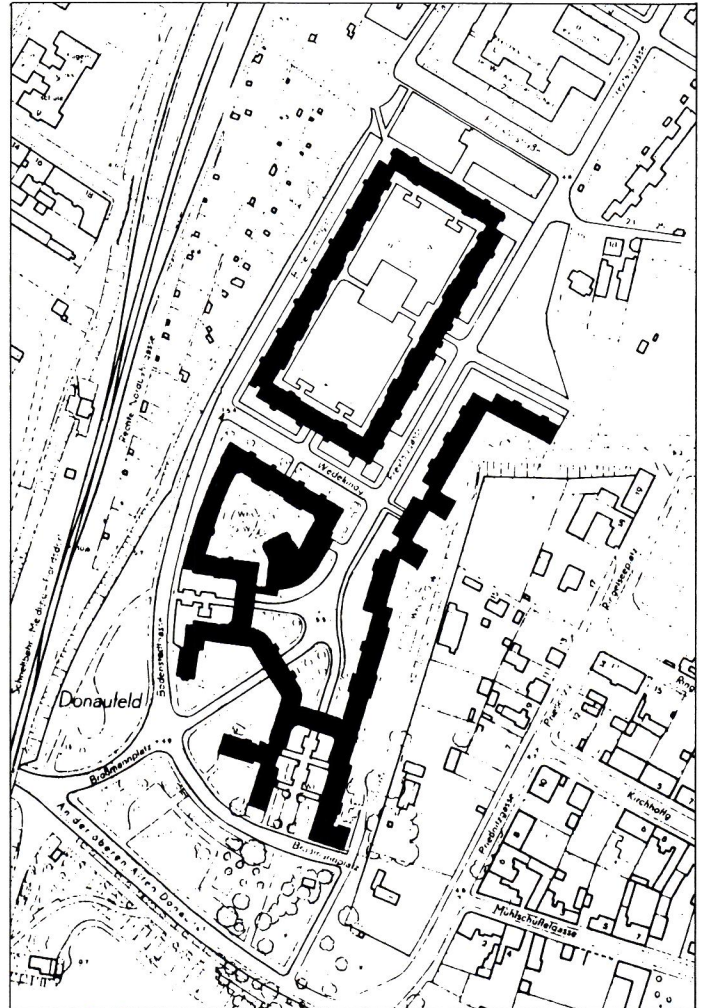
Paul Speiser-Hof, 1929

108 **Paul Speiser-Hof, 1929**
*Architects: Scheffel, Glaser,
Lichtblau, Bauer*
Number of apartments: 765

Figure Credits

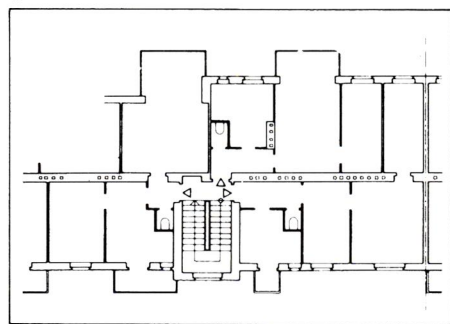
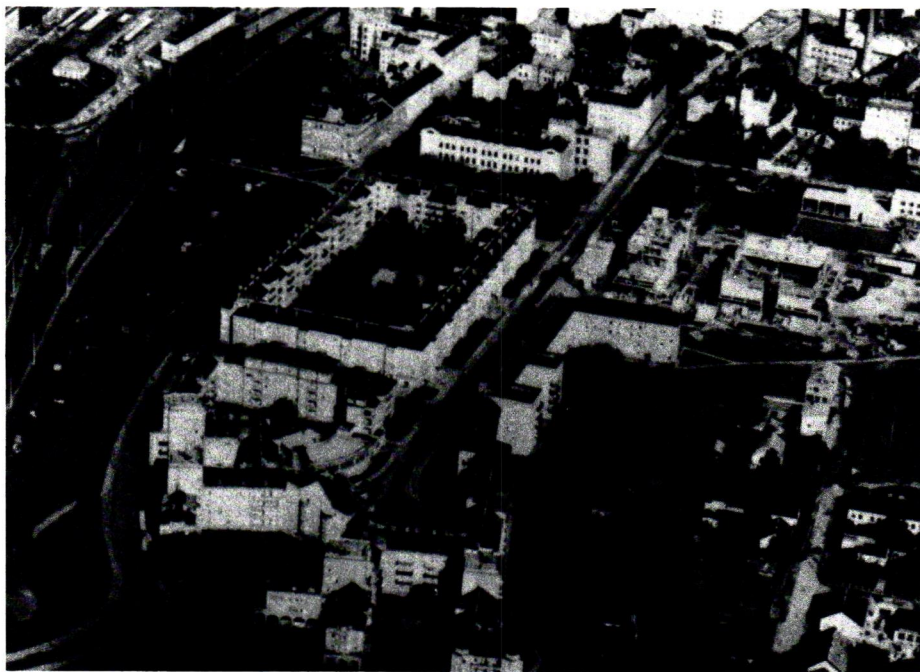
*1, 2, 4 From Die Wiener
Superblocks.*

*3, 5 From Kommunalen Wohnbau in
Wien.*



1 *Paul Speiser-Hof, Vienna 21.*
Scheffel, Glaser, Lichtblau, Bauer,
1929. Site plan.

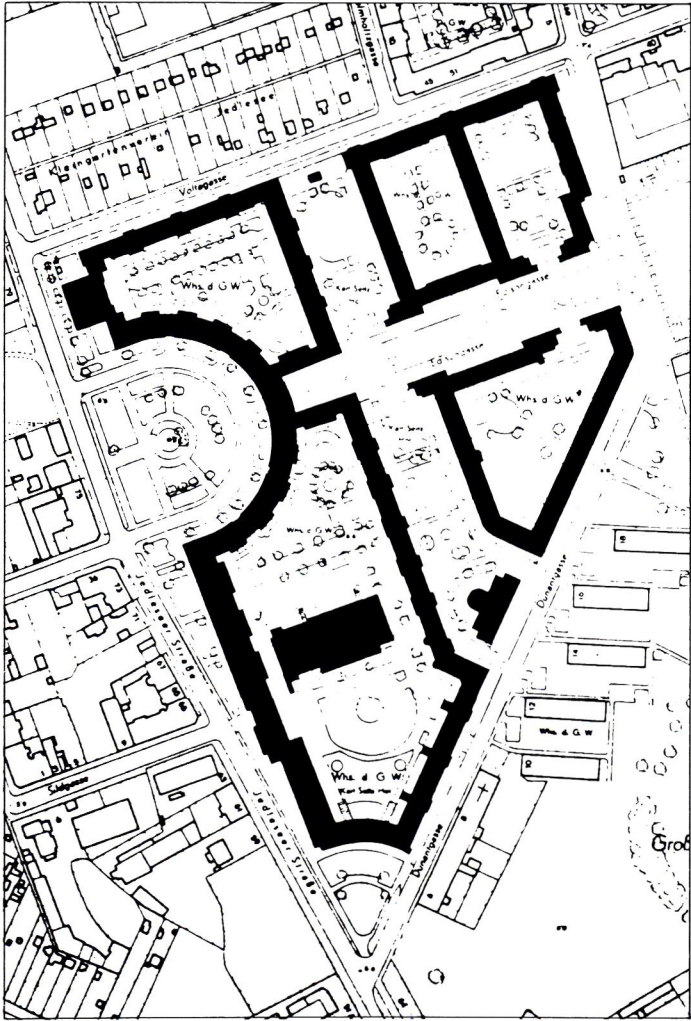
2 *Aerial view.*
3 *Exterior view.*
4 *West facade.*
5 *Floor plan.*



Karl Seitz-Hof, 1926

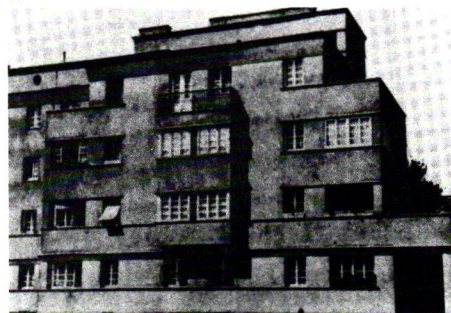
110 **Karl Seitz-Hof, 1926**
Jedleseer Strasse 66-94, Vienna 21
Architect: Gessner
Number of apartments: 1,173

Figure Credits
1-3 From Die Wiener Superblocks.





2



1 *Karl Seitz-Hof, Vienna 21.*
Gessner, 1926. Site plan.
 2 *Street courtyard.*
 3 *Edisongasse corner.*

3

Reviews and Letters

On Charles Jencks's *Le Corbusier and the Tragic View of Architecture*

Charles Jencks. *Le Corbusier and the Tragic View of Architecture*. 1973, Cambridge, Mass., Harvard University Press. 198 pp., \$13.95, hardback.

Cesare de'Seta
Translation by Diane Ghirardo

Cesare de'Seta is a Professor of Architectural History at the University of Naples. His major publications include *La cultura architettonica in Italia tra le due guerre* (Bari: Laterza, 1972); *Storia della città di Napoli dalle origini al Settecento* (Bari, 1973); *Città, territorio e mezzogiorno in Italia* (Turin, 1977); *Architettura e città barocca* (with Anthony Blunt [Bari, 1978]).

114



1 *Fir-tree study by Jeanneret, 1905 (?)*, made under his teacher L'Eplattenier.

One of the recent monographs in architectural history concerns itself with no less a figure than Le Corbusier. The works of this architect clearly represent a critical juncture in understanding the architecture of this century. It is well-known by now that Le Corbusier was a philo-fascist, that he was even enrolled for a time in the Fascist movement beyond the Alps, that he was a sincere admirer of Mussolini and a friend of the reactionaries of *Action Française*. Together with Perret he was a collaborator with the Vichy regime and, as such, nominated by Pétain to take charge of the (nonexistent) building politics under the Nazi occupation. As far as his relations with Fascist Italy are concerned, Mimita Lamberti has offered a clear and impeccably accurate account.¹ The political cynicism of Le Corbusier is also well known and documented. To those who asked him to unite with the artists and intellectuals who were supporting Republican Spain with their prestige—such as Léger and Picasso—the architect did not know how to respond other than by asserting that it was they who should unite with him. An arrogant figure to say the least, and an imperialist into the bargain. What else should we make of the outdated colonialism evident in his Punjab commissions? And yet this very suspect man, so compromised by his political allegiances, still counts. We may occupy ourselves illuminating his ideological propensities or we may unveil the authoritarian quality of his technocratic neo-Vitruvianism, but only by a comparable arrogance could we consider him thus 'defined' once and for all. Le Corbusier is a 'bad subject', and whoever presumes that he can gauge his stature with such ethical and political arguments commits the cardinal error of being banal.

Unable to conceive of the history of the Modern Movement merely as a battle of the giants, I am attentive to every new offering regarding its evolution. I can be nothing but enthusiastic about the reprinting of *L'Esprit Nouveau*, or about

the re-issue of other publications and/or translations of old documents that are now so difficult to find. It is surely the only way to graduate from a mythologizing historiography to a critical history of the Modern Movement. The literature on Le Corbusier is already ample: articles, essays, catalogues, monographs, extensive chapters in the major compendia of contemporary architecture, conferences, and an unknown number of commemorations. Nevertheless, there are few comprehensive studies that attempt a critical assessment of the position of the Swiss master in the history of twentieth century architecture.

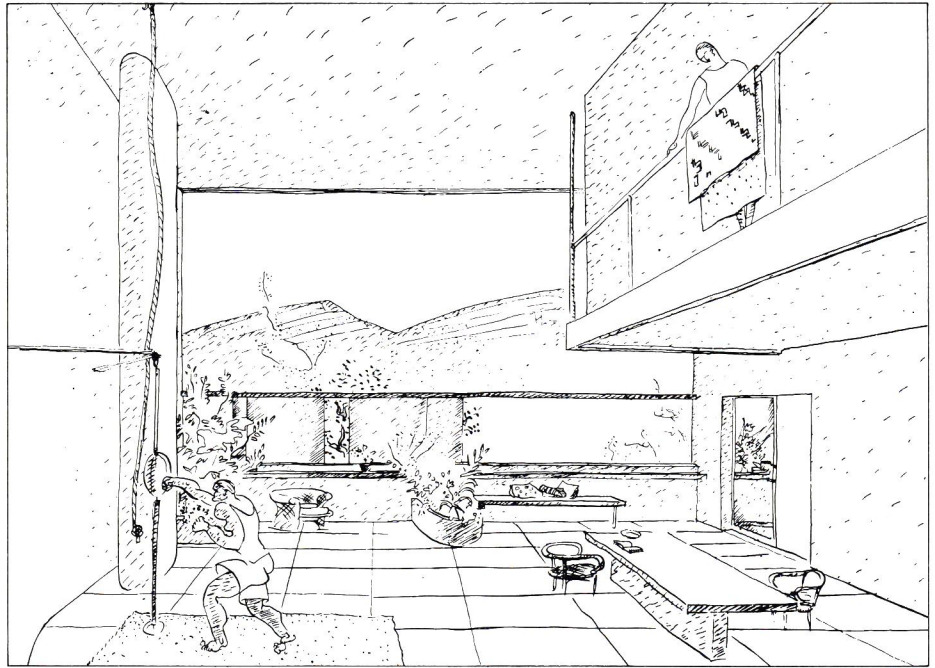
Charles Jencks's recent book *Le Corbusier and the Tragic View of Architecture* is divided into four long chapters that coincide with a periodization largely derived from Giedion. Within this general chronological framework one can distinguish segments of arguments that are more or less equally distributed throughout the book. There are three recurrent themes: formal biography, relations with the world, and the reading of his works. These threads, often superimposed on each other, are not always very comfortably arranged. The first chapter (1887–1916) is dedicated to the formation of the architect and to a presentation of his family background and origins. La Chaux-de-Fonds, where Le Corbusier was born, was founded by Huguenots who fled from France. Jeanneret's forefathers were themselves heretical Albigensians who found shelter there. As Jencks records, Rousseau, Bakunin, Kropotkin, Lenin, and countless others passed through this city—as well as through many other places in the tolerant Swiss confederation—but this fact hardly serves the author's purpose of wishing to demonstrate the particular libertarian matrix of the local culture in which Protestantism and anarcho-syndicalism were mixed. Jeanneret recalled with pride the activities of one of his revolutionary Bakuninite grandfathers. This libertarian education matured in

2 *Boxing in the hanging gardens of a collective apartment. Le Corbusier, 1928.*

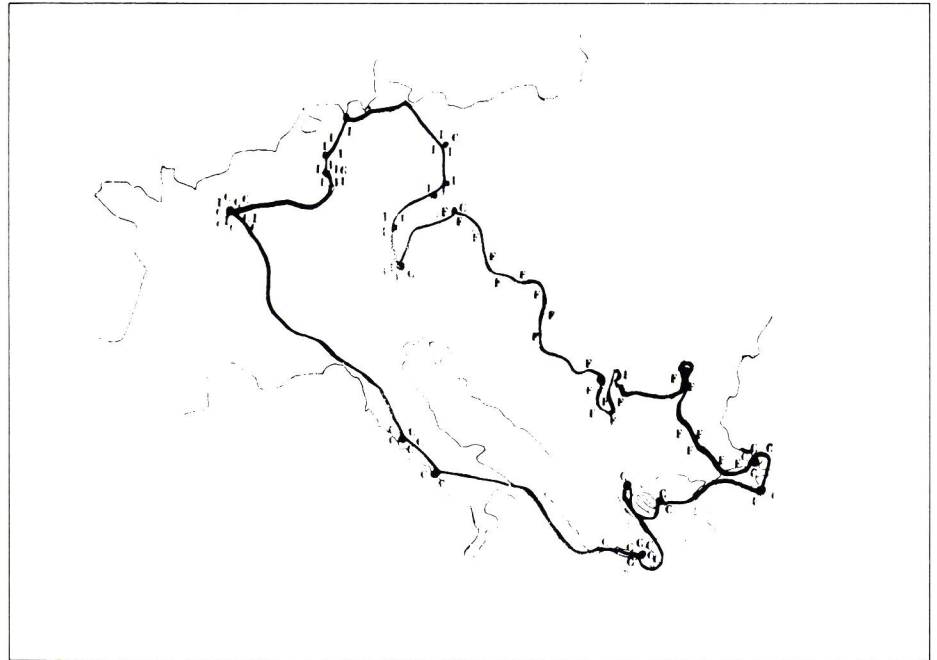
3 *"The Useful Voyage." Jeanneret's map of the 1911 journey classifying Europe into three aspects of civilization: culture (c), folk (f), and industrial (i).*

a particular climate, measured by the regular and inflexible rhythm of a thousand clocks. Nature, with its marvels, was for him an essential school: "the time of adolescence was one of insatiable curiosity. I learned about flowers, both inside and out, the form and color of birds, I knew how to grow a tree and why it keeps its equilibrium even in the middle of a storm" (fig. 1). Love of nature and love for sports were all one for him: the agony of sports was a training with which he could temper his own spirit and body to strenuous effort and exertion (fig. 2).

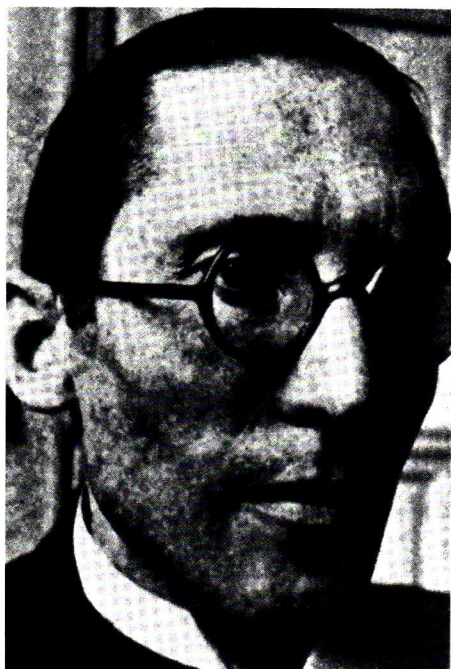
Charles L'Eplattenier, mathematician and naturalist, exercised a notable influence on the precocious intelligence of the adolescent Jeanneret. The objectivity of the exact sciences, the fascinating kaleidoscope offered by the natural sciences, were distilled in his artistic education. L'Eplattenier recommended, "do not make nature in the manner of landscape painters, who show nothing but its exterior. Examine in it the cause, the form, the vital development and make the synthesis of it in creating ornaments" (p. 20). Some famous definitions by Le Corbusier are already implicit in these maxims: Jencks recalls that celebrated line from 1921: "Architecture is the masterly, correct and magnificent play of masses brought together in light . . . cubes, cones, spheres, cylinders or pyramids are the great primary forms . . . the most beautiful forms" (p. 21). But as is well-known, this comment almost literally repeats an equally celebrated comment by Cézanne—a name that does not occur even once in Jencks's text, and yet must be considered decisive in Le Corbusier's artistic formation. L'Eplattenier and Cézanne form the polar extremes of a private culture, containing a dialectical tension between the mathematical naturalism of the former and the objective and geometric syncretism of the latter. If on the one hand Cézanne opened the road to Cubism, on the other he genially supplanted it, inaugurating that phase of post-avant-



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gardism that has its most dense point of aggregation in the Purism of Ozenfant and Jeanneret. Henceforth, the river-bed of Le Corbusier's reflection is enriched with new spirits and new experiences in contact with Paris, the great source that nourished everyone a little in the first quarter of the century. This moment, so decisive for Le Corbusier, is confusingly described in unfocused tracts by Jencks, as he passes from Loos to Art Nouveau, to the trip in Italy, to stays in Vienna and Lyons, to the decisive encounter with Garnier. In the text they remain biographical events incapable of becoming arguments for critical reflection.

The most useful passages in these early chapters are the shrewdly chosen citations culled from the texts of Le Corbusier and the attention devoted to Nietzsche. Jencks rightly observes that in *Thus Spake Zarathustra*, "aside from the similarities in style—passionate, vigorous, and aphoristic—there are also similar themes: the 'superman' struggling among men and the necessity that he destroy conventional wisdom before he can realize his revolutionary ideas" (p. 25). But if the attention accorded to L'Eplattenier and Nietzsche is a recurrent theme, it is truly surprising that Fourier is not mentioned. The essential terms of the ideas for the new city and for a different urbanism are already implicit in the lesson of that visionary Frenchman, whom Le Corbusier cites frequently and to whom he appeals as a major support for his theses.² To be sure, Jencks frequently discusses the Enlightenment tradition: but the 'Enlightenment' contains conceptions of the world so rich and differentiated that it demands precise definition. The beauty of Le Corbusier's work is that he makes his choices with extreme precision; in fact the specific themes of his 'Enlightenment' are unequivocally anti-Rousseau. This is an aspect of his ideology that merits greater attention than the author has reserved for it.

The problem is that Jencks almost always accords privileged attention to biography with the antiquated taste of a late nineteenth century serial. This is not to say that genre sketches of this type, notations of habits, are not worthwhile, but they are fragments that never quite manage to form a historical image. Some of these slices of life are useful, as when he observes of *Le Voyage d'Orient* (fig. 3) that "the later arguments for a machine aesthetic are here, and the same pedagogic and persuasive tone which was to characterize Le Corbusier's subsequent books" (p. 32). *Towards a New Architecture* confronted the fascinating theme of 'Greekness.' Le Corbusier polemically asserted that the Parthenon, in spite of the Futurists, was constructed "by the same spirit of 'imagination and cold reason'" that is found in automobiles and airplanes. Le Corbusier was to argue that "it emerged as a perfected object from technological evolution just as these machines did. All this plastic machinery is realized in marble with the rigor that we have learned to apply to the machine. The impression is of naked, polished steel" (pp. 34–5). The 'spirit of the Parthenon' assumed a symbolic value in a new era of forms. It was the prototype Le Corbusier attained after a long process of serialization so rigorous as to enable it to become a point of reference for contemporary architecture in a machine age. Thirty years later in a conference at the Sorbonne with the significant title *From the Acropolis to the Eiffel Tower*, Léger expressed unequivocally Corbusian concepts; he observed that the Parthenon was enjoying an unexpected success, a renewed vitality after the ridicule of the historical avant-garde, until it had become the symbol of the contemporary technological ethos, a sort of 'incarnation-after-the-fact' of standardized design. Léger went on to say that "the Greeks had a horror of the mawkish and the expressive: I think that we are now traveling along the same path. That which remains of the Acropolis today cannot possibly render any idea of its orig-

inal value. The romantic and spectacular chaos that stupefies visitors is contrary to the Greek spirit that conceived it. It was a precise and exact work. The remains that are still intact attempt to explain its plastic rigor; it was as rational as a modern factory. The men who built this architecture would be entirely at ease in our mechanical epoch.”³ Léger followed the Corbusian path, and went back to the first decade of the century, to the time of Le Corbusier’s first great proposal, the *Maison Dom-ino* of 1914, which “presented these properties with a beautiful, logical clarity, as if it were some idealized, Platonic essence of the new architecture” (p. 42).

The second chapter, with the romantic title “The Hero of the Heroic Period (1917–28),” covers the Purist period (including the confraternity with Ozenfant) through the roaring twenties. Here, anecdotes abound; Jencks does not even reject the modish psychological portrait. It appears to him that “the photographs of Jeanneret at this time show this effect: a stern, almost glacial expression verging on cruelty, pursed lips, a physiognomy reminiscent of his Calvinist ancestors, an intense gaze (fig. 4). One does not have to be a Marxist to see that Jeanneret’s dire economic condition changed his physical one, made him lose weight, and supported his new philosophy of ‘Purism’—a doctrine according to which natural selection produces pure forms of elegant, economic simplicity” (p. 50). Clearly Jencks holds some comical ideas about Marxism: God forbid that Marxists should have anything to do with such simplistic and vulgar materialist Darwinism. (But has Jencks ever wondered why Marx himself was so well-fleshed even though he was always so hard up?) The passage cited here is one that demonstrates the fragility and minimal knowledge of the rudiments of historical methodology which characterize this work. To be sure, the reproof is not delivered because Jencks does not know what Marxism is—most of us are ignorant of

very relevant concepts—but because he moves around with the grace of a bull in a china shop. Jencks has dim ideas about historical method and historical work in general, and this artlessness rambles on for about two hundred pages.

All of the useful information present in the text remains in the raw state of a news release. Furthermore, it is almost never based on primary research. Jencks’s pilgrimage opens obscure chasms that remain bottomless. “Le Corbusier, being an atheist, saw the machine as evidence of a pure cosmic force uncontaminated by personal interference. In this love of the impersonal he was part of a broad international movement extending across disciplines and countries from T. S. Eliot in literature to Eisenstein in film” (p. 54). This audacious critical conjunction is couched in terms that, frankly, elude me.

One paragraph in the second chapter is entirely dedicated to the experience of *L’Esprit Nouveau*, but should one want a documented testimony about that experience one would have to return again to the recently reprinted volumes of the magazine. Jencks reserves his attention largely for the relationship between Ozenfant and Le Corbusier. Rather than interpreting the dialectic of their ideas (hardly a coincidence), Jencks only considers the personal events of that confraternity, which was punctuated by quarrels, envies, and pique. This love for trifles, for little human miseries, is too precious and reveals Jencks to be more of a curious and gossipy chronicler of the human and cultural adventure than a historical interpreter of those events. His taste for the anecdotal has ample opportunity to unfold in the pages dedicated to the mundane life, friendships, and even the love life of the Swiss architect. In a biography of Zelda and F. Scott Fitzgerald this might be a central theme, but in one on Le Corbusier it is merely grotesque. No one was more bashful than he,

to no one was it more alien to confuse the public and the private, no one was more attentive—by deep conviction—never to confound the sacred and the profane. This is also easily seen in his not moralistic but profoundly religious intransigence, which is best expressed by the scarcity of information regarding it. Jencks believes differently, and maintains that the rapport between Le Corbusier and his wife Yvonne as well as with other women “has a certain relevance to Le Corbusier’s architecture and city planning” (p. 99). Thus—and here we fall into burlesque—in Ronchamp and in the Carpenter Center (God knows why!) “one can also find the curves of the buttocks and shoulder arches. This is quite a turn-about for a man who had been damning the curve as ‘the pack-donkey’s way’ and proclaiming that ‘culture is an orthogonal state of mind.’ No doubt a renewed contact with women changed his mind on that score” (p. 104 [fig. 5]). This is a critical interpretation (sic!) that leaves one speechless. Along this line of reasoning, we would certainly assume that Gropius had unhappy relationships with women, not to speak of the work of the post-expressionist Mies van der Rohe, so angular and translucent with steel and glass as to make one suppose that his fundamental problem was that his relationships with women were worse than anyone else’s. This erotic-formal line of Jencksian contemporary criticism is certainly a harbinger of what is to follow. As Totò, a great actor too little recognized, used to say, “Are we men or sergeant-majors?”

Since Jencks is an architect, one would expect more precise inquiries, but his reading of the works is characterized instead by a disjointed precariousness. With respect to the Ronchamp chapel he calls in Mendelsohn’s Einstein tower, and we are asked to confront Ronchamp as an Expressionist building. Jencks is so convinced of this interpretation as to negate even what Le Corbusier believed and expressed in his own writings—for example,



the fact that for Le Corbusier, the architecture of Finsterlin resembled “viscous ejaculations recalling underwater horrors” (p. 60), and that in Taut’s designs he found “the image of a distracted neurasthenia” (p. 61). Clearly Le Corbusier was guided by polemical intentions in these judgments, but Ronchamp certainly cannot be labeled an Expressionist work: such a pronouncement still signifies too many things to be able to define something specific. For another thing, the appearance of the chapel on the green hills of Ronchamp occasioned an international debate of which there is little trace in this text; if he had followed that debate from the outset Jencks would have spared us a great deal of banality. Anyone with eyes can see that the curves of Ronchamp are already present in that manifesto of the Cubist-Purist period, the Villa Savoye. If one looks carefully at these plans, especially those of the top floor, it is evident that the curves are already there, set in formal counterpoint to the external stereometry of the building. From the Villa Savoye to Ronchamp, Le Corbusier conducts his own coherent and uninterrupted research, neither jumping nor undergoing unexpected conversions. And he is coherent to the point of being stubborn: certainly he was attentive to what was going on around him and did not ignore the Expressionist experience. He was alert to its innovative characteristics and absorbed its less formalized aspects. The Expressionist experience was the distinctive feature of the German contribution to the Modern Movement, including even that of Gropius and Mies, who later became the celebrated champions of objective rationalism (see Marcel Franciscono’s study for documentation on this point).

Jencks’s section devoted to urbanism is a methodical exposition, hence readable even if it merely repeats well-known observations. However, the significant relationship with power and patronage in general is barely touched upon here. Le Corbusier himself beautifully expressed

his agnostic oscillation around the dominant ideologies of the period: “I am an architect; no one is going to make a politician of me. ‘A Contemporary City’ has no label, it is not dedicated to our existing Bourgeois-Capitalist society, not to the Third International. It is a Technical work” (p. 71). Jencks comments that Le Corbusier “emerges now as the apolitical technocrat, the neutral doctor solving society’s problems no matter what the ideology” (p. 71), a judgment as common as it is unsatisfactory. To design cities and houses in a certain way is a political statement. Such an obvious truth eludes Jencks, therefore he fails to offer any assistance toward understanding which *Weltanschauung* it is that pervades the city and house of Le Corbusier. To be sure, Jencks is not the only one who has failed to understand this, since there are more who speak about Le Corbusier’s ideas than about his architecture (or about the latter while ignoring the former), and from this misrepresentation alone construct an ideology. I am in partial agreement with what Jencks has to say about the social arguments Le Corbusier adopts to explain his projects: “For these arguments are based on an unusual form of idealistic paternalism or liberal elitism or Fascist benevolence. They all tend towards the conclusion that a few great men lead society towards its own best interest” (p. 72).

Jencks’s pages dedicated to the city as prefigured in Le Corbusier’s designs are the most convincing in the book, and this is partially due to the accurate description of certain key experiences, such as Pessac.⁴ As to the attempts to define Le Corbusier’s ideology (nowhere as clearly expressed as in his own projects), one cannot say that he is eloquent in his presentations or explicit in his position. The unequivocal positivism of science and technology, to which he raises a meta-historical altar, is in opposition to his systematic agnosticism in the face of the reigning orthodoxies. His relation with the world, as I noted

earlier, demanded a very different type of analytical development than that offered by Jencks. His perpetual youthfulness is beyond comparison, not only his creative and inventive artistic capacity—because then Wright certainly would not take second place to him—but his capacity to interpret historical events and their rapid evolution. His attitude toward critical analysis and his capacity to share in and interpret the dynamic of events are his own particular qualities. Such an authentic historical intelligence of his own era allowed him to end his days in a crescendo, a crescendo that had its happiest moment in the design for the hospital in Venice: a masterpiece in which Le Corbusier demonstrated, as few others have, an understanding of Venice's historical circumstances, far removed from the polemical gestures with which he sought to desecrate Paris nearly a half century earlier. Le Corbusier knew that Venice was an invalid unable to suffer violent therapies, so he designed an architecture that was itself a perfect diagnosis and therapy. He who always dared, dared no more than necessary in Venice. His response was the masterful fruit of a historical-critical and political issue that matured in the conscience and architectural culture of Europe in the sixties. In the post-war years, Europe accumulated a patrimony of experiences that can only be compared to the cultural action promoted during the Weimar period by Gropius and the Bauhaus, with the substantial difference that the legacy of Gropius became the common property of a large part of the post-war architectural culture in Great Britain, Germany, and, thanks to the presence of Gropius, the United States. The Corbusian legacy, on the other hand, was literally wasted with a speed and self-destructive voracity that are clear signs of a crisis of civilization.

The density of the Corbusian patrimony has much in common with the destiny of the Constructivist tradition of Leonidov, Ginzburg, and Golosov in the Soviet

Union. Just as the Stalinist regime put to the stake—and not always a symbolic one—artists whose attitudes were most congenial to the Revolution, in the same way the Capitalist world in its turn put to the stake its own heretics who would not recant, despite all those who did. Was not the destiny of many contemporary “masters” in substance a renunciation required by the exigencies of the very world in which they operated? Le Corbusier's last period is a rare attempt at coherence and resistance even in the less happy solutions, such as the Punjab undertaking, but it is an attempt that cannot be resolved within a diagnosis of the evolution of a formal language. Indeed, it remains to be shown that the contradictions in the work of Le Corbusier's last years can only be resolved beyond architecture. On this point too I dissent from Jencks's conclusions, where he writes, “if the war had undermined his faith in the machine civilization, it liberated a new belief in formal gratification. In a word, Le Corbusier conceived architecture as sculpture in a new plastic language” (p. 137). If this were the case with Le Corbusier, we would not need to be concerned any longer, his final outcome would be of interest only to his personal artistic biography. This is the line that Jencks follows which, in his pseudo-formal analysis, only meekly attempts to explain the Unité d'Habitation and insists on Ronchamp's symbolic aspect—“a nun's cowl, a monk's hood, a ship's prow, praying hands” (p. 152). Chandigarh, in this false light, “represents the culmination of this plastic integrity” (p. 153).

One paragraph in the last chapter on the period 1946 to 1965—specifically dedicated to the language of his architecture—bears the following title: “The Repertoire of Invented Signs.” It offers a highly debatable attempt at linguistic analysis, even though it is precisely Le Corbusier who has been the subject of exacting and widely available semiological readings.⁵ Here the splendid Zurich pavilion is

abused in a reading of its lineage that is nothing more than the fruit of the author's private suggestions served up as critical analysis.

He concludes the book with a last paragraph dedicated to the historiography on Le Corbusier. Had we started here, perhaps we would have been spared reading the entire book: the review is so summary that there is no reason to talk about philological lacunae. There is no acknowledgment of Giedion, nor of the exemplary pages of Reyner Banham—to whom he improvidently appeals more than once in the volume itself—nor of Hitchcock, nor of the rare but valuable comments of Pevsner, Summerson, and Francastel, not to mention the total absence of such names that cannot be ignored as Ragon, Zevi, and Benevolo. The most serious problem is that Jencks even ignores Anglo-Saxon historiography, with the single exception of the little volume by Blake, from which he unabashedly draws.⁶

Jencks's is a ‘tragic’ interpretation: Le Corbusier and Picasso, the one the Phidias and the other the Michelangelo of our times (!), while Nietzsche provides the interpretive key to Corbusian events. Such considerations make many pages of the text resemble the scenography of a Hollywood spectacular rather than historical criticism.

Lastly, the text is part of the prestigious series *The Architect and Society*, edited by John Fleming and Hugh Honour. Penguin Books cannot permit such oversights if it wants to hang on to its good name, particularly in the field of art history. But in the end, the blame is ours (architectural critics and historians) for having lent credence to labeling. Clothes do not make the man. One can only hope that our well-intentioned Italian editors will think twice before having this book translated. It would be a great disservice to our knowledge of Le Corbusier and a further proof of provincialism. By comparison, Peter

120 Blake's older volume remains a useful general reference work, and Robert Furneaux Jordan's 1972 monograph is much more convincing, and one to which it is worth returning. This is not to mention the only serious monographic work on Le Corbusier, the intelligent and precise study by Stanislaus von Moos, recently issued in an expanded and updated French edition, and to which I refer the reader who wants a serious and documented image of the Swiss master and his work.⁷

Notes

1. M. Mimita Lamberti, "Le Corbusier e l'Italia," *Annali della Scuola Normale di Pisa—classe di lettere e filosofia*, series III, vol. II, 2 (Pisa, 1972), pp. 818–71.
2. Further discussion of this point can be found in Cesare de'Seta, "L'ideologia della città nella cultura pre-marxista," in A. Caracciolo, ed., *Dalla città preindustriale all città del capitalismo* (Bologna, 1975), pp. 144–9.
3. Fernand Léger, "De l'Acropole à la tour Eiffel," in Roger Garaudy, *Pour un réalisme de XX^e siècle—dialogue posthume avec Fernand Léger* (Paris, 1968), pp. 232–3. On the formation of Léger, the text of Douglas Cooper, *Fernand Léger et le nouvel espace* (Geneva, 1949), esp. pp. 13–45, although dated, is still important.
4. Brian Brace Taylor, *Le Corbusier et Pessac* (Paris, 1972).
5. Renato de Fusco, *Segni, storia e progetto dell'architettura* (Bari & Rome, 1973), in particular "L'unité d'habitation," pp. 393–418.
6. Peter Blake, *Le Corbusier: Architecture and Form* (Harmondsworth, 1963).
7. Robert Furneaux Jordan, *Le Corbusier* (London, 1972); Stanislaus von Moos, *Le Corbusier l'architecte et son mythe* (Paris, 1971). It would be superfluous to add that Jencks makes unrestrained use of the German edition, *Le Corbusier Elemente einer Synthese* (Frankfurt, Switzerland, 1968). For an updated bibliography see the French edition. Von Moos's text is soon to be published in English translation by MIT Press.—Translator.

Figure Credits

1–5 From Charles Jencks, *Le Corbusier and the Tragic View of Architecture* (Cambridge, Mass.: Harvard University Press, 1973).

Opaque Transparency

Colin Rowe and Robert Slutzky.

"Transparency: Literal and Phenomenal,"

Perspecta 8, 1963.

Colin Rowe and Robert Slutzky.

"Transparency: Literal and Phenomenal. Part II," *Perspecta* 13/14, 1971.

Rosemarie Haag Bletter

In 1963 Colin Rowe and Robert Slutzky published the first of their essays, "Transparency: Literal and Phenomenal," in *Perspecta* 8, the Yale architectural journal. The same essay appeared in German in 1968 under the title "Transparenz" as the first number of *Le Corbusier studies* published by the Institut für Geschichte und Theorie der Architektur of the Eidgenössische Technische Hochschule, Zurich. This version contains, aside from an extensive commentary by Bernhard Hoesli, footnotes which reproduce sections in English that had been deleted from the original manuscript for the *Perspecta* article. The *Perspecta* version of this essay was, finally, published a third time in 1976 as part of Colin Rowe's collected essays, *The Mathematics of the Ideal Villa*. The second part of "Transparency" appeared in *Perspecta* 13/14 in 1971, eight years after the publication of the first essay. Part II was not republished anywhere, however, not even in Rowe's collected essays. Why part II presented a less forceful statement than part I will be considered below, but the more important concern here is to discuss the interesting and influential attempt in part I to redefine the language of architectural criticism, particularly criticism of Le Corbusier's works.

All three versions of part I are textually identical with only inconsequential additions to the illustrations in the later publications. (The footnotes of the Swiss pamphlet resurrecting deleted portions of the English manuscript would be of interest if we were dealing with the genesis of Rowe and Slutzky's particular position, but since these cuts were never used in the English-language versions of "Transparency" and since they appear as English footnotes to the German text, their general import to the overall argument is negligible.

The object of this review is to question not all the conclusions of "Transparency" but the specific methodology used by the

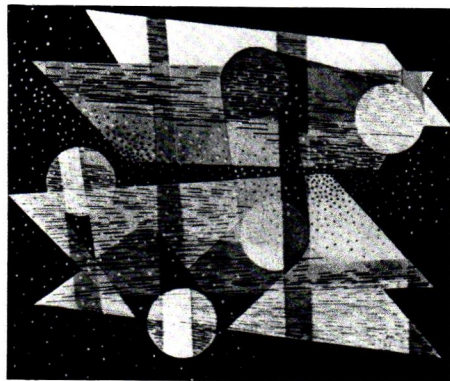
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two authors. Briefly, Rowe and Slutzky find Sigfried Giedion's association of the kind of transparency that occurs in the Bauhaus buildings at Dessau with the "transparency of overlapping planes" in analytic Cubism (from *Space, Time and Architecture*) unconvincing. To refine Giedion's use of the term, they turn to Gyorgy Kepes's definition of an apparent transparency as one which offers "a simultaneous perception of different spatial locations" (*Language of Vision*). Then, using both Giedion and Kepes, they assume two forms of transparency to exist: the one described by Giedion is called "literal" (actual) and the one alluded to by Kepes becomes "phenomenal" (illusionistic) transparency. These two varying concepts of transparency are then buttressed by comparisons among a number of paintings. Typically, a Constructivist work by Moholy-Nagy (fig. 1) exhibiting literal transparency is contrasted with a Cubist painting by Léger (fig. 2) in which the ambiguous, spatially fluctuating form of phenomenal transparency can be discerned. And, by extension, a similar differentiation is drawn between the Constructivist-influenced Bauhaus and Le Corbusier's Villa Stein at Garches which owes something to Cubist spatial perception. The question that must be raised is the following: does such a categorization into two concepts of transparency become a useful critical instrument, as the authors claim? Are these categories universal enough to tell us more than the obvious, that the architecture of Gropius is different from that of Le Corbusier? Can the notion of literal and phenomenal transparency be applied to modern architecture in general, as Giedion had clearly intended with his terminology?

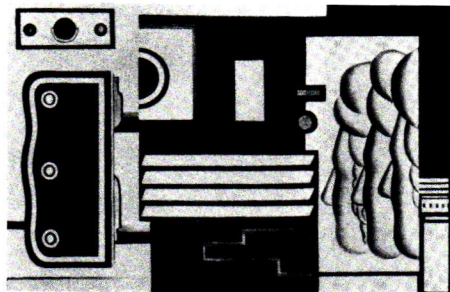
Since the classification used by Rowe and Slutzky is established by means of painting first, it is necessary to start with an examination of their argument in this area. On the surface a grouping of Gropius with Constructivism and of Le Corbusier with Cubism makes sense. But a compar-

1 Laszlo Moholy-Nagy, *La Sarraz*, 1930.

2 Fernand Léger, *Three Faces*, 1926.



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ison between a painting by Moholy-Nagy and one by Léger would seem to be loaded in favor of Cubism from the start—Moholy-Nagy's strength was as a conceptual artist, not as a painter. In general, the authors seem to find the gridded, shallow space associated with phenomenal transparency more interesting than the static, two-dimensional space used to convey literal transparency. This is probably so because of the obvious architectonic qualities of phenomenal transparency—their claim at the end of the essay that no value judgments are implied by such categories to the contrary. Whenever the two classes of transparency are contrasted, literal transparency is treated, however inadvertently, in a rather negative tone. Writing about Moholy and Gropius, the authors tell us that "Both . . . received a certain stimulus from the experiments of De Stijl and the Russian Constructivists; but both were apparently unwilling to accept certain more Parisian conclusions." "Unwilling to accept" sounds like an artistic deficiency when in fact Constructivist and De Stijl artistic intentions were quite different, and could not possibly have been explored together with Cubist spatial solutions. The comparisons are, then, not entirely fair because other styles are merely used as a foil for Cubism, while their own unique and positive aspects are not brought out. In a similar vein, Rowe and Slutzky write that ". . . a glance at any representative work of Kandinsky, Malevich, El Lizzitsky, or Van Doesburg will reveal that these painters, like Moholy, scarcely felt the necessity of providing any distinct spatial matrix for their principal objects. They are prone to accept a simplification of the Cubist image as a composition of geometrical planes, but are apt to reject the comparable cubist abstraction of space. For these reasons their pictures offer us compositions which float in an infinite, atmospheric, naturalistic void, without any of the rich Parisian stratification of volume." Again, the reader is informed only in what way these artists do and do not adhere to Cubism.

Such a Francophile analysis clearly prevents the creation of any objective system of classification.

For instance, the work chosen by Moholy (his *La Sarraz* of 1930), exhibits literal transparency, to be sure, but it is not altogether characteristic of his *oeuvre*. If his *Large Railway Painting* (1920), *AXI* (1923), or a number of his photograms of the twenties had been used, his work would have had to be grouped with that of Léger. The same is true of the work of Kandinsky or Malevich: no tight grouping with literal transparency is possible. Be that as it may, even if we grant that Moholy's *La Sarraz* is representative of his work, there are other aspects of the Cubist/Constructivist comparison that do not ring true. This is the authors' categorization of the spatial qualities of Constructivist works as naturalistic and of Cubist works as abstract. Diagonals, as they are used in Moholy's and many Constructivist paintings, are assumed to be vestigial referents to a naturalistic, spatial recession: "Generally speaking, the oblique and curved lines possess a certain naturalistic significance, while the rectilinear ones show a geometrizing tendency which serves as a reassertion of the picture plane." Perhaps diagonal lines in Futurist works retained this vestige of naturalism—the Futurists called them "lines of force" and they represented, therefore, actual movement through an illusionistic space. In Suprematist and Constructivist painting, however, the mechanistic Futurist conception of the diagonal became transformed to stand for far more abstract ideas, spiritual and revolutionary force respectively. Thus, diagonals in Constructivism cannot be seen as reference points to specific loci in space. In fact, they reassert the picture plane more consistently than do Cubist works.

Other aspects of Constructivist painting are similarly interpreted by Rowe and Slutzky as naturalistic. Literal transparency is associated with "the *trompe l'oeil*

effect of a translucent object in a deep, naturalistic space . . ." and the absolutely undefined background of Moholy's *La Sarraz* is said to fling open "a window onto some private version of outer space. . . ." While it is true that Kandinsky, Malevich, and De Stijl artists were interested in portraying a cosmic, universal space, this never took the form of anything so literal as "outer space," not even in Moholy's second generation Constructivist works. Ironically, of all the major early twentieth century movements, it is only in Cubism that palpable, naturalistic forms such as glasses, bottles, knives, cigarettes, newspapers, etc., are still discernible no matter how fragmented their portrayal. To refer to Cubism as abstract and to Constructivism as naturalistic, then, is a somewhat arbitrary classification which does not inspire a great deal of confidence. Without ever clarifying this point sufficiently, the two authors seem to prefer in Cubist painting precisely the suggestion of a naturalistic space, its layers of grids which exist in a shallow space. This adherence to structured form within a spatial matrix in Cubism would be of interest to an architectonic conception, but Constructivism's near-total abstraction is not so easily applicable to built form.

Their particular and rather unorthodox interpretation of Cubism and Constructivism really makes sense only if it is restricted to a purely *formal* analysis. The Cubist works given by Rowe and Slutzky as examples of phenomenal transparency are ones in which conventional notions of "in front of" and "behind" are depicted ambiguously through the deformation of objects and surrounding space into a shallow, oscillating zone. It is probably this confusion of object and its matrix which leads them to see these works as abstract. In the Constructivist paintings cited, the coherent representation of abstract objects against a background is seen as naturalistic because, even though the content of such works is entirely abstract,

3 *Villa Stein, Garches. Le Corbusier, 1927.*

4 *Bauhaus, Dessau. Walter Gropius, 1925-1926.*

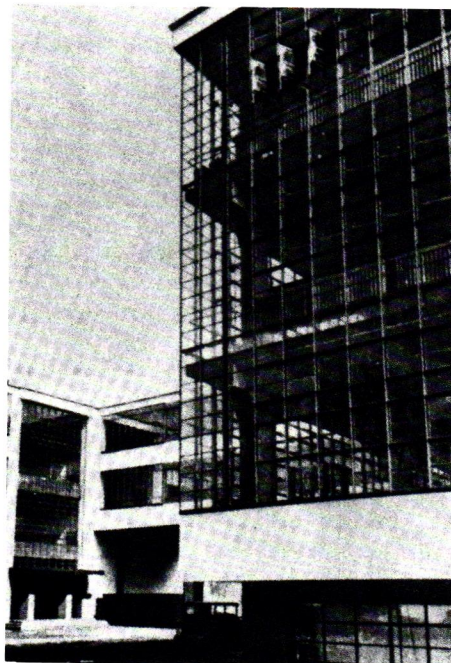
the naturalistic convention of “in front of” and “behind” is employed. Again, as was stated earlier, even such a formalistic interpretation of their categories does not manage to encompass Cubist and Constructivist painting in general. In any case, the completely formal and perceptual basis of their system of classification is not stated clearly enough at the outset of their argument, leading to much unnecessary confusion.

Phenomenal and literal transparency are categories that are not style-specific and they are, therefore, poor organizing tools in a discussion that attempts to contrast Cubism and Constructivism. And if these concepts rest on such a shaky foundation in painting, is it then meaningful to transfer them to architecture?

Rowe and Slutzky's main comparison between Le Corbusier's Villa Stein at Garches (fig. 3) and Gropius's Bauhaus (fig. 4) without any doubt does give us a new awareness of Le Corbusier's spatially complex architecture. But here also (as with painting, because the critical categories are limited) the comparison is turned into a procedure that resembles a contrasting of apples and oranges where we are told that an apple is better than an orange. The Bauhaus becomes a foil for the Villa at Garches in the same way that Moholy's painting functioned as a foil for Léger's. Rowe and Slutzky in their concluding statement say that “It is not intended to suggest that phenomenal transparency (for all its Cubist descent) is a necessary constituent of modern architecture, nor that its presence might be used like a piece of litmus paper for the test of architectural orthodoxy.” Nevertheless, in the actual comparison the absence of phenomenal transparency is treated as a default: “Relying on the diagonal viewpoint, Gropius has exteriorized the opposed movements of his space, has allowed them to flow away into infinity; and by being unwilling to attribute to either of them any significant difference of qual-



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124 ity, he has prohibited the possibilities of a potential ambiguity." The Bauhaus's association with Constructivist principles rests precisely in its unfocused massing, which gives this group of buildings an anti-monumental abstract aspect having no conventional "facades." As regards phenomenal transparency at the garden facade of the Villa Stein, it can only be fully appreciated if the observer is centered in front of the facade, i.e., at Garches if he stands in the garden at some distance from the house. Because phenomenal transparency is seen by the authors as a formal problem of perception and as an extension of Cubism, the naturalistic background such an approach requires is not brought out: the garden facade at Garches functions like a pre-Cubist picture plane which presumes a fixed, frontal point of view. Where the point of view in a Cubist painting hardly matters because the shallow space is all projected onto a flat plane, similar devices in architecture, no matter how shallow the space, become occluded with a shifting point of view because of the effects of parallax. Thus, the frontal approach Le Corbusier prefers is in many ways still tied to Renaissance rather than Cubist spatial perception, and may derive directly from his interest in Beaux Arts planning, especially the use of the highly directional *enfilade*. An examination of Le Corbusier's work in terms of phenomenal transparency, then, gives us useful insights about some aspects of his working procedure, but this perceptual system of analysis does not allow us to see the full richness of his *oeuvre* (for instance, that together with some obvious Cubist notions of spatial organization much more traditional Beaux Arts ones could be retained as well). The differences between Cubist painting and Le Corbusier's architecture are hardly examined, and the Constructivist/naturalistic Cubist/abstract categories, though wrong to begin with, can now be shown to be not very meaningful in any case. For, even if we assume Cubist space to be abstract, Le Corbusier applies Cubist principles

within a naturalist context.

The point of this analysis, it must be emphasized, is not to show that Gropius was dealt with unfairly—few would question today Le Corbusier's superior status—but to show that the two classifications of transparency have yielded useful critical results only for some aspects of Le Corbusier's work. Further questions that are raised by the methodology of Rowe and Slutzky are these: does phenomenal transparency characterize most of Le Corbusier's works of the twenties? Would a comparison between literal and phenomenal transparency have seemed as interesting if Le Corbusier's street facade at Garches had been contrasted with the work of a somewhat stronger architect than Gropius, say of Mies? In any case, the inclusion of Constructivism in Rowe and Slutzky's analysis does not add very much to the discussion. A more detailed critique of Le Corbusier might have yielded more lucid results. The concepts of phenomenal and literal transparency are at once too general and too circumscribed to be useful in the categorization of anything. And though they claim in their summary that the essay is to "give a characterization of species," they never make entirely clear what sort of species we end up with when architecture is divided Last Judgment-style into the blessed (phenomenal transparency) and the damned (literal transparency).

The answer to several puzzling aspects of "Transparency: Literal and Phenomenal," part I, can be found in part II, which was published in *Perspecta* in 1971. This appeared too late to have been included in the Swiss publication, but it was also not included in Rowe's collected essays of 1976. Did he regard it as a weak link in the argument? Whatever the reasons for its exclusion, part II is, nevertheless, important in understanding Rowe and Slutzky's method. It exposes more consistently the specific attitudes that deter-

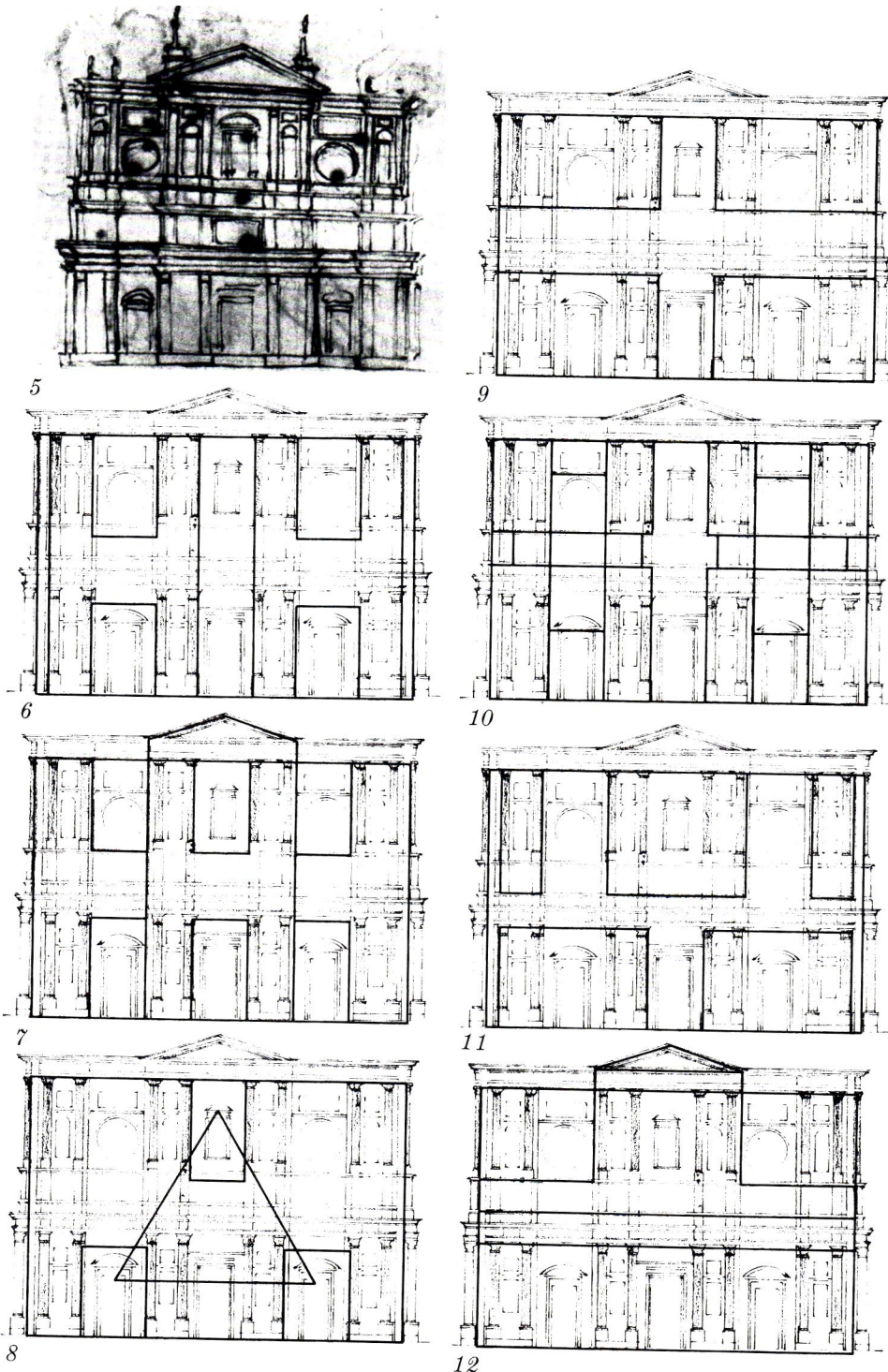
mined their basic definitions in the first essay.

Here the reader is told that "it would surely be possible to sustain a classification of modern architecture according to the absence or presence of (literal and phenomenal transparency), but to do so would involve unnecessarily tedious analysis." This then is an admission that the two forms of transparency are quite universal. While in part I phenomenal transparency was primarily paired with Cubism, there is in part II finally an awareness that there is nothing uniquely Cubist about it. The authors have discovered its presence in Gothic and Mannerist architecture as well. There follows a lengthy analysis of Michelangelo's proposed facade for San Lorenzo (fig. 5). Without explanation, though, the definition of phenomenal transparency of part I (a gridded space within a shallow *three-dimensional* zone which is perceived in fluctuating, ambiguous patterns) is shifted slightly to refer to ambiguous readings within an essentially *two-dimensional* space. The facades of the Villa Farnese and San Lorenzo do indeed elicit ambiguous readings (figs. 6–12), but they are not developed in depth. Thus the original definition of phenomenal transparency taken from Gyorgy Kepes (a simultaneous perception of different spatial locations) no longer has the full implications it did at Garches.

Finally, toward the end of this second essay, Gestalt psychology is invoked as an explanation both of the authors' analytical procedure and of phenomenal transparency. Since this interest in Gestalt psychology elucidates their emphasis on perceptual, formal organization in painting and architecture, it might have been of greater service at the beginning of the first essay. To explain the notion of phenomenal transparency, the authors point to some of the better-known Gestalt figures in which an ambiguous figure-ground relationship produces two separate read-

5 Facade design for San Lorenzo,
Michelangelo.

6-12 Ambiguous readings of
Michelangelo's facade for San Lorenzo.



ings (for instance, the vase which can also be interpreted as two facing profiles). The authors mistakenly conclude from such examples that ambiguity is a basic ingredient of perception, that ambiguous perception is, in effect, archetypal. Not only is this a misconception of Gestalt psychology, but if phenomenal transparency were indeed archetypal, it could then not also be used as a category in the classification of very particular architectural species. If the argument against the general usefulness of literal and phenomenal transparency is not yet convincing, the claim by the authors that ambiguous perception is archetypal would seem to be the final act of hara-kiri.

But to come back to Rowe and Slutzky's faulty understanding of Gestalt psychology: Gestalt psychology does not at all deal with ambiguous perception *per se*, as is implied in their essay. Gestalt psychology (not to be confused with the more recent Gestalt therapy) is a branch of normal psychology and as such covers the study of ordinary perception. The example of the vase/profiles figure cited by Rowe and Slutzky as an instance of ambiguous vision does not show anything of the kind (fig. 13). On the contrary, this figure, and others like it, is used by Gestalt psychologists to show precisely the opposite: that the mind attempts to maintain a coherent image at all costs. For the vase/profiles are not seen simultaneously: the mind takes in either one or the other. Even after both images are comprehended, their perception is sequential, not simultaneous. Gestalt psychology, therefore, cannot be called upon to explain ambiguities in Le Corbusier's architecture.

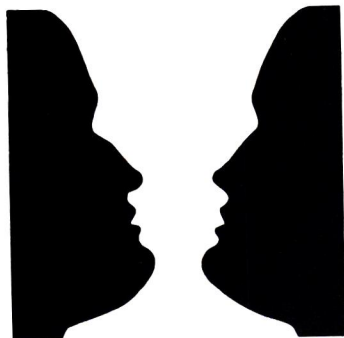
To make this point clearer, other figures can be used to show that the mind in its normal state tends to choose the most economical, efficient, and rational explanations.

For example, note the square with a missing corner (fig. 14). Since our language

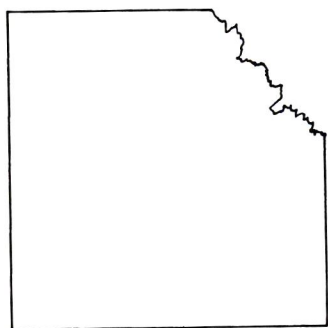
13 Vase/profiles illusion.

14 Square with missing corner.

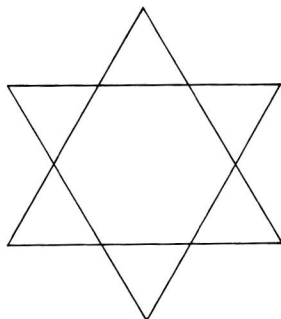
15 Hexagram.



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does not possess a word for such a figure, to make sense of it a mental comparison is made with similar known figures, i.e., squares. To justify calling this a square, however, the “missing corner” must be filled in. Hence, though no square is really shown, the near-universal description of this figure is that it is a “square with a corner missing.” We might call this procedure an act of mental comprehension. Gestalt psychology is further concerned with how the mind organizes and retains complex images. Let us take, for instance, the figure of a hexagram (fig. 15). Though a comparatively simple image, it can in reality be drawn in a great number of different sequences. That most people choose to draw it as two superimposed triangles illustrates that the mind tends to rely on the most economical forms in the selection of efficient mnemonic ideograms. Gestalt psychology, rather than being concerned with ambiguous images, deals with the mental ordering of perceptions which may or may not be ambiguous. The mind also selects from a chaotic visual field those groupings which make the most sense, which are meaningful. Thus the seeing of randomly organized images depends to some extent on one’s experience if meaningful associations are to be made. Perception is, thus, not the completely sensory act Rowe and Slutzky claim it to be. The senses and the mind constantly interact to understand the millions of stimuli the eyes receive. Rowe and Slutzky write that images are organized, among other things, according to what they call the “untranslatable ‘prägnanz’” (*sic*). “Prägnanz” is in fact translatable and means “significance” or, literally, the state of being pregnant as in “pregnant with meaning.” The eye does perform on the sensory level a certain amount of organization, but such organization depends on what psychologists see as a kind of field perception—no meaning derives from this sort of seeing. Significant seeing can only occur when there is an interaction between immediate sensory experience and long-range cognitive experience.

The authors finally propose that a natural affinity between Gestalt principles and Cubist perception exists because both are inventions of the early twentieth century. There are obviously certain cultural links between Gestalt psychology and Cubism, but to propose Gestalt notions as a critical tool particularly for that style is not entirely convincing. This is like saying that nineteenth century naturalism should be analyzed in terms of materialistic theory. Our methods of critical analysis can and even ought to be outside that of the system examined.

Be that as it may, no ideological or formal relationship exists between Cubism and Gestalt psychology. To wit, Gestalt psychology, which had its beginnings in Germany, could be more readily linked with Gropius and Moholy-Nagy (in fact, Gestalt psychology was taught at the Bauhaus). Rowe and Slutzky’s curious application of Gestalt ideas is then carried to a strange literal conclusion by Bernhard Hoesli in his commentary on “Transparenz” in the Swiss publication of this essay. Hoesli proposes exercises for students of architecture that incorporate phenomenal transparency. It had been comforting for some to believe that good architecture might result from the application of the golden section, or the Modulor: Hoesli uses phenomenal transparency as yet another recipe.

Phenomenal transparency is, then, quite useful in helping us comprehend some works of Le Corbusier, but the overall analysis of Rowe and Slutzky is too erratic to make for workable categories of architectural examination. While we may not agree with Giedion’s definitions of modern architecture, literal and phenomenal transparency in no way provide us with a new general definition.

1-4 From Colin Rowe, *The Mathematics of the Ideal Villa* (MIT Press, 1976).

5-13 From Colin Rowe and Robert Slutzky, “Transparency: Literal and Phenomenal. Part II,” *Perspecta* 13/14, 1971.

To the Editors:

Though her language is often unnecessarily difficult, Diana Agrest's "Architectural Anagrams: The Symbolic Performance of Skyscrapers" in *Oppositions 11* makes many good points. However, her classification of the recent skyscraper development is not as convincing as the rest of the essay.

She categorizes as a "mutant species" contemporary skyscrapers in which the base, particularly the entrance hall, has replaced the building's crown as the most important transmitter of meaning. Agrest writes that "This transformation marks the latest stage of the skyscraper's development, in which the skyscraper mutates toward a new typology of which partial examples already exist. . . ." She goes on to mention Philip Johnson's I.D.S. Center and Pennzoil Place, John Portman's Hyatt Hotels, and Roche & Dinkeloo's Ford Foundation. The Hyatt Hotels and Ford Foundation do not qualify as skyscrapers and should not be used to prove the existence of a changing typology. Hugh Stubbins's Citicorp Center, not mentioned by Agrest, on the other hand, could have been used to reinforce her claim.

More important, her semiological analysis avoids a very central issue regarding meaning. According to Agrest, "the base, formerly a secondary signifier, undergoes an unusual transformation . . ." and "the skyscraper mutates . . .," all passive descriptions that do not raise the question *why* the change has occurred. Unfortunately, on this point her analysis, which describes a succession of signifiers, differs little from a purely stylistic analysis in which forms succeed forms.

Is it possible that because of the greater average height of skyscrapers and because of the greater density of tall buildings in downtown areas, the crown

of a building is no longer readily visible, except from great distances? It may be because of such a simple perceptual reason that the corporate image of skyscrapers can be identified more clearly today through the base and galleria. After all, signifiers that cannot be perceived with some ease have become archaisms.

Sincerely,
Rosemarie Haag Bletter
New York

To the Editors:

Anthony Vidler's editorial (*Oppositions 7*) and subsequent article ("The Idea of Type," *Oppositions 8*) have expanded the critical dialogue concerning typology. Unlike Giulio Carlo Argan and Alan Colquhoun who discuss typology as a fixed concept, Vidler attempts to situate the word "type" historically, proposing that the word and concept have undergone several major transformations since their first appearance during the Enlightenment.¹ However, the editorial's categorization of three typologies and in particular its apologia for the third typology are problematic and, I believe, must be reconsidered if the notion of typology is to become a useful critical construct for architects and historians.

One important conception of type is neglected in the editorial's tripartite historical division: the nineteenth century notion of type related to building function. With the industrial revolution and radical transformation in social and technical requirements, the creation of new functional types—train stations, department stores, stock exchanges, and public museums—became a predominant theoretical and practical concern for architects. The objective was the production of new architectural forms, as a logical consequence of abstract rules and elements, which would both serve new functional requirements and express the

appropriate "character." To include this conception of type with the neoplatonic theory of the Enlightenment, exemplified in Laugier's primitive hut, is difficult. As Vidler himself demonstrates in his article, "The Idea of Type," the meaning of type had shifted radically by the mid-nineteenth century; Durand's divisions by building function suggest a mentality quite different from Laugier's concern for origins.²

However, given the polemical intention of the editorial, the general apologia for the third typology is of greater concern to the present discussion. The city and this typology—represented in the work of the New Rationalists—are "reasserted as the only possible bases for the restoration of a critical role to an architecture otherwise assassinated by the apparently endless cycle of production and consumption."³ While one might share this hope, the argument presented is often elusive, and in certain instances contradictory: "[In the third typology] the columns, houses, and urban spaces, while linked in an unbreakable chain of continuity, refer only to their own nature as architectural elements, and their geometries are neither scientific nor technical but . . . essentially architectural. It is clear that the nature referred to in these recent designs is no more nor less than the nature of the city itself, emptied of specific social content from any particular time and allowed to speak simply of its own *formal condition*."⁴ However, several paragraphs later Vidler states: "When a series of typical forms are selected from the past of a city, they do not come, however dismembered, deprived of their original political and social meaning. The original sense of the form, the layers of accrued implication deposited by time and human experience cannot be lightly brushed away; and certainly it is not the intention of the Rationalists to disinfect their types in this way. Rather, the

carried meanings of these types may be used to provide a key to their newly invested meanings.”⁵

It cannot so easily work both ways: the typical forms of the Rationalists can hardly “be emptied of specific social content”—refer only to their “own formal condition”—and still carry the deposit of their original social and political meaning. The confusion perhaps stems from the fact that the first position can never be absolute. Although it can be legitimately argued that modern art has focused on form, and thereby has increasingly become an entity without content, the situation of any creative work within a social context inevitably returns to the work some reverberation of meaning. Thus, the denial of art as a mode of communication never entirely succeeds; Mallarmé’s answer to Nietzsche’s question, “Who speaks?”, “The word itself” has only relative truth. Architecture, as an abstract art, has perhaps a greater capacity than writing to become silent, yet, even the simplest geometric form can acquire cultural meaning depending upon the context in which it is situated. The pyramid is an obvious example.

However, Vidler is not concerned with the ambivalent balance between social meaning and formal silence which the designs of the third typologists suggest. He ignores the implications of his first statement and the possible social significance of a relatively “silent” or pure architecture; instead he emphasizes the communicative capacity of the typical forms and the particular importance of this communication in providing political critique. A further consideration of each position might serve to elucidate the problem of architecture and political engagement.

With regard to the first issue, the question arises whether a search for pure architecture, for “form without

utopia,”⁶ might in fact be a more sincere course than an effort to evoke political and social meaning at a time when architectural language has lost its communicative power. And perhaps it is on this ground that the architecture of the third typology might best be defended. Though such an architecture risks uselessness, it is at least more innocent; in its break with the past it cannot be accused of perpetuating a mode of composition or a vocabulary of formal elements tied to a previous social order. The utilization of past styles, which depend upon now archaic symbolism, does not, as some communist (social realist) critics claim, serve a revolutionary cause; rather it perpetuates the ideology of an earlier period in its refusal to recognize architecture’s own situation in history.⁷ It is a situation, as Vidler acknowledges in his quotation of Victor Hugo, in which architecture has lost its “use-value”—its capacity to act as a primary means of communication, as a “social book.” Any attempt to go back to such a mode of architecture, such as recent “post-functional” designs, risks becoming kitsch, a kitsch which is not harmless. Its mechanical formulas encourage vicarious experience, faked sensations, in fact, an inability to respond to the very values which generated it.⁸ It is, unlike the “silent” art of the avant-garde, readily adaptable to manipulation. As Clement Greenberg observed in 1939, the primary difficulty with avant-garde art and literature for the Fascists and Stalinists was not that they were too critical, but that they were too innocent, that it was too difficult to inject effective propaganda into them; kitsch was more pliable. Though pure architecture, like avant-garde art, may not change any social order in its dedication to self exploration, it posits a freedom in its choice of form which at least cannot be reactionary. Its autonomy, its detachment from reality, can, in fact, be considered on the most general level to

have a critical value. The greater art’s separation from society, the greater is its potential challenge to the social structure which it denies. Thus, the more blatantly irrational the society becomes, the greater the opportunity to oppose it to the rationality of the artistic world.⁹

However, such a justification of formal autonomy implies a willingness to accept a limited, if transcendent conception of architecture’s social role. In its rupture with the world, autonomous architecture may protest social relations, but it remains outside of them. Its connection to critical social action is at best indirect and frustrating. No matter how innocent or even liberating such an architecture may be, it does little to inform or alter the relations of production or class position. It increases our awareness of artistic form more than our consciousness of material conditions. It is perhaps for this reason that Vidler, given his own political commitment, is obliged to defend the work of the new Rationalists not on the grounds of their virtual formal autonomy, but on the vague potential for political meaning that arises from the public context in which their designs are situated: the city. Disregarding his previous discussion concerning formal self-reference, he now asserts, as the second quotation reveals, that the original meanings of typical forms provide the key to newly invested meanings; thus, he claims that the architecture of the third typology attains a communicative power and potential as a critical force.

Three problems emerge from this position: first, the obvious dilemma of whether such communicative power is possible in architecture today; second, the nature of the content associated with the projects of the Rationalists; and finally, the focus of the critical investigation on the formal object. As the editorial and first part of this

discussion have stated, the time when architecture might be considered a “social book” has passed; yet, it was also suggested that meaning never deserts architecture. Regardless of the designer’s intentions, the social and physical context bring meaning to the most abstract of works. The question remains, however, if a building can communicate a pre-established message, can the meaning of a design be made clear and specific enough to render it effectively critical? Architectural forms may never have had the legibility of the prose text, but with the destruction of established canons of composition and decoration, the problem of making buildings communicate, anything beyond functional attributes or the most general cultural inferences, is compounded. Too often we are left with layers of images so multivalent that they become mute, or with the cold silence of geometry content in its own isolation.¹⁰ The difficulty of communication can be seen in the example of Aldo Rossi’s City Hall project for Trieste. Vidler claims that Rossi in his transformation of a late eighteenth century prison type to a city hall project refers to “the ambiguous nature of civic government.” It is not evident, however, that the prison image will be understood by more than a few architects who happen to read “critical” reviews. It is as the editorial states, only one of many evocations: house, arcade, piazza are other possible readings. But even if the image of prison is understood, it can hardly be said that the problematic nature of civic government is made explicit in this, or in any, design. The dialectic is not clear as a fable. If there is meaning, it is poetic and ambiguous—like the simplest remnants of a cultural labyrinth. There is no specific message or moral. The building does not elucidate ideological myths, making manifest our historical situation. Its value is not political.

To the extent that the designs of the

third typologists do suggest content, they risk in their reliance on past symbolic forms the perpetuation of an ideology of an earlier period. The Rationalists propose the formal types of the traditional European city—street, square, avenue, arcade, park—as a viable alternative to the decentralization, fragmentation, and disintegration of the modern urban fabric. The parallel between formal and social solution is implicit. Despite the placement of modern facades on traditional squares and streets, the designs remain more nostalgic than critical. The public realm which the projects suggest is not a highly advanced capitalist or post-capitalist order, but one that precedes capitalism, in which monarchical or imperial visions dictated the evolution of urban structure. The formal coherence of such cities, in particular the role of the street and square in defining a public realm, may serve as a useful pictorial foil to the desolate urban wasteland which twentieth century planning notions have so frequently produced; but the constructive social benefits of the Rationalists’ investigations are not evident. One is reminded, in part, of Engel’s critique of utopian socialism: the validity of its depiction of a certain social wrong, but the mythic, if not reactionary, character of the solution proposed. The traditional types of the Enlightenment city in themselves offer little insight into the cycle of production and consumption which has rendered architecture impotent as a symbol of community life.

The dilemma, however, extends beyond the particular use of past types to the consideration of typology *per se*. The potential of metaphorical opposition, even if it were a viable possibility given the loss of architectural language, is not sufficient to establish a critical role for architecture in terms of radical *praxis*, social action. It is not just the juxtaposition of types which needs to be

considered, but the actual process by which types—and in fact all components of architecture—are made; in other words, a serious investigation of the means of architectural production is required.¹¹ Given the Rationalists’s preoccupation with exploration in form and their emphasis on the final physical attributes of the designed object, rarely can issues of technology, economics, or social class be investigated; to the extent that they do emerge as latent concerns in the sometimes seductive drawings, the tone verges once again on nostalgia—medieval “folk” community or artisan craftsmanship.

Undoubtedly, a shift in critical focus to those factors which in fact comprise architecture’s production would lead ultimately to a much less literal evocation of the traditional European city. New types would emerge, which might, in a new synthesis of Modern Movement notions of city as garden and traditional notions of city as continuous fabric, finally begin to bridge the long time enmity between city and country.

The confusion in Vidler’s editorial, I believe, is a confusion that exists within the Rationalist movement itself. One group, characterized by Aldo Rossi and his followers, seems to state in their designs if not always in their writings that we have little choice, given the loss of architectural language, except to deal with the nature of architectural form itself. The other faction, represented by the Krier brothers, emphasizes the particular ideological content of the design proposed. Typology is probably a useful tool for the architect faced with the task of designing a building here and now. As Colquhoun has described, it provides a serious alternative to the deceptive assumptions of biotechnological determinism or the architect’s intuitive genius offered by the Modern Movement. But as a basis for a critical social role for architecture it

130 leaves much unanswered. To the extent that it establishes *a priori* canons, it risks leading, as did previous “scientific” methods, to a new positivism. Finally, perhaps we must recognize with Manfredo Tafuri, that there can only be class criticism of architecture, not class architecture.¹² Silence is preferable to nostalgia; but both evade the issue of architecture within the production processes. The Rationalists’ failure to achieve substantial material realization—the narrow and elitist audience which their work has received—point all the more explicitly to the painful futility of attempting social criticism through the designed object.

Lest earlier remarks concerning “pure” architecture be forgotten, this is not to deny all potential critical value to architecture, that is within the sphere of the artistic world, but only to suggest that its primary liberating value lies outside the realm of practical social action.

Mary McLeod
New York

Notes

1. Giulio Carlo Argan, “On the Typology of Architecture,” *Architectural Design*, trans. Joseph Rykwert, December 1963, pp. 564–565. Alan Colquhoun, “Typology and the Design Method,” *Perspecta* 12, 1969, pp. 71–74.
2. The categorization of building types according to utilitarian functions is, of course, not entirely new to the nineteenth century. In the second volume of his *Cours d’Architecture* Jacques-François Blondel organizes his discussion of “Distribution” by functional type and introduces a completely new range of building *genre*, previously considered unworthy of the architect’s concern. Durand uses his categories and does not introduce any major new functions. It is not until the publication of *Revue Générale d’Architecture* beginning in 1840 and of Léonce Reynaud’s *Traité d’Architecture* in 1850 that further systematization of emerging typologies occurs. Among the building types introduced at this time are railway stations, agricultural constructions, workers’ housing, and communal social facilities.
3. Anthony Vidler, “The Third Typology,” *Oppositions*, 7, Fall 1976, p. 4.

4. *Ibid.*, p. 2.
5. *Ibid.*, p. 3.
6. Manfredo Tafuri, *Architecture and Utopia* (Cambridge, Mass.: MIT Press, 1976).
7. The analogy can be made to the social realist writers. As Roland Barthes points out, social realism makes multiple use of the grossest signs of literature. Far from breaking away from a mode of writing which is or was after all typically bourgeois, it continues without reservation the formal preoccupation of the petit-bourgeois art of writing. See *Writing Degree Zero* (Boston: Beacon Press, 1969), p. 70.
8. Clement Greenberg, “The Avant Garde and Kitsch,” in Gello Dorfles, *Kitsch: The World of Bad Taste* (New York: Universe Books, 1969), p. 122.
9. Extending Hegel’s argument, Herbert Marcuse writes: “The artistic transformation violates the natural object, but the violated is itself oppressive; thus the aesthetic transformation is liberation,” *One Dimensional Man* (Boston: Beacon Press, 1964), pp. 239–240. Marcuse further develops this argument in his recent work *The Aesthetic Dimension* (Boston: Beacon Press, 1978).
10. Tafuri’s *Architecture and Utopia* perceptively discusses this dilemma.
11. This argument owes much to Walter Benjamin’s essay “The Author as Producer.” See *Understanding Brecht*, trans. Anna Bostock (London: New Left Books, 1973), pp. 85–103. Manfredo Tafuri also attempts to apply Benjamin’s position to architectural criticism in his essay “L’Architecture dans le Boudoir,” trans. Victor Caliandro, *Oppositions* 3, May 1974, pp. 37–62.
12. Tafuri, *Architecture and Utopia*.

Francesco Dal Co

Francesco Dal Co was born in Ferrara, Italy, in 1945. He graduated in architecture in 1970 from the Istituto Universitario di Architettura di Venezia where he is presently a professor of the History of Architecture. He has also lectured extensively in Europe and America. From 1974–1976 he was a member of the Commission for Architecture and Visual Arts of the Biennale di Venezia and organized the exhibition "Cinema, città, avanguardia" for the 1974 Biennale. He was also the author of the two catalogues of this exhibition. His published work includes: Hannes Meyer, Scritti, 1921–1942, Francesco Dal Co, editor (Venice/Padua: Marsilio, 1969); De la vanguardia a la metropoli (in collaboration with M. Cacciari and M. Tafuri [Barcelona: Gili, 1972]); La città americana dalla guerra civile al New Deal (in collaboration with others [Bari: Laterza, 1973]); Architettura contemporanea (with M. Tafuri [Milan: Electa, 1976]). He is presently working on two books, one on the works of recent outstanding architects, and the other a collection of essays on architectural culture in America.

Sima Ingberman

Sima Ingberman was born in West Berlin and is a doctoral candidate in the Department of Art History at the City University of New York. She is currently researching the functional and constructivist tendencies of the Swiss, Dutch, and Soviet "ABC" architects for her dissertation on the periodical ABC: Beitrage Zum Bauen, 1924–1928. In 1978 she assisted Rem Koolhaas and Gerrit Oorthuys with the exhibition "Ivan Leonidov, Russian Visionary Architect, 1902–1958," held at the Institute for Architecture and Urban Studies.

Rafael Moneo

Rafael Moneo was born in Tudela, Spain, in 1937. He graduated in architecture in 1961. After living in Rome as a Fellow of the Spanish Academy he returned to Spain in 1965 to start his own professional practice and to teach at the School of Madrid. In 1971 he obtained a Professorship at the School of Architecture in Barcelona. He taught at the Institute for Architecture and Urban Studies from Fall 1977 to Summer 1978 and during this time lectured at various universities in the United States. He is presently teaching in Barcelona while maintaining his private practice in Madrid.

Joachim Schlandt

Joachim Schlandt studied architecture at the Technical University in Berlin and was a teaching assistant to Professor O. M. Ungers. He became an active member of the S.D.S. group in Berlin from 1968 to 1970, and later on he worked for the government of Hessen.

O. Matthias Ungers

Matthias Ungers was born in Germany in 1926 and graduated from the Technical University at Karlsruhe in 1950. He practiced architecture in Cologne from 1950–1952 and in Berlin from 1962–1969. He was Professor of Architecture at the Technical University of Berlin from 1963–1973, Dean of the Faculty from 1965–1967, and has been Chairman of the Department of Architecture at Cornell University since 1968. He has written extensively, both books and for journals. His published work includes: Utopian Communes in America (co-author) (Cologne: Kiepenheuer & Witsch, 1973); Megastructure in Habitation (1968); The Urban Block (Cologne: Studio Press, 1977); The Urban Villa (Cologne: Studio Press, 1978); and The Urban Garden (Cologne: Studio Press, 1979).

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Georges Teyssot was born in Paris in 1946 and graduated in architecture from the Istituto Universitario di Architettura di Venezia (IUAV) in 1971. After a year of studies at Princeton University, he returned to Venice as an assistant in the Department of the History of Art, IAUUV, under Manfredo Tafuri and, since 1975, as a Professor in the same department. He has carried out several research projects for the Institut d'Etudes de Recherches Architecturales et d'Urbanisme, of which he is a member. From 1974 to 1976 he was the book editor for L'Architecture d'Aujourd'hui. His published work includes articles for Architecture/Movement/Continuité, Casabella, L'Architecture d'Aujourd'hui, and Oppositions. He wrote the introductions to Emil Kaufmann's Three Revolutionary Architects: Boullée, Ledoux, Lequeu (Italian and French editions) and to R. H. Guérand's Les Origines du Logement Social en France (Italian edition).

Anthony Vidler

Anthony Vidler was born in England in 1941. He was educated at the University of Cambridge where he received a degree in architecture. Since 1965 he has taught at Princeton University where he now holds the position of Associate Professor. He is also a Fellow of the Institute for Architecture and Urban Studies.



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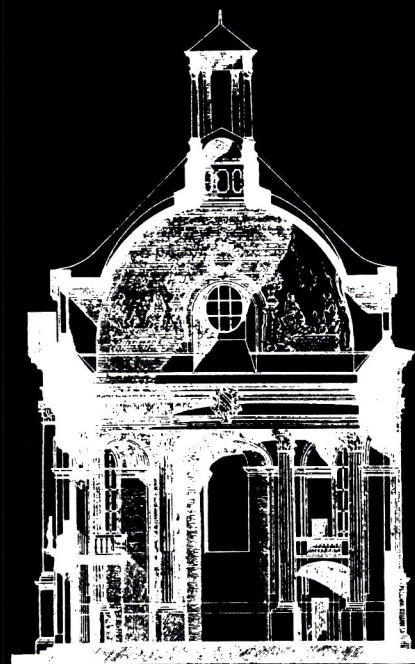
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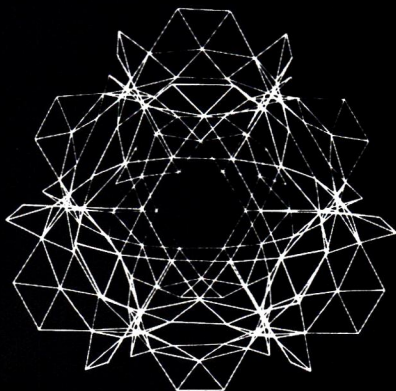
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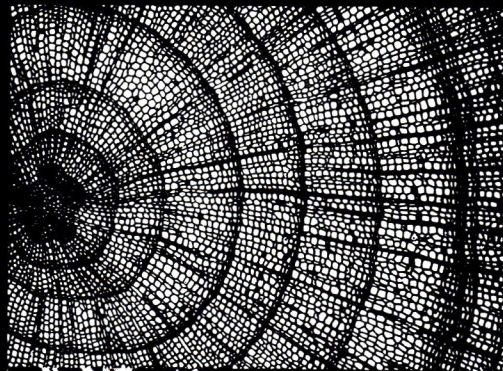
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