OPPOSITIONS

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"Deus ex Machina"/"Machina ex Deo"
Aldo Rossi's Theater of the World

Daniel Libeskind

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Frontispiece, Aldo Rossi, Il Teatro
Veneziano, *1979.*
1 Giuseppe Arcimboldo, The
Librarian.
*2 Teatro del Mondo, Venice. Aldo
Rossi, 1979.*

We are close to waking when we dream that we are dream- 3
ing.
Novalis, Hymns to the Night, *1810*[1]

Maybe we're here only to say: house, bridge, well, gate,
jug, olive tree, window—*at most* pillar, tower. . . . *but to
say them, remember, oh to say them in a way that the
things themselves never dreamed of existing so intensely.*
R. M. Rilke, Duino Elegies: The Ninth Elegy, *1923*[2]

In a world bereft of transcendence the practice of archi-
tecture, like the culture it embodies, is irremediably
caught between the paradoxical alternatives of unreason
and the ardent faith in a salvation through knowledge.
This tendency is marked by the deceptive claims of his-
toricism and technology, the prohibition of questioning,
the belief that from a wretched world a perfect one will
evolve historically.

Contemporary "knowledge" in architecture is character-
ized by the construction of a closed process of meaning:
the severing off of immanent (self-referent) meaning from
a world-transcendent one. On one hand we have the im-
ages of a positivist, collectivist superman about to be
projected into a utopia: a utopia with which architecture
would come to an end. On the other we have visions
purged of promises and emptied of all content: powers we
have to submit to as the price for self-fulfillment charac-
terized by the invention of formulas for self- and world-
salvation. As a result of this dialectical process, much of
architecture today can be understood as a symbolic ex-
pression or an anticipated salvation, in which the power
of technique (be it the technique of deception or that of
making) has replaced the power of cosmos and its gods.

Personal anguish and guilty vanity, not entirely concealed
behind this optimism of technique, are often mere symp-
toms of an imaginary exaltation in which the absence of
conscience and the grace of "infinite" reason fluctuate. To
invert the celebrated dictum of philosophy: meaning is
nowhere, its circumference everywhere; establishing a
tradition amounts to forgetting its origins. The movement
of contradictories which pass into each other—the positive

bursting into emptiness and the negative establishing itself in form—all this is the beginning of System, Reason, Type. It is this ceaseless reversal that upholds all our efforts in architecture, and without which we fear all our projects would crumble into nothingness. In design, seen in this focus, history seems to transgress upon the present and truth becomes only an imaginary structure—the contemporary of all forms which retain significance without loss. Truth in architecture becomes only a memory of all that has been found along the way.

But this skepticism in regard to the present—to time itself—to its contingency, unease and uncertainty, has already made itself felt in a radical form: the refutation of all rationalistic dogmas achieved by critical philosophy. From it we have learned that an "architecture-in-itself"—as an unmediated perception of things-in-themselves—can only be accomplished by a divine mind. The *conditio humana* can rise no higher than the "principles" or pure "concepts of reason," principles which are only capable of setting forth an ideal for which reason can aim. But already Kant made it eminently clear that no such "concepts" can ever give knowledge of an actual or even of a possible reality.

By way of this preface, I would like to introduce the idea of Aldo Rossi's Theater of the World. In particular I would like to interpret his design in the light of a contemporary sensibility. Simultaneously, I will attempt to illustrate what ravages the advent of a certain kind of self-awareness has wrought on the existence of architecture and the life it implies. The intimation of rupture between consciousness and imagination, action and motive, suggested by this peculiar self-awareness already casts a doubt on the very notion which the make-believe world of reason depicts. This fictional system of reason—a secular substitute for Aquinas's faith, which was for him the "substance of things hoped for and the proof of things invisible"—seeks to form a brotherhood of concepts which through ontology and epistemology simulates their independent genesis. The notion of "autonomous architecture" and the types which it invokes follow from this independence—from the moral freedom that is enacted by the individual.

But is this freedom not at best an illusory dream?

However that may be, the very idea of reason in which the realm of ends is plausible depends on the following assumption: the world itself must be a "natural kingdom" ruled by a goal. In other words, there is here a belief in a law which guarantees our moral activities. Still more, this faith means something only on the condition that we share its implied trust in a universal teleology. Yet critical philosophy emphatically denies that the idea of purpose can ever be constitutive of the principles of knowledge and therefore, *de facto* of purposes' belonging to the realm of nature.

Thus we come, with Kant, to see the need for self-determination, the lack of which corresponds to our view of Nature; in this case an alienated and concealed Nature. This self-determination is also a call for normative laws—of ideal types; it resonates with a faint promise of God and future world. But what is paramount for us is the very fact of this autonomy of metaphysical freedom: the human predicament of making choices in a purposeless universe where moral law and being, man and nature, have parted company. The ethics of contemporary architecture, of design as metaphysical freedom, are a reflection of an anguished search. Surrounded by circumstances which are today untenable, they form a labyrinth haunted by a faith no longer endurable. The dream of reason, the concept of the Theater of the World: is it only an idealistic legacy belonging to the "as-if" nature of Kantian morality and hypothetical ethics? Are we here in the midst of muddy waters that are residues of nineteenth-century Romanticism and the nostalgia of its *Weltanschauung?* Is this Pantheon of Memory really a tomb which walls in history as it does the light of Venice in a system that excludes time? Or are we, on the contrary, in the very presence of "modernity"—the concrete "thereness" of our time and its "is"?

We are no longer concerned with landmarks or even with their absence. Neither are we describing the loss of meaning or our own attempted survival vis-á-vis the uncertainty of the present. Past architectures do not survive

here in their "spirit" alone, as stages of some final solution which is both mute and inevitable. Their ticket to "timelessness" is not an admission to an immanence of consciousness which would function as the museum of form. Rather we are witness to an overall endeavor which endures both trust and foolishness and whose "madness" is as much part of a historical legacy as it is of contemporary poetics, understood in its original sense of a making which reveals being itself.

The "autonomous" life of architecture which Rossi aims at is not an imitation of nature—since nature is conceived by him to be a simulacrum of intelligible forms having no independent existence. But neither is his work a mimesis of existence, an outbreak of emotions. The Theater of the World is emblematic of his entire vision because both in its function and in its analogical being it is at once the affirmation of the "boredom" of reproduction and a turning away from the passions involved in a self-determined dialectic. This theater lives off everything which happens immanently, yet it throws its own architectural stability out of kilter by transposing it into a scale of universal symbols and an order of language. There is no more sense in judging the work by its analogical life than the life of analogy by the reality of the work.

Without choosing between individual eccentric sources or the social meaning of symbols, we will turn in a circle of interpretation and conception which is not in fact the vicious circle of orthodox logic nor its progeny: dogmatic design. This inwardly spiraling circularity which delineates forms without recourse to an established history, and is an index of resistance in respect to any fictional future, is not to be equated with meaninglessness or arbitrariness. Verifiability through analysis, the positivism of "interest," the claims of objectivity, are in the Theater of the World put out of play. What is contrasted here to the internal purism of architecture is not a socio-historical determinism of form but another philosophy which this time seeks a way out of the underlying despair associated with the technical-scientific alienation of production. We are reminded in looking at this theater of Kierkegaard's comment that the "best demonstration of the misery of

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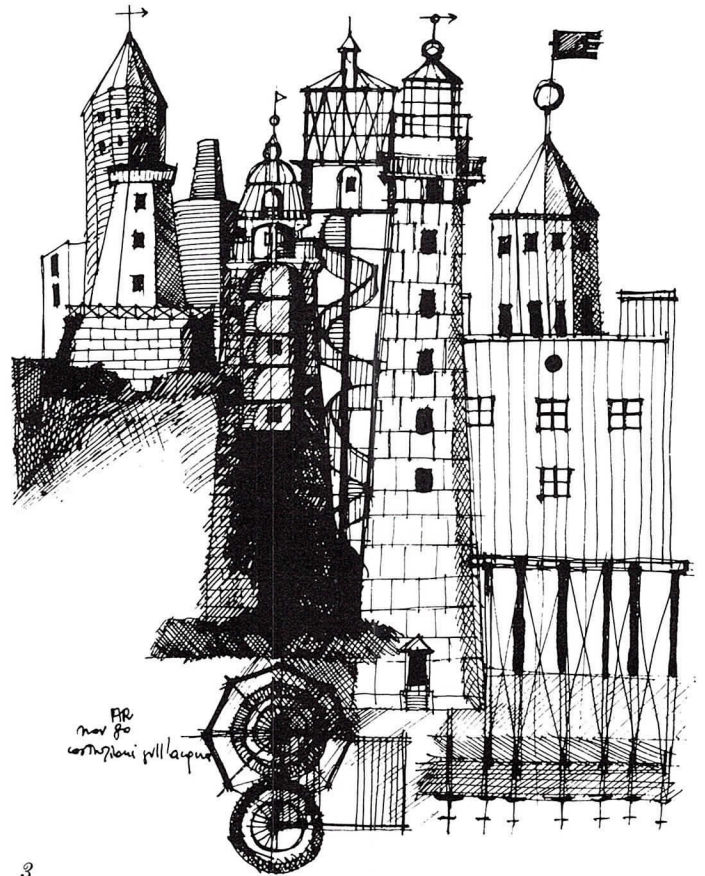
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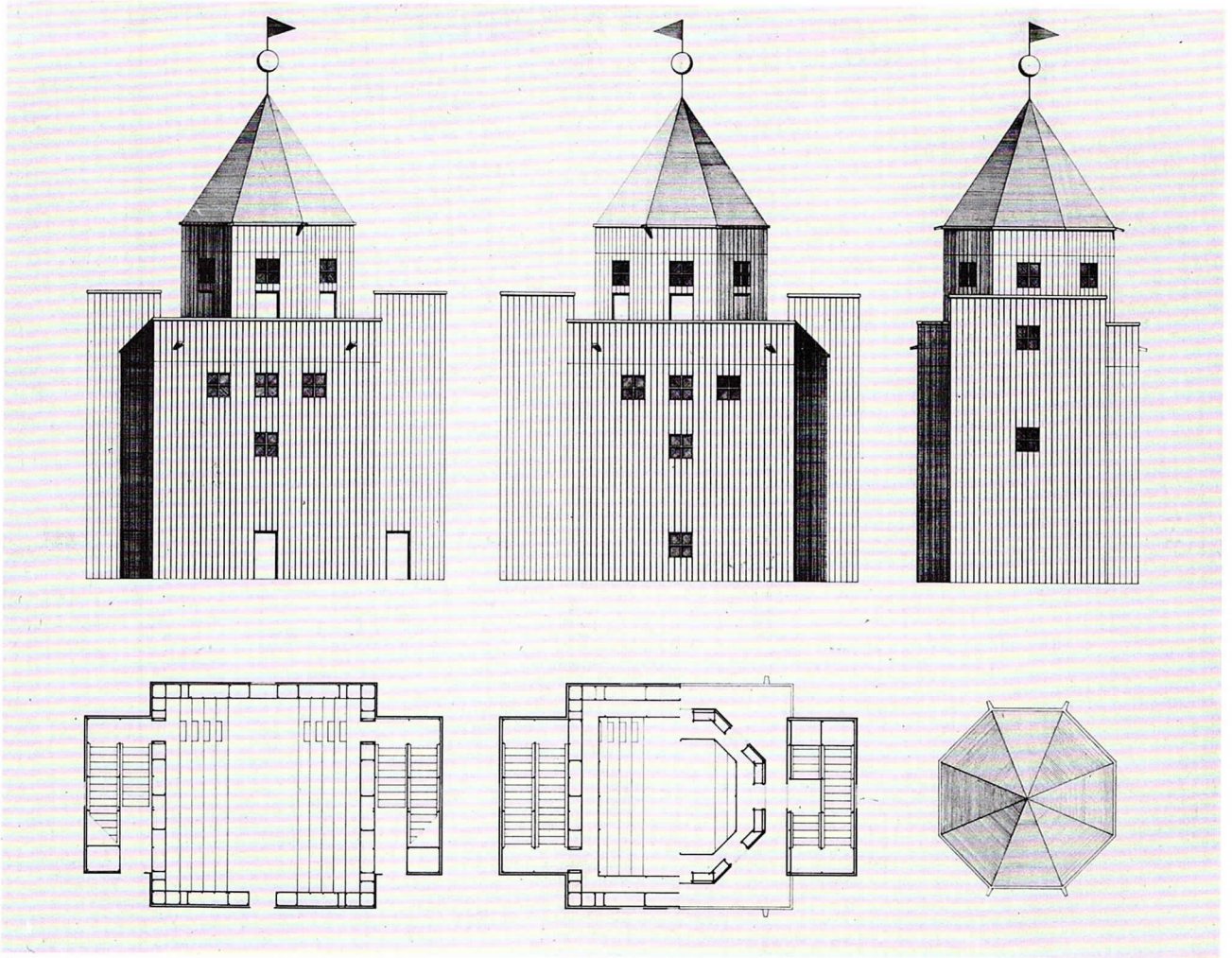
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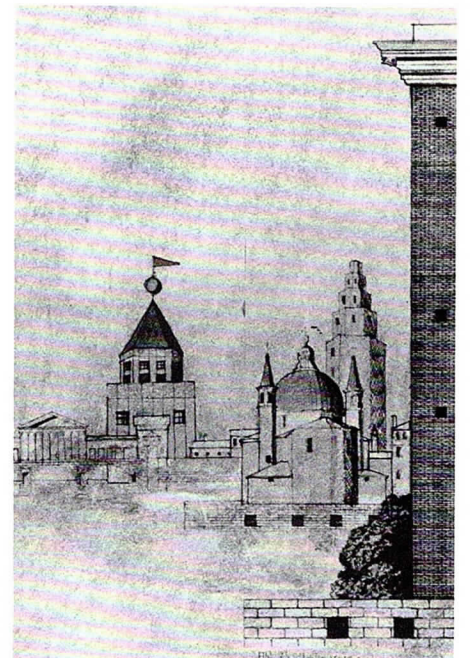
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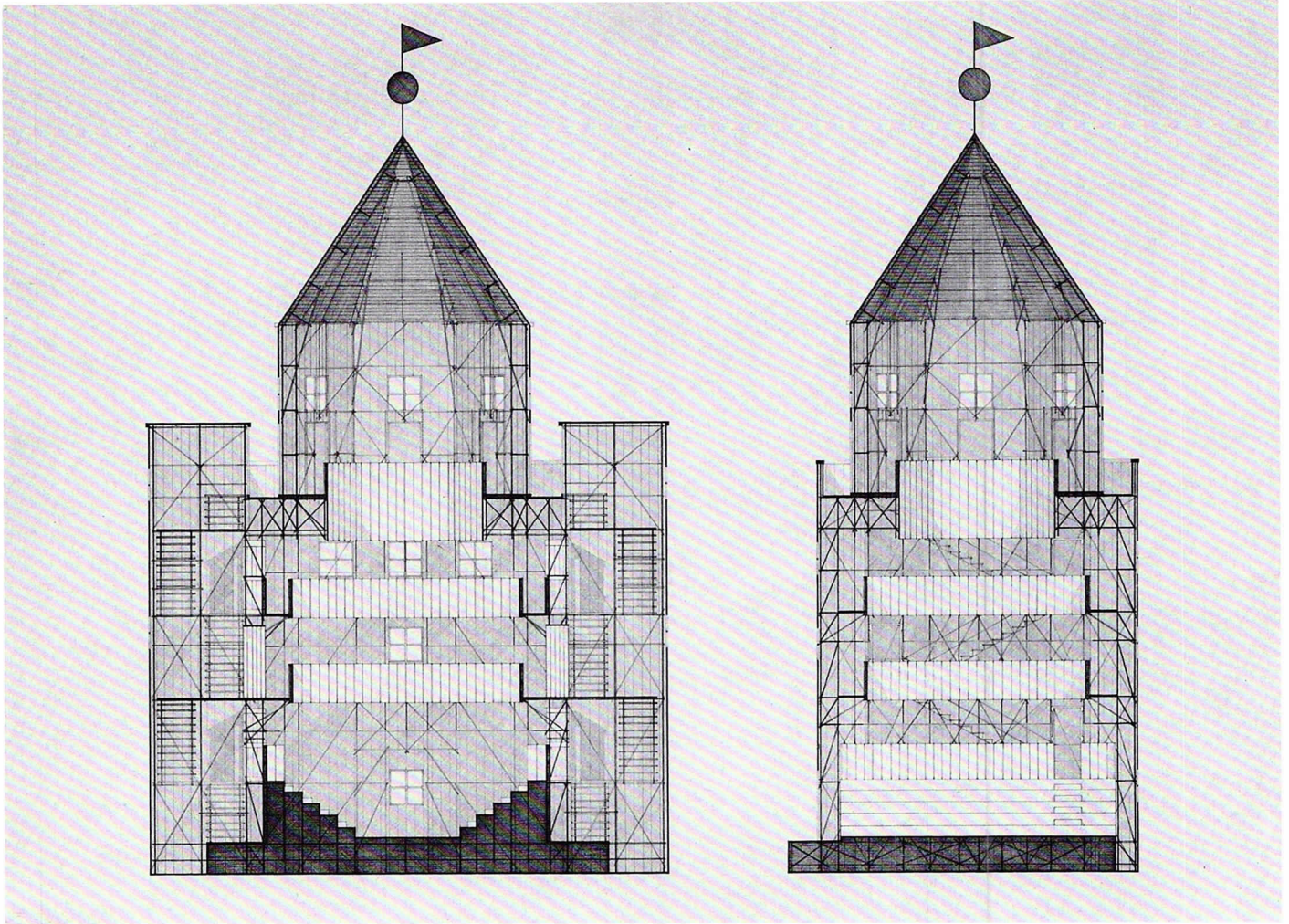
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4 Teatro del Mondo, Venice. Aldo
Rossi, 1980. Elevations, plans,
aerial view.
5 Aldo Rossi, Teatro del Mondo,
1979.
6 Teatro del Mondo, Venice. Aldo
Rossi, 1980. Sections.
7 Aldo Rossi, Teatro del Mondo,
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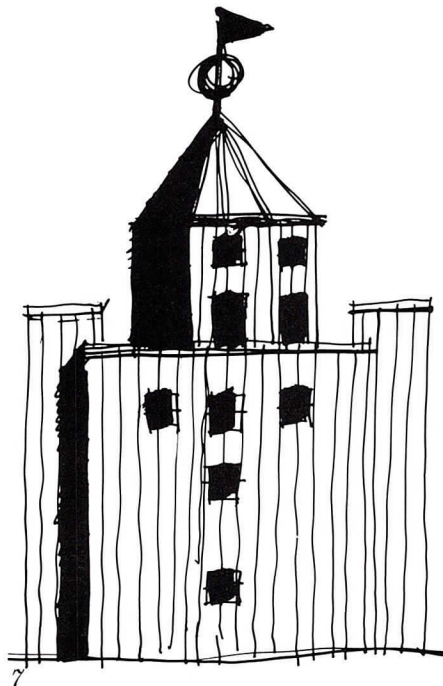
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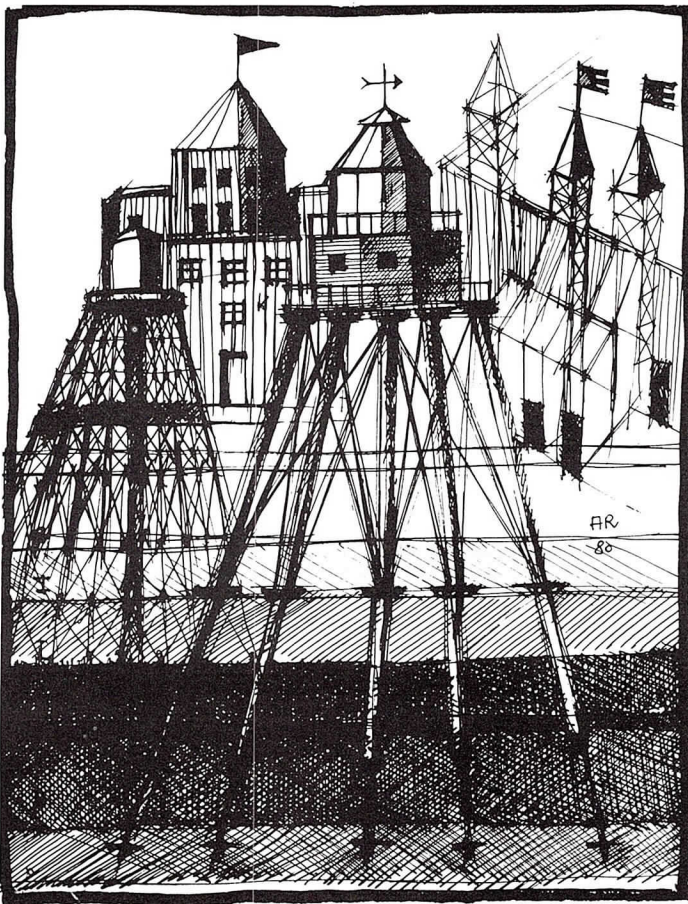
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civilization is given by the contemplation of its marvels." This theater appears in the "prism" of capitalism as an episode in which the specter of the Italian-style theater, long dead for this world, makes an appearance. Without going into the specific complexities of its history, we can say that Rossi's building seems to dissolve with the society which comes to see itself mirrored on its stage and in its edifice. His forms elucidate a bourgeois philosophy which is the product of its own history. However, for Rossi this material history has become a way of conceiving form—that is, an implicit philosophy of architecture.

The "immorality" of the spectacle, already prefigured for us in the "conceptual" panorama, that "consumption of humanity made natural by that glance which transforms it into space"[3] is here doubly subverted, both in relation to the internal organization of space and to the external relation of the theater to the city. Here there is no facade and internally no dress circles, lobbies, chandeliers, boxes which would interpose themselves between us and the event and thus obscure the "performance" of architecture. But the reduction of architecture at no point becomes magnified into a stylized architecture of reduction; the ruins of classical architecture have not here become the architecture of ruins.

We are made aware of a steep vertical section by means of the tower which is its symbol. There is a compression taking place here which almost neutralizes the "others": both people and places. This flattening magnifies all exteriority by thrusting it forward well beyond the detachment of privileges or the prerogatives of history. The theater compresses reality. It has the strength to press its action like a pump, through its own hardness, and thus results in a certain demystification of architecture, a consequence of the projective enlargement of meaning taking place at the level of perception as much as of the mechanics of distillation. A precise and intensely suggestive scene unfolds, which touches us by its sudden disturbing lyricism. The appearance of the theater—a familiar "little" world—gives way in this operation to another reality: the alienated (*unheimlich*) associated with an existential contraction of space.

In their condition of being seen, these "others" loom larger than life or stage. The "leveling" of performance means that in this building there is no alienation or corruption associated with distance: it makes no difference how far we are from San Marco or indeed from the stage. For wherever we are, so is the "other." The "other" accompanies what is the "same" like its shadow, but this operation is no longer conceived dialectically. It seems that the obvious, the close, the "lived-through," has become the sole architectural possibility which is not concealed by any "play": the play of dialectics or the dialectic of play. In other words, the "principles" of design which like a citadel in a barren landscape are meant to guarantee, *a priori*, all of their undertakings, are here carried to a paradoxical point which is "not yet" and "already after" any dealings with space.

On this point the Theater of the World provides us with two complementary "readings." The first reveals it as a kind of architecture by "proxy," which in terms of technique of both making and siting substitutes for the objectivity of space a certain embodiment of places and thus imparts to the whole the aura of strange concreteness associated with a name/place. This reading endows the whole with a reality that links it with our own, seemingly futile, efforts to place it into the context of some memory.

The second interpretation discloses in its traditional handling of signs a familiarity with history, a composition made of countless discrete segments and interconnected fragments which extract memory from its everyday context, in the sense that this word "memory" is used to denote a materialization of essence. This meaning is always a shock in relation to the habit-forming drug of "objective" time.

Both these readings are, I feel, crucial to the understanding of Rossi's work. Yet the intimation that Rossi's architecture has no dealings with space but is rather attempting the reincarnation of places is perhaps the most crucial for the interpretation of his work.

Yet is it not "axiomatic" that from space there can be no further retreat to anything else? Does it not follow that space—brute space—is in this theater the ultimate refuge of an architecture stripped of its former and glorious covering, relegated now to a "souvenir" culture? No indeed. It suffices to look at those blue stripes (which here replace by signs the absent nobilities of pediments) or to see the "crossed-out" windows (which are in their reduction the nefarious symbols of Christian forgetfulness) in order to sense that no manipulation of objects or presumption of innocence can here redeem architecture's history.

Rossi denies the presupposition that the objectivity of functional space is the *conditio sine qua non* of all architecture. Such a denial—accomplished without the abandonment of geometry—appears problematic only when we consider all space as an alteration or prefiguration of one homogeneous and fixed domain. But it is neither necessary nor sufficient to condemn all space to objectivity. It is not necessary, since time becomes exclusive of space only on the condition that all space is objectified in advance. In addition such an *a priori* reification of architecture ignores that primordial space whose abstract form is our carnal presence in the world. Neither is it sufficient to condemn the "spatialization of time" because even if the transformation of time into space is assumed to be impossible, we are not by virtue of that assumption in the midst of authentic time.

Rossi's theater (like the rest of his work) is conceived in the light which reveals *things themselves as special places* and implies that the physical-technical domain is no longer the orienting dimension of his architecture. In other words, the theater is not located in a pre-given space (an *a priori* system), but looms out of a specific inner locale through which space subsequently unfolds itself. The Theater of the World is generated from within and is thus limited, *closed* space: a space produced from inside itself— from its own finitude—and not structured from an external viewpoint which would be its surrogate or its invisible alibi. Thus it would be useless to apply the language of volume and mass, of object and function (terms as recent as the Newtonian physical science which made them popular), to the interpretation of Rossi's work, whose very

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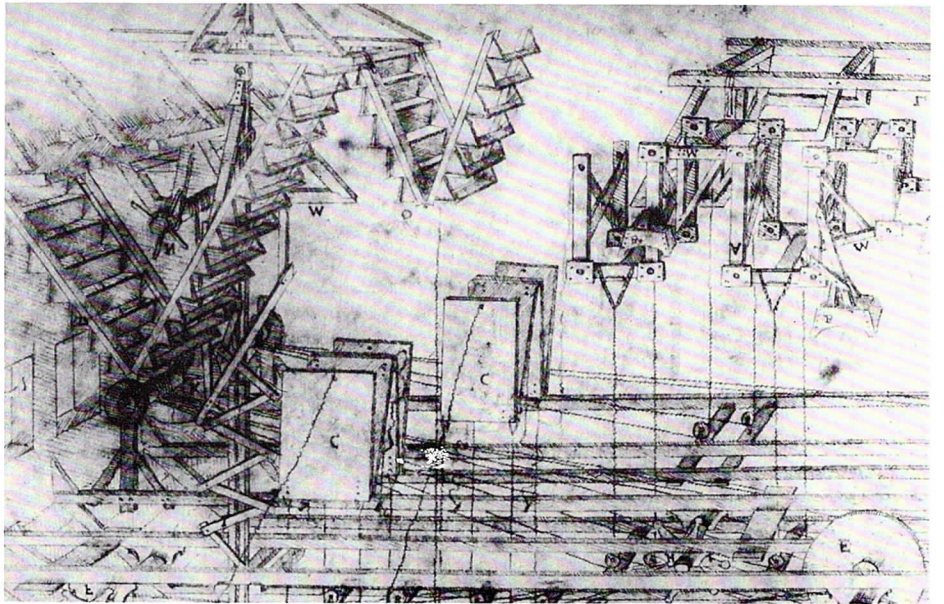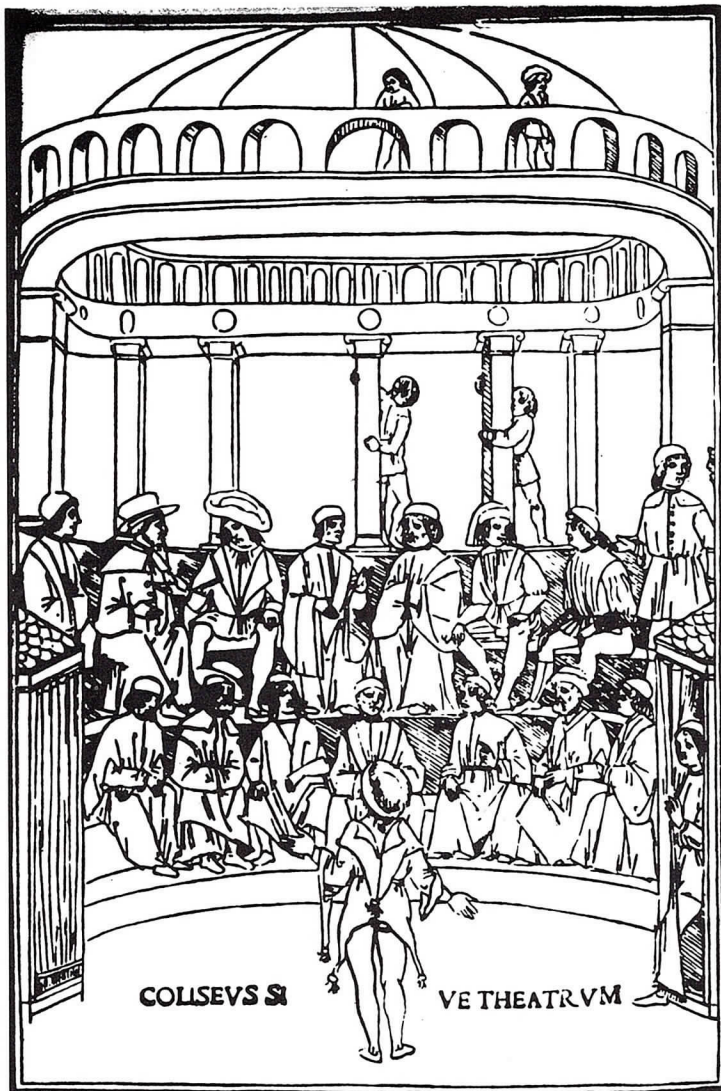
9 Building of the Tower of Babel,
from Supplementum Chronicarum,
Venice, 1490.
10 Rigging at the Teatro Farnese
*with folding platforms and
staircases.*
11 Performance in a Theatre, *from*
Terence, *Venice 1497.*
12 René Magritte, Eloge de la
Dialectique, *1948.*

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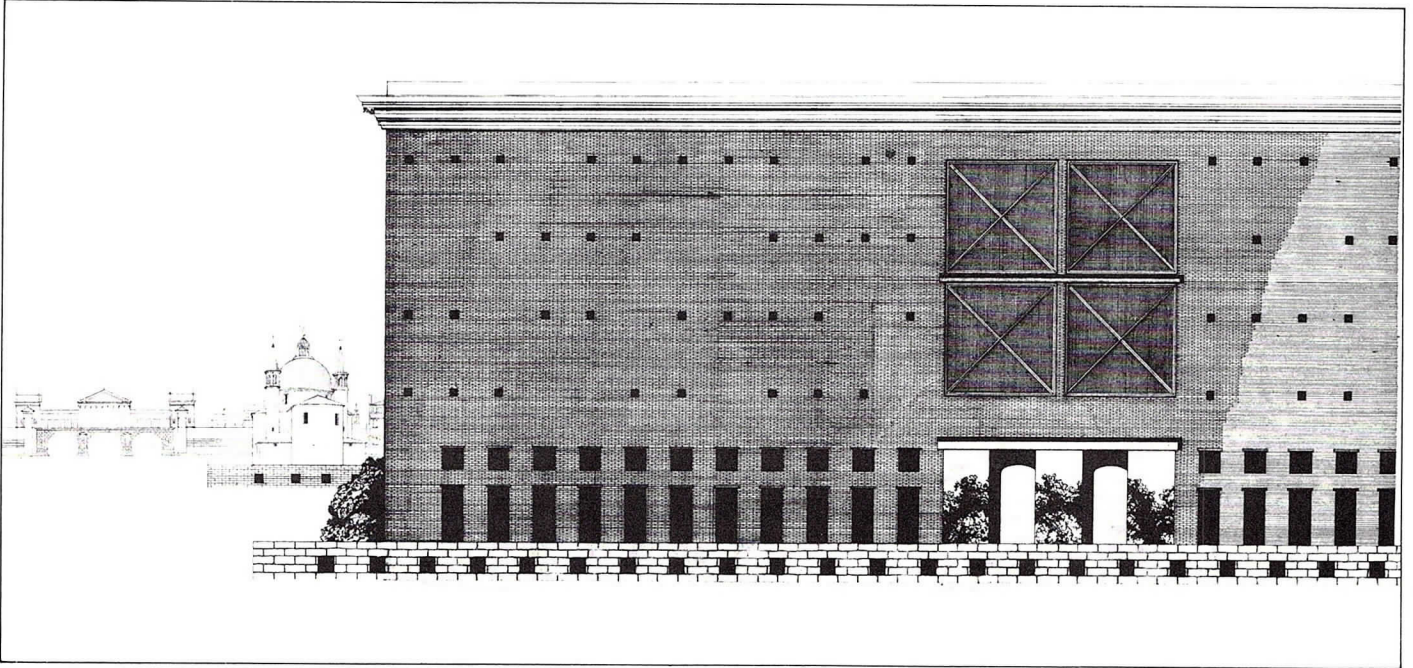
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13 *Aldo Rossi*, Costruzione per il
Concorso Venezia, *1978*.
14 *Johannes Romberch*, Abbey
Memory System, *1533*.

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15 *Athanasius Kircher*, The Animals
Entering Into the Ark, Arca Noë,
1673.
16 *Abraham Bosse (1602–1676).*

17 *Thomas Malton (1726–1801).*
18 *Athanasius Kircher*, The Interior
Organization of Noah's Ark, Arca
Noë, *1673.*
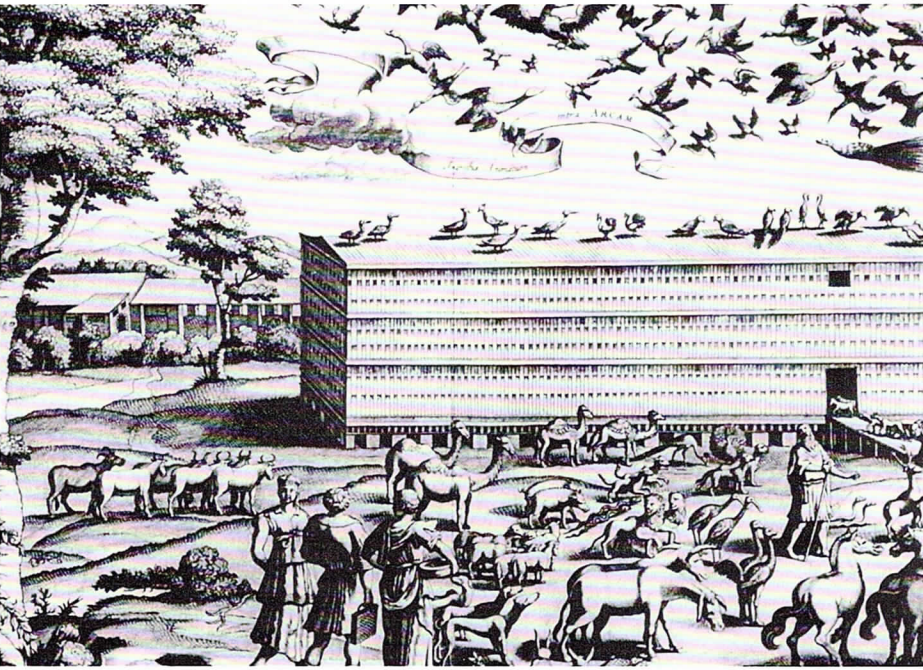
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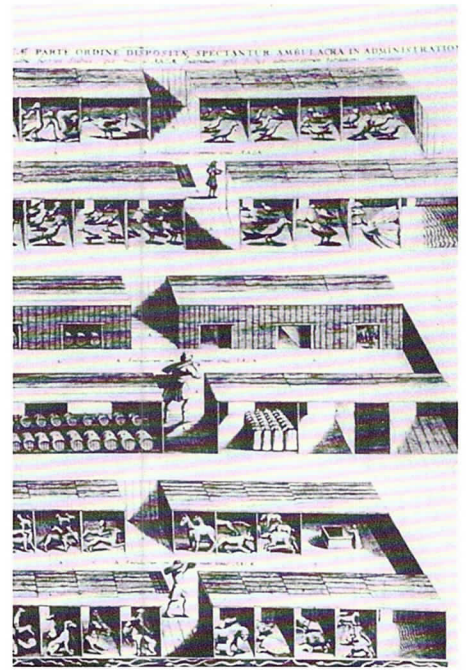
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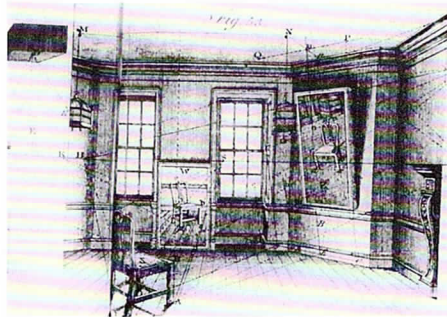
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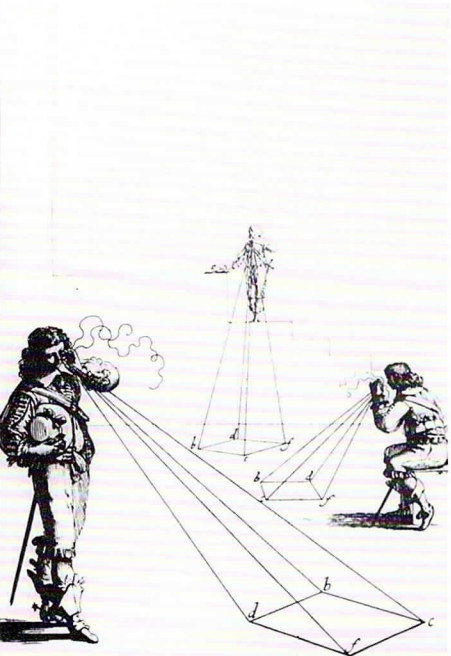
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14 vividness and enigma are tied to the concealment of objectivity.

These terms—object, volume, mass—in externally demarcating spaces, a surface inside from a surface outside, are only as relevant as the techniques which created them. Yet Rossi's theater is based on precedents which are at once more original and more remote. The fundamentally closed space of original representation is here reconstituted in the form of a self-presentation of architecture's being and its visibility, an auto-presentation of meaning—an auto-nomy.

Even the process by which this apparition is made visible reminds us that space itself *is* an event tied to time and manifesting what has been achieved in advance on the level of pre-spatial meaning. Does it not remind us of the "ship of fools"? Is it not towed like some festive effrontery, impelling the public to deck itself out with a greater nakedness—as if it were celebrating the demise of its former illusion or ideal? For what is astonishing here is the "concrete abstraction"—the materialization of the imaginary—invoked as a liturgy of amazement and thrown as an obstacle in the path of "common sense" and "reasonable" design.

But upon what "picture" of reality or schema of order can this Theater of the World, like its ancestor, be projected in order to reverberate with themes already prepared for it by a latent and remote faith, the secret longing for place? Is it even legitimate to think that today particular forms of architecture can still be used to symbolize an accepted meaning within a "language of architecture"? Can they still be tools of revelation or means of communicating shared convictions? Surely architecture has long ceased to utilize the presumed correspondence between symbol and human body whose anatomical parts have in the past served for such an analogy. In any case the world has long ceased to be conceived as a cosmos—an orderly structure where every being finds its rightful place; and architecture has lost its anthropomorphic concern.

While Rossi's theater makes no claim to producing such an identity between meaning and symbolic form, or between macrocosm and microcosm, it does invest an existing architectural (theatrical) type with certain indefinite "cosmic" implications. Unlike its famous predecessor, Giulio Camillo's "Theatrum Mundi," his Theater of the World suggests that this can be achieved even today, but only on the condition of allowing common spectators to participate tautologically in such a representation. The space of representation and the experience of participation have flattened themselves so that they can no longer be distinguished. The thing has become meaningful only because "meaning" has come to reside in things, like some new dispensation of "manna." We have here an architecture once again concerned with the potency of things which possess a life of their own despite the gradual loss that has befallen them in modern times. Perhaps today anything can become, once again, divine: one has only to decide that it is.

We must remember that the traditional "Theatrum Mundi" organized an encyclopedic ritual for the benefit of a privileged viewer, one who occupied the center of the stage, and the seats of a non-existent audience were filled by images of his reflected glory. However, the reductive nature of Rossi's theater should not make us overlook the fact that it is a successor to this grand magical tradition of "reflected" meaning which has resulted in so many vain follies and has produced so many victims in the process. Like Camillo's theater, it is much more than a system of speculative thought. It is a *machina* or apparatus whose very purpose hinges on a secret message—one capable of finding its place in the heart and in the unprotesting mind of the spectator. Its ultimate goal is not merely to "expose" reality but to reveal a new one through a different schema. This "schema" hinges on the acceptance of the tautological: space itself has become redundant. In this manner the "theater" hopes to redirect man's very will by showing him an image capable of remaking memory itself, a memory in which time ceases to be the colorless medium of events and becomes inseparable from their content. Thus Rossi's theater joins the tradition of architecture and magic, perhaps even of the Jesuits' Exercises.

19 Aldo Rossi, Costruzione Marine,
1980.

costruzioni marine AlRossi 80

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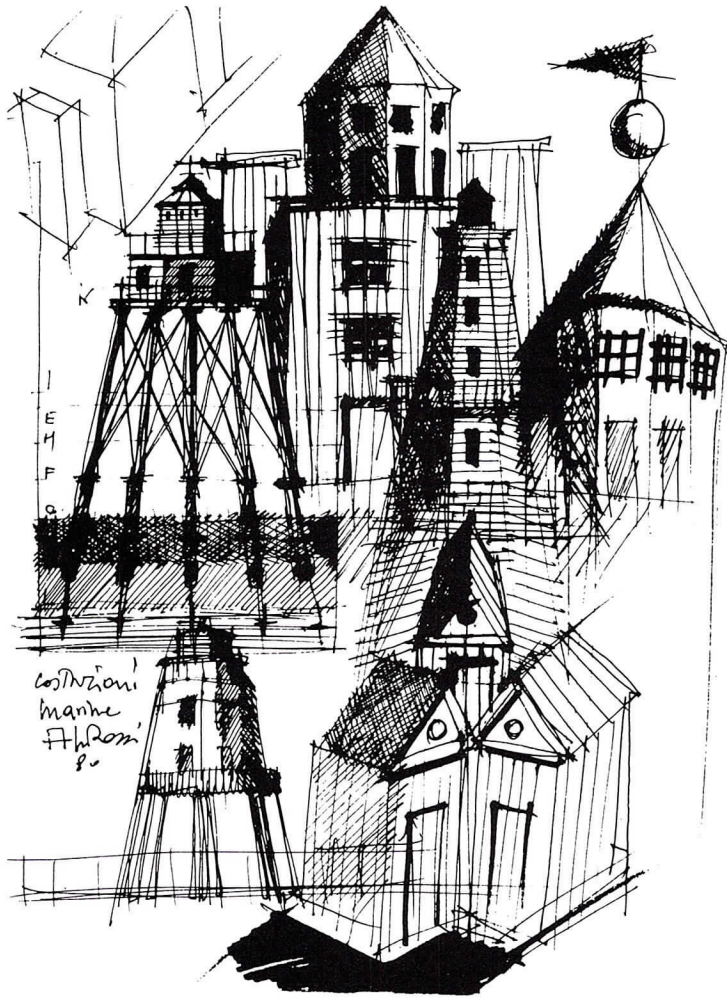
This theater reveals to us, collectively, what in the past 15 was only hinted to a singular witness, namely, that the corpus of meaning is caught in-between the object and perception; that architecture manifests itself in the stillness of a moment when its reflection (speculation) in the mirror of interiority gives place to a void between the real and the unreal. We are asked by this structure to prepare a "view," which by the effort of our own understanding would link the tourist's detached glance with those points we have actually inhabited. Required to bring together a simulacrum of continuity between these divergent experiences, we become the cartographers of an imaginary topography at once functionally continuous yet unfamiliar.

While Theaters of the World have often been actually built—and this one is eminently real—they are in fact nothing more than metaphors promising a complete yet literary treatment of some aspect of reality. Made of wood and floating on water, this instrument of language—a functional dream—becomes a veritable demon of analogy: an architecture rooted in history and correspondences that are as unexpected as they are automatic. Ranging in spectrum from the figures of classical mythology to the Christian associations we mentioned before between signs and symbols, between water and purification, between event and its mythology, these references resonate with possibilities which propel this ark past its own literary richness.

While in Camillo's theater the benches were left empty for displays of various sorts, the benches in Rossi's theater—when occupied by the audience—become a primary locus of symbolization. Presumably, by harnessing the public to an analogical presentation of this kind, it seeks to "suspend" the theater as an institution of privilege. In this context, the significance of its reductive power derives from the idea of a community no longer requiring the mediation and support of privileged institutions: a community of autonomous individuals. The extinction of magnificence and hierarchy is the *idée fixe* of modernity in search of a final realm of freedom. This reductive yet complex symbolism of architecture reaches for fulfillment, through its own immanent ontology, symbols deriving

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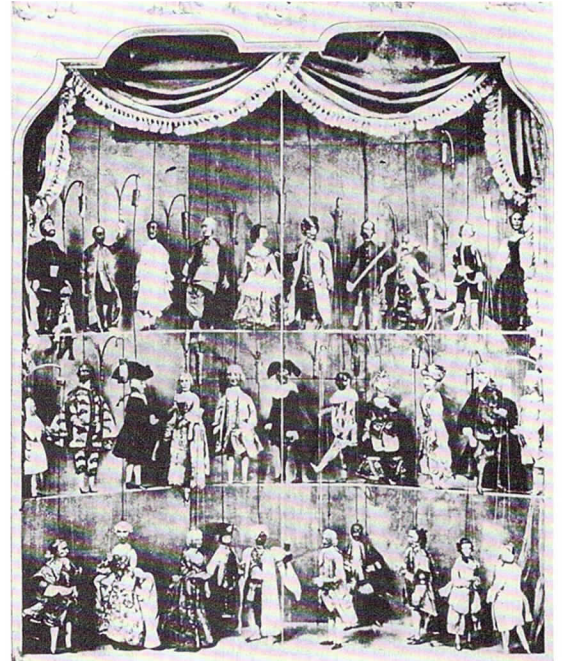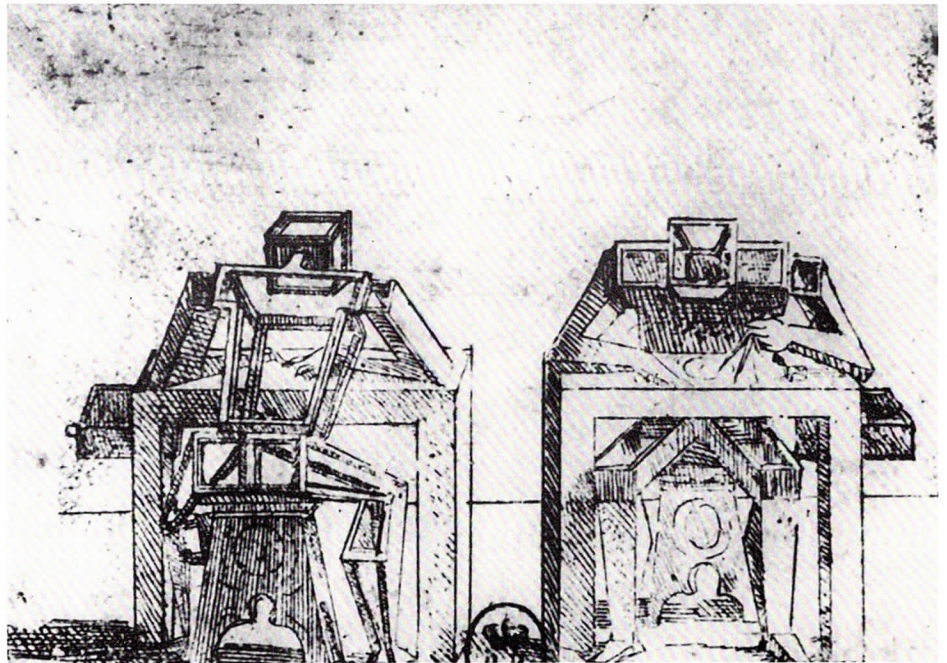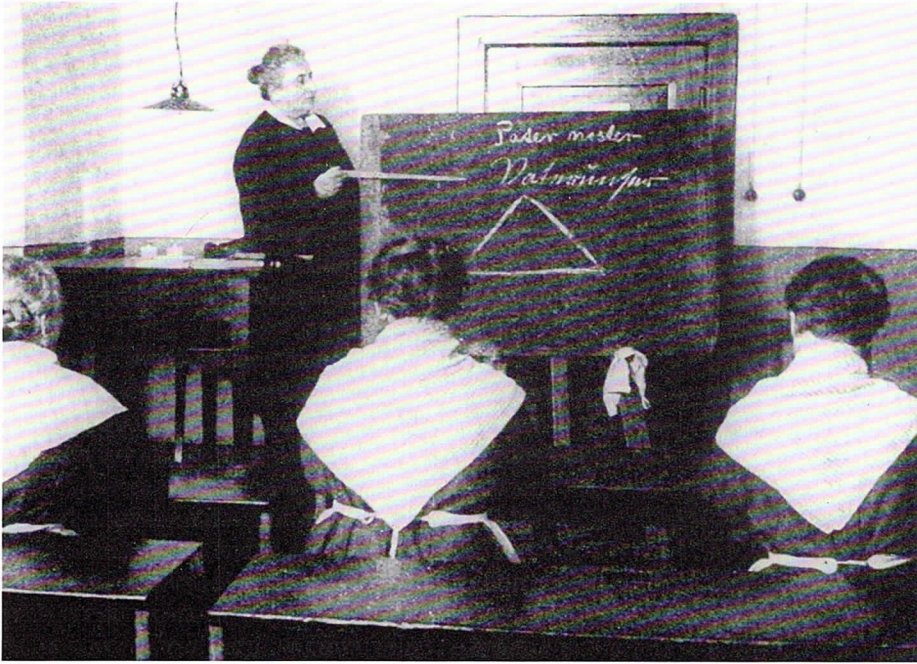
20 *From a performance by Jerzy Grotowski.*
21 *Marionettes in the Civic Museum, Venice.*
22 *Bracelli gravure.*

23 *Illustration of tautology. From Kurt Tucholsky,* Deutschland, Deutschland Über Alles.
24, 25 *Stendhal, drawings from* The Life of Henri Brulard.
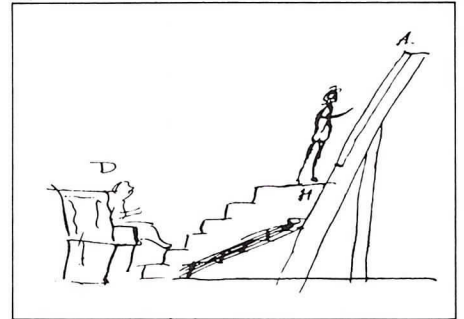
from the Christian idea of perfection and more recent speculation which would bring perfection into the realm of human action. The variants of retrospective anticipation, of reversal, are here the controlling devices of an architecture tempted by the expression of "this-worldly" (formal) certainty, which is only the subordination of a fundamental doubt that seems to be a general human problem.

Within this framework a structure of the world appears; we perceive an intelligible configuration of meaningful forms—signs that beckon us. This time, however, we are not directed to look for planetary circles or cabalistic signs, for the regular and stratified order belonging to an age long gone by. Rather we are to see, mirrored in all its bareness, the absent distance whose traditional presence provided a possibility of mediating experience and its representation. But here there is no openness that would allow the transcendent to become manifest. This "lack" of space, this suffocating absence which permits us to read this building as neither a forgotten type nor a new construction, is felt most strongly perhaps in the hovering volumes: the whole, inflated and precarious, gliding like an apparition of a spaceless world.

Unlike the classical Theater of Memory—which displayed coffers, boxes, and explanatory papers hanging from its walls, in the form of a mnemonic system—in Rossi's "presentation" drama unfolds itself in the unremembered and unrecollected mirroring of tautologies. If everything "other" (i.e., that which is supposedly different) is really the "same," then the difference between Santa Maria della Salute (its liturgy) and the Theater (its performance) is only a masquerade of surfaces external to the essence of architecture. Everything has *become* a place, does not merely belong to a place. Every appearance has become substance. For we are here obliged to accept a location that is not a part of some preconceived space (not even of Venice) but which is disclosed in a movement which "assembles" places. Just as Venice unfolds itself by the gathering of diverse places and by obliterating that homogeneity where no point can be distinguished from any other possible point, so this place too by a paradoxical twist now requires a sensibility that can distinguish differences even amidst "sameness."

Thus the Theater of the World belongs to Venice and yet it does not: it mirrors its surroundings yet denies them. The architecture of this theater glows with that enchanted inwardness which manages to offset the regularity of the whole by a systematic lack of variation. Yet one can also detect in this building a mathematical-geometric trust, a "purposiveness without purpose," which shows an internal coherence without any factual meaning. It would then seem that without laying any claim to "space" (whether transcendent or phenomenal), this architect has withdrawn from all ontological concerns. In this light the building appears as a "pattern," a structure which without describing anything at all is merely a "blank form" awaiting its future completion. It is, then, nothing factual in the sense of figurative reality: only an abstraction waiting to be sublimated.

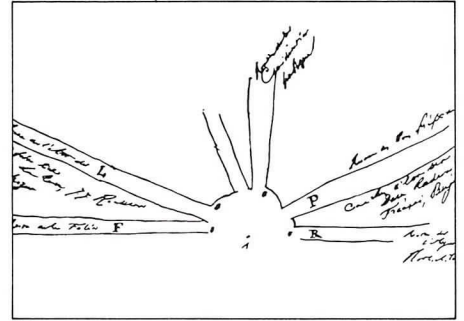These different "readings" suggest a preservation of a realm in architecture which still protects its authentic possibilities—even while revealing places which the gods have deserted: places which testify to the *deprivation of space*. Perhaps the "strangeness" of this architecture is that its forms prepare for something else by building emptiness. This "constructivism of emptiness" is perhaps the dominating theme which characterizes all of Rossi's work. Yet in this specific instance the density of the history of Venice and of its artifacts serves as an emptiness far more concrete than those alienated localities we have all experienced. It is the "metaphysical mass" of Venice which forms the Archimedean point: for here in Venice there is *no more space*. Everything—from its oriental architecture to the vendors of postcards and commercial knicknacks—has congealed into an occupation. Is there an open site anywhere?

In this sense Venice is a paradigm of the lust for objects and for space. It incarnates that almost demented obsession for demarcation and recognition that the desire for luxury promotes. It is an illustration of the preoccupation with things as things—with all that can be seen and

touched. The "inner" and the "outer," the *elevation* and the *downfall* here as nowhere else stand to lose most by their reversibility. This city—the "jewel of Europe"—is perhaps the ultimate achievement of concentration, of compaction and reconstitution. In this sense it increasingly challenges us to bring space under human control to its very limit. Does such a city not fill us with an irrevocable anxiety? Is it not a prefiguration of a man-made Nature where the city descends into its own subconscious, forming a vast inarticulate dimension which is once again outside of history? In this way the end of Venice—the crumbling of the precious stone secreted by technology and the will to power—finds its symbolic embodiment in the Theater of the World.

This theater has become a hieroglyph, a cipher of the advent of a new perception in architecture: *emptiness belongs to places.* There is nothing nihilistic about this vision. Likewise there is here no hint of occult forces or dark ideologies, nor of the rhetoric seeking to submerge architecture in a polemic of "post-modernism." The Theater of the World discloses a meaning of architecture that is not determined by manipulating history or making rooms; it becomes responsible for guarding something other than this sphere. It is concerned with a dimension of reality untouched by objects themselves. The existential presence which dislodges emptiness is evoked by this structure, with a peculiar, material "thereness." The theater provides us with an insight into the fragile connection that subsists between space and architecture, between a "body" and its "spirit." Through a sort of clairvoyance we are made to feel that architecture is experienced in all its profundity when it is only tenuously anchored to space; that in this moment it approaches the mystery of music freed from instrumental concerns or the enigma of speaking itself.

This sequence of forms, as well as of thoughts, links up the technical, metaphysical, one might even say theological implications, into a nexus which obliterates the transcendental "eternities" associated with the "beyonds" of yesteryear. In their place, it substitutes a performance, one which is no longer a mnemotechnic ritual but its re-

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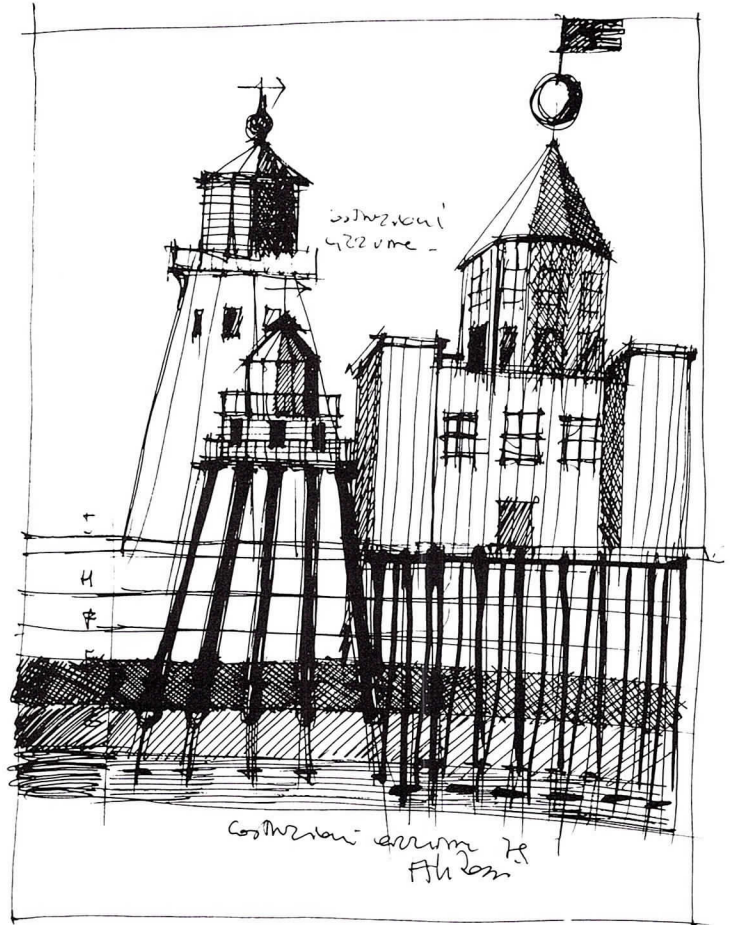
verse: a technique of forgetfulness presented for our assimilation. Yet this architecture is no phantom phenomenon. Its utility lies in a subtly attempted bracketing or neutralization of conventional architectonic methods and especially of classical forms. In order to bring about a primordial experience of place, now so removed from the frontiers of consciousness, Rossi contracts the analogical power of experience by multiplying referentiality beyond the power of recall. This building, so different from its neighbors, so alike, so rich, and still so hollow, is a chimera. We thus see it shifting from some Quattrocento vision of our anonymity through the metaphysical terrorism of Artaud to the meticulous and sublime intellectualism of Roussel—and still farther to the things we cannot remember, things which are imagined without ever having been experienced. For today reality has far outstripped what we can imagine it to be.

Far removed from the classical prosthetic of memory and the anthropocentrism it embodied, Rossi's work reverses the tradition of allegory and the reliance on the spiritual and internal which together with modern machinery have transformed "self-activating" things into mere resources that are in themselves dead. In the classical Theatrum Mundi the spectator-orator walked through a familiar building placing or removing salient images from their "seats" within the configuration of the building (columns, gates, porticos, etc.), in this way retracing—in an imaginative anticipation of real experience—an equally "memorable" narrative. Here, however, the participant halts before an elusive image in order to forget what he has never managed to assimilate. The memory of things, implicitly giving back to us what was entrusted to places on our behalf, has become a "trust fund" returning to places what no longer justly belongs to us. Are not the coding systems of iconography, semiological devices, morphological games, architectural orders, manuals of types—like the Ciceronian *ars memorativa* itself—symptoms of decay? Are these not only delaying tactics, strategies seeking to forestall the inevitable collapse of objective space?

The radically changed milieu of "modern architecture" is inextricably tied to the fate of abstraction. So different from its predecessors, it resonates with the premonition of a tautologous being: *an escape from things by virtue of going deeper into them*. This condition encloses Rossi's work with a mysterious and haunting clarity. These volumes, elusive as they are intriguing, will never really form a context for orientation. Even the pinnacle, its rigid flag a messenger of some deflated and long-forgotten Boreus, is only a shadow of spatiality that now refuses to become the locus of human concerns. Rossi's concern with "autonomous architecture" is closely related to the acts of erasure and of concealment, of release and clearing. In replacing the rambling sojourn through the colonnades and spaces of contemplation by a kind of zodiac of concrete redundancy, a pleonasm of the visible, he comes close to a dangerous, yet intensely hopeful zone which is well beyond the aesthete's elegance of architecture—a remote realm that rings only vaguely of promise and of a humanist's longing. Rossi's profound work, his Theater of the World, has dared to probe the fundamental question: whether the "no longer" of modern architecture actually *belongs* to its very own "not yet."

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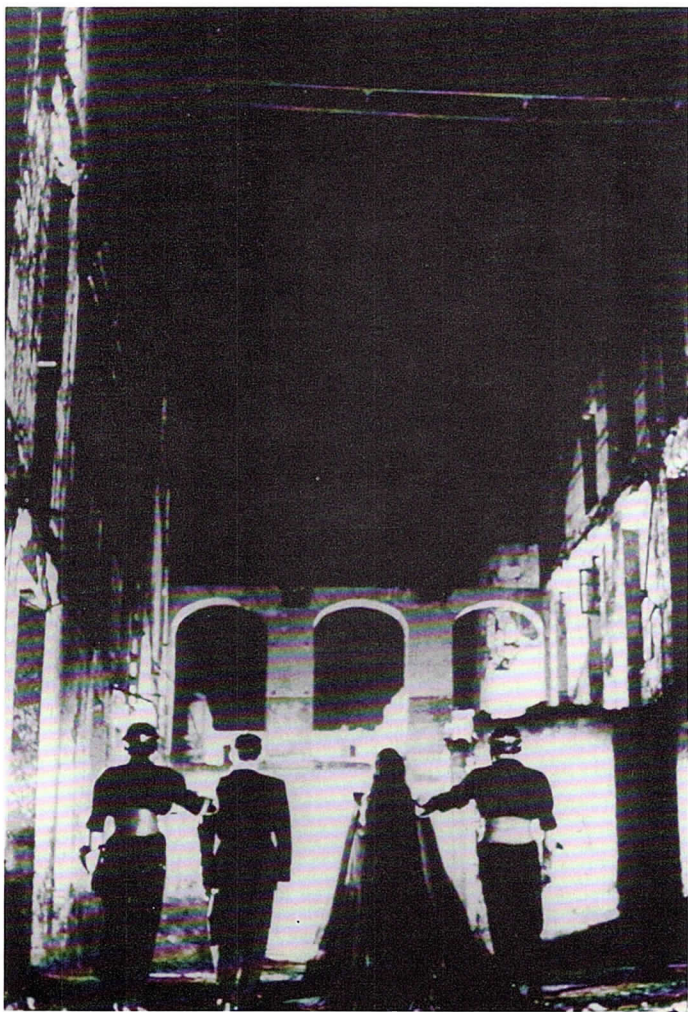
27 *The City of Death. From Jean Cocteau's* Orphée.
28 *The City of Light. From Jean-Luc Godard's* Alphaville.

Appendix

22   *We shall ask future city planners to provide for a cemetery within the confines of the city, where the dead will continue to be buried, or to plan for a disturbing columbarium, a structure whose style will be simple yet impressive, and close beside it, in its shadow so to speak, or among the very graves, the theatre will be built. Do you see what I am driving at? The theatre will be built as close as possible to, actually in the guardian shadow of the place where the dead are buried, or the solitary monument which digests them.*

Where shall we go from here? Towards what form? The theatrical site, containing the stage and the auditorium?

The site. I told an Italian who wanted to build a theatre whose elements would be movable and whose architecture flexible, depending on what play was being performed—even before he had finished his sentence I said that the architecture of the theatre still remains to be discovered but that it must be stationary, immobilized, so that it can be held responsible: it shall be judged by its shape. It's too easy to put one's trust in the movable. Let anyone who wants to work towards the perishable, but only after the irreversible act by which we shall be judged or, if you prefer, the fixed act which judges itself has been accomplished.

Because I am not blessed with spiritual powers—assuming they exist—I do not require that the theatrical site be chosen, after an attempt at meditation, by a man or a community capable of such an effort; and yet the fact remains that the architect must indeed discover the sense of the theatre in the world and, once having understood it, go about his work with an almost priestly and smiling solemnity. If necessary, let him be supported and protected during his undertaking by a group of men who are capable of real daring in the effort of meditation, that is of laughing inwardly.

In today's cities, the only place—unfortunately still on the outskirts—where a theatre could be built is in the cemetery. The choice will be useful for both cemetery and theatre alike. The architect of the theatre will be unable to bear the inane construction wherein families bury their dead.

Raze the chapels. Perhaps keep a few ruins: a piece of a column, a pediment, the wing of an angel, a broken urn, to suggest that a vengeful indignation has wrought this initial drama so that the vegetation, perhaps some handy grass as well, born from all of the rotting bodies, can level the field of the dead. If a site is reserved for the theatre, the public, when it arrives and leaves, ought to take paths which skirt the graves. Imagine for a moment what it would be like for the audience to leave after a performance of Mozart's Don Giovanni, *making its way amongst the dead lying in the earth, before returning to the profane world. Neither the conversations nor the silence would be the same as one generally experiences after a performance at some Parisian theatre.*

Death would be both closer and lighter, the theatre more solemn. There are other reasons. They are more subtle. It is up to you to discover them within yourselves without defining or naming them.

The monumental theatre—whose style remains yet to be discovered—ought to be as important as the Law Courts, as the monument to the war dead, the cathedral, the Houses of Parliament, the military academies, the seat of government, the clandestine place where black market goods and drugs are bought and sold, as the Observatory—and its function is to be all these things at once, but in a certain way: in a cemetery, or close by a crematorium oven, with its stiff, oblique, and phallic chimney.

To search for the origins of the theatre in History, and the origin of History in time, is stupid, a waste of time. What would we lose if we were to lose the theatre?

Jean Genet, "The Strange Word Urb . . ." *from* "Reflections on the Theater" *and Other Writings, trans. Richard Seaver (London: Faber & Faber, 1972).*

Notes

1. Novalis, "*Hymns to the Night*" *and Other Selected Writings*,
trans. Charles E. Passage (Indianapolis: Bobst-Merrill, 1960).
2. R. M. Rilke, "Duino Elegies: The Ninth Elegy," in *Duino*
Elegies and the Sonnets to Orpheus, trans. A. Poulin, Jr. (Bos-
ton: Houghton Mifflin, 1977).
3. Roland Barthes, *The Eiffel Tower and Other Mythologies*,
trans. Richard Howard (New York: Hill & Wang, 1979).

24

Avant-Garde and Continuity

Giorgio Grassi
Translation by Stephen Sartarelli

This discussion will be largely focussed about two basic issues: 1) that avant-garde architecture itself is of minor importance. It is always marginal to any decisive change—despite the fact that its importance has been exaggerated to an absurd degree by militant criticism, and even though it has been taken seriously by many, both in the past and today; 2) that the avant-garde position in architecture contradicts the very definition of architecture; that is to say, it is contrary to architecture's most specific characteristics; factors which cannot be overlooked in the projection of architecture, not even when the contradiction between architecture and the city, or between humanity and the reality of its product, is as much in evidence as it is today.

And since we are talking about the avant-garde in architecture, we should also mention in passing something that is often forgotten. We should remember that we are talking about *works*, about concrete matters—not about ideas, fantastic images, or polemical issues. The Schröder house and the Villa Savoye are there to be seen; they are not just manifestos or ideal models—they are "houses," designed to be used; they are connected to everyday life. And even that which is not yet built, but is still only in the planning stage, must be imagined in terms of its completion, for this is really architecture's only raison d'être. But the first thing we must do is rediscover an acceptable frame of reference.

In referring to the "architects of the revolution," I point to the various experiments of the Modern Movement's canonical vanguard, as well as the greater part of contemporary experimentalism, which share in common the singular aim of searching for "new form."

There is a requirement, as shocking as it is terrifying, that Michelangelo prescribed for sculpture, which goes more or less like this: "*A beautiful statue must be able to roll down from the top of a mountain, without losing anything of importance.*" This is a very powerful image, worthy of Michelangelo, charged with theoretical implications, intended to create uproar—and a convincing edict as well, because it tends to coincide with the law of nature.

To my mind this law establishes above all that in great works (in sculpture but especially in architecture) the "monument" comes first. In my opinion, the most general and comprehensive conception of a work is always aimed first of all at the reaffirmation of the specific nature of the particular type of representation, be it sculpture or architecture. Of primary importance is the "monument," that is, the law of architecture.

All the rest is really secondary; that is, it has no bearing as such on the conception. It becomes irrelevant with respect to the "work." For this reason all the rest may easily become the object of the most obstinate and fanatical experimentation, or of the most sophisticated critical revelation. It may even have a price, as it does. It may be exhibited in galleries, discussed in seminars, offered for the wonderment of a public—a public which has however been shrewdly turned away from the real object of its perception and judgment.

Taking the whole gamut of forms proposed by the vanguards of the Modern Movement, I believe that if we try to imagine the exclusion of this "rest" (that is, of all that which crumbles and disintegrates in the fall prescribed by Michelangelo), there remains indeed little, if anything at all, of all the various proposals made with regard to formal transformation and innovation.

Of course there remains the excitement, the desire for change, the intensity of experimentation, and so on, the concern for lifestyle, the conflict of polemics, factions, or "tendencies"; but all of this exists only in the pages of books.

What I'm trying to say is that, if perchance one wants to build a house, one should certainly not look for the exemplar among those strange objects which awaken our sense of wonder! On the contrary one should be very wary of them.

If we consider even for a moment the real changes—the growth and transformation of cities, of their purposes, and of their forms, the modification of the landscape,

26 etc.—we readily realize that all of this always comes about *despite* the contributions of the so-called avant-gardes, and not because of them.

Here, by way of example, I should like to oppose the transformations within the Neoclassical city to the designs of the "architects of the revolution," who are all too often invoked in support of the experimentalism of modern architectures. I should like to go on to oppose the Hamburg of Fritz Schumacher, or the Frankfurt or Ernst May, or even the Viennese housing blocks carried out under the socialist administration of the twenties, to the entire avant-garde of the Modern Movement, to all of European expressionism, to all the "isms" and their derivations.

In other words, the real transformations brought about by architecture have always begun with the specific practical and material conditions of the city and the structure of its elements—and always as a denial of any *"leaps of logic"* that may be advanced. And nowhere is it said that architecture, for all this, has stayed on the right path! On the contrary.

I ask myself what relation is there, for example, between the *architecture parlante* of a Ledoux and the transformations of the city that succeeded it? I ask myself what relation is there between these "new forms" and the Neoclassical city—which, apart from its presumption of political restoration, erected, in effect, a "new city"; a revolutionary city made up of collective elements, a city capable of transforming its building fabric all at once? We need to bear in mind the instance of the Restoration and the new uses then made of Church property. I ask myself what relation there is between these "new forms" and the European Neoclassical city's notion of "Civic Architecture."

The avant-garde of architecture seems to be stuck in a permanent condition of trying to solve *false problems* (or in any case of trying to solve problems that have nothing to do with transformation); and of starting from these "problems" as motives and justifications for their "new forms," as though in this process the meaning (and there-

fore the recognizability) of the forms themselves could be exhausted.

Ledoux's anxiety over clear and untainted symbols, Boullée's research oriented toward the establishment of new, open scenic spaces in the city—what role do such contributions play in the history of architectural forms, other than that of an inconsequential "sidestepping"? Moreover, what meaning can Boullée's overemphatic "research" have when compared to the Neoclassical city's public buildings and their "meaning"?

That a public building should have the "exact" appearance of a public building is an idiocy that comes to be accepted as correct when the city no longer seems capable of giving expression to collective meanings—that is, when the process of privatization has begun. This was never before a problem in itself, but rather primarily a practical problem of truthfulness and of necessity (I am thinking of the great assembly halls that have always been the same throughout history).

The finest buildings in the constructed city, those which overcome this emphasis on *theme*, call attention to their own "truth," and therefore their recognizability, with the result that they are always far ahead of any glamorous designs. I am thinking of Soane, for example, or Schinkel, for whom architecture is primarily a matter of technique.

The process common to all artistic avant-gardes is that of borrowing slogans, or inventing their own, and then as it were rebuilding their world upon these, according to their own representation of it. But although this may be compatible with the representation characteristic of the figurative arts (precisely because of the characteristic distance that always exists between the representation and the object represented), it certainly has no meaning in architecture. This is especially true in that as far as the vanguards of the Modern Movement are concerned, they invariably follow in the wake of the figurative arts.

What has happened to the permanent preeminence that Michelangelo granted to architecture over the other arts?

Didn't this preeminence derive from the fact of its being "construction," that is, "composition" par excellence, in that it was subject to the fixed laws of nature?

Cubism, Suprematism, Neoplasticism, etc., are all forms of investigation born and developed in the realm of the figurative arts, and only as a second thought carried over into architecture as well. It is actually pathetic to see the architects of that "heroic" period, and the best among them, trying with difficulty to accommodate themselves to these "isms"; experimenting in a perplexed manner because of their fascination with the new doctrines, measuring themselves against them, only later to realize their ineffectuality. This is the case of Oud when faced with "De Stijl." It is the same for Mies. Few are immune to it: Loos, Tessenow, Hilberseimer. I emphasize this point because it seems to me that today, amid all the confusion, a strong *avant-garde wind* is again blowing our way!

The "isms" of the Modern Movement have certainly produced a bulk of material impressive for its variety and novelty. We must recognize that for the most part contemporary architecture still bases its formal choices on this material. Hardly a reassuring sign! But how else does one explain for example the recent fortunes of a Terragni, studied today in the United States as though he were Vitruvius? The illusion, the myth of the "new" persists. And it renews itself in the most negligible, the most idiotic, historicist *pastiches*.

Here I do not intend to go into the historical and ideological motives behind the "formalistic" choices of the modern vanguards. But in the face of the new definitive rupture between architecture and the contemporary city, can anyone still think that the option of denunciation or protest is a valid one in itself?

Moreover, the situation today is this: the dominant cultural superstructure is incapable of expressing collective meanings. It is therefore incapable of creating architecture, since architecture is always the expression of such meanings. In this sense, architecture in itself is in a state of perpetual denunciation, as it were, as a consequence of the unequivocally "formalistic" nature of the dominant superstructure.

This nature is made manifest whenever the superstructure shows itself to be open to, that is, ready to appropriate and include within its own expressive horizons, those formal experiments in the realm of architecture whose values are posited only in formal terms. In this light, is not the search for a "new form" the most paradoxical choice of all, even if it be the most obstinately pursued?

A superstructure which tends to the reactionary always approves of everything that conforms to its own characteristic stylistic preferences, that is, to everything that serves to dissimulate contradictions rather than expose them: such as formal experimentation as an end in itself, innocuous heresies, autobiographism, etc. Such a superstructure seems to have a particular predilection for all that is expressed ambiguously, or in an incomplete or provisional way—one need only think of the success of the so-called "paper architecture." For this reason, it is in my opinion all the more absurd to give credence to or to get involved with that area of architectural research which more or less openly makes ambiguity its program, or focuses on experimentation as a search for unusual and peculiar connections, nuances, abnormalities, and so forth.

Therefore, any choice made in full consciousness of its opposition to the state of the contemporary city today must first of all be evaluated in light of this specific problem. It must take stock of architecture in itself, as a real and positive alternative: that is, architecture as an instrument with which to probe contradiction.

I believe that for architecture today to enter, in a real sense, into conflict with the cultural superstructure according to which it is judged, it must be unambiguous, to the point of didacticism, and not vague or indistinct. I believe that research, especially at the present moment, must be concentrated on proposing forms that can be interpreted in only one sense. And this "sense" must be consistent with the object of representation.

2 Farmhouse in Lombardy.
3 Altes Museum, Berlin. K. F.
Schinkel, 1823–30. Perspective view
of atrium interior.

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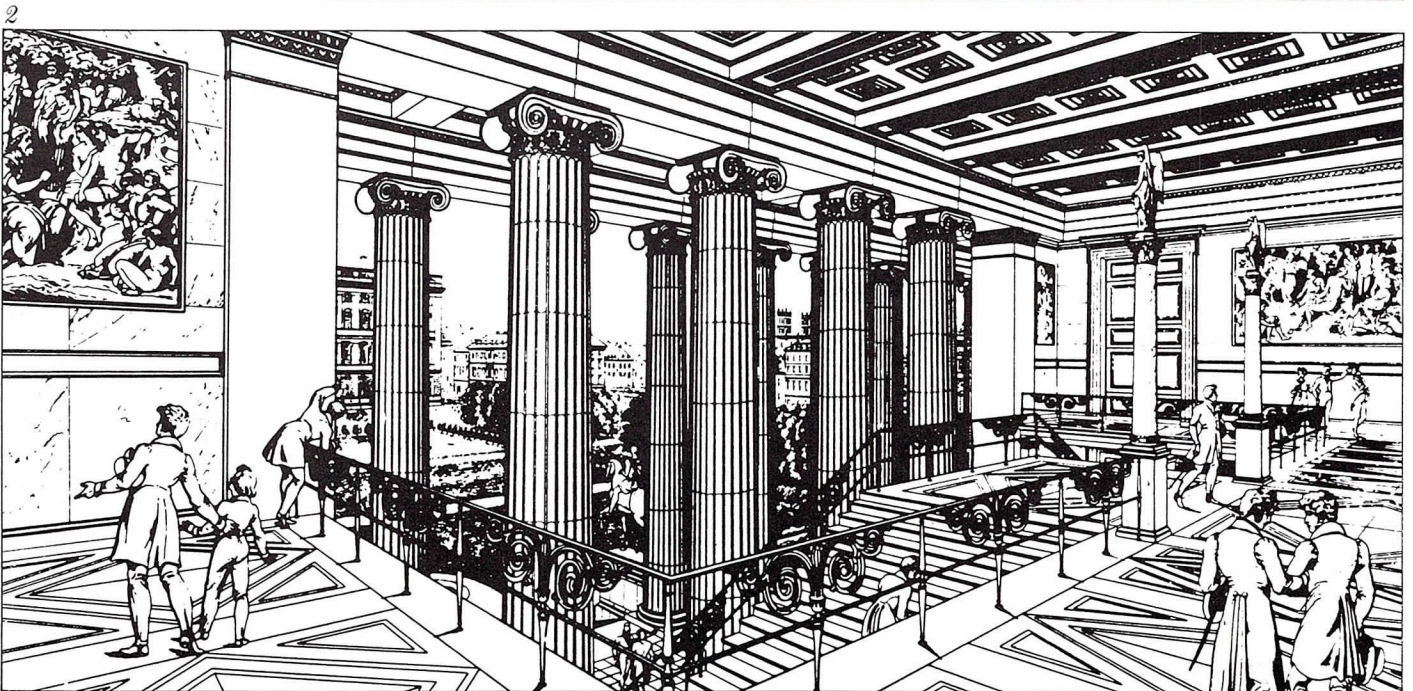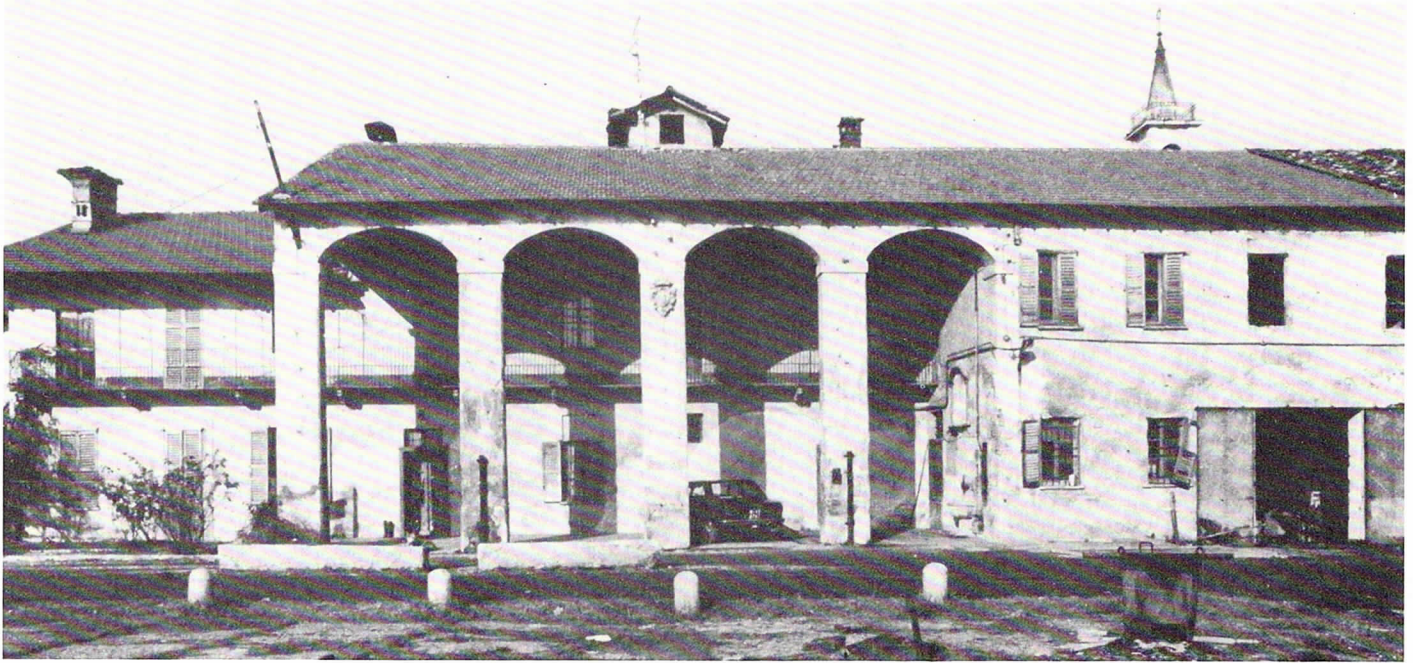
3

4 State School at Klostsche, near
Dresden. Heinrich Tessenow, 1925.
View of central garden.
5 Student housing at Chieti. Giorgio
Grassi and Antonio Monestiroli,
1980. Aerial view of model.
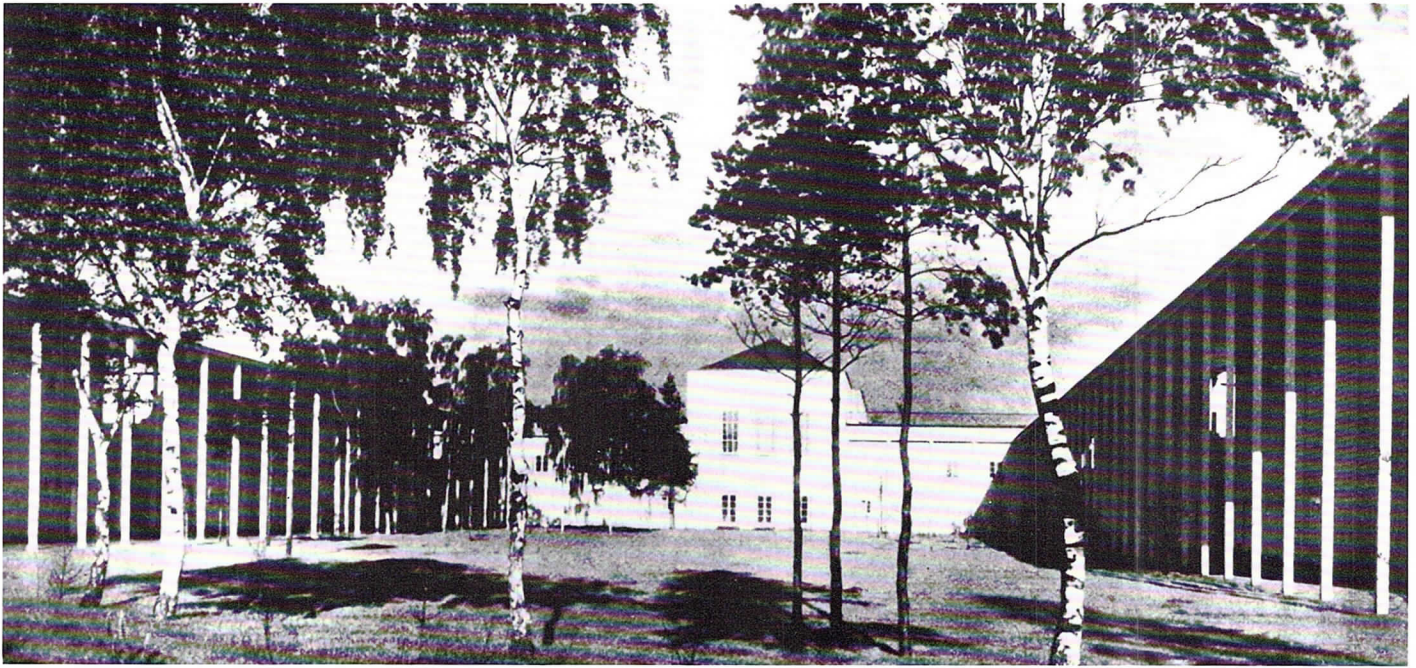
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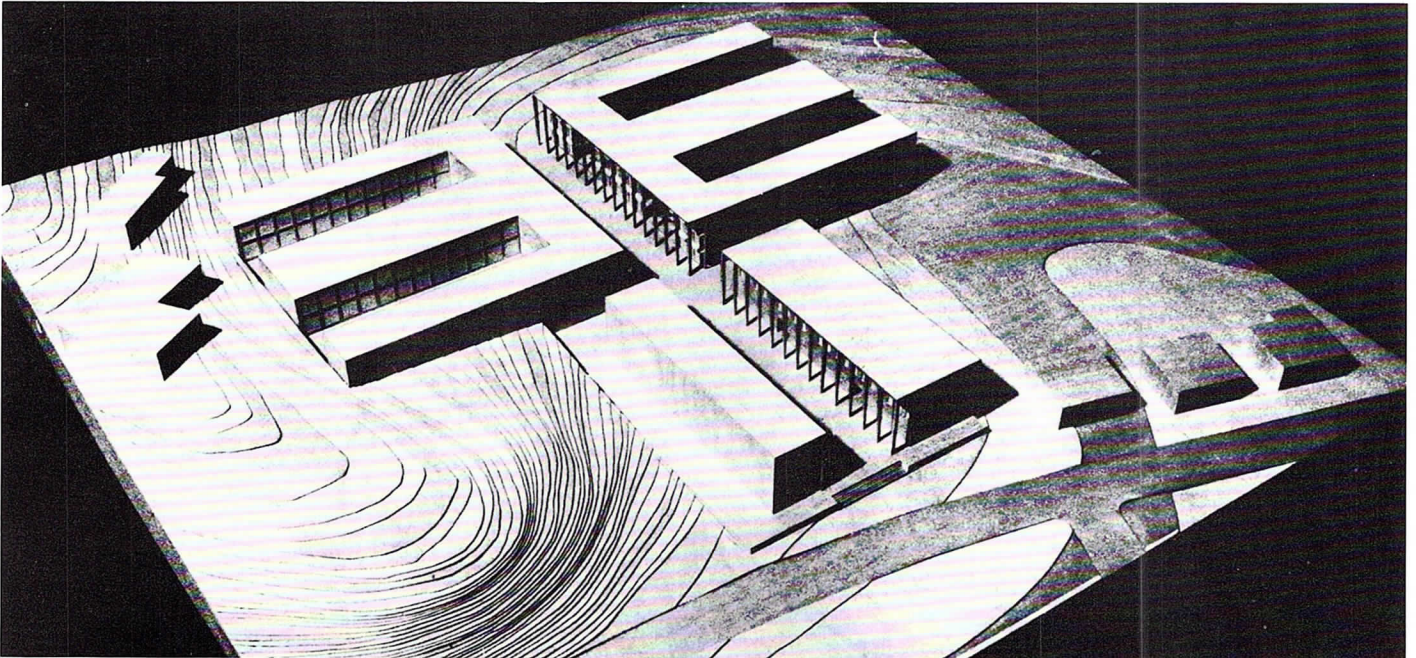
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30 And, since this object is to a great extent architecture itself (that is, the history of its forms and their constant connections with everyday life and with the uninterrupted thread of hope and progress), and given that we want the problems of architecture to be seen in a different way from that in which they are presented, then we must demonstrate this in terms of the specificity inherent in the problems themselves, by bringing to light their real content and by measuring ourselves concretely against the specific goals of our work.

Besides, isn't this perhaps the same path chosen by the best of the so-called "masters" of the Modern Movement? Doesn't Loos's appeal to tradition, Tessenow's sense of "craft," and Oud's so-called "betrayal" still constitute the only chances for survival? They are surely the only ones capable of preserving architecture's dignity and sense of responsibility. I am thinking of architecture as it has been realized over the centuries in the context of everyday life.

With regard to what has been said so far, I believe it might be worthwhile to go back to architecture's historical experience; to return to those elements which define its specificity; that is, to go back to architecture as practical activity and as cultural specialization. It is useful to remember first of all the "realism" implicit in the very definition of architecture: the indispensable, dramatic realism of architecture. Here I am referring to the fact that the specific nature of architectural space is precisely its "reality"—even if it be a unique reality arising from its particular evocative quality; and to the fact that this same evocative quality (since there is no separation between representation and object represented) can never in fact express itself through form as a negation of an open contradiction.

Only those who are able to imagine a built architecture capable of simultaneously negating itself (a useless, disconnected architecture, which cannot stand on its feet) can hypothesize an architecture of denunciation or protest—that is, an "expressionistic" architecture, in the current sense of the term; moreover, the architecture of expressionism always derives its characteristics from out-side elements, whether scenographic, decorative, pictorial, etc. It is for this reason that architecture must always be not only stable and necessary, that is, affirmative of itself, but also essentially approbative.

Gyorgy Lukács has given us a rather precise definition of what is particular to architecture. He says, roughly: "*Architecture creates a real and consistent space, designed to visually evoke fitness.*" The "realism," materiality, and concreteness of architecture are obviously inherent in both of these characteristics indicated by Lukács; for this reason these characteristics are inseparable, in that the one can only define itself through the other, and vice-versa. For example, the "realism" of a pillar consists of course in its function, but also in the relation which from the moment of the pillar's appearance is established with that form in time; and included in this relation is the pillar's function of support. All this means that in an architectural work, the definition of "fitting space" will depend greatly upon the degree to which the notion of "fitness" comes to be elaborated. Such an elaboration is the specific object of evocation. From this notion derive the inevitable reciprocal relationships which link various architectures across history. And from this notion also derive the relations which unite successive building techniques, various functional connotations, and so on.

From the standpoint of the architectural work, the eye that wants to evoke, and therefore share—the *evocative eye*—has its own particular way of looking at historical experience. And it does not imagine the future otherwise. It judges, searches for the truth and the necessity of the object; it recognizes what is stable in it. And unlike the nostalgic eye which likes to linger upon things, it eschews models, it does not trust first evidence; because of its "analytical" nature it primarily seeks confirmations, attentive only to the strong thread uniting the various architectures in history.

In this light it becomes rather difficult to restrict the notion of *function* to the narrow limits of immediate necessity (cf. Functionalism). The same should be said for the *technical aspect*. The task of the technical element has

always been to prove its own necessity, as is evident in works which are firmly planted in the ground: that is, it places most importance on the total, characteristic *staticness* of architecture. Technical solutions, even the most future-oriented, must always conform to this condition, which is one of architecture's most basic principles.

To speak of evocation in the particular world of architectural representation is to speak of *forms*. The notion of fitness must therefore always include that which interconnects the forms themselves in history: that is, the generalizing tension which characterizes architecture's historical experience (the good sense common to all solutions of a given practical problem: the house, the road, the public place, etc.). This is the realm of the *typical forms* of architecture: of those forms which, more than others, manifest themselves as definitive solutions.

Certainly, calling attention to the specific conditions of architecture does not fully explain the notion of fitness— but it indicates in any case a definite choice of method with regard to the project. The remainder belongs to the realm of the *meanings* of forms. The constructed city, the arrangement of the rural landscape, and in general everything that tells of man's domination of the natural element express *collective meanings*. Architecture is to a great extent the mirror of such meanings, and it is in this way that its forms acquire stable meanings.

The notion of fitness is therefore able to include very broad and general questions, questions involving architecture's correspondence to and harmony with collective life and its objectives: it is like the mirroring of collective circumstances which, however they may present themselves at the moment, are all points on a *line of progress* toward these same objectives. And if it is rather difficult to speak about this, it is nevertheless true that we have at our disposal its most evident manifestation in the form of its analytical representation, so to speak: the history of forms, which is nothing less than the history, through images, of the search for the evidence and truth of these objectives. And it is this that we should be concerned with in the architectural work.

Now the world of possible forms, the domain of the work of architecture, reveals its innumerable ties to the past through images constructed over time; it is able to explain itself only through a confrontation with this past; and it becomes reality only by means of a concrete, positive *imitation*. Such imitation is to be understood not as nostalgic re-evocation, but as the inclusion and surpassing, as the continuation and unification, of the most general objectives—and as the ideal circumstances for a positive transmittal of the elements of the *craft*.

As it is necessary to reckon with architecture's particular characteristics, it is in the same way necessary to consider as well *the specific conditions of the craft*, because these latter incarnate, so to speak, the very transmissibility of architecture. La Bruyère said, "Writing a book is as much a trade as making a pendulum-clock!" Naturally these conditions depend directly upon their "product," with the result that they have become fixed in time; but because we are able to recognize them from their long application to an object which is always the same, they offer the security of fitting means and resolutions, born out of unchanging necessities (somewhat like a *tool*, which represents the form undisputed but established by its use).

Any sort of work implies learning, familiarity, technical proficiency, acquired mastery; but it also always implies a sympathy and an appreciation for how much has been studied, learned, prechosen, and an appreciation of the standards by which one measures oneself so that one may more thoroughly come to know a work's reason for being; and finally it implies a full awareness of the limits of that particular sort of work.

But does the fanatical desire of the avant-garde, old and new, to "start from scratch" have anything to do with all of this? To what state would architecture be reduced (especially as labor) if it were diverted from its search for its very raison d'être, its "truth"?

Once again, especially when confronted with the avant-garde's options, we must not forget the particular bond that exists between the work of architecture and the *pub-*

32 *lic.* Besides, architecture is a "public matter" par excellence.

In fact, architecture must first of all come to terms with itself, that is, with its specific characteristics; but at the same time it must also come to terms with its particular social responsibility. And in this light the question of its rapport with the public becomes impossible to ignore. For this reason the language of architecture is—or should be—an accessible language! Moreover, since architecture enters directly into everyday life (for example, through its extra-artistic functionality), it creates a permanent bond that provides a firm critical base from which to pass judgment upon many "good intentions."

But this bond also has another aspect, less evident but just as important, which relates to architecture's particular evocative purpose. It is the bond between individual aspirations and the *great collective goals*; it is this characteristic tension of ideas which animates the most important passages of history; it is finally the bond of *style*, destined to incarnate these goals.

This tension is recognizable in all the great architecture of the past: in the most significant moments in the history of cities, in the buildings of these cities, and in their predominant forms. Nor does it abate with changes in the historical conditions. And this is so not only because the forms become part of the *collective memory*, but also and above all because these forms interpret goals that have existed for a very long time. *And the forms themselves do not in time lose their efficacy with respect to these goals.*

This is precisely the meaning behind the question that Hannes Meyer asks at the end of his 1942 work, "The Soviet Architect" ("La Realidad Soviética: Los Arquitectos," *Arquitectura* no. 9, 1942): "Will we, the architects of the democratic countries, be prepared to entrust the pyramids to the society of the future?" In this work Meyer affirms that the historicity of architecture has its base in its most decisive and profound formal problems; he also goes beyond the symbolic meaning imputed to the pyramids as forms to vindicate the destiny of architectural forms in general to serve as concrete, perennial testimony.

Moreover, architecture has always been, even in responding to immediate needs, part of that "world" which most directly bears witness to the collective desire to leave traces for the future. In this sense architecture, even at the moment of its appearance, always finds itself in a situation of constantly surpassing present actuality in the attempt to be a collective choice in the broadest sense.

As a matter of fact, the medieval city (in its rationale and economy), the cathedral together with the elements of the monarchical or the Neoclassical city, the palaces and the town squares, are always in their forms something more than the *real* city, even as they constitute it in fact. I mean that these forms—these irreplaceable passages in the history of cities—in their response to the expectations of the present always interpret the *utopia* of this present as well (that is to say they simultaneously evoke a sense of fitness).

Architecture cannot fail to come to terms with the particular purpose of its forms—that of testifying, bearing witness. Moreover, if architecture neglects this task, it fails in the very sense of its *lastingness*, its *material solidity* (which is also a principle in itself). And this also applies to even the most personal research. For this reason it is difficult to accept a great deal of the current experimentalism, even when it takes place within a hypothesis that is affirmative of architecture. Architecture cannot escape the fate of being collective work in the broadest sense, not even at a time when historical conditions seem to offer no way out. Only by measuring itself against its own historical experience can architecture reasonably hope to match this experience, and again become a concrete point of reference in everyday life.

Figure Credits
1–3, 5, 6 From Giorgio Grassi and Antonio Monestiroli, *Casa dello Studente a Chieti* (Rome: Edizioni Kappa, 1980).
4 From Gerda Wangerin and Gerhard Weiss, *Heinrich Tessenow* (Essen: Verlag Richard Bacht, 1976).
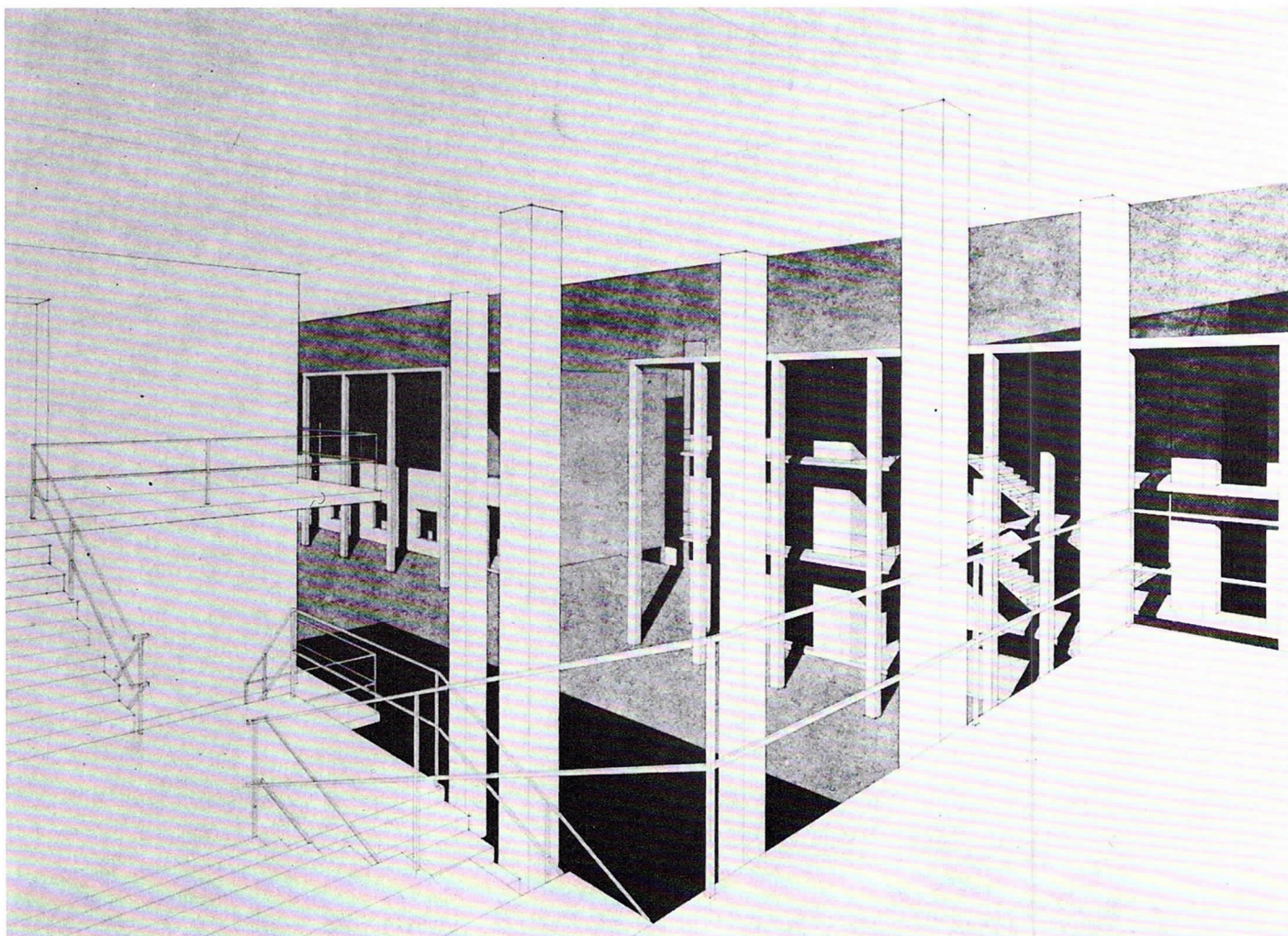
6 Student housing at Chieti. Giorgio Grassi and Antonio Monestiroli, 1980. Perspective view of the arcade from the gallery.

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Designing for the Motor Age:
Richard Neutra and the Automobile

Thomas S. Hines

The idea of the motor age was important to Richard Neu- 35
tra and to most of his contemporaries in the early Modern
Movement. Like them, Neutra not only designed drive-in
structures—buildings built for and around the automo-
bile—but also an actual motor vehicle. Unlike Gropius's
Adler Cabriolet, Neutra's motor bus project for the White
Motors/Alcoa group was ultimately never produced. His
series of drive-in structures, however, constitutes a par-
adigm of the evolution of his own work as well as of the
development of the larger Modern Movement.

Neutra's fascination with the car as a symbol of modernity
was celebrated in the use of his own Los Angeles house
of 1933 as the background for a 1936 Oldsmobile adver-
tisement (fig. 1). "Modern to the minute," the ad read,
suggesting some of the images that modernists of the
thirties hoped their buildings would convey: "From its
freshly streamlined styling . . . down to the finest detail
of its quality construction, Oldsmobile is thoroughly mod-
ern . . . Modern in all the appointments of its newly
enriched interiors . . . Modern in performance that is
smoother, livelier and more economical . . . Modern in its
riding quality and its features for extra safety . . . And
modern too in leading the trend to greater value at a new
low price."

Neutra liked the messages automobiles conveyed. He
never parodied the name of a car as Le Corbusier did in
his Citrohan houses of the 1920s, but was pleased when
in 1936 John Nicholas Brown gave his Fisher's Island
house, designed by Neutra, the suggestive name of
"Windshield" (fig. 2). He also used cars whenever possible
in the drawings and photographs of his buildings (figs. 3,
4). He liked to photograph his buildings with new model
cars beside them to demonstrate how "up to the minute
modern" they were, and he took equal relish in the show-
ing and publishing of old photographs of his buildings with
quaintly dated cars—contrasted with what he liked to
think of as the ageless and timeless quality of the build-
ings.

However "exclusive" the Modern Movement may have
been in other ways, it never seemed to feel the need to

1 (frontispiece) Oldsmobile
advertisement, 1936, with Neutra's
own Van der Leeuv Research House,
1933, in the background.
2 John Nicholas Brown House,
called "Windshield," Fisher's
Island, New York. Richard Neutra,
1936.
3 Scholtz Advertising Agency, Los
Angeles. Richard Neutra, 1937.

exclude automobiles. It helped, of course, if they were clean and polished. In fact, they were seen as epitomizing in their styling and appointments the ambience of the International, and related, styles. It is hard to imagine more compatible companions.

Neutra and his generation were not born in the motor age but came to their maturity as the auto developed into a universal mode of transport. Thus, they were party to the excitement about its novelty and promise. Born in 1892, Neutra grew up in a world of horses, carriages, and railroads. Among the first buildings that caught his attention were the interurban train stations of the Vienna Stadtbahn, designed by his hero Otto Wagner. Even later, when he discovered the buildings of Frank Lloyd Wright in the Wasmuth publications of 1910–1911, Neutra saw them being served by horses and wagons. The machine age metaphors he used to describe these wondrous buildings evoked not only the automobile but the nineteenth century train: Wright, he wrote, "was creating low buildings with tremendous shading roofs and long ribbon windows like those of the venturesome transcontinental trains which looked out on a free breezy landscape."[1]

But if Wright was Neutra's first American hero, Henry Ford was certainly his second. "It would not be far-fetched," Neutra's student Harwell Harris has written, "to think Neutra came to America because America was the home of Henry Ford. Ford was more amazing to Europeans than to us who saw in him our own features . . . Europeans were prepared to worship the machine"— especially the car—and "Fordissimus" became a European phenomenon.[2] What Neutra appreciated most about Henry Ford was not so much the styling of his cars as the way he put them together in prefabricated, assembly-line mass production—a method, a process, an effect that Neutra strove to translate into architecture. In the partially prefabricated Lovell House of 1929 (fig. 6), Neutra paid homage to Ford by using as stairway light fixtures the headlights of Ford's Model T (fig. 7). In 1923, the year that Neutra left Europe for America, Le Corbusier wrote in *Vers une Architecture* words to which Neutra would have eagerly subscribed: houses, argued Le Corbusier,
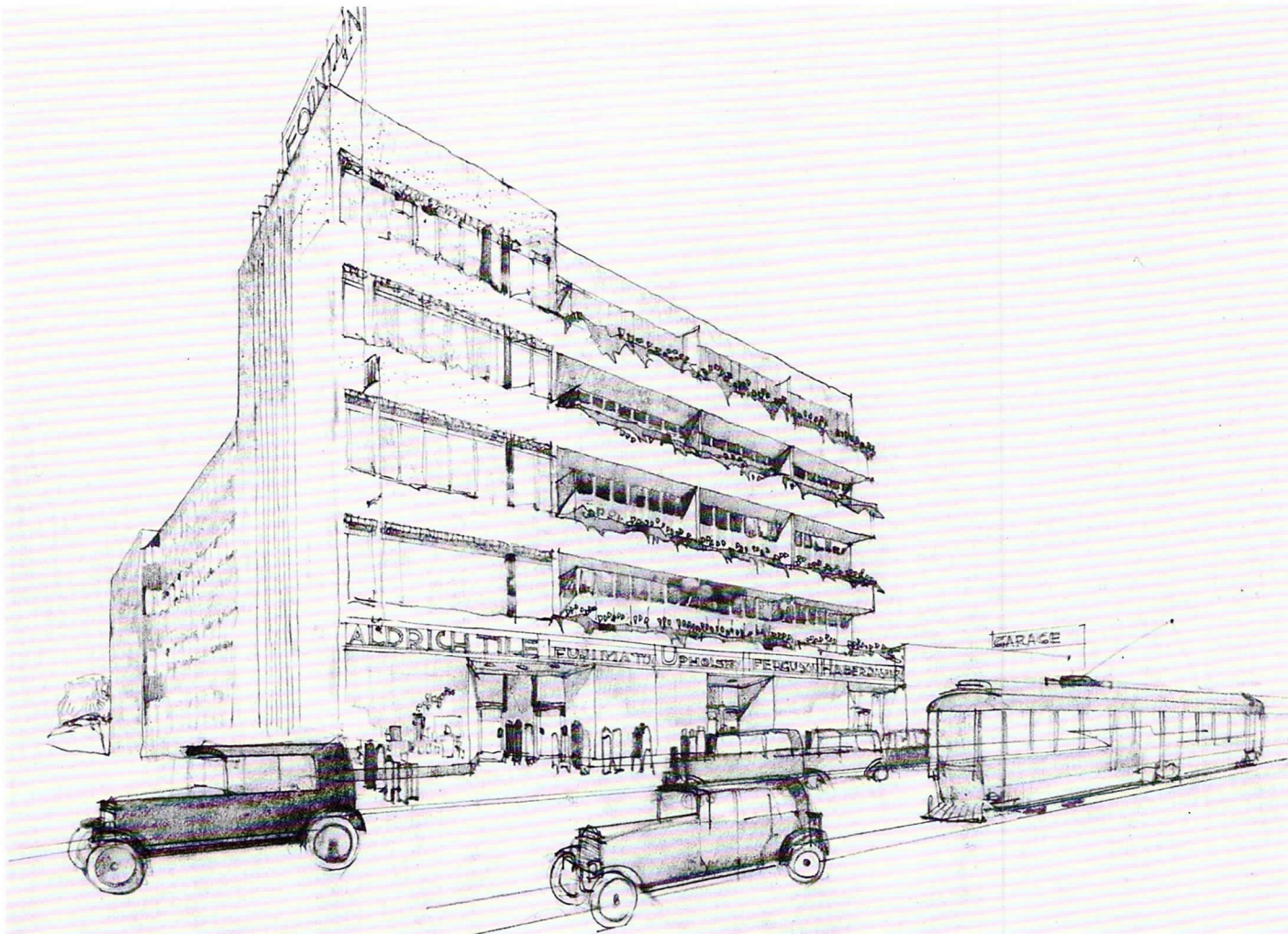
4 Commercial and apartment
building for AGIC, Los Angeles,
Richard Neutra, 1930.
5 Richard Neutra, with wife Dione
holding son Dion, and sister-in-law
Doris Niederman, and the second-
hand Franklin car, Los Angeles,
c. 1926.

6 Lovell Health House, Los Angeles. Richard Neutra, drawing dated 1928.
7 Lovell Health House, Los Angeles. Richard Neutra, 1929. Lighting on main stairway from Ford Model T headlights.
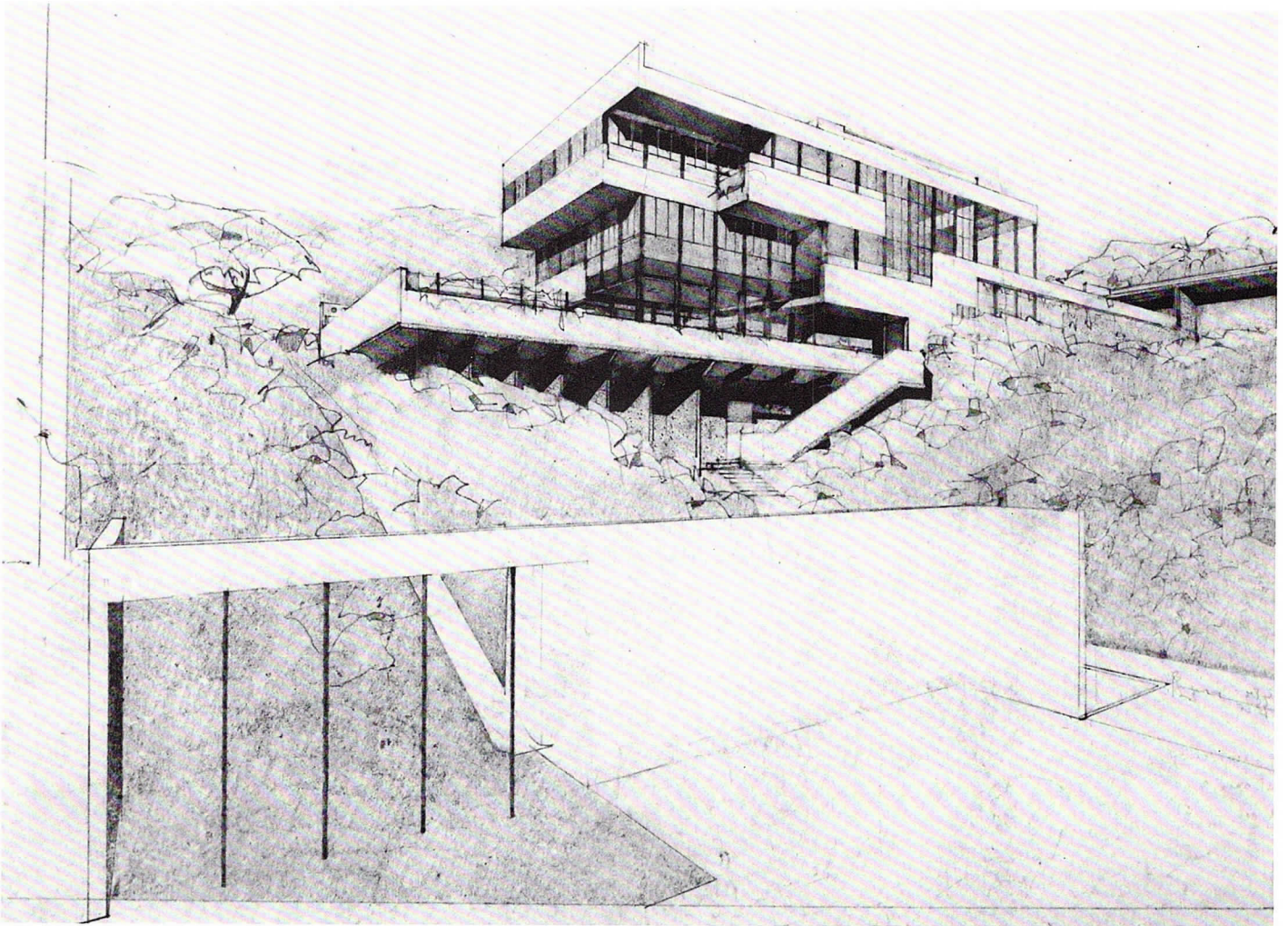
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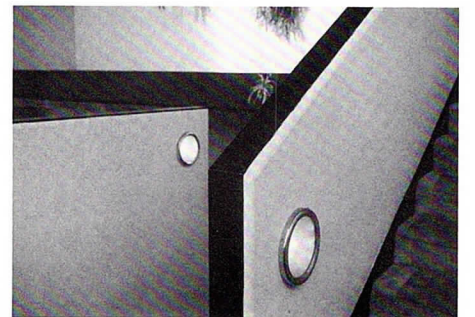
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"must go up all of a piece, made by machine tools in a factory, assembled as Ford assembles cars."

Neutra himself did not learn to drive until 1925 when he moved to Los Angeles, where even then, despite the then superb intra-urban train system, a car was essential to real mobility. He did not own a car until the next year, a modest second-hand Franklin of which he was very proud (fig. 5). The car he later settled on as best suited to his needs was the Nash, which he valued for its operating efficiency and especially its reclining front seat. He enjoyed taking naps while being chauffeured about and also liked to tell how he frequently lowered the seat and looked at the sky to keep from having to see so much objectionable architecture. The most beautiful car, he believed, was the Lincoln Continental of the 1940s—the luxurious Ford descendant of the simple Model T. This was also Frank Lloyd Wright's favorite car, a notorious gas guzzler admired unabashedly by both architects for its elegant design.[3]

Neutra never designed an automobile, but he did design a bus in 1931 for Homer H. Johnson of Cleveland, the father of Philip. Homer Johnson was a corporate attorney and large shareholder in the young but growing Aluminum Corporation of America, and he planned for Alcoa to participate with the White Motors Company in the design of a new aluminum bus. By this time Philip Johnson was already working with Henry Russell Hitchcock for the Museum of Modern Art's epochal 1932 "Modern Architecture" exhibition, a show that included Richard Neutra, and when asked by his father to suggest a designer for his new bus, Philip Johnson recommended Neutra. Neutra admitted that he knew nothing about bus design, but he knew he could learn and was both flattered by the offer and delighted with what during the early Depression was an extravagant fee. He was housed in Homer Johnson's private club in Cleveland and for his work and other expenses paid $150 a day. He hobnobbed with the Johnsons and the Cleveland establishment in a rented tuxedo but when he was not being entertained by his hosts, he would save his salary by sneaking around the corner from the elegant Union Club and eating in a diner.[4]

Homer Johnson had thought it important to bring in an outside designer to confront the relatively conservative in-house designers at White Motors, who, jealous of Neutra's invasion of their territory, tried to resist him in every way possible. "I have drawn up beautiful buses" (figs. 8–11), Neutra wrote, against "the involved special interests of the various bureau chiefs . . . The chassis specialist advises me to round out, make the rear more exotic, that affects only the body designer, and not him, but the radiator cannot be tampered with under any circumstances . . . I have discussions with the bumper specialists, the aluminum seat and upholstery experts"—and on and on.[5] Yet Neutra also understood that it was important that his new Pullman of the Highway not be so structurally or stylistically radical or so far ahead of current taste that White Motors or future customers would resist it as unsuitable or unrealistic. Therefore his designs were only slightly more "streamlined" and sophisticated than other actual buses of the period—considerably less futuristic, for example, than the slightly later unbuilt designs of Norman Bel Geddes (fig. 12). Still, for the time, Neutra's designs were advanced in their relatively "clean" lines, their upswept rear ends, and the wavy streamlining of the front cab roof.

While Neutra produced several different variations, the bus was never manufactured. This was owing in part to the foot-dragging resistance of the White Motors production chiefs, the steadily worsening Depression, and various other factors that militated against a single, standardized, prefabricated design. The critic Arthur Millier summed them up in the Los Angeles Times: "The difficulties," he wrote, "that must be overcome before any form of standardized, prefabricated house can be successfully put into quantity production are graphically illustrated by a consideration of the difficulties which prevent the standardization of so inherently mechanical a contrivance as the inter-city motor bus. Most of us take it for granted that motor buses are already highly standardized," but when architect Richard Neutra "was invited to the main plant of the country's biggest producer of motor buses to design a standard, all-metal bus suitable for use in all parts of the U.S.A. . . . he found that this one bus

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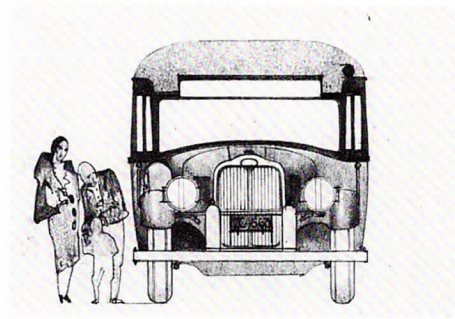
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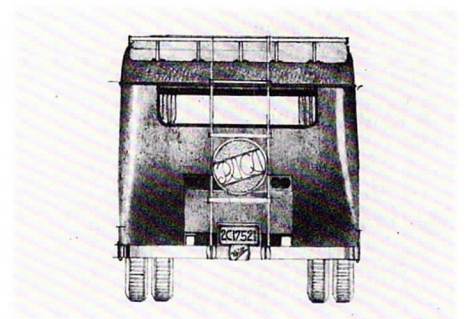
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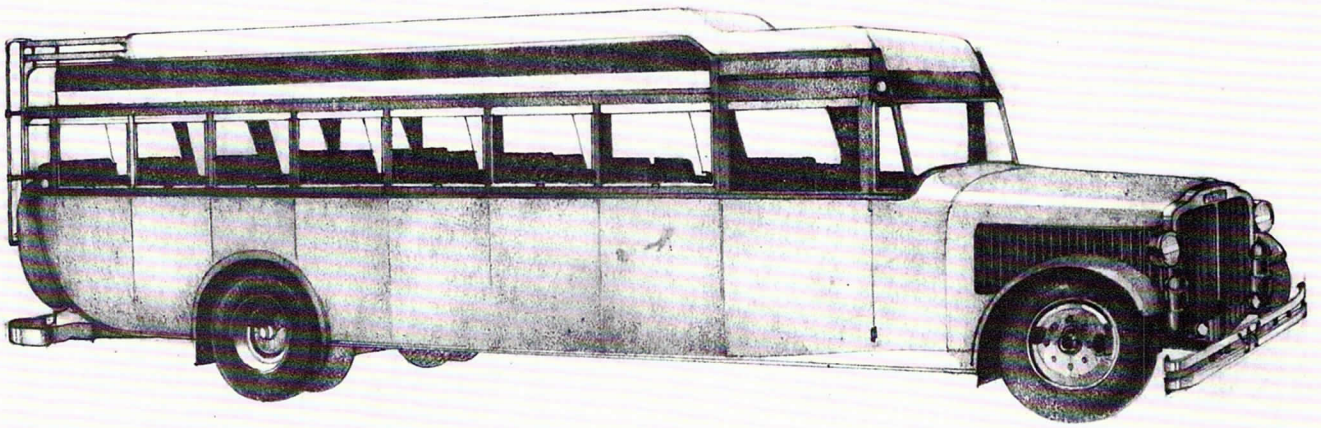
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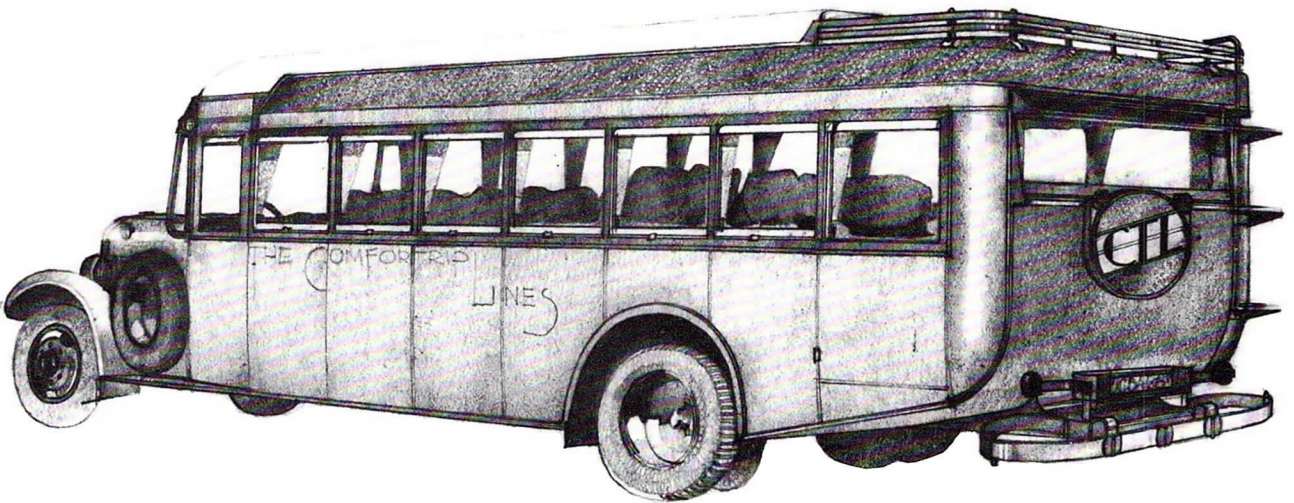
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8–11 *"Pullman of the Highway"*
motor bus for White Motors/Alcoa.
Richard Neutra, 1931. Unexecuted
designs.

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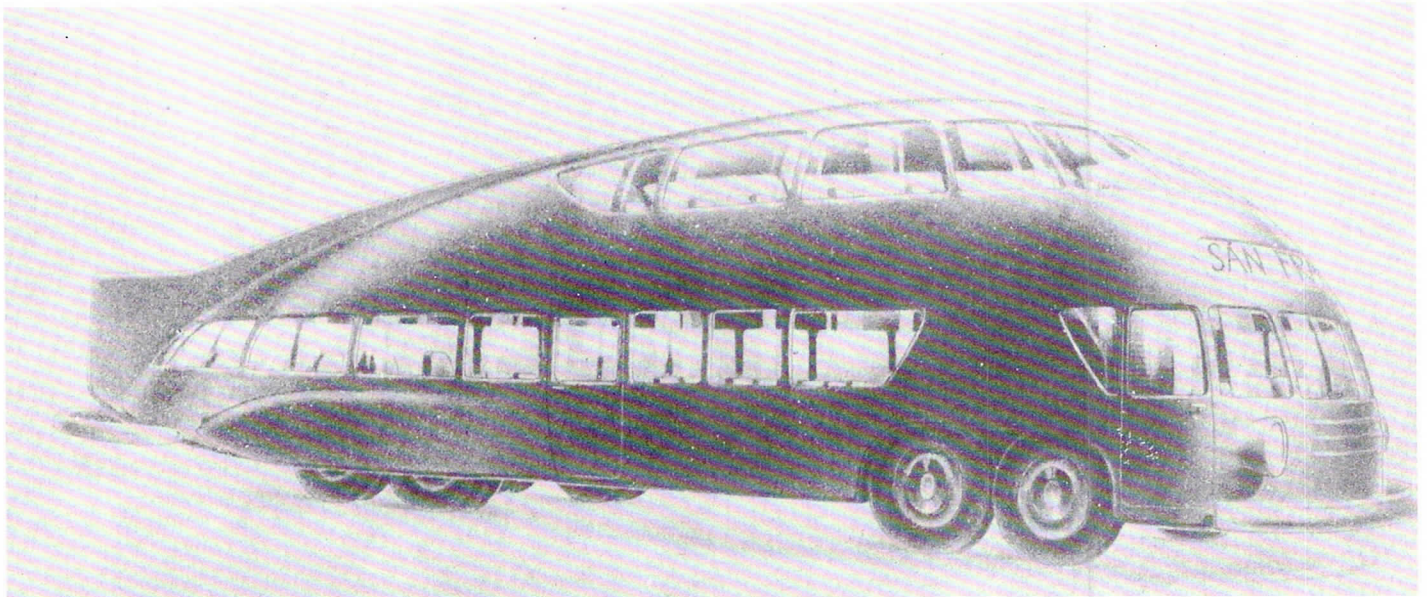
12 Motorbus #2. Norman Bel
Geddes, 1932. Unexecuted design.
13 Mosk House, Los Angeles.
Richard Neutra, 1933.
14 Van der Leeuv Research House,
Los Angeles. Richard Neutra, 1933.
Folding door-wall between living
room and sleeping porch.
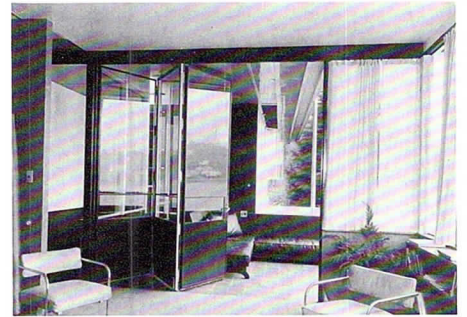
factory had over two hundred models for inter-city traffic alone, the differences in type being caused by the differences in types of travelers throughout the country. An ideal bus, he says, would have a light upper structure and all baggage would be carried underfoot, reducing the needed motor and braking power. But in one part of the country the people carry farm products, chickens in coops and other cumbrous baggage which can only be housed on the roof. This necessitates heavy posts, therefore more engine and brake power. . . . If, says architect Neutra, it is so difficult to build a bus that will work for all comers, imagine how hard it will be to design a standard home which will suit enough people to make standardization profitable. But, he believes it will ultimately be done."[6]

But the ill-fated bus project was not without its tangible results. It allowed Neutra and his family to live for more than a year on the amount he saved from his Cleveland salary. It also allowed him to think about and experiment with the problems and possibilities of prefabrication and of automobile imagery for architecture, as borne out frequently in his buildings of the thirties, some of which took on the actual "look" of buses: the Mosk House, Los Angeles (1933), for example, with its long bands of ribbon windows (fig. 13), and his own home in Los Angeles (1933) with its bus-like folding doors and its shiny, metallic silver-gray trim (figs. 1, 14).

The White-Alcoa episode was the one and only time Neutra designed an actual vehicle, but throughout his career he delighted in experimenting with drive-in architecture. The progression of drive-in structures he designed suggests much about his developing work and the rise and deliquescence of the Modern Movement. His first encounter with the drive-in problem occurred in 1924, the year before he learned to drive, during a three month apprenticeship with Frank Lloyd Wright at Taliesin. The project was an automobile observatory for the entrepeneur Gordon Strong, planned for Sugarloaf Mountain, Maryland, between Baltimore and Washington (figs. 15–18). Apparently conceived by Wright with input from Neutra, the circular recreational Sugarloaf structure contained bars, restaurants, shops, dance floors, and service areas. Enveloping the building were ascending and descending vehicular and pedestrian ramps and parking slots where motorists could leave their cars while using the various facilities or observation platforms. Somewhat unrealistic, even by 1920s standards, in its provisions for auto traffic and storage, the building evoked through its streamlined styling the age and the idea of the automobile. Neutra drew renderings, floor plans, sections, and elevations while Wright was away in California during December of 1924. Later, in 1925, after Neutra had moved to Los Angeles, Wright added a planetarium to the building's collection of diversions, but retained the basic concepts of the early studies. Nothing in Wright's *oeuvre* before that time would have predicted the observatory's streamlined circular forms—features and qualities of a decidedly Mendelsohnian stamp, which Neutra, a recent Mendelsohn apprentice, may well have imparted to the scheme. The circle and spiral would play an increasingly important role in Wright's subsequent work. Neutra would later enjoy pointing out the obvious similarities between the Sugarloaf Observatory of the mid-1920s and the Guggenheim Museum of the late 1950s.[7]

Another unexecuted project, the Coulton Theater and Commercial Center of 1927, was to have been built in a suburb of Los Angeles. It was designed by Neutra in collaboration with Rudolph Schindler in their tenuous association called the Architecture Group for Industry and Commerce (AGIC) (fig. 22). Conceived in a style closer to Wright's work of the early twenties, the drawings, in Neutra's hand, suggest the popular style that would come to be called Deco. The building was a "drive-in" only in the sense that more than usual attention was given to internal underground parking facilities, the cars in the rendering lined up to enter a clearly marked drive-in portal.

AGIC had relatively little work in the late twenties, however, and with time on his hands, Neutra continued to work on his ideal metropolis. "Rush City Reformed" he called it after the boom towns of legend and the fast pace of American life (fig. 20). With its vast spaces and monolithic apartment slabs, it recalled the exciting, prescient,

15–18 Automobile Observatory,
Sugarloaf Mountain, Maryland.
Unexecuted designs, signed Neutra,
drawings for Frank Lloyd Wright,
1924.

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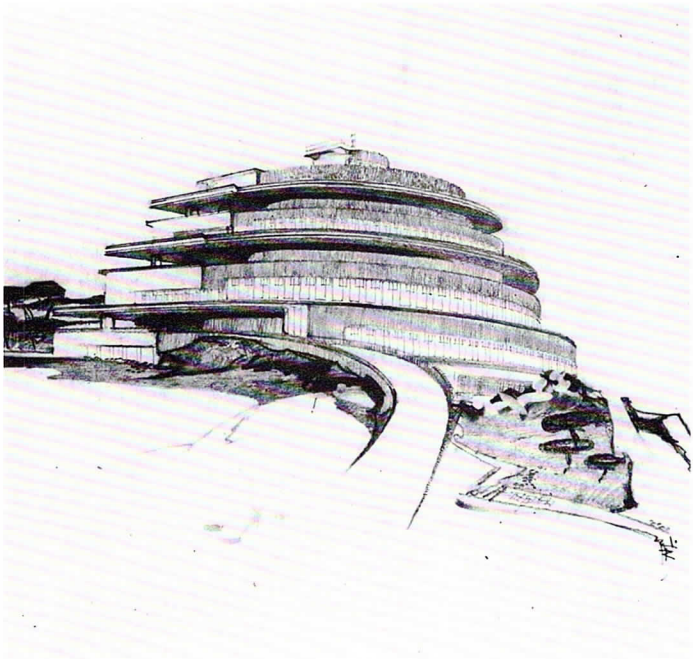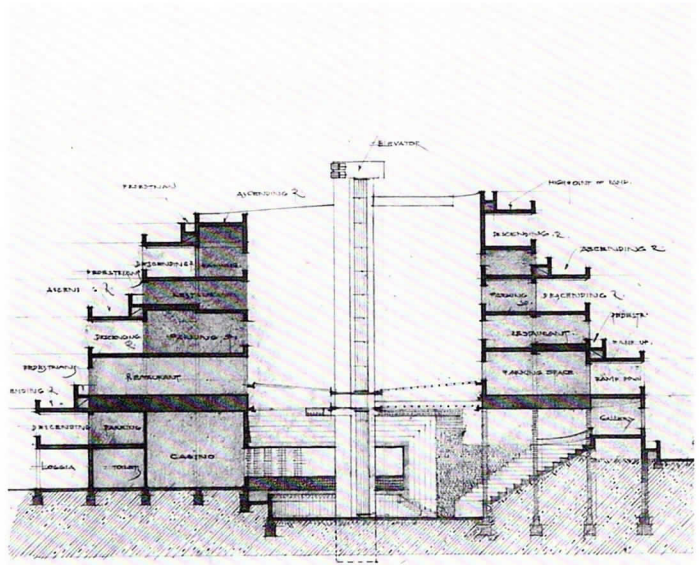
ZUTOMOBILE OBSERVATORY ON SUGARLOAF MOUNT

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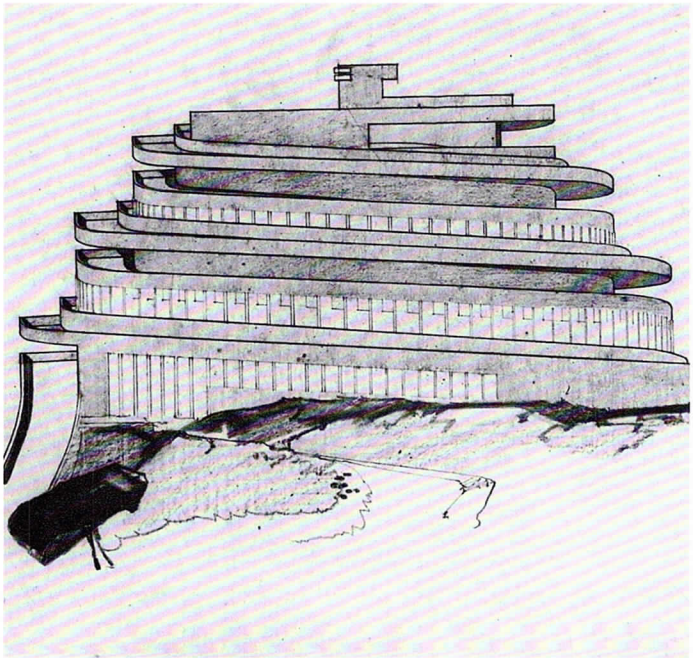
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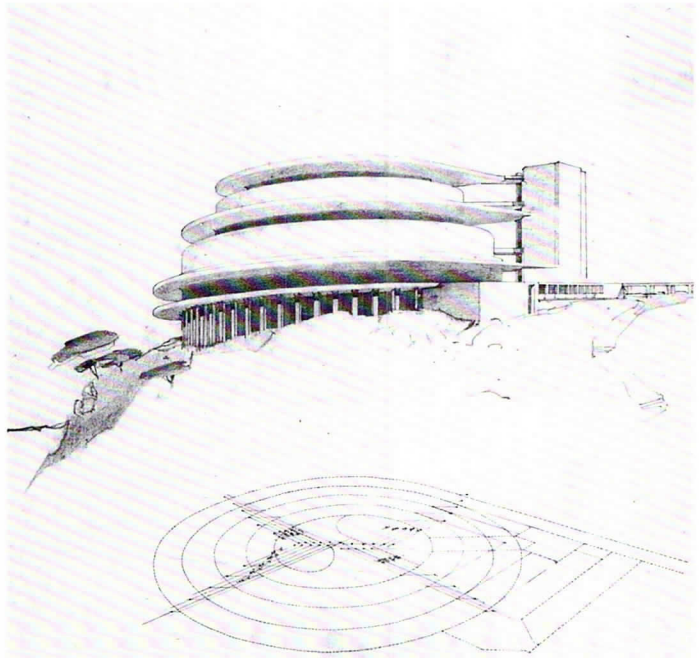
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19, 21 Drive-In Market, Rush City
Reformed. Richard Neutra, late
1920s. Unexecuted designs.
20 Rush City Reformed. Richard
Neutra, late 1920s. Unexecuted
design.
22 Coulton Theater and Commercial
Center for AGIC, near Los Angeles.
Richard Neutra, 1927. Detail of
unexecuted design.
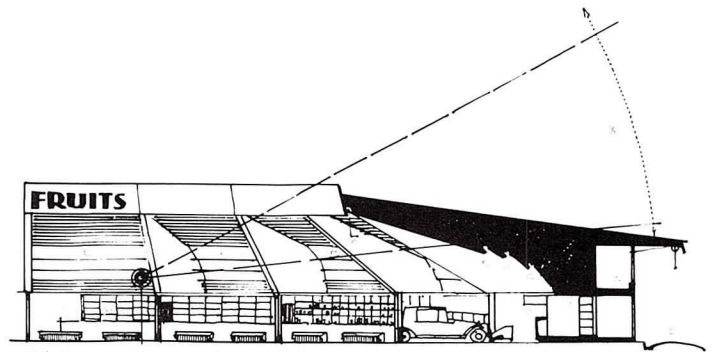
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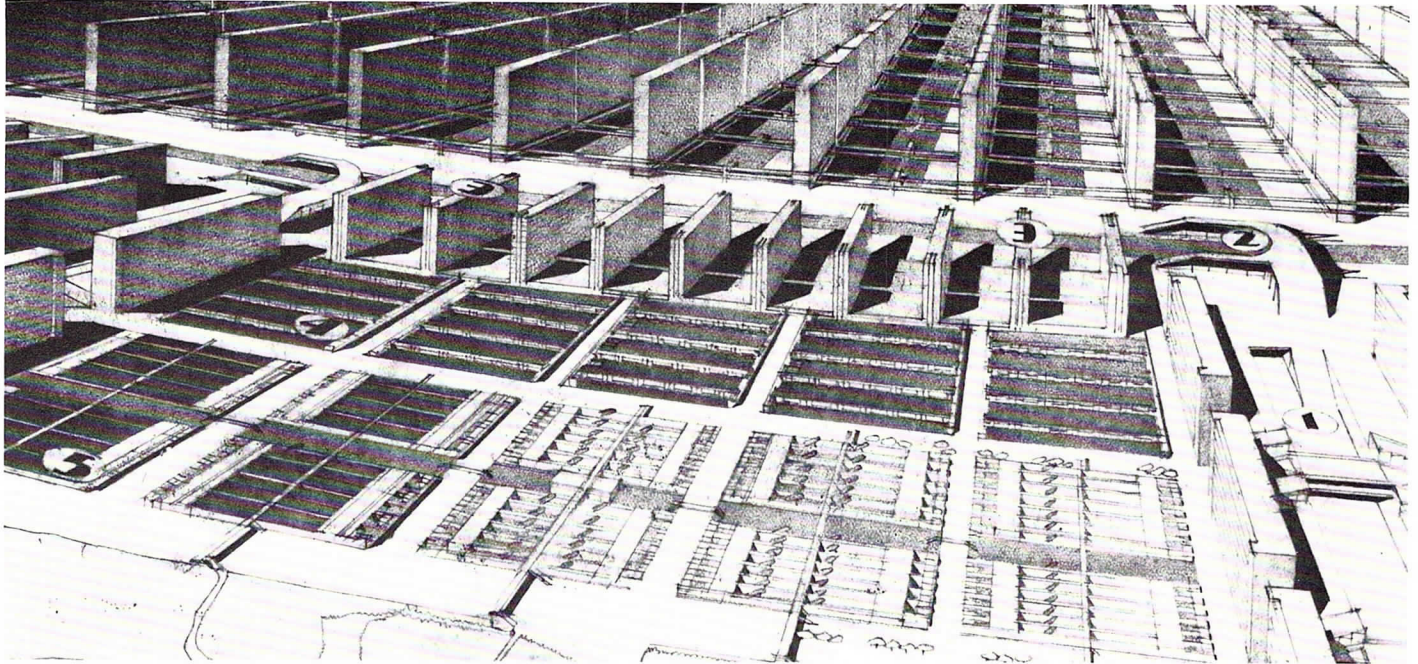
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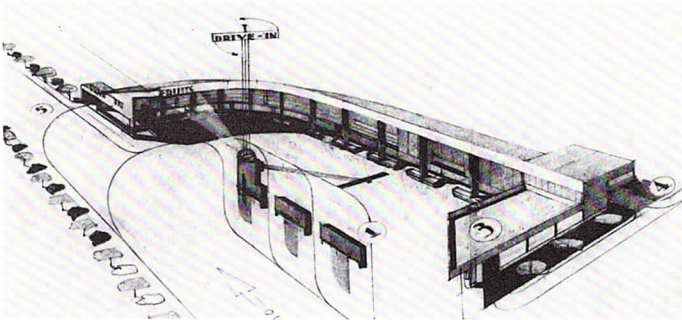
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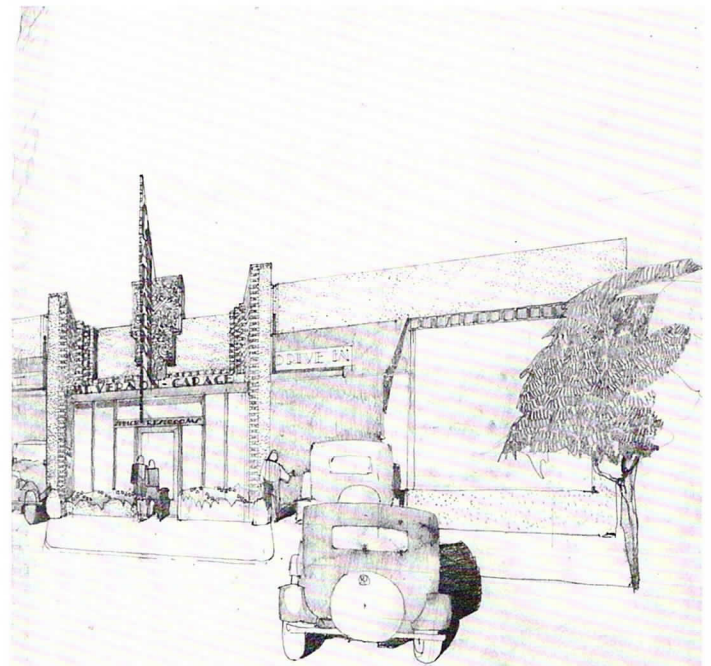
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and frequently frightening urban designs of the Futurists, Le Corbusier, and Ludwig Hilberseimer. Great elevated superhighways cut through the rows of towers and across the grid of the slower moving city. Strategically located "off ramps" connected the freeways with surface streets and rail facilities. Neutra's verbal explanations of his new metropolis were less poetic than Le Corbusier's or Marinetti's, but the graphic delineation of the long, wide, straight traffic corridors clearly evoked the mood of the Futurists: "We declare," Marinetti had written in 1909, "that the splendor of the world has been enriched by a new beauty—the beauty of speed. A racing car . . . rattling along like a machine gun is more beautiful than the winged victory of Samothrace." "We want an architecture," Gropius echoed in 1923, "shaped to our world of machines, radios, and fast cars."[8]

Yet beside and beyond the great freeways for fast cars were smaller buildings at which slower cars could pull in and stop for shopping and services. Neutra's drawings showed drive-through areas, where motorists could pick up quickly bundled bags and packages of fruit (fig 19). More conventional parking spaces nearby allowed them to leave their cars and stop for longer periods in a variety of shops (fig. 21).

"A completely new architectural form has been ushered into service," the critic Willard Morgan announced in *American Builder* in 1929, "with the building of drive-in markets to serve modern motor-driven America. Such a development has been the direct result of the increasing traffic congestion which is clogging up the main metropolitan centers of our larger cities. With this increasing confusion during the business hours, thousands of prospective customers are going to the suburban marketing centers to do their shopping. Such a trend in the buying centers is only natural as thousands of new automobiles are placed on the highways every month.

"As a result of new motoring demands in every traffic congested area throughout America, Richard J. Neutra of Los Angeles has just completed the plans for a new market which embodies the most revolutionary features in modern merchandising. The new markets . . . will fit into

the modern traffic whirl as completely as the latest 1929 streamline motor car." Recalling the Vesnin brothers' Pravda building of 1923, and unconsciously anticipating Robert Venturi, Morgan announced that Neutra had "designed a market which is really a living billboard which will attract the attention of the thousands of passing motorists long before they actually drive into the market." In designing the markets, Neutra explained, "I have been able to incorporate a number of important features which are of direct appeal to the busy motorist who is anxious to make his purchases in attractive surroundings and with the greatest speed. . . . This fact becomes more important during the traffic congested hours along the main outbound arterials of the city. . . ."

"Practically every display," insisted Neutra, "may be seen long before the motorist actually swings in to the motor-in market. . . ." A filling station and service garage were provided where customers could leave their cars while shopping in the market. The second-story offices opened out onto a roof garden where customers could stop for refreshments. "Around the front of the market," Neutra explained, "will be a continuous illuminated band of attractively lettered signs which will direct the incoming motorists to the different departments. All the lighting fixtures will be concealed behind panelled mirrors which extend around the open market above the display counters. These mirrors will pick up the display colors and give greater depth and attractiveness to the entire market . . . . A central rotating beacon with changing colors will sweep back and forth along the band of illuminated signs. Inasmuch as the heaviest sales come during the late afternoon and evening hours, this lighting feature has been designed to key in with this development . . . . Even the green lawns in front will take on the curved forms which follow the traffic lines."[9]

The Dixie-Drive-In Market of 1929, commissioned for Lexington, Kentucky, embodied most of those elements though on a greatly enlarged scale (fig. 23). The main building there was to be several stories high with office spaces above the shops. Across the parking lot stood open fruit and vegetable market stalls. Neither the Rush City

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nor Dixie-Drive-In Markets were ever built as such, but their publication and explication by Morgan and Neutra helped confirm and suggest further development of the inexorable, frequently anti-urban trend to drive-in shopping centers.

Like other modernist architects, Neutra was intrigued with the possibilities of the automobile service station—indeed the original auto structure. Schindler had designed an unbuilt prototype for the Union Oil Company in 1933. Stations were actually built by Bertram Goldberg in Chicago in 1938 and by Frank Lloyd Wright in Cloquet, Minnesota, in 1956. But Wright, Goldberg, and Neutra seem to have been the only major modernist architects to get beyond the planning and designing stages. Neutra himself had designed an unbuilt station garage in 1931. This so-called Auto Haven was drawn in a softer, more conventional, flower-bedecked style than the more stark and "modern" Rush City markets. It was, in fact, an early "motor hotel," obviously catering to travelers, with dining, sleeping, and recreational facilities in addition to the auto service functions. It appears relatively *retardataire*, however, when compared to a design of the mid-1940s for a station that was actually built (figs. 25, 26).

Neutra designed the Norwalk station for a client named Frank Davis in Bakersfield, California, for whom he had already designed a house in 1938 (fig. 24). Davis was the area distributor for Norwalk gasoline and decided to build this station for lease as an investment. He got from Neutra a crisp emphatic design with two overlapping slightly pitched roof slabs surging and "floating" above the glass and open spaces. It was a rare example for the time of a gas station built in the high International Style as opposed to the numerous Deco and streamlined *moderne* stations of the day. It was published in the trade journals and in the next decades became a pervasive image of gas station architecture. The International Style and kindred modes seemed perfect for the gas station—aesthetically, functionally, symbolically. They seemed to signify "gas station," to stick in the mind as *the* generic style, *the* appropriate type. Edward Ruscha confirmed this typology with his noted gas station paintings of the 1960s (fig. 27). When

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Your

Invitation

to

Inspiration

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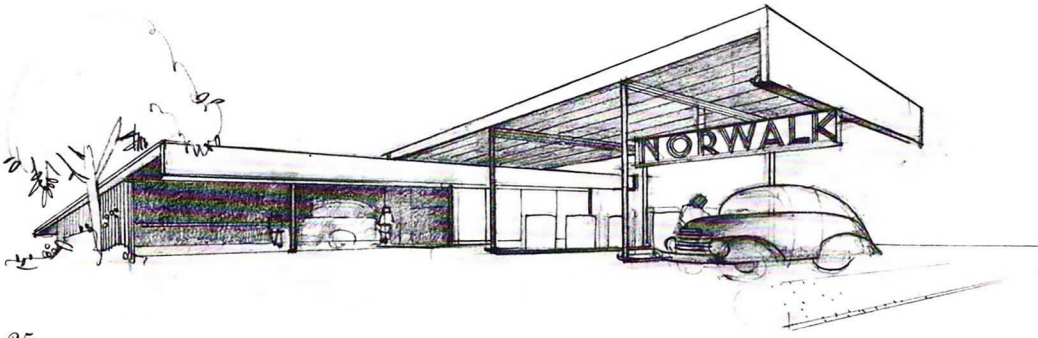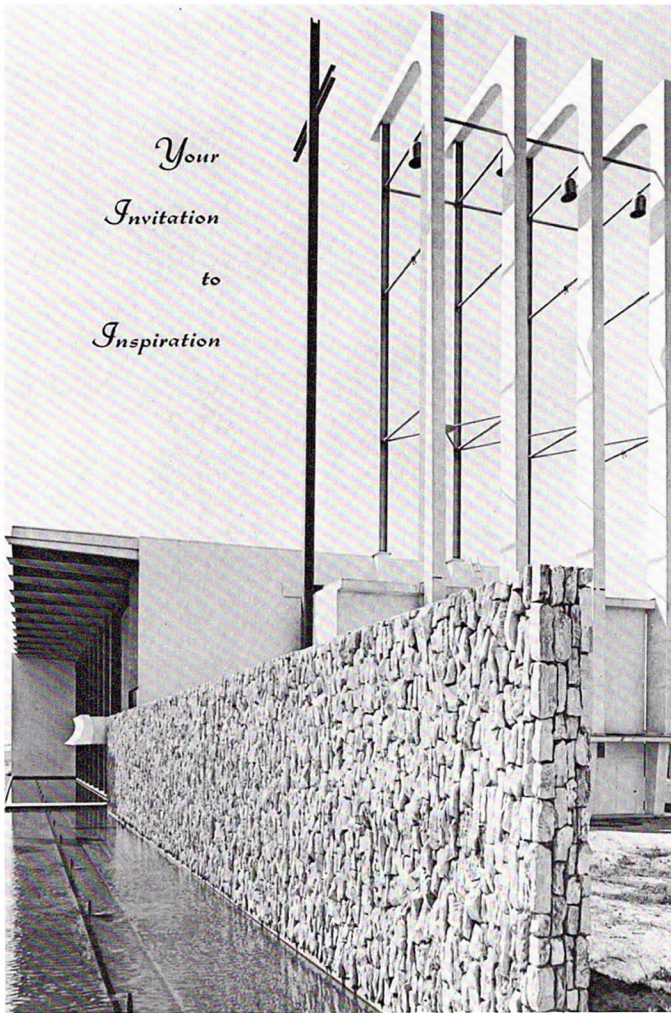
Norwalk Gas was consumed by one of the larger oil conglomerates with a differently named product, the large Norwalk sign, carefully designed by Neutra, had unfortunately to be removed. It had been important to the scale and the whole design of the building as signs frequently were to modernist structures. The Norwalk station later became bowdlerized as a body shop.

The drive-in markets and the Norwalk station were designed in the twenties, thirties, and forties when both Neutra and the Modern Movement were in their ascendancy. Neutra's largest, most ambitious and most potentially interesting drive-in structure, on the other hand, the Garden Grove Drive-In Church, was built in the mid-sixties when he and the Movement were obviously getting tired and defensive. Longstanding criticism that "modern" architecture was too hard, cold, austere, and abstract led to work that seemed, by comparison, soft, confused, and lacking in conviction. This was occasionally true of the work of both Neutra and Gropius, especially their large, late public buildings.

Neutra's Garden Grove Church was the world's first drive-in church and was based on the idea of the drive-in movie. When the Reverend Robert Schuller began his church near Los Angeles in fast-growing Orange County in the early 1950s on virtually no money, he held his first services in a drive-in movie lot which he rented on Sunday mornings. He delivered his sermons from the top of the concession stand using the theater's sound equipment wired to each car. He did this partially because he could rent the lot cheaply when he could not afford a hall, but as a smart operator and a concerned minister, he knew he could get an instant congregation of auto-bound invalids and indolents, who as good Angelenos were most comfortable in their cars and who could not or would not come to a regular service. In response to his advertisement of these special new services, he quickly developed enough of a following to construct a modest church building for administrative needs and indoor services. Convinced, however, of the need and validity of the drive-in option, he continued to hold a second service outside on the new church's parking lot. But the two remained sep-

31 Garden Grove Community
Church, Garden Grove, California.
Richard Neutra, 1960s.
32 Garden Grove Community
Church. Site plan:
a) sanctuary;
b) parking for worshipers;
c) sanctuary parking; d) lounge and
offices; e) social hall with kitchen;
f) nursery; g) Sunday school.

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SLIDE SILENTLY OPEN . . . and worshipers both in the
Drive-In Church and Sanctuary enjoy a clear
view of ministers and choirs . . .
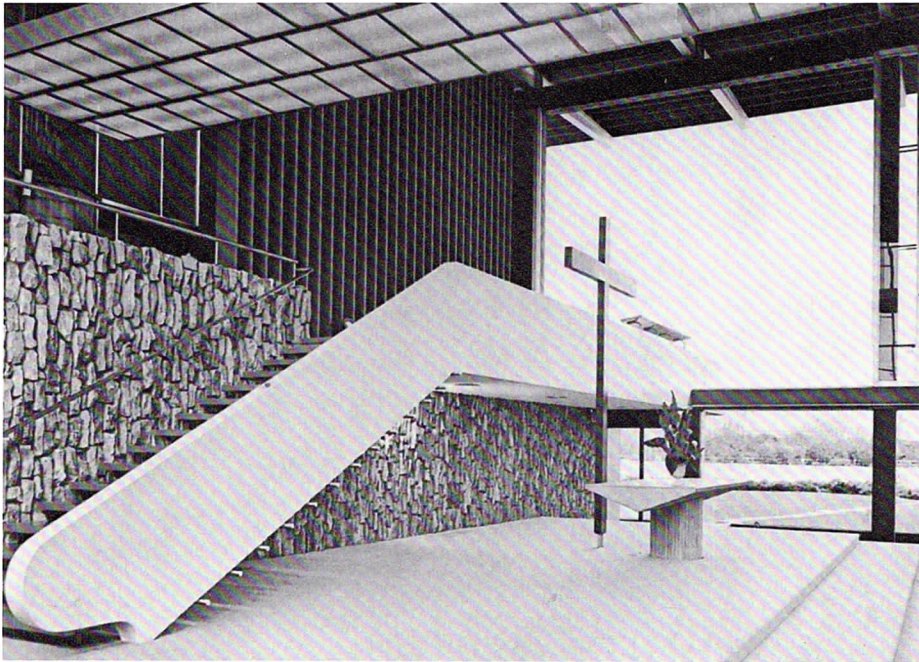
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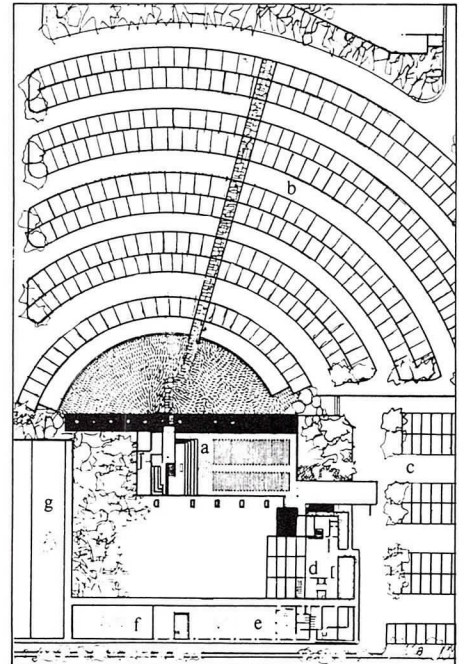
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50 arate; there was no interaction. And so in the early 1960s, with a greatly increased membership, Schuller decided he needed a building that would serve both functions at the same time. And, always thinking "big," he called on Richard Neutra, the best-known architect in California.[10]

The resulting church was built in several stages: the main building first in the early 1960s, the "Tower of Power"[11] in the late 1960s, and Sunday schools and various offices constructed throughout the decade (figs. 28–32). Neutra designed an indoor/outdoor pulpit on which Schuller would stand to deliver his sermons, speaking to the well-groomed, able-bodied, traditional churchgoers inside, as well as to those outside in the "pews from Detroit," each parked on a slight incline so as to allow maximum view of Schuller and the nearby choir. One major difference between this and the original drive-in movie church was that Neutra dispensed here with the individual sound boxes hooked onto the car door and for sound relied solely on individual car radios carrying the broadcast of the service inside. This would, of course, discriminate against cars without radios, whose owners would have to sit as if watching a silent movie.

Certainly when viewed from a traditional perspective, this was a most unusual building program, and it furnished a number of rich possibilities, which Neutra's design in fact somehow failed to meet. On the whole, it came off as rather tired and lifeless, falling prey to what would come to seem the most banal clichés of "late modern" architecture. The attempts to "warm it up" with such materials as natural rock were incompatible with the automotive ambience—unless Neutra derived them unconsciously from Detroit's flabby, flossed-up confections of the late fifties and early sixties. Except for Neutra's indoor-outdoor pulpit, the building's obvious juxtaposition with the parking lot, and the streamlined automotive motifs in the campanile, there was little apparent effort or intention to relate the building to the car in form, in materials, in symbolic or iconographic ways. Where, for example, was the chrome so beloved by the modernists? Reyner Banham has noted the similarity between the form of the campanile and automobile car-wash standards,[12] though it is questionable how conscious Neutra was of this connection. In any case, one wishes there had been more such allusions.[13] If Neutra had only brought to this church the talent and imagination reflected in the signs, forms, symbols, and materials that he had used in the Norwalk gas station and the drive-in markets, for example, he might have achieved a more convincing and memorable work. This, after all, was not a traditional or tradition-bound congregation with a traditional church building program. Both Schuller and Neutra were men of verve, imagination, and even wit and irony. In using and exploiting the idea of the car and the drive-in motor age, could they not have achieved more—for themselves and for architecture?

The symbols, the forms, the imagery, the materials, were all present already both in automobile culture and in the Modern Movement, a movement which from the very beginning had welcomed, celebrated, and exploited the car. In fact, functionally, structurally, aesthetically, and symbolically it had already proved itself the ideal companion for the early motor age.

Notes

Source Note: This article is an edited version of a paper presented to the Society of Architectural Historians, Savannah, 1979.

1. Richard Neutra, *Life and Shape* (New York: Appleton-Century Crofts, 1962), p. 172.
2. Harwell Hamilton Harris, "AIA Gold Medal Awarded to Neutra," *North Carolina Architect*, May/June 1977.
3. Thomas Hines, interview with Dione Neutra, Los Angeles, Jan. 25, 1979.
4. Ibid.; Neutra, *Life and Shape*, pp. 259–61.
5. Richard Neutra to Lilly Niederman, Jan. 1931; Neutra to Dione Neutra, Dec. 19, 1930, Dione Neutra papers.
6. Arthur Millier, "Problems of Bus Design Told," *Los Angeles Times*, Oct. 9, 1932.
7. Hines, interview with Dione Neutra. Neutra had worked in Mendelsohn's Berlin office from October 1921 to August 1923.
8. Quoted in Reyner Banham, *Theory and Design in the First Machine Age*, 2d ed. (New York: Praeger, 1967), pp. 103, 282.
9. Willard Morgan, "At last—A Place to Park," *American Builder* (July 1929), pp. 58–60.
10. "Garden Grove Community Church," *Church Management*, XXXIX (Oct. 1962), pp. 16–20.
11. A popular local nickname for what Neutra and Schuller had called the "Tower of Hope."
12. Reyner Banham, *Los Angeles, The Architecture of Four Ecologies* (New York: Harper and Row, 1971), p. 195.
13. Philip Johnson's later, related "Crystal Cathedral" design for Schuller, 1977–80, takes even less notice of the church's automotive and drive-in identity than Neutra's original buildings.

Figure Credits
1–31 Courtesy the author.
1 From *Colliers*, Feb. 15, 1936.
2–4, 8–11, 13–24 Courtesy Neutra Archive, U.C.L.A. Special Collections (3, Luckhaus; 14, W. P. Woodcock; 24, Julius Shulman).
5,6 Courtesy Dione Neutra.
12 From Norman Bel Geddes, *Horizons* (Boston: Little, Brown, 1932).
26 From Richard W. Snibbe, *Small Commercial Buildings* (New York: Reinhold, 1956).
27 Courtesy Edward Ruscha.
28, 30 From Garden Grove Community Church brochure, "Your Invitation to Inspiration."
32 From *Richard Neutra 1961–66: Buildings and Projects* (Zurich: Verlag für Architetktur, 1966).
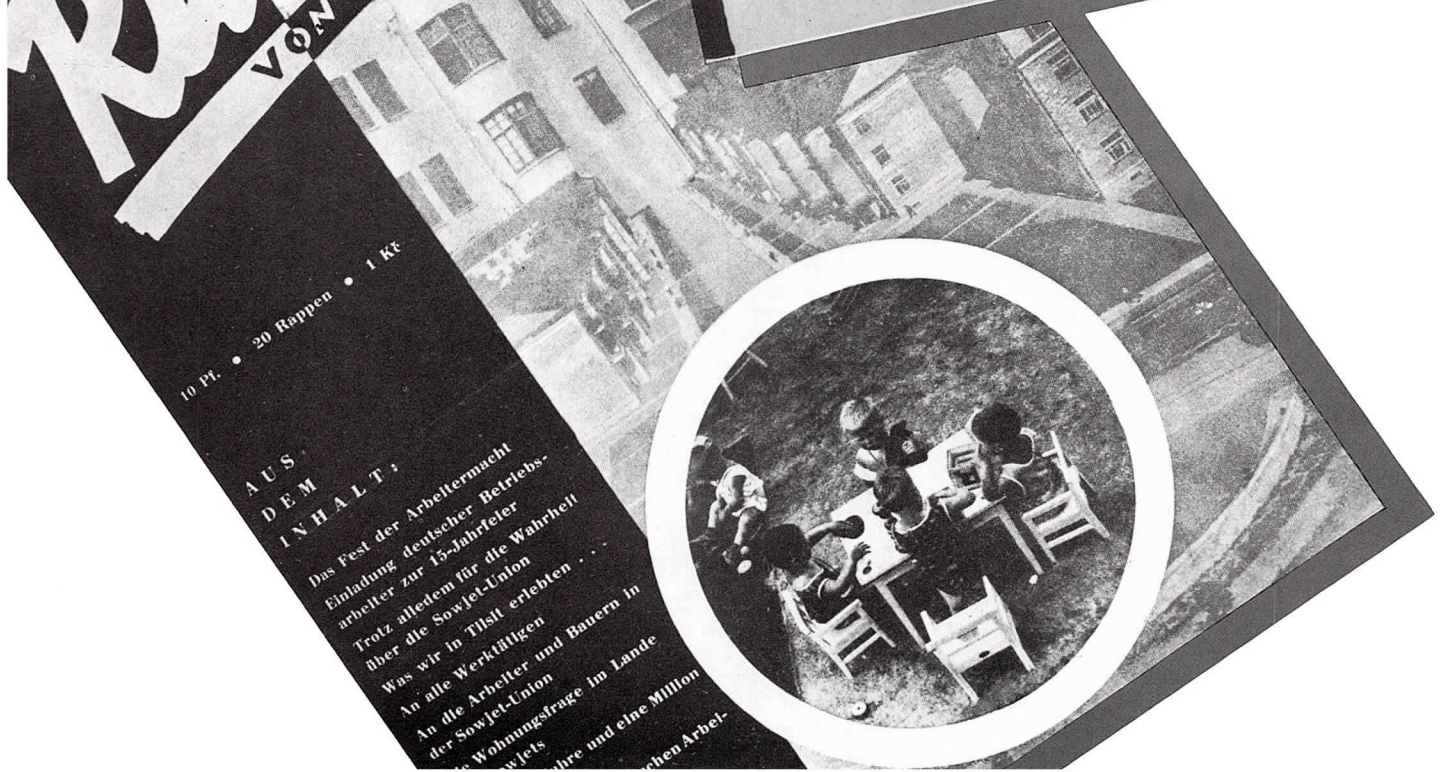
The Idea of the *Dom-Kommuna* and the Dilemma of the Soviet Avant-Garde

Barbara Kreis

"The real emancipation of women, real communism, will begin only where and when an all-out struggle begins (led by the proletariat wielding the state power) against this petty housekeeping, or rather when its wholesale transformation into a large-scale socialist economy begins."[1] Lenin's statement of 1919 became the keynote for the avant-garde architects in their designs of *dom-kommuna* (housing communes) which appeared in the late 1920s. Underdeveloped Russia was the country in which the concepts of an egalitarian life were supposed to be materialized in architectural terms without becoming unrealistic like the earlier Utopian Socialist plans.

The Russian avant-garde saw themselves as serving the new social situation, and used the instruments which symbolized the advancement of the new society. In order to create new forms for the new contents, they proclaimed in their projects a scientific rational organization, construction and building materials that were functionally and technically highly developed, and a collectivized system of living. However, in their search for new forms they neglected to consider certain conditions, and their own demands were their undoing. Most of the projects for the collective life in a *dom-kommuna* never left the drawing board. The designs were rejected in Russia as being too left, while in the West they were interpreted either as proof of repression, or as evidence of a progressive force in a socially emancipated movement, or finally as the betrayal of a revolutionary idea through Stalin's influence on all spheres of life.

The development of the *dom-kommuna* exemplifies the general discussion centered around architecture: it accompanies the decline of the avant-garde in the late twenties and the 'functionalization' of architecture in the early thirties with regard to overall social aims. Parallels with Western (especially German) development seem obvious, if only because the apparent conditions are very comparable; but this comparison overlooks the differences in the given historical context.

A new spirit in old buildings: socialist changes
Through its revolution, Russia, as one of the most under-

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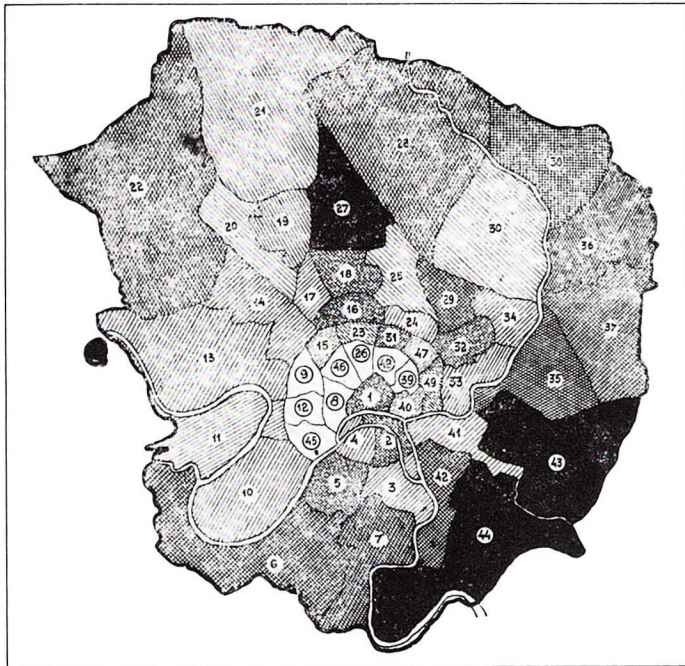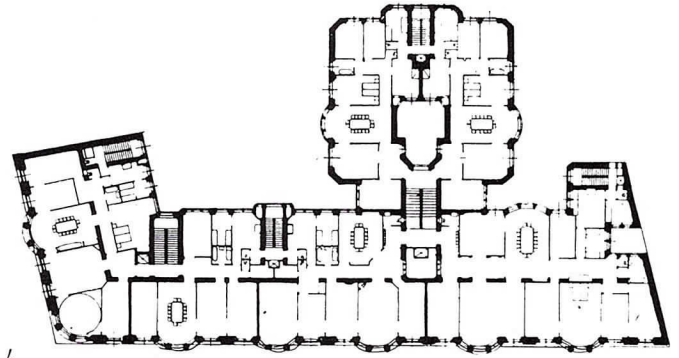
developed countries in Europe, was to take a transitional
step away from its traditional archaic agricultural form of
production toward socialism. Russia had virtually no dem-
ocratic tradition and prior to 1917 had been characterized
by a ruinous economy and by low levels of science and
technology. Meanwhile the housing problem in the major
cities was comparable to that of nineteenth-century west-
ern Europe. However, although agriculture before 1917
still retained strong feudal chracteristics, the cities, with
the help of the State, had developed into big industrial
centers. The consequence of this development, as in West-
ern industrial centers, was the mass migration of workers
from rural areas to the cities, causing major housing short-
ages.

Of Moscow's 1912 population of 1.8 million, 300,000 inhab-
itants lived in basements and cellars. Though a bourgeois
apartment normally provided shelter for three to five peo-
ple, an average of 8.7 people lived in a typical Moscow
flat. The death rate was 27.5 per 1000 citizens each year,
as compared with Berlin of the same time where the death
rate was 15.4.[2]

The basis for socialist city planning was created on the
day after the revolution, October 26, 1917, through the
Decree on Nationalization of Land (fig. 5). The country
stood on the brink of ruin because of the civil war and the
international economic blockade. Measures which could
lead to an improvement in the housing situation remained
largely organizational in the early years following the rev-
olution while more important political and economic prob-
lems had priority. One of the first steps to be undertaken
after the revolution was the transfer of slum dwellers
from the outskirts to centrally located bourgeois flats (fig.
4) which, according to law, were to house one person per
8.2 square meters (fig. 2).[3] Through this communalization,
the percentage of workers living in central areas grew
from between three and five percent of the population to
forty percent. The result of this was communal flats in
which families shared common kitchens and bathrooms,
and frequently, because of space shortage, had to use
curtains as make-shift room dividers. Even today such
shared communal households, which existed even prior to

4 *Upper middle class apartment
house, Moscow, 1913.*
5 *Cover of* Zhilishchnoe
Tovarishchestvo, *1926, showing
views of a* dom-kommuna; Collection
of Orders and Important Decrees on
the Housing Situation, *Moscow,
1921*; Decree on Nationalization of
Land, *Oct. 26 (Nov. 8), 1917.*

1917, have not entirely disappeared and remain a night-mare in terms of family living (fig. 3).

Simultaneous with this communalization of housing and with the intention of creating a new socialist form of life, the first voluntary attempts at collective living were begun. The *New World Review*[4] in 1920 described one of these communes (fig. 5), which consisted of twenty five-story buildings and was assigned to the Bakers' Union. Adhering to Communist principles the inhabitants ran the commune's affairs, renovated the buildings, administered the sharing of kitchens, established a laundry, a child-care center, a nursery, and a reading room, and arranged parties and concerts on the lawn. By 1921, 865 such communes existed in Moscow. The idea of the 'commune' went back to the 'Paris Commune.' Young revolutionaries calling for its continuation had already founded the first communes during the reign of the czars, in anticipation of a socialist form of social organization. After the revolution these collective principles of work and life were proclaimed and put into effect through the organization of factories, unions, and committees.

The *dom-kommuna* was described in the Party program at the Eighth Party Day, 1919, as a means of emancipating women and giving them equal rights. The program declared "the Party strives to free women from the burden of outmoded housekeeping through the establishment of the *dom-kommuna*, public dining halls, central laundries, and nurseries. . . ."

Legal support for the *dom-kommuna* is found in the decree of May 23, 1921 (fig. 5),[5] "Toward an upgrading of workers' living conditions and measures against the destruction of housing." This decree provided that all inhabitable buildings on factory property be turned over to the employees for use as communal housing, and called for the acquisition of additional living space through the reparation of damaged buildings and the completion of unfinished ones. Workers who lived in miserable quarters such as cellars or attics and who lived farther than 3.2 kilometers from the factory would have first claim on housing thus provided. In the interest of building preservation

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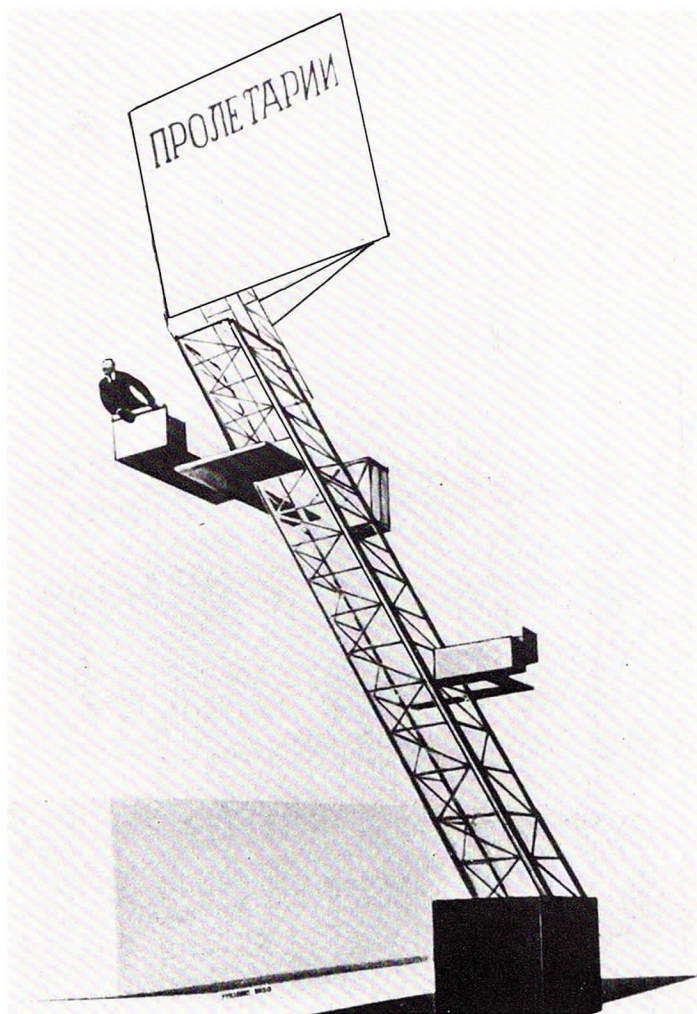
and improvement, the assignment and repair of commune houses would be turned over to company management, and all movable furnishings would belong to the company. A general assembly of inhabitants would select the commune's steering committee, which, among other activities, could call for the organization of nurseries and playgrounds.

After this decree was announced, a circular concerning the construction of housing communes for the new generation of workers was published. Young men and women working in a variety of factories and businesses scattered throughout the city would benefit, it was suggested, by living among their peers and further would be afforded the possibility of both group interaction and personal solitude. The first step called for the construction of buildings each to house fifty youths, with provisions for 4.5 to 8 square meters per person. Well-lighted, wholesome bedrooms, a communal dining hall with a kitchen, and a spacious library were envisioned, while a laundry could be provided if desired.

These early communes stemmed largely from organizational measures to improve living conditions and were introduced either through administrative channels for the purpose of creating factory housing or on a voluntary and ideological basis through population resettlement programs. These post-revolution provisions for housing were the fulfillment of a social task which the new conditions had created. They were concerned more with providing greater living space, derived from new societal requirements and realized through the available means, rather than with seeking the 'correct' socialist way of life.

Ideas and efforts toward a proletarian culture
In light of the devastatingly poor sanitary conditions, the population density, and the extreme poverty, the essential demand was for hygienic and economic new buildings; plenty of free space, fresh air, and green areas were also desired. In this spirit *Izvestia* reported on August 15, 1918, on the measures for Moscow's reconstruction. It advised architects that in designing new and renovated city quarters special attention should be given to sanitary

installations in housing for the poor and to the placement of polluting factories outside of residential areas. In 1919 a program was proposed for the construction of model quarters which consisted of eight to twelve residential buildings with community utilities and was to serve as an experiment for the city of the future.[6] However, poor economic conditions caused construction to come to a virtual halt, so that such plans for model cities remained largely a theoretical expression of architectural city planning programs. Parallel to this battle for necessities, a discussion carried on with revolutionary fervor continued concerning the creation of a proletarian culture.

Artistic societies were formed. Determined by the new social consciousness, they called for radical change in all areas of social living and wanted to revolutionize artistic means. Avant-garde artists found a new social basis for their ideas and formed the Free State Art Studios in 1918, which in 1920 became the State Higher Art and Technical Studios (*Vkhutemas*). This institution, which shared many ideas with the Bauhaus, made it its task to place art in the service of mass production, with the intent of producing useful articles capable of giving satisfaction to all rather than to a few individuals. It sought to free art from the ballast of bourgeois aesthetics and to adapt it through the *Neue Sachlichkeit* (the new objectivity) to the modern technical possibilities of the industrial present.

Vladimir Tatlin dealt in his introductory course on creative work with the structure of materials. His Monument to the Third International of 1919 clarified his view that expressive power should be sought entirely in construction, as did El Lissitzky's Lenin Tribune project (fig. 6) and the Vesnin brothers' project for the Leningrad Pravda building. Nikolai Ladovsky gave lectures on problems of visual perception and the laws of perspectively distorted forms; his 1920 design for a housing commune (figs. 7, 8) exemplifies his experiments with space and motion studies. After the basic courses there was instruction in specialized workshops.

Yet the transition from handicraft to industrial production was frequently impossible, so that many products, such

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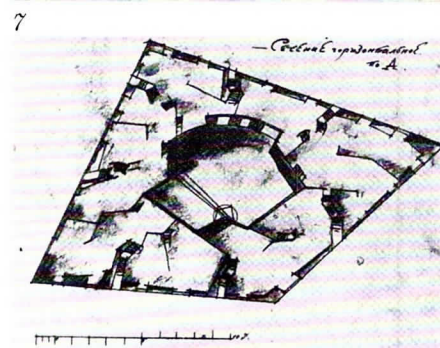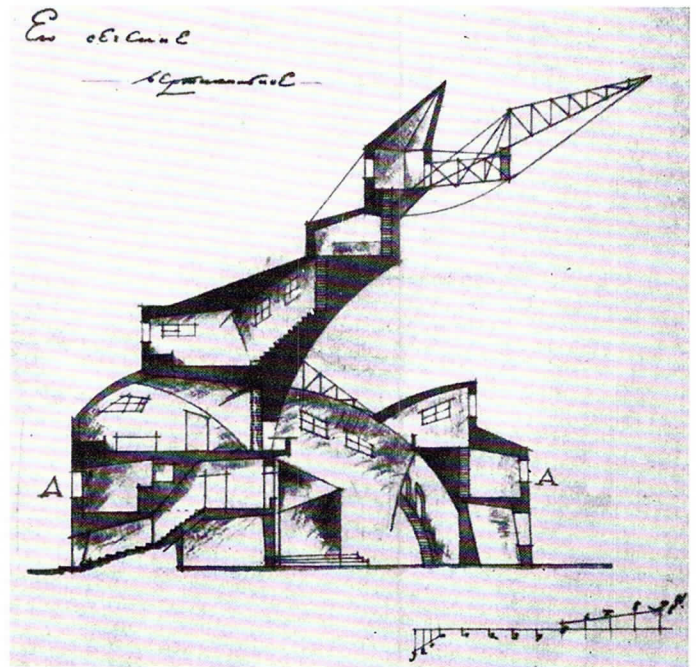
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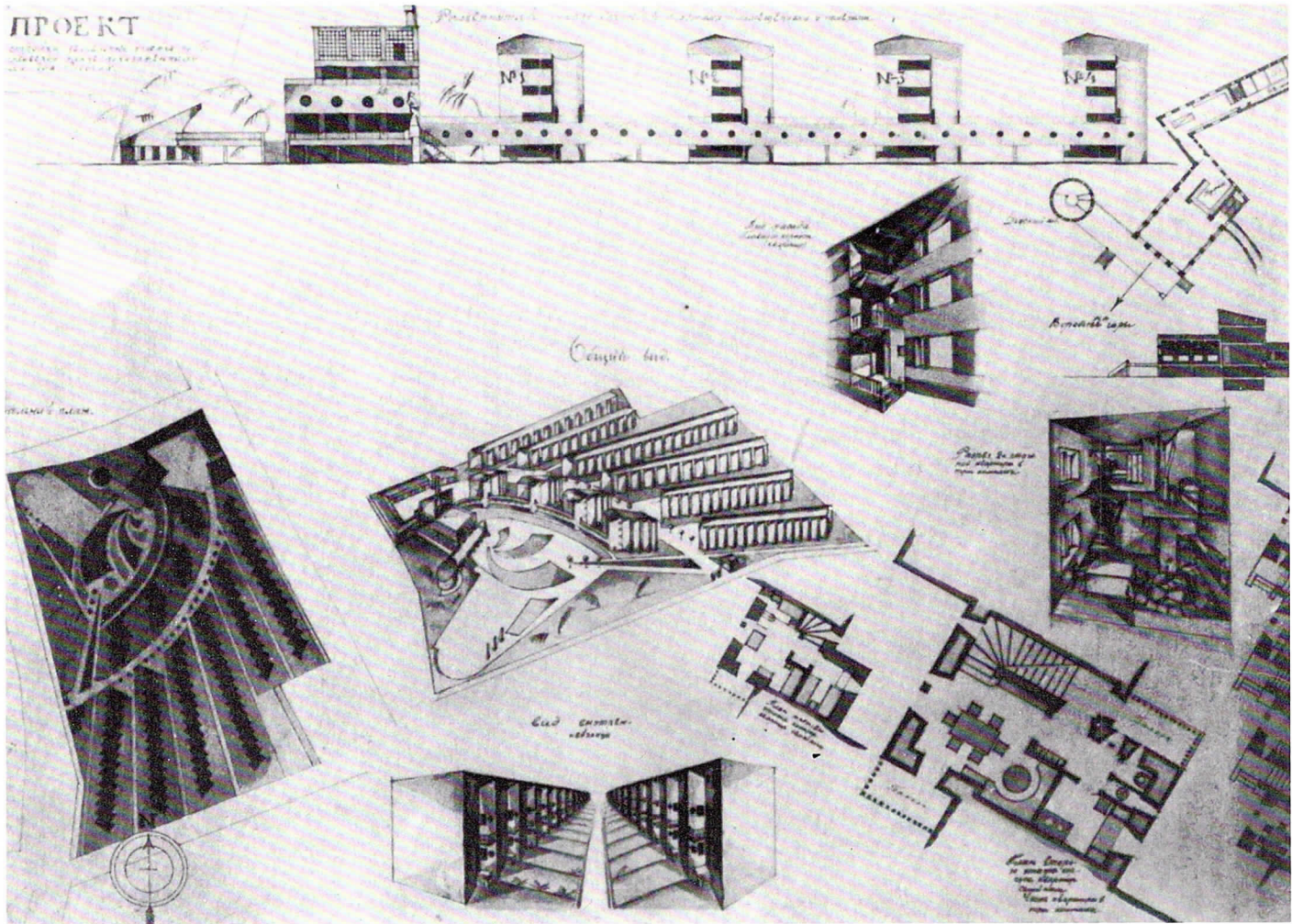
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9 Design for workers' housing for
Serpukhov Ulitsa, Moscow.
Konstantin Melnikov, 1923.
10 Housing settlement on Chavsko-
Sabolskii Road, Moscow. G.
Volfenson, S. Aizikovich, E. Volkov,
1926–27. Site layout showing dom-
kommuna and residential district.
11 Dom-kommuna on Chavsko-
Sabolskii Road. Typical floor plan.
12 Dom-kommuna on Chavsko-
Sabolskii Road. Front elevation.
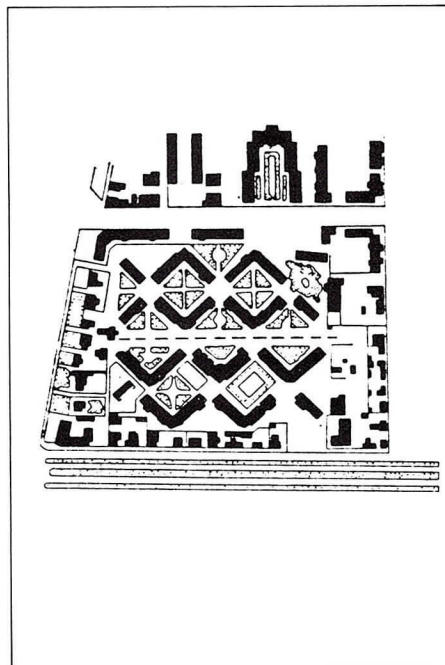
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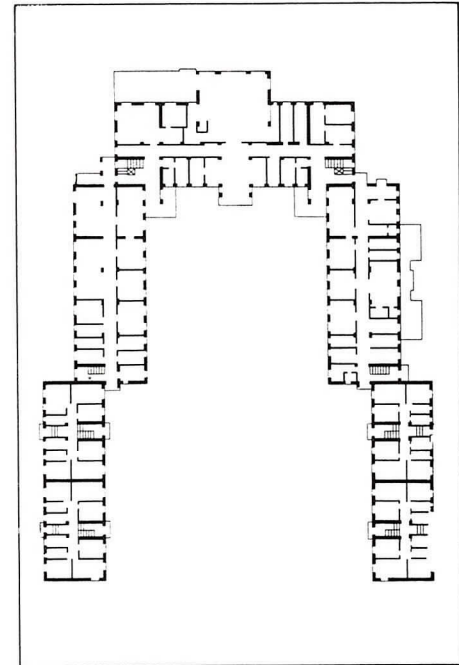
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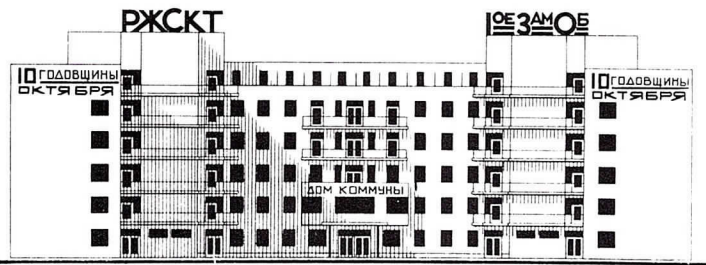
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as furniture, clothing, and the like, remained only symbols of the new life. The designs remained more as a stimulus, as daring ideas, than as blueprints for actual realization. Lenin's position on the new cultural movement was clear from the start. He warned and reproached those intellectual dreamers who reveled in the so-called "proletarian culture" and neglected to consider the actual cultural level, the current exigencies, and the need for massive programs in cultural education.

From traditional forms of life in traditional architecture to new forms of life in traditional architecture
After the revolution, through the immediate socialization of all capital goods, the State had attempted to take central control over all factors of production and distribution. In 1921, however, after the civil war, this 'War Communism' lost its political significance, and its organizational potential was seriously called into question in light of widespread famine. With the introduction of the New Economic Policy (NEP) of 1921, private trade obtained greater freedom again. It was believed that capitalistic trade methods could better assuage the economic misery and encourage cultural development.

The first major housing projects were begun. Of special importance was the 1922 competition which called for the planning of model workers' quarters to be constructed in Moscow's downtown. Hygienic and wholesome living and enough light and fresh air were the main demands. The desirable masonry building would be two to four stories high and would cover thirty percent of the available area. Seventy-five percent of the apartments would be provided with child-care centers, nurseries, and libraries for families (these were two-room apartments of 54.62 square meters and three-room apartments of 68.28 square meters), while the remaining twenty-five percent would house single persons (13.6 to 20.5 square meters per two individuals). Under the competition conditions community facilities had to be provided. In addition, provision had to be made for management, maintenance, housekeeping, and accounting rooms, as well as a pharmacy and accommodation for an ambulance.[7] In many of the projects (notably those of Leonid Vesnin, Sergei Chernyshev, and Ilia

and Pantaleimon Golosov) the apartments were planned   59
as three-story houses with community utilities located in single buildings. Only in Konstantin Melnikov's extraordinary design (fig. 9) were the apartments planned in fan-shaped blocks and linked with the community building at the second floor level by a passage.[8] The first settlement projects often aimed for a combination of the Russian *izba* (farm hut) with the comforts and amenities of the new English Garden City cottages (as in the Sokol project by N. Markovnikov, fig. 14), but block planning was increasingly regarded as being most suitable for mass housing projects.

The Moscow Soviet showed a similar orientation in its announcement of the "First Competition for Workers' Housing" in 1925. Planning and execution were to correspond to living conditions and climatic circumstances. Rational selection of building materials and construction were to lead to economical building units of optimum comfort and sanitary installations appropriate to the limited space. For residential space there were provided fifty percent two-room apartments, thirty percent three-room apartments, and twenty percent larger apartments, with 6.75 square meters living space per person. All competition entries were to present a less expensive alternative to earlier plans and were to consider local building materials and production capabilities. These requirements reveal the primary importance placed on economic and technical considerations.[9]

The Moscow Soviet's second competition, announced in late 1925, for proposed communal house types, was oriented in its program toward a new form of life; but in construction and design the expectations were based on earlier projects. The complex specified was to house 750 to 800 individuals, allotting six square meters per person and with a private kitchen; ten percent of the living space was designed for single individuals, thirty percent for childless couples, and sixty percent for families. Community services would be provided by a central kitchen, dining hall, laundry, kindergarten, and nursery. Three- or four-story building complexes were envisioned, construction materials were to be locally available, and con-
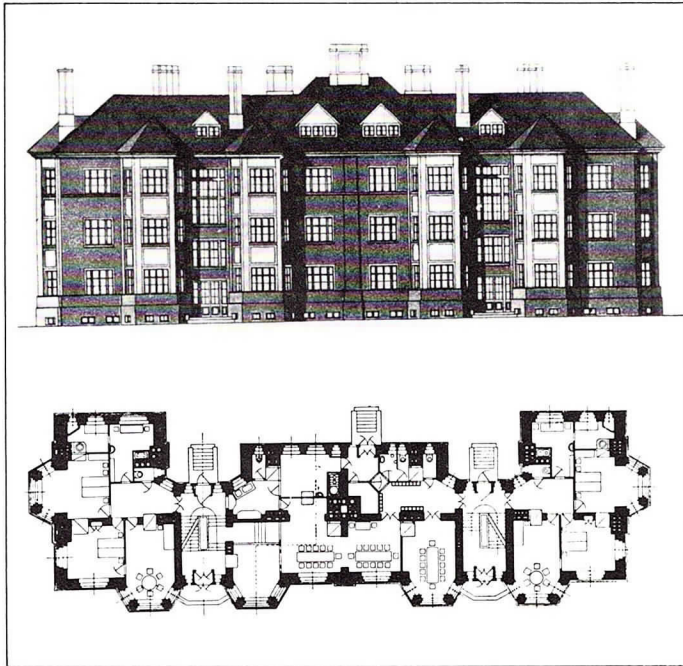
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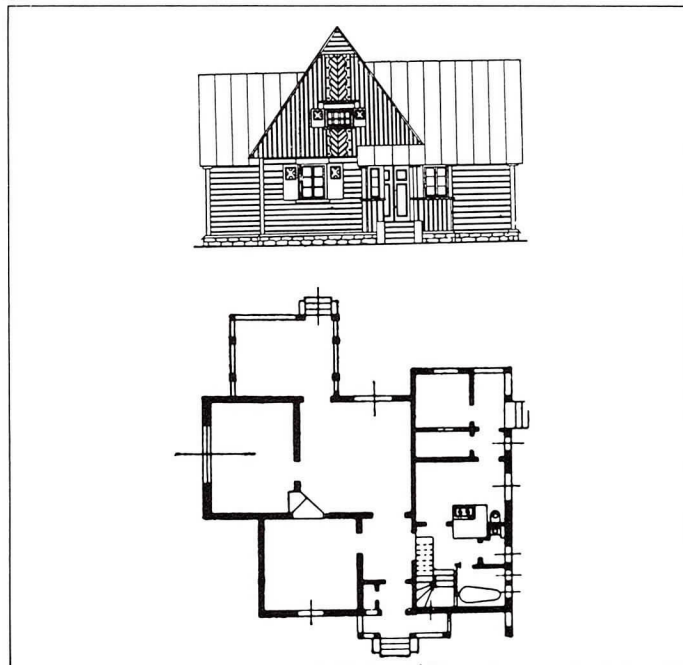
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struction time was to relate to depreciation time.[10]

The first prize (figs. 10–12), awarded to architects G. Volfenson, S. Aizikovich, and E. Volkov, and realized in a slightly changed form between 1926 and 1928, placed the apartments and community rooms on different levels in a single building; in later descriptions this residential project was deemed to be the first *dom-kommuna*. In 1928 the central housing office (*Tsentrozhilsoiuz*) issued an ordinance describing the goals and organization of communal life. The major articles of this document concerned education and medical care and were to be achieved through collectivization of education, food preparation, laundering, and cultural organization. The inhabitants were required to take active part in social and cultural activities, while the aim was to wipe out illiteracy within one year. Vestiges of the old way of life were not to be tolerated in the new society—neither drunken rowdiness nor religious icons. At the same time, eighty percent of the workers' salaries was to be turned over to the community.

The bulk of the projects announced by the Moscow Soviet were to reflect local methods and experience in construction materials, while for their design they were dependent on Western settlement projects as well as on traditional forms (fig. 13). An upgrading of housing was to be achieved through sanitary living quarters, the provision of adequate green areas, and adjoining community service spaces.

Yet the housing shortage could scarcely be alleviated through construction of new buildings.[11] The new housing allocated for approximately 270,000 people between 1923 and 1928 was inconsequential in relation to the additional 880,000 migrants who came to Moscow during those years. In addition, improved nutritional and health conditions led not only to a drop in the death rate, but also to a rise in the birth rate; thus to an overall national growth in population which in urban areas was augmented by the influx from rural areas. The average living space per person dropped from 5.8 square meters in 1926 to 4.54 square meters in 1928, although statistics vary greatly and give

13 Design for a housing commune. L. Vesnin, 1924. Elevation and plan.
14 Blockhouse within the Sokol area, Moscow. N. Markovnikov, 1923. Elevation and plan.
15 Design for the Leningrad Pravda building, Moscow. L. and V. Vesnin, 1924.

only a rough idea of the misery involved. Many businesses could provide little or no living space for their employees in either dormitories or barracks, so that workers and their children often slept on the floor of workshops.[12] Despite the misery, it was not possible to convert company buildings into communal houses as had originally been intended. Of the 471 company-owned communal houses registered in 1921, only seventy-seven were still in existence several years later,[13] and a similar fate had befallen communes in the collectivized flats. The housing shortage remained so acute that even the newly built housing communes became overcrowded. Whole families lived in single rooms originally designed for one individual and still cooked with their own gas burner, while rooms designated for central service and community use had to be reorganized for living space.

The impact of technology on socialism
The deep discrepancy between the pressing necessity to build and the desire to view construction as an architectural statement was particularly noticeable at this time in the Soviet Union. On the one hand there was a need for the quick and inexpensive production of living space, while on the other there was an intention to create a new socialist architecture. In the project description for the above-mentioned competition, the journal of Moscow's Association of Architects (MAO), *Architektura*, declared in 1923 that besides economic and sanitary conditions, social ideological components existed which had yet to find their organizational form and specific solution. For this reason enthusiastic reformers remained dissatisfied with the building projects. The journal argued, however, that "The challenge cannot be worked out immediately; it must be met through life and practical experience."[14]

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Various groups soon formed, each of which embraced a different opinion concerning the new socialist architecture. In the meantime the older generation of academic architects devoted themselves more to practice than polemical discussion. Nikolai Ladovsky founded the AS-NOVA (Association of New Architects) in 1923, which stressed functionalism, rationalism, and autonomy of forms. The Constructivist Moisei Ginsburg and the Vesnin
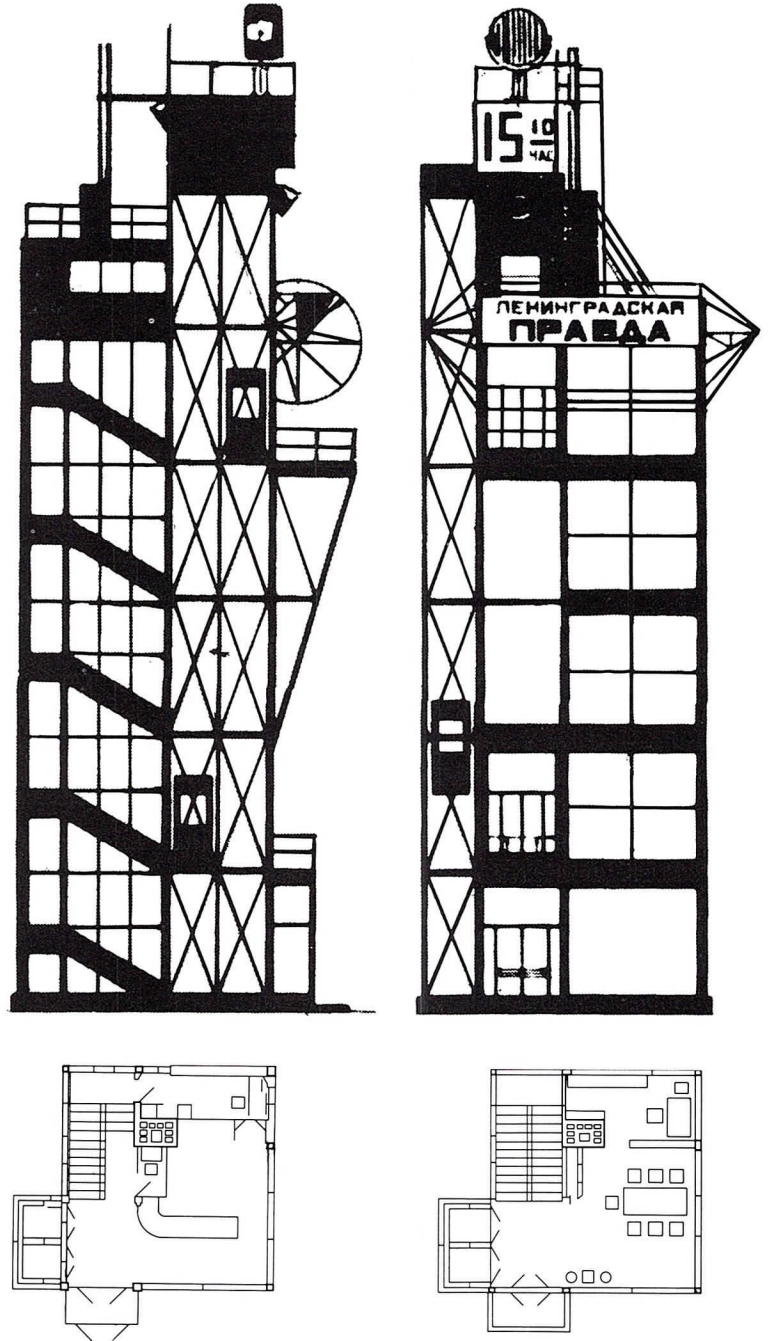
16 Design for a residential complex with communal facilities. I. Sobolev, 1927. Site plan and typical cross-section. Arrowed lines show bridge circulation at third floor level.
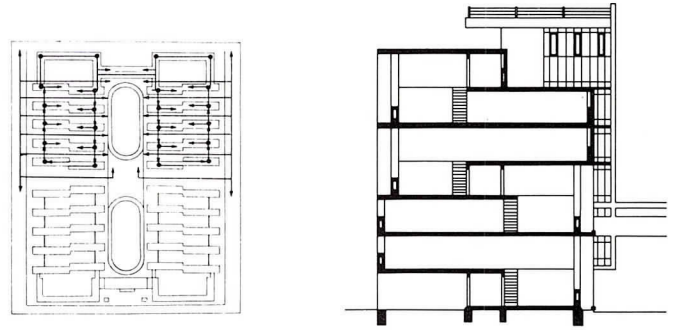
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62 brothers formed the OSA (Association of Contemporary Architects) in 1925, which maintained close contact with developments in Western functionalist architecture. They took up social architectural tasks, and their method aimed for integrity in terms of material and construction.

In their synthesis of technical and artistic elements the avant-garde architects sought to achieve an outward form for a new social content; aesthetic measures that would depend on technical functionality. Practicality was considered the highest and only characteristic criterion of the machine. The architects felt that this was the formal source of a new beauty. But with the singular orientation toward progressive technology and science, certain material economic realities were overlooked. El Lissitzky's comments on the Vesnin brothers' design for the new Pravda building of 1924 (fig. 15) exemplify the enthusiasm for the symbol of the new age: "The building is characteristic for an age which is aching for glass, iron, and reinforced concrete."[15]

The enthusiasm for machinery and technology was symptomatic of the importance attached to industrialization in the country. From a Marxist standpoint, the social system of the youthful Soviet Union was the most advanced in the world, yet technologically it lay far behind capitalism. According to Lenin the economy had to be raised to the same level as the political structure by bypassing developmental stages through the utilization of new technology. In this way the fight for a new technology became the fight for socialism. According to the slogan "Either catch up economically with advanced countries or perish," the Soviet Union industrialized in order to become economically independent and capable of preventing Western intervention.

At the Fourteenth Party Day in December 1925 (also called the Party Day for Industrialization), intensively forced development of industry was decided upon since sympathetic proletarian revolutions in highly developed industrial countries were no longer anticipated. By proclaiming "the building of socialism in *one* country," the Soviets demonstrated their determination to become eco-

nomically and politically self-sufficient. In a country in which the rapid development of productive methods was a question of survival, the appearance of intensive propaganda on behalf of machines and motors was hardly surprising, and general enthusiasm for technological advancement naturally became a political issue. Western industry served as a model; since as yet no alternative socialist strategies had been developed, the goal was "a combination of Soviet social order and American technology."

New form and new content
The fascination with technological advancement and social change was concentrated in the new projects for communal houses (fig. 20). Discussions and suggestions for new socialist housing were introduced between 1925 and 1926 by the journal *Sovremennaya Architektura* (Contemporary Architecture), the publication of the OSA group. This magazine organized a survey of specialists and society members in order to clarify certain questions. A fraternal competition was organized for members dedicated to the theme of the "New Living." This was announced in 1927 and the various entries were displayed at the exhibition "Contemporary Architecture" (fig. 19). The major trend among competitors was to propose solutions which would allow for the gradual dissolution of individual households. To this end most schemes projected small apartments with kitchenettes and baths, though it was hoped these would later be abandoned by the occupants in favor of the communal services. The word "*dom-kommuna*" was consciously omitted, since this term, as one architect declared in his project description, would only serve to arouse prejudices and negative associations.[16]

OSA took a stand against those workers who, backed by the Moscow Soviet, advocated the retention of individual apartments with separate kitchens. In the light of the new social situation, the *dom-kommuna* provided for the broadest and most stable form of living while simultaneously serving an educational function and affording a certain emancipation from the single household.

Moisei Ginsburg's entry for the competition projected maisonette apartments along one side of a long corridor with

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17 Detail of additive housing
system. V. Vladimirov, 1927.
18 Additive system of communal
housing. Vladimirov, 1927. a) Block
configuration, b) Block layout.
19 Exhibition room of OSA exhibit,
"Contemporary Architecture," 1927.
20 "Our' commune—we are for the
new way of life."
Tram Theater of Young Workers.

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b

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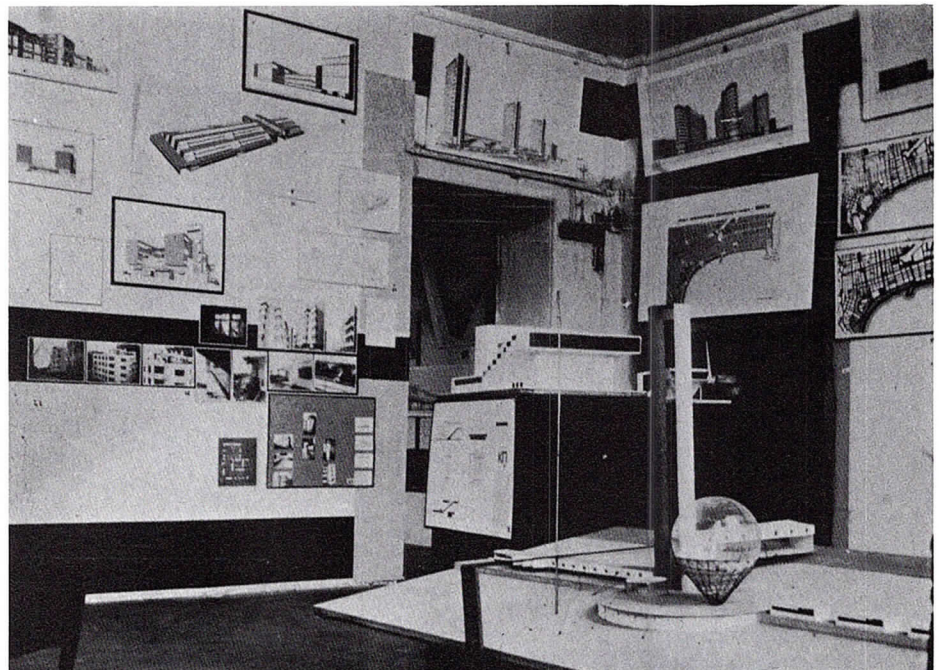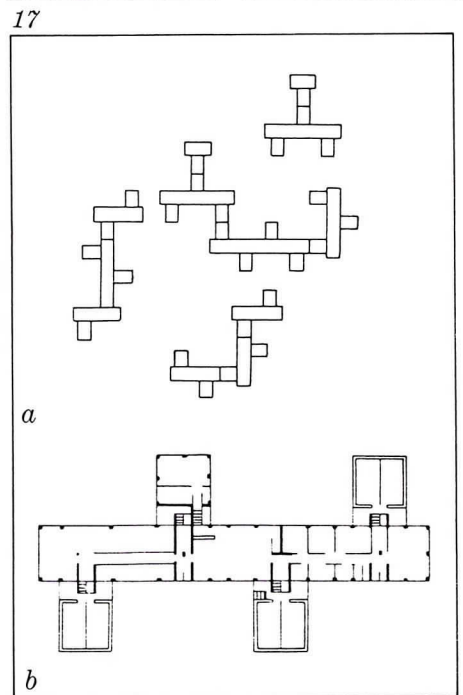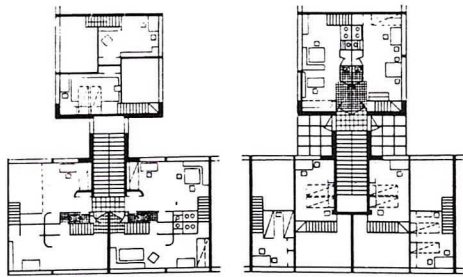
21 Narkomfin, housing for
employees of the Finance
Commissariat, Moscow.
M. Ginsburg and I. Milinis, 1929.
Type F kitchenette.
22 Plans of type F apartments.
23 Perspective view.
24 Typical floor plans.
25 End elevation showing linkage
between communal block and gym.

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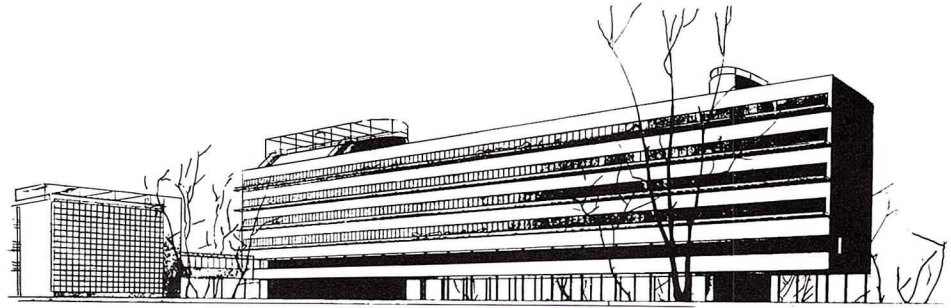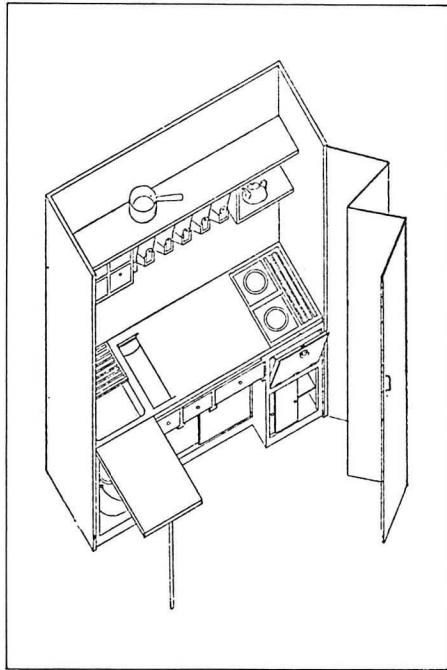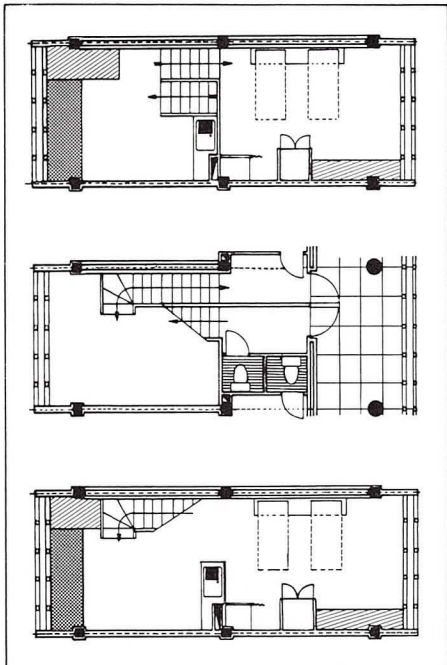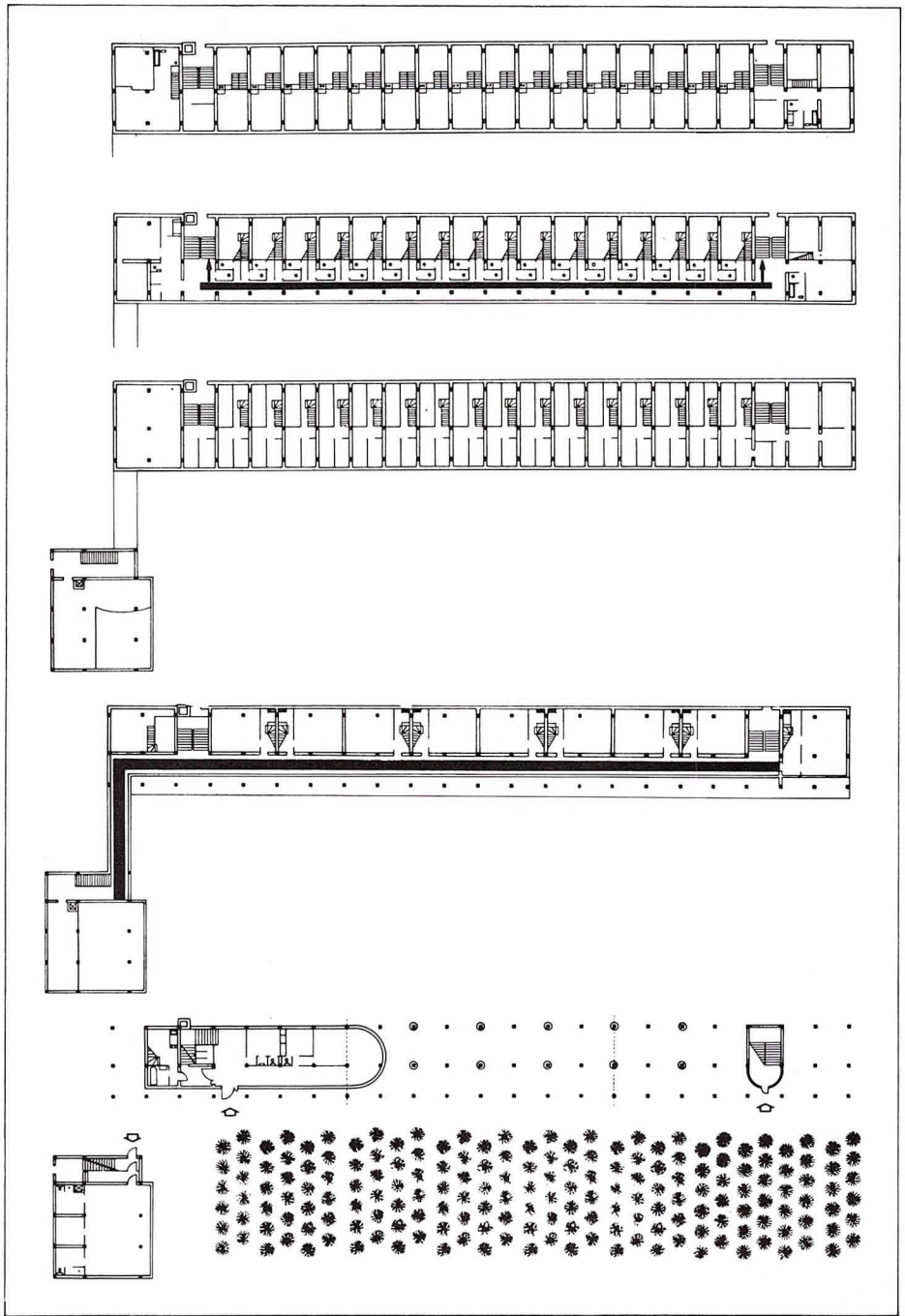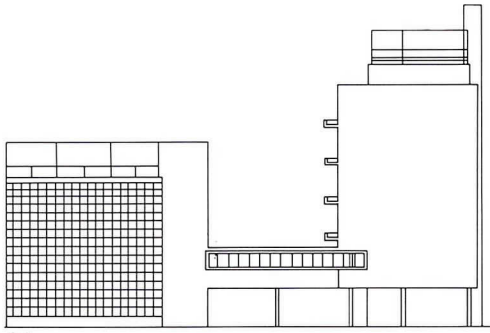
the common space paralleling the living units. On the topmost story, pairs of buildings would be connected by community rooms, while child-care centers and nurseries were planned as additions to the dwelling units on the ground floor. Ivan Sobolev, also a member of OSA, planned a residential quarter in which duplex units, assembled into seven-story slab blocks, would be connected to neighborhood communal facilities by covered *passarelles* at the third floor level (fig. 16). In Viacheslav Vladimirov's plan (figs. 17, 18), six two-room apartments were grouped in various T-shaped combinations about common access staircases while the communal service areas were located on the ground floor. The economic aspects of the project were seen as the economizing of living space in order to provide more generous public facilities. On the basis of experience gleaned from technology—"In machine construction, one attempts to reduce single parts and mechanisms to a minimum of space, something which is not yet considered in architecture"[17]—various suggestions were made within OSA for efficient centralization and rationalization. The creation of large buildings for housing was justified, both economically and ideologically, in light of the housing shortage. In 1928 and 1929, the Division for Standardization within the Building Committee of the Economic Council of the R.S.F.S.R. devoted itself to the problem of scientifically organizing daily life. A team of architects under Ginsburg's leadership (which included M. Barshch, A. Pasternak, G. Sum-Schik, and V. Vladimirov) began with a study of old tenement houses. They went on to analyze various proposals for the rational planning and equipping of buildings, and undertook extensive circulation studies. "A motion study and an equipment scheme worked out with as much care as Henry Ford had used indeed led to a scientific picture of the production process."[18] According to Ginsburg, such scientific procedures would prove to be equally useful for the division and classification of overall life processes. Ginsburg's team, working for the Building Committee of the Economic Council of the R.S.F.S.R., eventually produced a series of typical apartments (see figs. 21–25, 28–32, 34–37, 41, 42). The type F apartment was finally realized by Ginsburg in the Narkomfin block of 1929.

The maisonette apartment type F consisted of virtually single room apartments which varied in area from twenty-seven to thirty-one square meters. These units were stacked above each other on a split-level system. This arrangement provided for a 3.5 meter ceiling height in the main living space and for a 2.25 meter ceiling height in the auxiliary living space of one of the units. Each unit had a built-in kitchenette (fig. 21), wash-basin and shower stall with WC's on the corridor level. The units were conceived as transitional apartments. They were ranged along a well-lighted corridor leading to common rooms. The apartment type E (see fig. 37) was a slightly smaller variation on the same *parti* with 18.2 square meter living space instead of thirty square meters serving two to three people. Type F was used together with other maisonette apartments (fig. 22) in the experimental building known as Narkomfin which Ginsburg designed with Ignatii Milinis (figs. 21–25). Narkomfin was an experiment at the level of social organization, architecture, and construction. The project was considered by the Building Committee to be an important step in the direction of a *dom-kommuna*. The 'removable' kitchenettes, which were also included in this 'transitional' project, were seen as eventually becoming superfluous since the adjoining community center incorporated a central kitchen and dining hall. The glass loggia which linked the apartments was conceived as an internal communication street. The building, which was executed in reinforced concrete, was based on Le Corbusier's Five Points of a New Architecture (that is to say, the *pilotis*, the roof garden, the flexible plan, the horizontal window, and the non-supporting free facade).[19]

Glass, steel, and concrete were also used in many other projects to be dedicated to creating the new collective lifestyle. Such projects were largely justified in terms of construction and form. The combination of rational planning with collectivization and centralization was defended on economic grounds. However, the socialist content was mainly explained as a search for new forms and modes of construction: "we can no longer force our new content into old forms." This development took place in close liaison with the Western architectural avant-garde which was proclaiming the *Neue Sachlichkeit*. In the OSA journal

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26 Dom-kommuna *for students,*
Domskii Street, Moscow.
I. Nikolaiev, 1929–30. Sketches and
plan.

27 *Design for a* dom-kommuna.
I. Golosov, 1930. Typical plan and
elevation.

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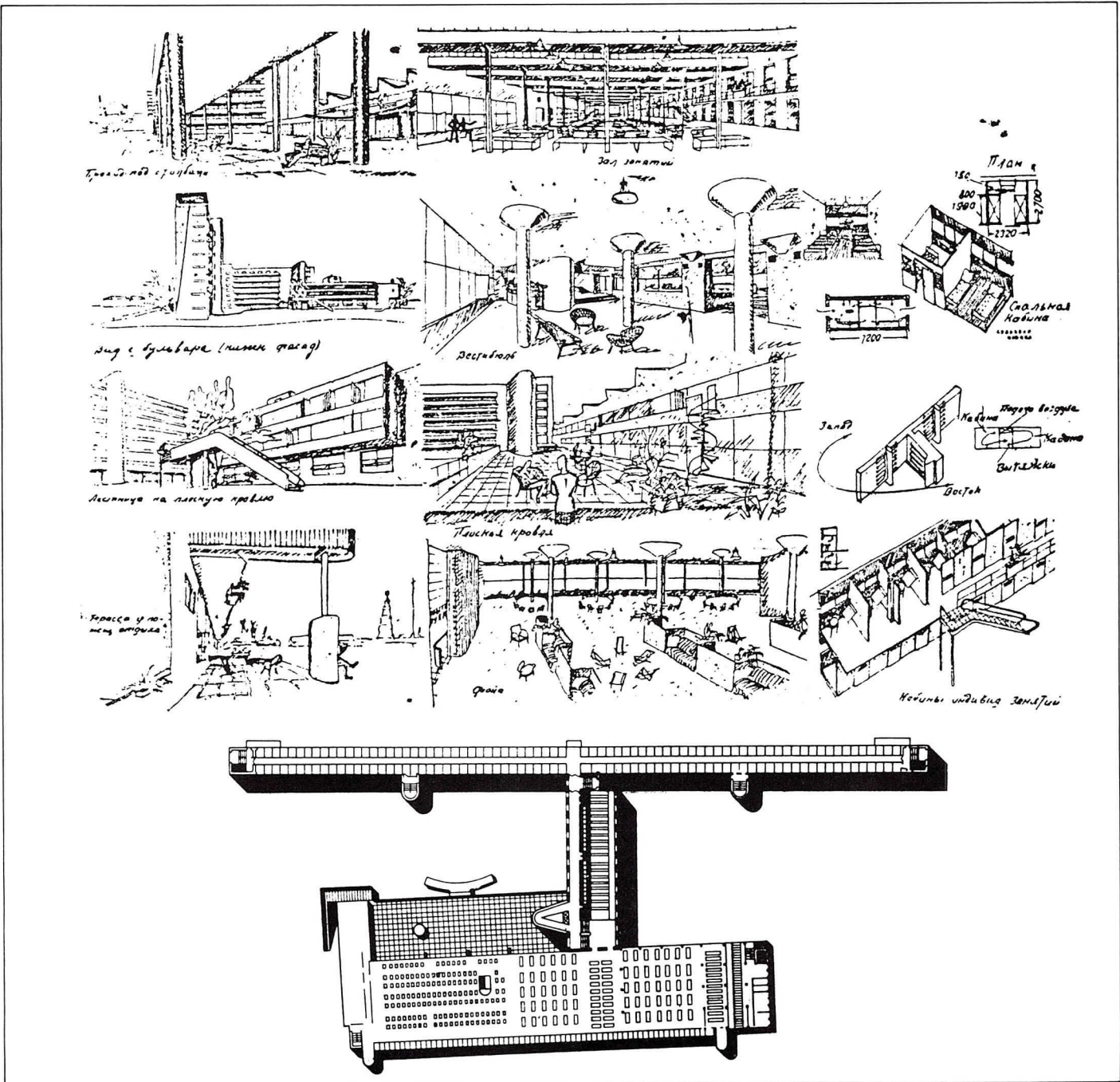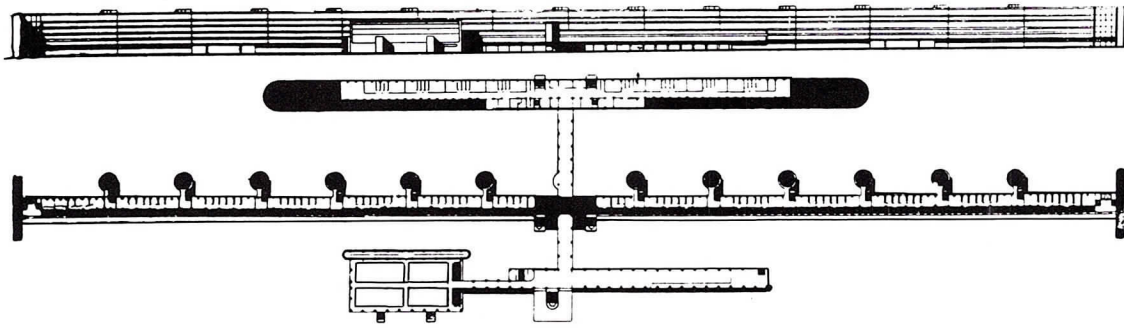
Sovremennaya Architektura Pasternak argued that modern architecture should free itself of bourgeois bric-a-brac since such ornamented forms would only bestow on workers' housing the surface illusions of a comfortable villa.[20] However, at the same time, the journal featured extensive ovations praising Le Corbusier's villa projects built for the capitalistic bourgeoisie. This criticial attitude to traditional bourgeois architecture—which demonstrated the very superficial ties linking form and content—led to somewhat false conclusions; above all because outwardly modern architecture seemed to be an equally functional representative of both socialist and bourgeois life.

Worker adjustment to the architectural-functional scheme
The first five-year plan of centralized economic planning (1928)—the beginning of the collectivization of the agrarian economy and the simultaneous development of heavy industry throughout the entire country—gave rise to debates over the planning of settlement projects. The two rival factions, who were respectively for urbanization and disurbanization, left their respective marks on the *dom-kommuna* projects. The technical aspects of collectivization and industrialization influenced architecture so greatly that many architects began to consider themselves as designing instructions for the entire operation of life, and their architectural designs resembled industrial operational plans; particularly in their use of time and motion studies, as these were influenced by Taylor's principles of scientific management and by the methodology of the conveyor belt. Avant-garde architects criticized existing communal houses on the grounds that they scarcely differed from bourgeois homes.

The discussion eventually became extremely removed from reality, particularly after the "Taylorized" attempts at communal housing had so evidently failed.

Vitalii Lavrov's 1929 proposal for communal living utilized a concept based on division and classification of human functions. He suggested an organization based on the following functions: 1) rest, sleep; 2) recreation, silence, isolation; 3) recreation, movement, noise; 4) individual work, silence, isolation; 5) collective work; 6) child rearing; 7) eating; 8) community concerns. From these elements Lavrov formed respective groups and created a cross-shaped structure 200 by 200 meters. The structure was built of steel and concrete and located throughout the city.[21]

Ivan Nikolaiev's project for a student *dom-kommuna* was realized as a model communal type in 1930 (fig. 26). His basic ideas were 1) to divide rooms according to their function, and 2) to provide for their 'sterilization' in accordance with the physical conditions and habits of the inhabitants. The mechanically ventilated, six-square-meter sleeping cabinets contained bacteria-free furniture and a sanitary 'sluice' for washing. Two beds, symmetrically placed in relationship to the door, two stools, and a concrete window sill offered the only furnishings necessary, since the only functions assigned to the bedroom were preparatory washing, showering, changing of clothing, and sleeping. Along the two hundred-meter corridor, small balconies were provided for early morning exercise. The eight-story and 7.8 meter wide building had to house two thousand students. Nearby community buildings housed a dining hall, reading room, lecture hall, gymnasium, nursery, laundry, and workshop.[22]

Ilia Golosov's plan was structured in a very similar way (fig. 27). Sleeping cabinets were arranged along one side of a 546-meter hallway with bathrooms regularly placed along the opposite side. Community areas were housed in a structure parallel to sleeping quarters and connected to them by a glass corridor.

Mikhail Barshch and Viacheslav Vladimirov's design for a *dom-kommuna*, presented to the Building Committee of the Economic Council of the R.S.F.S.R. (figs. 28–32), was to advance the idea of functional differentiation to its ultimate extent, with special rooms or groups of rooms being planned for each function. The complex consisted of three separate building forms linked by *passerelles*, etc. The six-story nursery building and the five-story building for school children were attached to the major ten-story structure for adults. The lower four stories of the adults' building contained community facilities, while the upper stories along both sides of a central corridor consisted of

28 Dom-kommuna *for the Building*
Committee of the Economic Council
of the R.S.F.S.R. M. Barshch and
V. Vladimirov, 1930. Axonometric.
29 *Plan of ground floor showing*
section lines.
30 *Plan of third floor.*
31 *Plan of fifth floor.*
32 *Typical sections showing various*
duplex apartments.

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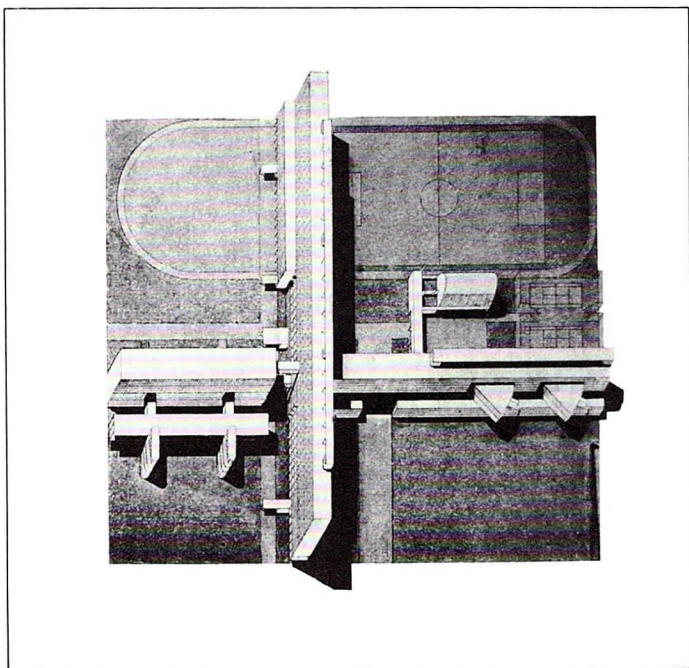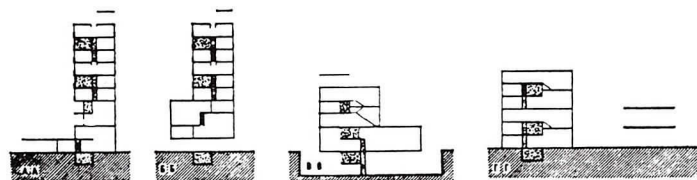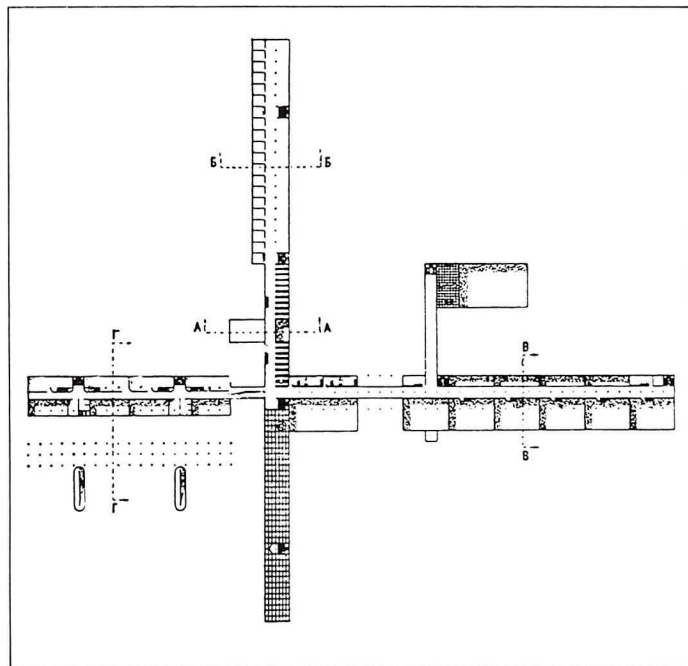
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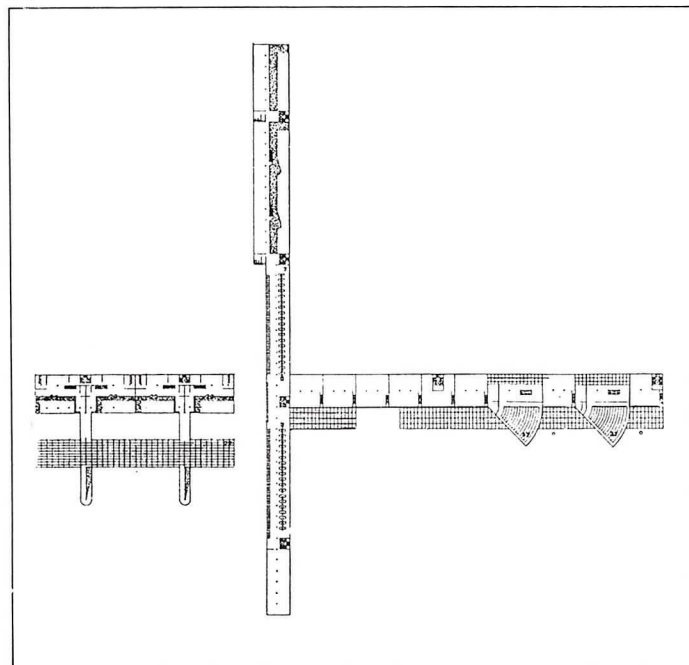
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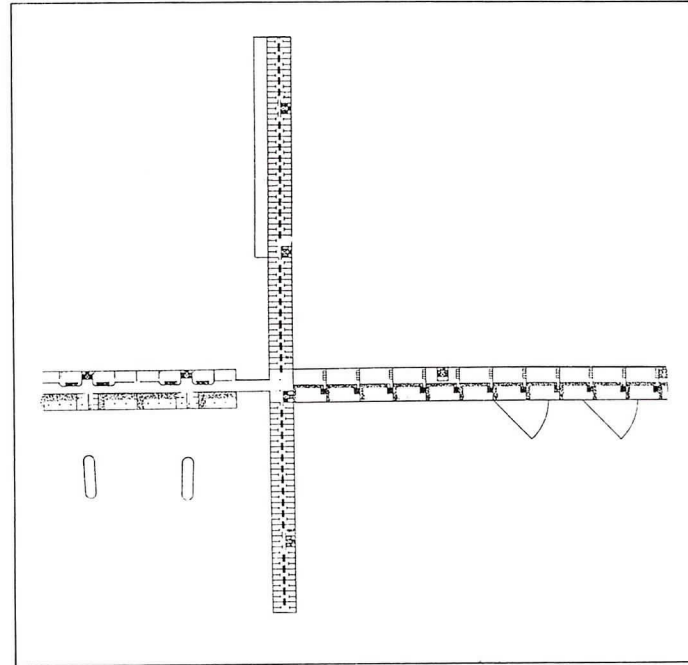
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33 Dom-kommuna *complex.*
I. Kuzmin, 1930. a) Axonometric of
layout, b) Plan of apartment towers.

two-person bedrooms each comprising six square meters. The nursery building's upper levels provided twelve large rooms for thirty children each, and open verandas on each floor offered plenty of fresh air. The ground floor housed entry and reception halls. Meals were cooked in the central kitchen and transported in thermos containers to the various parts of the building. The building for school children included entry halls and workshops on the lower two stories while the upper stories provided eight classrooms for forty pupils each and bedrooms for twenty-eight children each. Pupils were to be fed in the main dining hall, though separately from the adults. The *dom-kommuna* would be designed to house 1,680 people and was to have been situated on a 200 by 230 meter area site thereby producing a density of 350 people per hectare. Seventy percent of the area within the structure was appropriated for communal use.[23]

L. M. Sabsovich, a leading member of the Economic Council's planning division, focused on the untapped reservoir of manpower in society when making his proposal for collectivization in his book *The Socialist City* (1930). According to him, the chaotic petit bourgeois household wasted thirty-six million work hours a day in food preparation alone. Sabsovich thus designed the *dom-kommuna* capable of housing from two to three thousand people, each of whom would be assigned a 3.5 by 2.3 meter room. He rejected the idea that husband and wife should live together and, along similar lines, he considered the problems of the relationship between parents and children as nothing but petit bourgeois sentimentalism. He regarded the well-being of the overall society as the only reference point. In his theory the transition time for the shift from individual to collective life was to vary from five to eight years.[24]

This utopian vision of collective life went so far as to propose that individual regeneration and development could only be allowed for during sleep, since personality could only truly develop within the community. Yet in Konstantin Melnikov's "Green City" plan, even sleep was to be regarded as socialistic. He was to project huge communal sleep pavilions, where the workers' sleep would
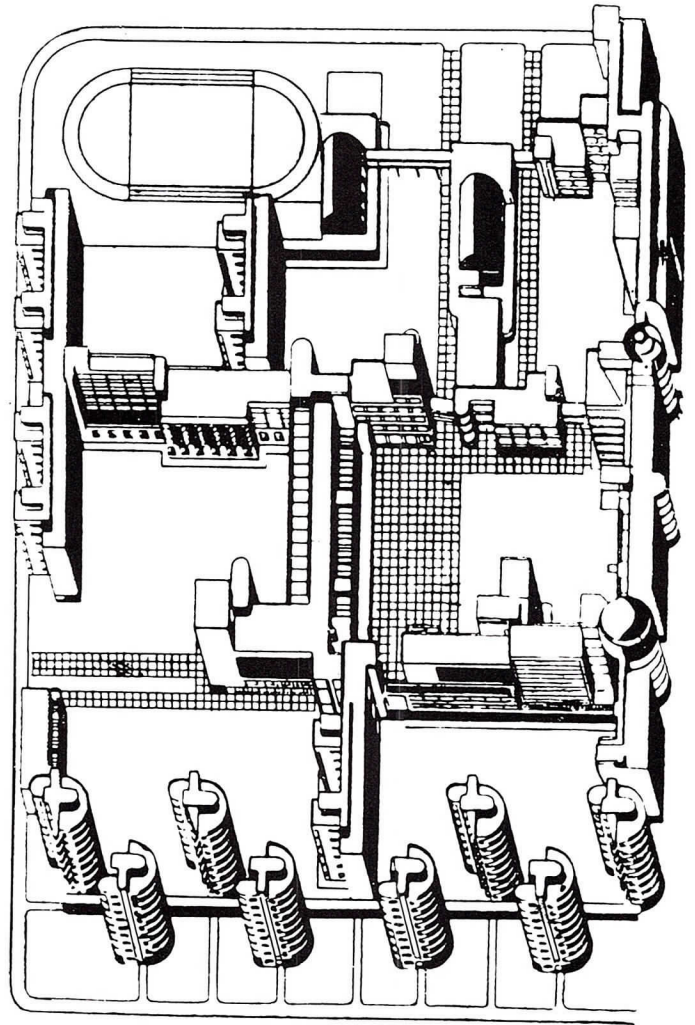
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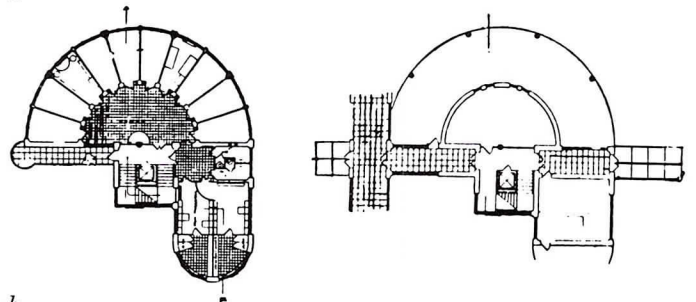
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34 Dom-kommuna. *Barshch and Vladimirov, 1930. Plan and axonometric of bachelor apartments, perspectives of communal floors.*
35 Perspective of ground floor communal level.
36 Apartment type F of the Building Committee of the Economic Council of the R.S.F.S.R. Perspective.

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37 Dom-kommuna *type E*.
38 *Mud cottage in which the founders of Magnitogorsk lived, 1929.*
39 *Elderly man with headphones during the literacy campaign.*
40 *The eradication of illiteracy in the Red Hero Club, Moscow, 1932.*

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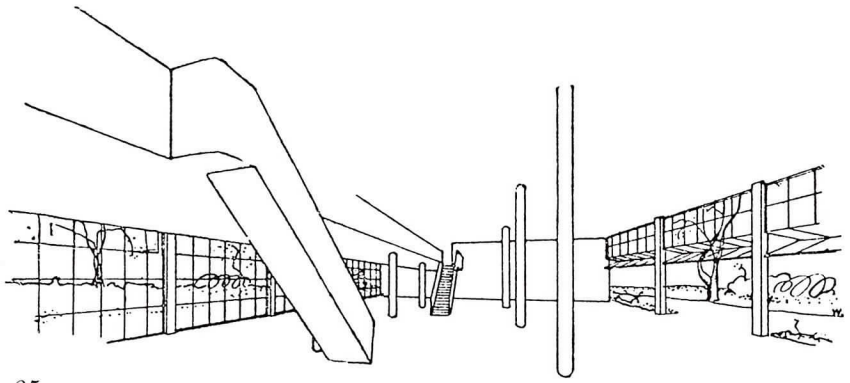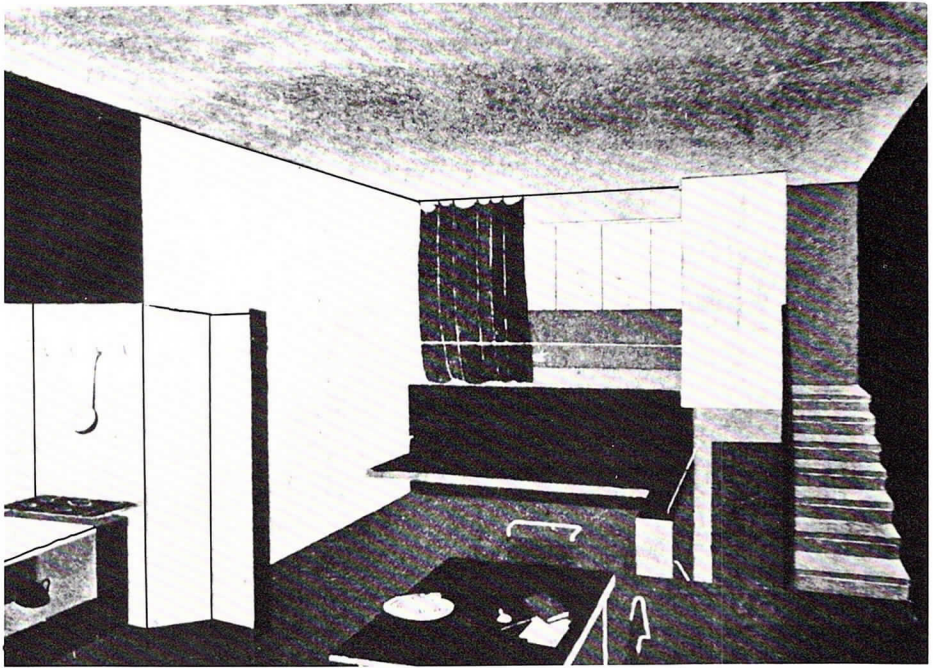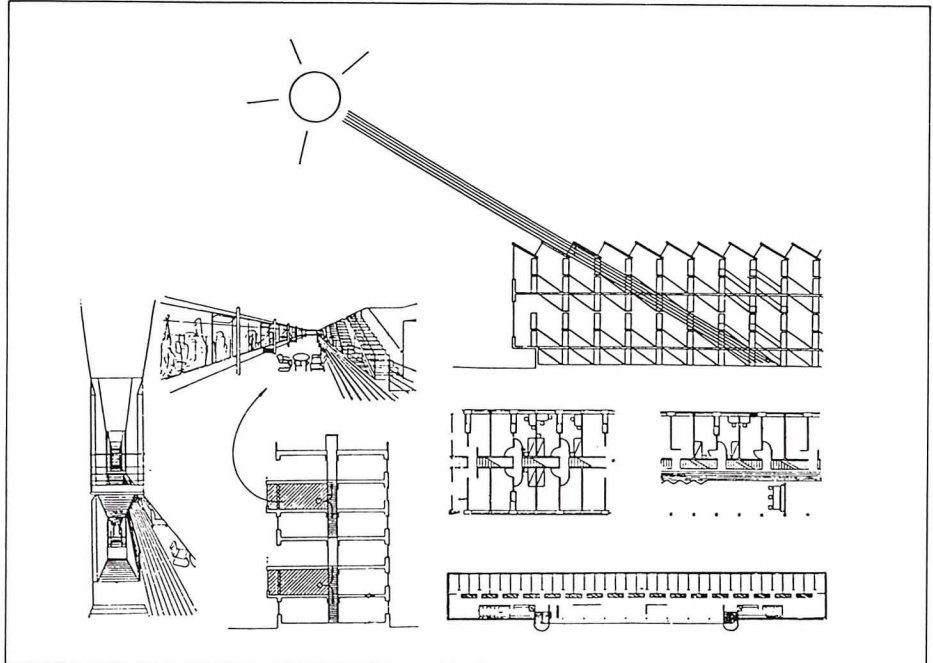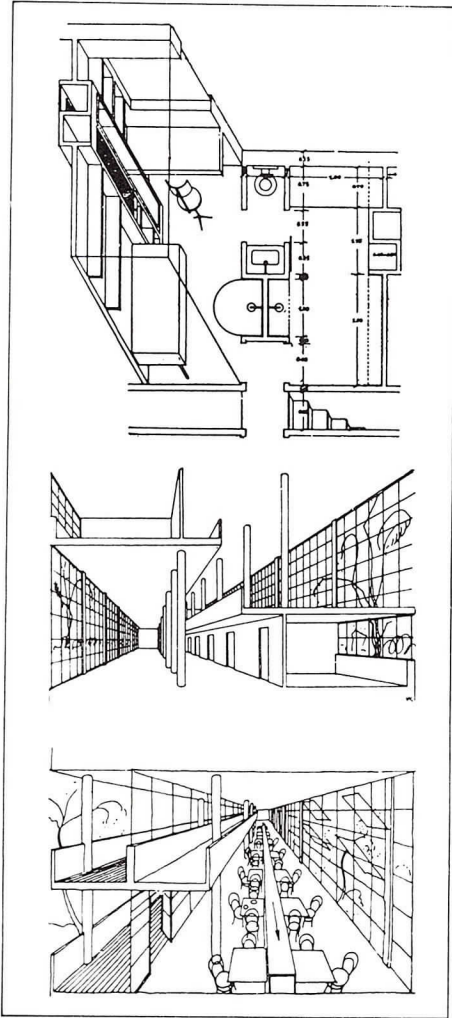
be accompanied by orchestral music throughout the night. The goal, again, was a scientifically ordered life and the model being used corresponded to Taylorized management, with its functional and rational division of labor.

Ivan Kuzmin interpreted all life functions as forms of work, and wrote in 1930 in regard to the scientific organization of life that emotion was a consequence of intensive labor, since man 'works' even while sleeping. As far as he was concerned, there was no absolute recreation. He demanded a clear differentiation of the working process as a prerequisite for the planning of housing since the present chaos of individual households did not allow any single human function to be satisfactorily fulfilled. Because of this, he wrote, recreation was impossible for women because they had to devote all their strength and health to the family. In addition, he argued that scientific organization of meals was impossible and that disorganized sexual relationships led to social-sexual burdens and to disease. Cultural development, child rearing, and sanitary and hygienic care were generally controlled by this chaos. Kuzmin proposed instead the strict division of the daytime routine into precise minute-by-minute 'time frames' according to which workers would lead their daily lives.[25] They would start their day by being awakened by the central radio station, then they would proceed with five minutes of exercise. The day would end at ten p.m. after allowing precisely ten minutes of preparation for sleep. In accordance with this timetable, Kuzmin attempted to make his architectural designs assume a clockwise form (fig. 33).[26]

The first programs for workers' housing addressed themselves primarily to hygienic equipment, open space, constructional materials, and the like, while in later designs the architectural plan became the guideline for its use by the inhabitants. The architect had in fact become an organizer of daily life. In the new housing machines the workers were to be lined up in the 'conveyor-belt' corridors, and the successful practice of living was measured in terms of its functionality. The housing program was thus to imitate production cycles, and the inhabitant functioned as part of it.

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In 1929 a commission considered the possibility of integrating communal housing into the already existing city structures. Interdisciplinary studies examined population make-up of the communes. They gathered data on infrastructural services, on property boundaries (most communes required very large areas), and constructional issues. During the preparation of the earlier designs, architects had failed to consider the relationship between socialized organizations and existing housing forms. Instead they planned the community facilities in such a way as to make them capable of serving only the communal building itself. The *dom-kommuna* was not integrated into the production and reproduction processes taking place in the city but functioned instead as self-sufficient complexes functioning in accordance with their own principles or operating instructions. On the other hand, the workers' clubs, which also appeared in the 1920s, were affiliated with the factories and provided a general place, open to all, for political and cultural interaction and education.

Even before architects had become involved with the design of the *dom-kommuna*, the earliest communes dating from the initial housing crisis had failed. Later, various suggestions were made to speed up the population's change of lifestyle. It was suggested that the building of individual apartments be stopped, and that incentives be provided to attract people to the housing communes. Furthermore, credit was given for alteration of housing. This was accompanied by other social measures aiding employment placement, lightening tax burdens, and increasing food rations. Such measures were used despite the housing shortage since people were reluctant to accept the communal houses and their highly organized programs. In fact, because of this shortage they were not even able to make use of such communal areas as had been provided, since all available space was needed to house people.

As long as the giant-sized projects consisted of no more than discussion and sketches, there was no limit to fantasy. Gradually, however, doubts arose. G. Volfenson complained that not a single project had presented a satisfactory solution; the fault lay not in a lack of creativity but in false goals and unreal programs, the results of which were abstract representations and theoretical schemes. The *Journal for Municipal Affairs* warned, "One must be careful that this type of architecture does not fall into disfavor with the workers." Bruno Taut, who made several trips to the Soviet Union, was aware of the situation; he wrote that "architects are attempting to reform workers' housing according to their own ideas, and in doing so they have to construct the 'new' inhabitant for it."[27]

An article addressing the "socialist change in life" which appeared in *Pravda* on January 2, 1930, discussed the interaction between the growth of industry and the new life. The scale of collectivization of the communal projects was in total disproportion to the status of industry in 1930 inside the Soviet Union. Given the level of production at the time, where were the requisite washing machines, clothes dryers, and special culinary instruments to be had? The production of dishes and furniture was impossibly backward. The cost of outfitting a central kitchen for a *dom-kommuna* was thus made inordinately expensive—110 rubles per person, then about the same as one square meter of floor space. The *Pravda* author wrote: "As long as there is no industrial provision for widespread public services, petroleum stoves will still be needed in individual households."

The machine tool industry largely remained dependent on foreign countries. How else could a country suffering from starvation obtain elevators and air conditioning for ventilated housing projects? From whence could it obtain the necessary energy for ventilating and heating glass corridors at a time when famine was raging? In a country with over sixty percent illiterate, where would one find the specialists to man the machine rooms, the libraries, and the clinics (figs. 34–40)? During the late 1920s, the period when the Soviet Union had greatest need for specialists, the economic depression was also to hit hard in the West. Many engineers and architects clearly preferred the prospects of working in the Soviet Union to unemployment at home (see fig. 1); fourteen hundred experts applied for a

41 Dom-kommuna *type F of the Building Committee of the Economic Council of the R.S.F.S.R. Axonometric and typical floor plan.*
42 Dom-kommuna *type F. Upper plans are based on a 27-square-meter standard. Lower plans show the type as applied in the Narkomfin block built to a 30-square-meter standard.*

job when Ernst May was invited to develop huge settlement projects in the Soviet Union. Eventually May assembled a team of sixteen people.

There were also problems with construction materials and methods. Architects had envisioned the realization of their commune projects in glass, steel, and concrete, along the lines of Western models which were evidently dependent on highly developed industry. Research and experiments concerning the use of such materials along with cost estimates and comparisons frequently appeared in journals around 1930. Pages were filled with discussions about the use of concrete during winter months, about the efficient employment of cement and the rational utilization of steel. There were elaborate analyses of the depreciation of various materials over time and experiments were made as to the intrinsic economy of horizontal windows, etc. The correct use of steel presupposed conditions which were evidently lacking. Meanwhile, expensive steel was required for the building up of industry and for production of machines and tractors. Sufficient cranes would have had to have been available before the housing complexes could be built. The unproductive habit of basing plans on the use of unavailable materials like steel and the visions of gigantic glass facades show the tendency of many architects to base their ideas on unrealistic standards and to disregard the real demands of the normative consumer. For a country that was still catching up with other industrial nations, the projects depicted luxury and waste rather than progress.

In 1930 the Narkomfin project was criticized for its uncritical acceptance of Western capitalistic architecture and for its formal transference of Western constructional and aesthetic methods. The demand situation in capitalistic society was not connected to the basis of living in the Soviet Union, and the technical and economic conditions were also different.

The People's Committee on Labor (*Narkomtrud*) allotted its entire 1930 budget for experimental buildings to the construction of six experimental *dom-kommuna* which were later to serve as models.[28] Since clear ideas con-

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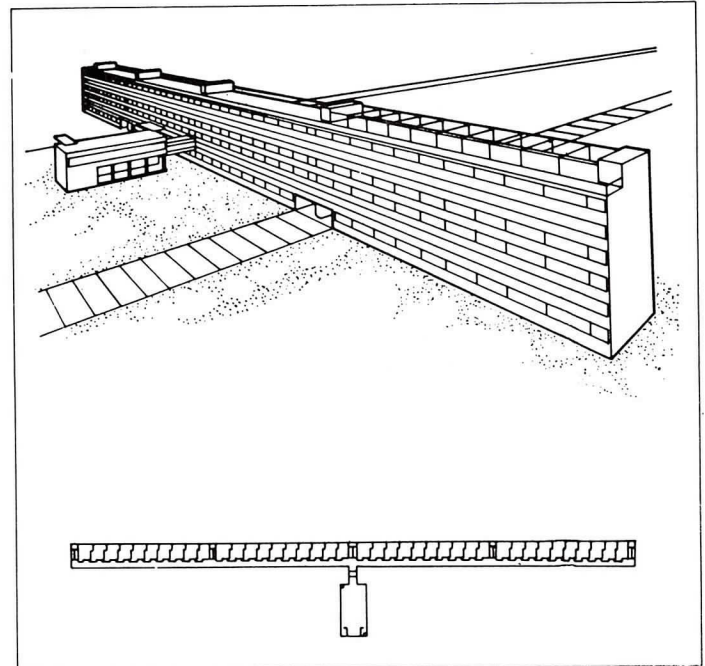
cerning space utilization had yet to be developed, a certain high flexibility was demanded. At the same time, in an effort to rationalize construction, standard types for apartment buildings, schools, child-care centers, dining halls, and communal houses were developed. The first plans were published by 1931, but work on standardization of the *dom-kommuna* was discontinued since criteria for the standardization did not exist.[29]

Adaptation of architecture to the social plan
The end of the commune projects was heralded on May 16, 1930, when the Communist Party's Central Committee announced its conclusion "Concerning Work for the Alter-ation of Life." In a single sentence the Committee dis-missed those semi-fantastic architectural projects that had attempted to bypass evident problems concerning social change. The Committee's comments partly focused on the current need for maximum concentration of resources for fast industrialization of the country, which they thought to be an absolute prerequisite for social change. Yet the country's economic and cultural backwardness and its un-prepared population also helped shape the Committee's decision. Specific proposals were made for the setting up of standards for workers' settlements and apartments and these were to be followed quickly by actual realization. The major goal was to provide both old and new residen-tial areas with public buildings, including child-care cen-ters, nurseries, laundries, dining halls, kitchens, and bath houses. Production was to be accelerated for equipping of these buildings. In housing construction, expectations concerning the building's future use were no longer to be taken into consideration; instead, a concern for immediate utilization by the masses was stressed. A quote of Lenin's was now recalled: "The workers build a new society with-out themselves having changed into new people, free from the filth of the past: they are still up to their knees in it. To free oneself of the filth is still a dream today. It would be an insane utopia to believe that it can happen from one day to the next."[30]

As a result of the entire economic plan and its uniform goals, solutions proposed by individuals were replaced by integrated tasks. Segregated, self-sufficient projects for a *dom-kommuna* were rejected in favor of the organiza-tion and working out of city-wide socialized public service systems.

After the centralization and consolidation of power, and after a united set of economic goals had been agreed upon, architects assumed their proper place in the hierarchy. They were to use their specialized training for the real-ization of the new social and economic plan.

The avant-garde's dilemma or the other way
In light of unsatisfactory social conditions, the Western bourgeois avant-garde, with whom we are more familiar, saw its duty as the production of ideologically based proj-ects. They attempted to carry out this function by means of progressive aims in architecture and urban planning, or else saw themselves as artistic revolutionaries, isolated from the social conditions. In contrast, the Soviet avant-garde acted on the basis of their belief in a transformed society, but nevertheless projected an unavailable tech-nology. They attempted to anticipate socialist architecture without taking into consideration still prevailing social habits and material exigencies. In this way they remained just as divorced from their society as the bourgeois avant-garde. They seemed to think themselves capable of tele-scoping the lengthy process of re-educating the society and of predetermining the development of 'socialist archi-tecture.' In short, they tried to curtail a process which could only emerge from the experience of socialist life itself. During a period of social upheaval and change, the superstructural systems of society invariably lag behind the newly established order; the arts live on for many generations sustained by past forms. The new ruling class, the proletariat, as yet unable to formulate its own aes-thetic precepts, delights in appropriating the taste of the previous regime. In theoretical terms it is only after "pos-sessing" and conquering the old aesthetic that the new leaders become able to formulate and enact their own intentions. In this way aesthetic ideas and lifestyles from a previous era—even together with the social classes they serve—survive during the transitional period. This may account for the Russian people's aversion to an orna-mentless architecture, which seemed to them to be for-

mally as poor as the huts from which they came. Instead of the abolished czar's palaces, they wished for their own workers' palaces. The Soviet avant-garde architects, who were largely drawn from the pre-revolutionary bourgeois class, felt themselves to be in a position to question the value of that class. Their consciousness permitted them to postulate a transition to a new aesthetic and a new way of life. Their goal was to demolish old ideas and values and to break with the past in order to further new modes of thought. Thus the bourgeois avant-garde's cultural aims were entirely opposed to those of the masses. Their demands for new cultural forms were always ahead of their time and the immediate desires of the populace. The dilemma of the Soviet avant-garde was clearly formulated by Maxim Gorki in his *Thoughts Out of Season on Culture*: "Because of their history, the Russian people are a weak gigantic body. . . . The Russian intelligentsia is a diseased bloated swollen head, which has taken on too many foreign ideas; it is not joined to the body by the strong backbone of common goals and desires, but by a scarcely visible, thread-like nerve. Our intelligentsia is rich in book knowledge but poor in knowledge of the Russian reality."[31] After the revolution the avant-garde went out to serve the masses with a blind messianic sense of mission, but without questioning their own ideas of what was beneficial to the people.

Another major problem lay in the discrepancy, heightened by the economic poverty of the time, between utilitarian necessity in architecture and artistic significance. Bruno Taut wrote in 1926, even before the more utopian projects had been projected, "The difference between actual construction and construction in the intellectual minds of architects is more noticeable in Russia than in any other country. That is, buildings quickly constructed out of bricks and other materials as the result of desperate need cannot be considered true architecture, while on the other hand, the architectural power which is hidden in the country is very difficult to actualize because of the daily misery."[32]

The experience of this epoch clearly poses the question, how can an avant-garde orient itself to the people's tastes and necessities without abolishing its capacity to dream? Such a renunciation could lead to an impass, since history has shown that "castles in the air" sometimes become reality. The danger of an avant-garde with an idealistic sense of mission resides in its tendency to remain self-sufficient, to be more interested in its own wishes than in the creative potential residing in the imagination of the people.

Despite its utopianism, the Soviet avant-garde of the twenties fulfilled a social function by challenging the received wisdom of the then current social and economic policies. The avant-garde's provocative projects called forth discussion, and the entire country became a laboratory for social experimentation. To what degree the avant-garde influenced the reaction which followed remains unclear, but their utopian proposals unquestionably initiated research into function experimentation in building, the testing of materials, and techno-economic analysis. The architects desired to accelerate the development of a socialism through a functional and scientifically organized architecture and were in themselves functionally organized so as to make their professional contribution to the overall social reconstruction. But while the avant-garde's conceptions remained in the realm of the fantastic, the housing shortage of the masses was intolerable. One could not afford to wait until the perfect 'socialist' apartment type had been 'discovered' before tackling the housing problem. Architects and other specialists were desperately needed for construction. As Ginsburg was well aware in the conclusion to his book *Housing* of 1934, "To solve the housing problem today means to be able to respond to the varied forms of life which taken together sum up today's realities. The solution of housing today will be found in the barracks of migrant workers, in temporary and in permanent housing units, and in commune houses. In other words, the solution will be found in all types of housing whose necessity has not vanished and which will not vanish in the near future. The difficulty lies in the architect's duty to develop maximum social, hygenic, and architectural quality in each housing type, so that all may express a universal striving to higher forms of life and to social and economic services."[33]

Editors' Note: The translation of this article from German was originally prepared by Diane Blaurock and was extensively reworked by the author.

1. V. I. Lenin, "A Great Beginning," *Collected Works* (London: Lawrence & Wishart, 1960), vol. 29, p. 429.

2. V. Shmidt, *Rabochii klass SSSR i zhilishchnyi vopros* (Moscow, 1928), p. 5.

3. D. I. Scheins, *Zhilishchnyi vopros* (Moscow, 1924), p. 6.

4. "The first workers commune in Moscow," *Soviet Russia*, Sept. 4, 1920, p. 245.

5. *Sbornik dekretov i vazhneisikh rasporiazhenii po zhilishchonomu voprosu* (Moscow, 1921), p. 17.

6. V. Khazanova, *Iz istorii sovetskoi arkhitektury 1917–1925* (Moscow, 1963), p. 17.

7. Khazanova, *Sovetskaia arkhitektura pervykh let oktabria* (Moscow, 1970), p. 64.

8. Ibid., p. 76.

9. Khazanova, *Iz istorii . . .* , pp. 61–63.

10. Ibid., pp. 63–64.

11. V. Ovsianikov, *Kak zhivet rabochii v SSSR* (Moscow, 1928), p. 66.

12. K. Strievskii, *Materialnoe i kulturnoe polozhenie moskovskikh rabochikh* (Moscow, 1929), p. 19.

13. I. Koblents, *Zhilishchnoe pravo* (Moscow, 1924), p. 83.

14. "Konkurs proektov pokozatelnykh domo dlia rabochikh kvartir v gorode Moskve," *Arkhitektura*, 1923, p. 35.

15. El Lissitzky, *Russland: Architektur für eine Weltrevolution 1929* (Berlin: Ullstein, 1965), p. 14.

16. A. Pasternak, "Novye formy sovremennogo zhilia," *Sovremennaya Arkhitektura*, vol. IV–V, 1927, p. 125.

17. G. Vegman, "Ukrupnennoe Zhile," *Sovremennaya Arkhitektura*, vol. I, 1927, p. 16.

18. M. Ginsburg, cited in K. Afanasiev, *Ideen-Projekte-Bauten, Sovietische Architektur 1917–1932* (Dresden, 1973), p. 39.

19. Le Corbusier, *Der Plan des modernen Hauses 1929*, Ulrich Conrads, ed. (Berlin: Ullstein, 1964), p. 119.

20. Pasternak, *Novye formy . . .* , p. 125 and following.

21. V. Lavrov, "Opyt planirovki kollektivnogo zhilishcha," *Stroitelstvo moskvy*, vol. VII, 1929, pp. 9–11.

22. I. Nikolaiev, "Opytnaia postroika studenticheskogo domkommuna," *Stroitelstvo moskvy*, vol. VII, 1930, p. 30.

23. G. A. Gradov, *Stadt und Lebensweise* (Berlin, 1971), pp. 57–58.

24. L. Sabsovich, *Gorod budushchego* (Moscow, 1929).

25. Daily Schedule:

1) Go to bed. 22.00; 2) Sleep 8 hours. Arise. 6.00; 3) Calisthenics. 5 minutes. 6.05; 4) Wash up. 10 minutes. 6.15; 5) Shower (optional). 5 minutes. 6.20; 6) Get dressed. 5 minutes. 6.25; 7) Go to the dining room. 3 minutes. 6.28; 8) Breakfast. 15 minutes. 6.43; 9) Go to the cloakroom. 2 minutes. 6.45; 10) Get dressed. 5 minutes. 6.50; 11) Go to the coal mine. 10 minutes. 7.00; 12) Prepare for work, get ready to be lowered. Work in the mine. Come up. Bathe. Dress. 8 hours. 15.00; 13) Return to the commune. 10 minutes. 15.10; 14) Undress. 7 minutes. 15.17; 15) Wash hands. 8 minutes. 15.25; 16) Dinner. 30 minutes. 15.55; 17) Go to the hall of rest for a free hour. 3 minutes. 15.58; 18) Free hour for naps and so on. Those who wish may go to their bed-

rooms. 16.58; 19) Wash up (change clothes). 10 minutes. 17.08; 20) Go to the dining room. 2 minutes. 17.10; 21) Tea. 15 minutes. 17.25; 22) Go to the club. Cultural entertainment. Cultural development. Physical culture. Maybe bathe, swim in the pool. Life itself dictates the schedule here, makes the plan. Allotted time, 4 hours. 21.25; 23) Go to the dining room, eat supper, and go to the bedroom. 25 minutes. 21.50; 24) Prepare for bed (maybe take a shower). 10 minutes. 22.00.

26. N. Kuzmin, "Problema nauchnoi organizatsii byta," *Sovremennaya Architektura*, vol. III, 1930, pp. 14–17.
27. Bruno Taut, "Russlands architektonische Situation," *Moderne Bauformen*, vol. II, 1930, p. 58.
28. "Chronika," *Stroitelstvo moskvy*, vol. I, 1930, p. 40.
29. "Za 30 dnei," *Stroitelstvo moskvy*, vol. VII, 1931, p. 24.
30. P. Krasin, "Za novoe zhilishche i rasselenie proletarskoi stolichy," *Stroitelstvo moskvy*, vol. III, 1931, p. 25.
31. Maxim Gorki, "'Unzeitgemässe Gedanken,' Novaia zhizn 16 (3) März 1918," *Unzeitgemässe Gedanken über Kultur und Revolution*, B. Scholz, ed. (Frankfurt, 1974), p. 149.
32. Taut, "Die neue Baukunst in Russland," *Das neue Russland*, vol. V–VI, 1926, p. 20.
33. Ginsburg, *Zhilishch, Die Wohnung* (Moscow, 1934), p. 170.

Figure Credits

1 From *Das Neue Frankfurt*, vol. IX, 1930 and *Soviet Russland von Heute*, vol. XII, 1932.
2 From S. M. Gornyi, *Socialisticheskaia rekonstruktsiia* (Moscow, 1931).
3 From *50 Jahre Sowjetunion im Spiegel ihrer Karikatur* (Munich, 1967).
4, 27 From R. Chiger, *Proektirovanie zhilishch* (Moscow, 1935).
5 From *Zhilishchnoe Tovarishchestvo*, vol. XXVII, 1926.
6–8 From *Mastera sovetskoi architektury ob architekture* (Moscow, 1975).
9 From S. Frederick Starr, *Melnikov: Solo Architect in a Mass Society* (Princeton: Princeton University Press, 1978).
10–12 From G. A. Gradov, *Stadt und Lebensweise* (Berlin, 1970).
13, 14 From V. Khazanova, *Iz istorii sovetskoi architektury 1917–1925* (Moscow, 1963).
15 From *Sovremennaya Architektura*, vol. I, 1926. Redrawn by Joshua Katz.
16–18 From *Sovremennaya Architektura*, vol. IV–V, 1927. Fig. 16 redrawn by Joshua Katz.
19 From the Institute for Architecture and Urban Studies exhibition catalogue, *Art and Architecture U.S.S.R. 1917–32* (New York: Wittenborn, 1971).
20 From *Das Neue Frankfurt*, vol. VI, 1931.
21, 34, 36 From *Sovremennaya Architektura*, vol. I, 1929.
22–25, 41, 42 From Anatole Kopp, *Ville et Révolution* (Paris: Editions Anthropos, 1967). Fig. 25 redrawn by Joshua Katz.
26 From *Stroitelstvo moskvy*, vol. VII, 1930.
28, 30, 31, 35 From *Sovremennaya Architektura*, vol. IV, 1929.
29, 32, 37, 41, 42 From El Lissitzky, *Russia: An Architecture for World Revolution* (Cambridge, Mass: M.I.T. Press, 1970).
33 From *Sovremennaya Architektura*, vol. III, 1930.
38–40 Courtesy the author.
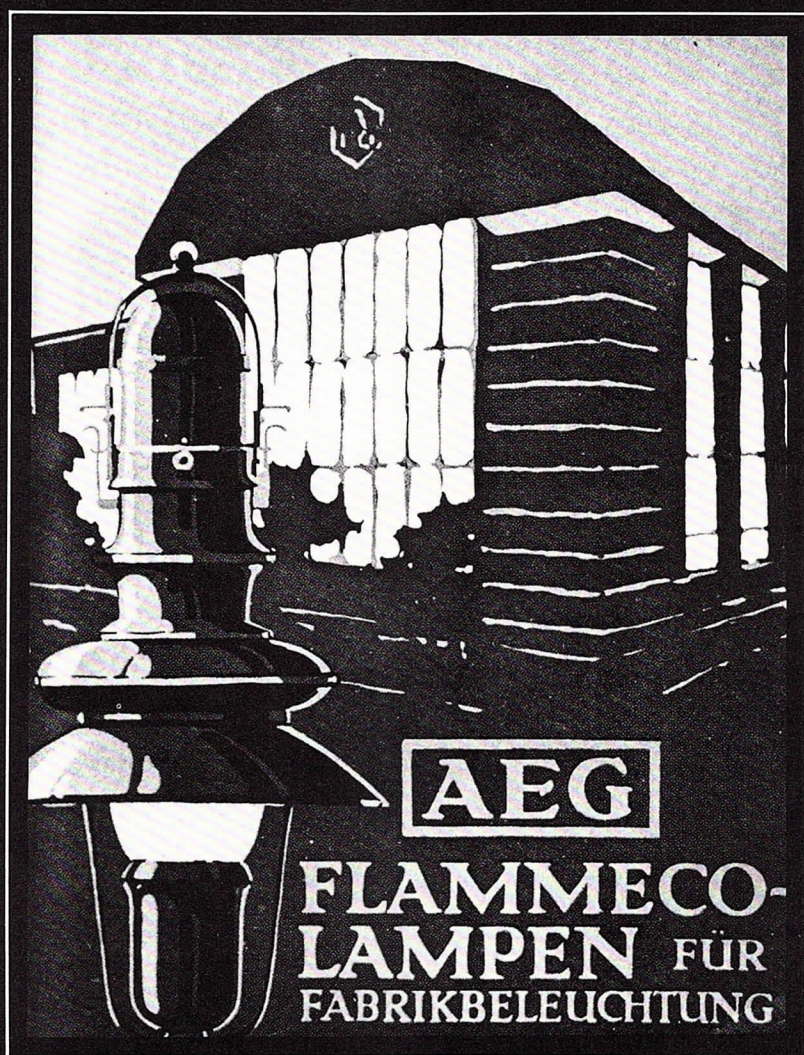
AEG
FLAMMECO-
LAMPEN FÜR
FABRIKBELEUCHTUNG

Modern Architecture and Industry:
Peter Behrens, the AEG, and Industrial Design

Stanford Anderson

1 Cover of brochure for Peter Behrens's "Flammeco" industrial light fittings for the AEG, December 1913.

Early and repeated claims for the innovative role of Peter Behrens in the field of industrial design may serve as an instructive point of departure from which to examine traditional German concepts of the relationship between artistic form and technique.

Nikolaus Pevsner summed up and most successfully propagandized these claims for Behrens (figs. 2–9):
"The importance of Germany in the early years of the twentieth century lies altogether in the shift from craft to industrial design and concurrently in the discovery by architects (and engineers) of the aesthetic possibilities of industrial architecture. . . . The most important architect was Peter Behrens, the most important organization the Deutscher Werkbund founded in 1907 and dedicated to the cause of good functional form in the crafts and soon in industry too. Peter Behrens was made consultant to the AEG, the Berlin manufacturers of electrical products, both for these products and for their buildings—a completely new and highly influential job. His tea kettles, his street lamps, his notepaper and invoices, his shop interiors and his large factories have all the same functional directness. Art Nouveau which had been Behrens's own point of departure about 1900 was left leagues behind. The style and the spiritual attitude of the twentieth century had indeed been achieved."[1]

Pevsner remained loath to abandon this position, first expressed in his *Pioneers of the Modern Movement* of 1936, even when he felt compelled to recognize that others did not share his view.[2] An attempt at a better understanding of Behrens's contribution might well start with an examination of his design of an arc lamp (fig. 4) for the large German electrical corporation, the AEG. Though this lamp was his first work in industrial design, it quickly became—and has remained—the touchstone for his reputation as the first industrial designer.[3]

AEG publicity and internal histories misdirect the interpretation of Behrens's role in the origins of industrial design. In two publications,[4] only the ornate "late Victorian" arc lamp (fig. 2) and Behrens's most renowned design (fig. 4), both produced by the AEG, were shown. The

2 Decorated arc lamp, designed late
nineteenth century but in continuing
production after the arrival of Peter
Behrens at AEG.
3 Undecorated arc lamp, precedent
for the design by Behrens.
4 Arc lamp housing as redesigned
by Behrens, 1907.
5–7 Portable electric heating units
by the AEG. Peter Behrens, 1909.

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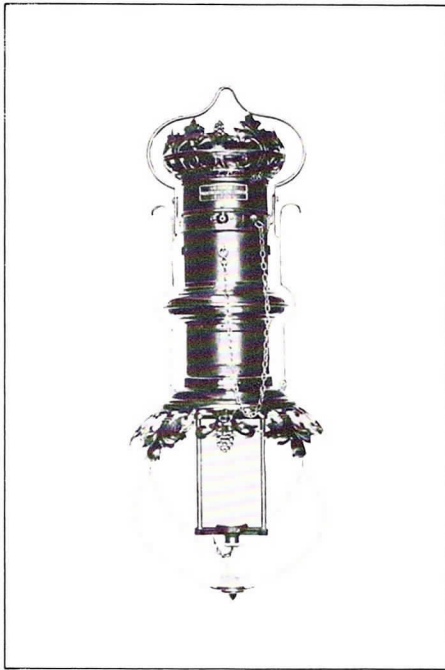
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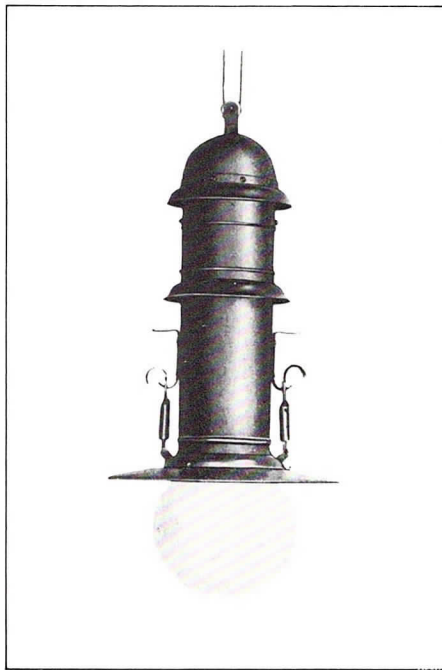
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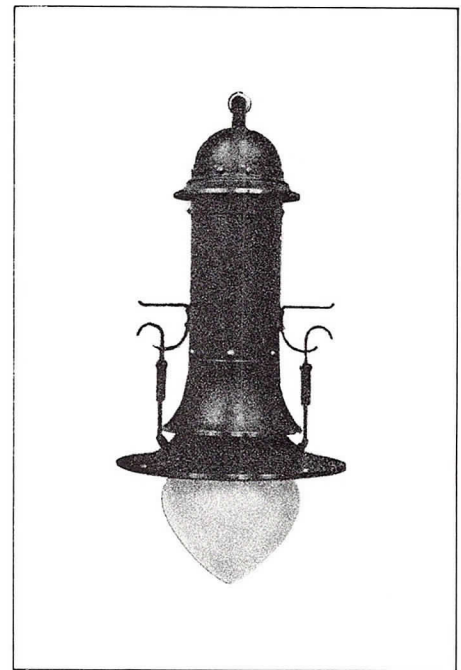
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8 Electric tea kettles by the AEG.
Peter Behrens, 1909.
9 Portable radiant electric heater by
the AEG. Peter Behrens, ca. 1907–
1908.

former was labeled *"aus dem Jahre 1906,"* the latter dated 1908. The implication seems to be that Behrens came in and, with one fell swoop, swept out nineteenth-century abuses and achieved "the spiritual attitude of the twentieth century." The situation was not that simple; while honoring Behrens's achievement, such comparisons obscure the facts.

The "Victorian" lamp was composed of two basically simple parts: a spherical globe shielding the arc and diffusing its light, and a cylindrical tube housing the regulator and the feed mechanism for the carbon electrodes. The floral decoration was literally "applied art" intended to make the lamp acceptable in rooms in which similar decoration was prevalent. This applied art would have been supplied by the *Fabrikzeichner* (the factory draftsman), one of the predecessors of the industrial designer. According to Arnold Schürer,[5] this lamp was in production in the late nineteenth century and was still represented in AEG catalogues after Behrens's arrival. It was always offered not as *the* arc lamp model, but as an alternative to unornamented models. An AEG catalogue of 1901 shows a very handsome, unornamented lamp, literally just a sphere and a cylinder with a short cylindrical collar at their juncture.[6] The lamp in the center of our illustrations (fig. 3) was another model available prior to the arrival of Behrens at the AEG. In such a lamp, one recognizes a fundamental, engineered form. One should not imagine that such form is achieved automatically nor that it is the best solution. However, successive AEG catalogues reveal increasing recognition of the problems addressed, mastery of the technology employed, and articulation of these factors in the changing forms of the products.[7]

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When Behrens turned to the problem of industrial design, he could accept neither the loose application of ornament nor the simple refinement of "functionally direct" form. Rather, he sought to give such technological products their place within the greater synthesis of *Kultur*: "it is true that the works of engineers are not without a certain beauty. One need only think of the great iron halls, the broad-spanning roofs which definitely give an impression of grandeur. We cannot deny that the simple utili-
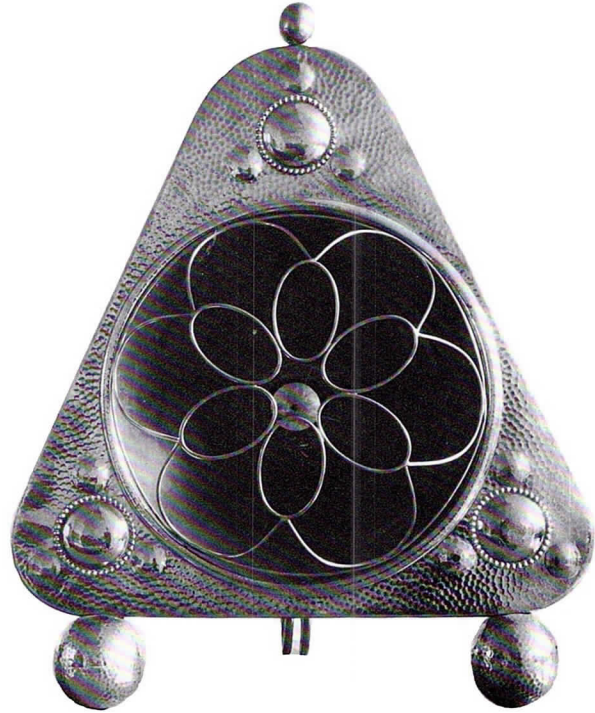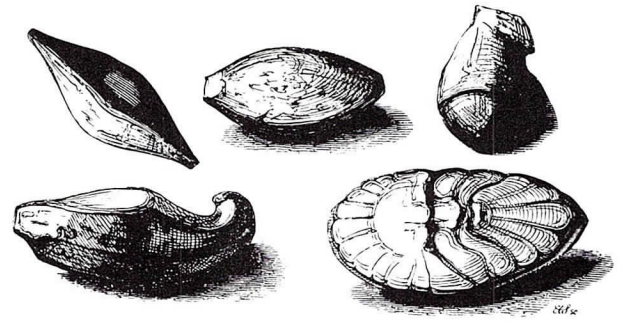
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82 tarian buildings built by engineers, still more their machines, achieve a certain aesthetic impression by means of their often bold and logical construction. This effect is achieved despite the fact that no conception derived according to artistic principles prevailed in these examples and that the aesthetic result is accidental. This phenomenon can be explained in that these works possess a pseudo-aesthetic embodied in a certain lawfulness, that of mechanical construction. This is the lawfulness of organic development which Nature also reveals in all her works. But just as Nature is not *Kultur*, so the purely human fulfillment of functional and material needs cannot create *Kultur*. Despite all this genuinely enthusiastic recognition of the accomplishments of technology and transport, nothing could be more natural than that the desire for absolute beauty should be awakened in us. Quite naturally we will not believe that from this time on the satisfactions called forth by exactitude and utmost functionalism will take the place of those values that have formerly delighted and elevated us."[8]

For Behrens, then, the engineer's "pseudo-aesthetic" achievement was not art. Far from allowing these products to be formed in accordance with the dictates of purpose, material, and technique, he insisted that art was a response to human expectations and psychic pressures. It must therefore be free to fulfill itself unhindered by (and perhaps even in contradiction to) material conditions. This was an explicit instance of Behrens's resistance to what he saw as the materialism of Semperian thought and his acceptance, via Riegl, of the dominance of artistic will.[9]

In Behrens's formulation, it was the artist's role to accept the imperatives of technological civilization and then to overcome them in the interests of a holistic culture. In redesigning the arc lamp, he saw his problem as the formulation of an aesthetic which accepted the blunt, prosaic power of the machine, of engineering, and of industry, but which also raised this power to an electric, economical poesy expressive of a suprapersonal and modern *Kunstwollen*. Behrens's lamp,[10] at the right of our illustrations (fig. 4), did not tamper with the mechanics of the lamp; it was the housing that he reformed. Without any apparent coercion, the silhouette of the lamp became simple and harmonious. A strong, central shaft replaced the jointed and molded midsection of the earlier lamp. The absence of these moldings allowed the cap unit of the new lamp to be easily distinguished; the reflector, now achieved in a pair of graceful and repeated curves, was then complemented in the similar but reversed curves of the globe below. Even the operable hardware, though still rather flat, asserted itself as a set of bolder strokes in interplay with the massive form of the housing. Beyond the calligraphic elegance of silhouette, this new simplicity suggested that the lamp was made of a few solid parts. The handling of the sheet metal enhanced this effect; rather than expose the sharp edge of this light material, Behrens had each exposed edge turned down and then given a bronze edging in order to 'portray' the termination of a sturdy material. In contrast to the engineered design (fig. 3), which was perfectly frank in its jointing, assembly, and character of material, Behrens's design was sculptural, almost Egyptian in both its line and weightiness. The engineered lamp was admirably direct, and yet Behrens's design offered, in this instance, the more compelling image of technical efficiency.[11] Wolf Dohrn records the anecdote that salesmen for the AEG were so pleased with the new form of the housing that they requested a similar redesign of the working parts.[12]

Through Behrens, the AEG lamp received a form which was to serve as an aesthetic reformulation of the "new nature" of industrialization and thus as an indirect testimony of the underlying technical efficiency. This comparatively small artistic form drawn from the new nature also implied a new architecture, for Behrens's flower-like lamp[13] would have been as out of place in a work of raw engineering construction as the florally ornamented lamp had been. Behrens's arc lamp and his AEG Turbine Factory, for example, are complementary designs.

A deeper understanding of Behrens's approach to industrial design and of his opposition to Semper emerges from a consideration of the German concept of *Tektonik*.[14] The late Schinkelesque classicist Karl Bötticher wrote a detailed study of ancient Greek architecture entitled *Die*

10 Ancient Greek lead shot for slings.
11 Analysis of ancient shot.
Gottfried Semper, 1859.

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Tektonik der Hellenen.[15] The motto for his book indicates the immanence of meaning in form to which *Tektonik* was to refer:

"Des Körpers Form ist seines Wesens Spiegel!
Durchdringst du sie—löst sich des Räthsels Siegel."[16]

On his first page, Bötticher explained that *"Tektonik"* referred not just to the activity of making the materially requisite construction that answers to certain needs, but rather to the activity that raises this construction to an art form. That is, every element of a building—a column, for example—has an actual technical function, but this function may not be fully apparent. The functionally adequate form must be adapted so as to give expression to its function. The sense of bearing provided by the entasis of Greek columns became the touchstone of this concept of *Tektonik*. Under this interpretation, the Greek temple became a composite of functionally expressive members relying on organic analogies, a kind of mosaic of functions. According to Bötticher, in the Hellenistic tectonic, as in nature, the form of a body was the embodiment or plastic representation of its essence. Form gave to the construction material the expression of its fulfillment of function.[17]
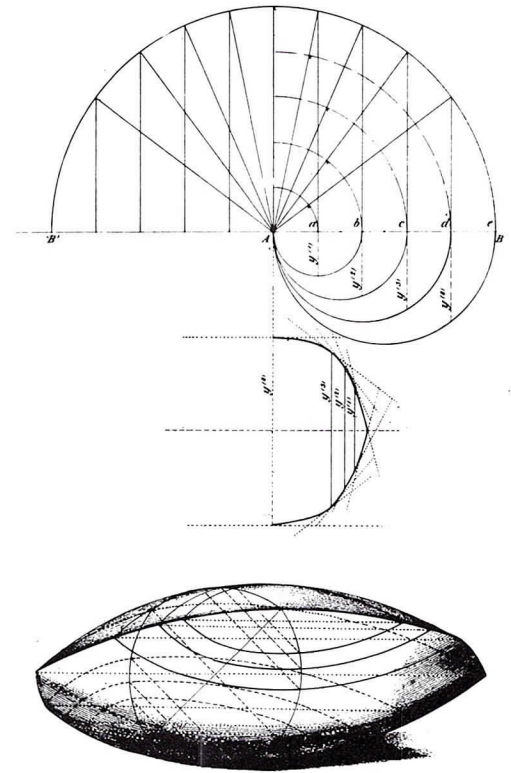
Gottfried Semper shared Bötticher's belief that the Greeks had achieved the highest tectonic expression and that this achievement bore a relation to the forms of nature. Semper was convinced "that every art form must be the expression of a definite law of the innermost necessity, just as this is certainly the case with natural forms."[18] However, Semper also stressed that plans, sections, elevations, and all laws of beauty developed from them were artificial and fell short of the organic tectonic forms of the Greeks, which were not constructed, turned, or cast, but organically developed. He specifically chastised Bötticher for his *Strukturschemen* and his applied symbolic ornament. Rather, in Greek art "the forms in themselves are such as are brought forth when the organic energies are thrust into conflict with ponderous matter." Semper drew a lesson from this: "the more the works of our hands appear as though they were the resultant of a similar conflict between elemental energies and vital energies, the higher these works stand on the ladder of artistic fulfillment."[19]

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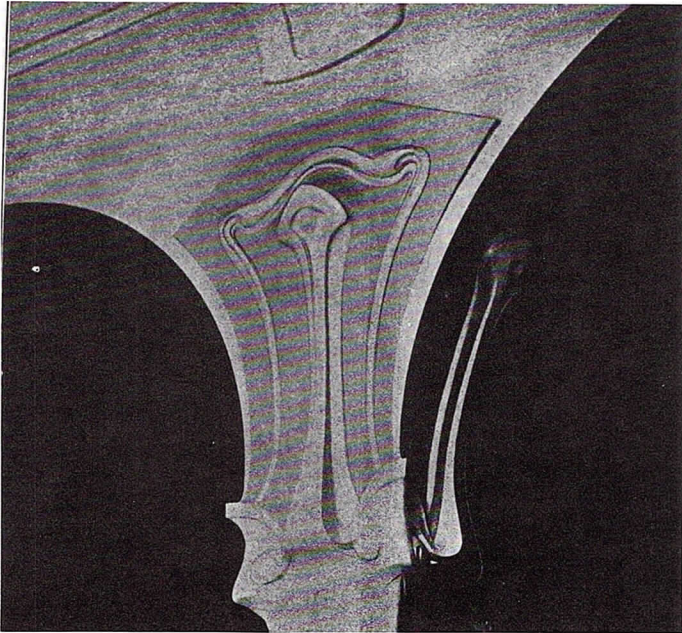
The book quoted here is Semper's small study of Greek lead shot for slings (fig. 10), in which he questioned why these missiles should have been almond-shaped. In giving his answer, Semper offers a general study of objects moving in a resistant medium. The book demonstrates to us Semper's submission of an ancient "industrial" product to a theoretical study conceived to elucidate both timeless artistic problems and production-related concerns such as those of boat or missile design. In his own statement of purpose, Semper removes some concern about what may have appeared to be a simplistic naturalism:

"I have been driven to the following study by the desire to demonstrate, by means of a simple example, that the Greeks did not merely observe natural laws and then strive to imitate the forms that resulted from the operation of these laws. Rather, I would like to demonstrate that the Greeks actually researched these laws and out of these laws, independent of all imitation, created their own forms. These new forms relate to those of Nature only in the commonality of the underlying natural laws."[20]

As Figure 11 indicates, Semper's aerodynamic studies satisfied him that the "almond-shaped" missiles of the ancients were the expression of a definite natural law. In the final section (§21), he returns to more conventional aesthetic concerns. Noting that in his study of forms moving in a resisting medium all the curves exhibited a "spring-powered resistance" to the straight line, tending to bend into a curve, he also remarks that it is such contours and expansions that characterize the Greek tectonic profile in strong differentiation from all other styles of architecture. Finally, he claims not "that the Greeks constructed their forms according to mathematical formulas, which would be absurd in the arts. On the contrary, the Greeks did not merely sense, but clearly recognized a law of nature: in achieving form in objects extreme limits are observed and energy controls everything."[21]

I am here concerned not to verify the historiographical or scientific adequacy of Semper's study but rather to examine the theoretical insight that it offered to his contemporaries. Discovering the form that answered to all the

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12 Capital, Folkwang Museum,
Hagen. Henry van de Velde, 1898–
1902.
13 Dining room furniture. Henry
van de Velde, 1895.
14 Dining room, Behrens House,
Darmstadt. Peter Behrens, 1899–
1901.
15 Chair. Richard Riemerschmid,
1899.

demands of its context (the complexity of the context varying with the problem), Semper asserted a relation between the process of "streamlining" and the form of the Parthenon. Two generations later Le Corbusier wrote:

"The airplane is indubitably one of the products of the most intense selection in the range of modern industry.

"The War was an insatiable 'client', never satisfied, always demanding better. The orders were to succeed at all costs and death followed a mistake remorselessly. We may then affirm that the airplane mobilized invention, intelligence, and daring: *imagination* and *cold reason*. It is the same spirit that built the Parthenon.

"Let us look at things from the point of view of architecture, but in the state of mind of the inventor of airplanes.

"The lesson of the airplane is not primarily in the forms it has created, and above all we must learn to see in an airplane not a bird or a dragonfly, but a machine for flying; the lesson of the airplane lies in the logic which governed the enunciation of the problem and which led to its successful realization. When a problem is properly stated, in our epoch, it inevitably finds its solution.

"The problem of the house has not yet been stated."[22]

Tektonik was, then, a complex and evolving concept that attempted to establish a relationship between form and technical considerations. According to Bötticher, such a concept was necessary because what was technically functional might not be sensed as such. This implied demand that the artist assert himself in giving form to objects was, then, in the interest of giving expression to the function of the object. The artist must be brought in not for his *a priori* personal sensibility but for his ability to give expression to what was objective in a situation. Semper sought to give a still more reasoned interpretation of good form by demonstrating the necessity of considering all the conditions which the environmental context placed upon the object. *Tektonik* thus received a still more precise functional interpretation.

Such concepts of bringing function to expression through carefully considered form were overt in much Art Nouveau and Jugendstil work—notably with van de Velde (figs. 12, 13) and Riemerschmid (fig. 15), but also in the early Behrens (chairs in fig. 14) and others. The polemics of the time referred to such works as "functionalist." Men as seemingly different as Bötticher and van de Velde were committed to this inferentially functional, organismic world of forms associated with Greek classicism (and Gothic architecture).[23] Semper went on to describe an alternative—an abstract, non-organic formal world labeled *Stereotomie*, associated with the Renaissance (and Romanesque architecture).

The terms *Tektonik* and *Stereotomie*, as well as the architectures with which they were associated, indicate that these were, respectively, distinctions between constructs of articulated elements (elastic skeletal structures, e.g., timber or metal frames) and comparatively inert assemblies (intractile masses, e.g., masonry walls).

Successive sections of Semper's principal work, *Der Stil*, are titled "*Tektonik*" (carpentry) and "*Stereotomie*" (masonry, etc.).[24] The Greek temple remained the highest form[25] even though, as a tectonic assembly in stone, it was a heterogeneous combination of the form allied to *Tektonik* and the material allied to *Stereotomie*.[26] The major distinction between the types was that tectonic structures were composed of members; stereotomic assemblies of identical or similar pieces. These pieces all had the same function, the absolutely mechanical one of compression and resistance to compression. In contrast, the members of the tectonic structure (even if executed in stone) were differentiated in their action, in their position in the frame, and consequently "could, by means of art, be brought to life as organisms." In opposition to this functionally expressive and organic quality of the tectonic structure, the stone mass had a lifeless, crystalline mineral quality which built up into totalities of a crystalline or eurhythmic character and which could only be conceived in terms of a regular, closed form.[27]

Behrens's own development reflects a shift from functionally expressive to crystalline form as he passed from his Jugendstil work in Darmstadt (fig. 17) to the post-Jugendstil work of his Düsseldorf period (fig. 16). Four years later, beginning work for the AEG in Berlin, he was faced
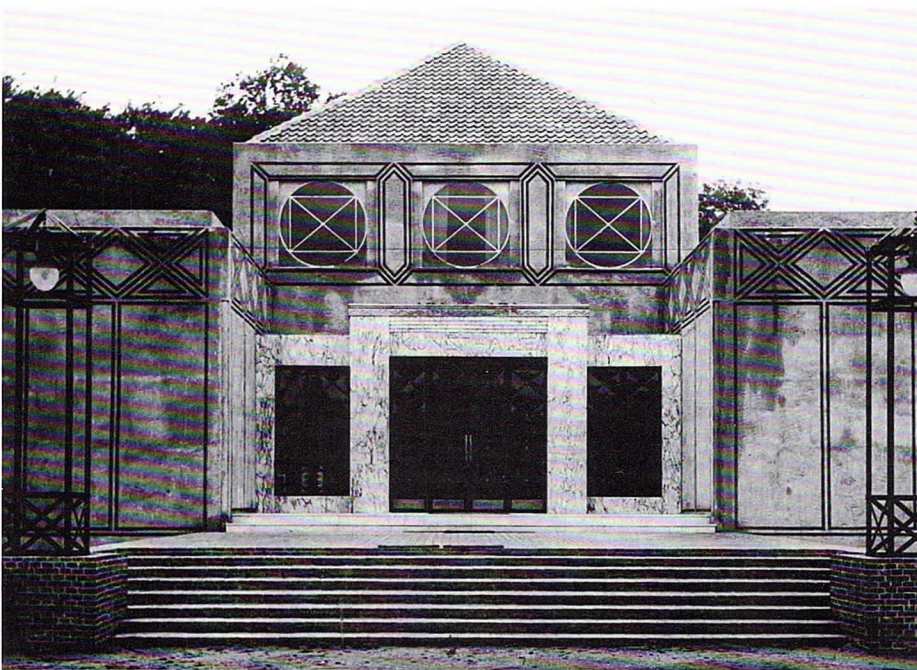
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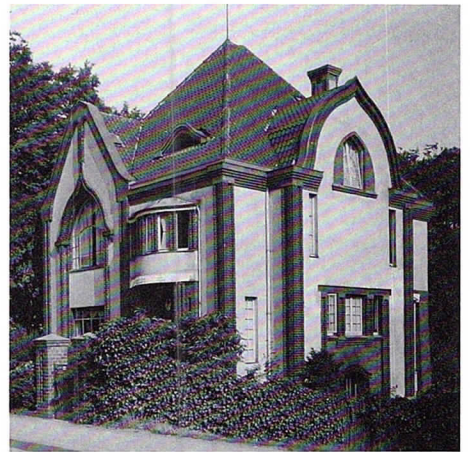
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16 Northwest German Art
Exhibition, Oldenburg, 1905.
Exhibition pavilions by Peter
Behrens.

17 House of the Architect, Artists'
Colony, Darmstadt. Peter Behrens,
1901.

18 Corliss steam beam engines
which were exhibited at, and
supplied the power for, the
Machinery Hall, Centennial
Exhibition, Philadelphia, 1876.
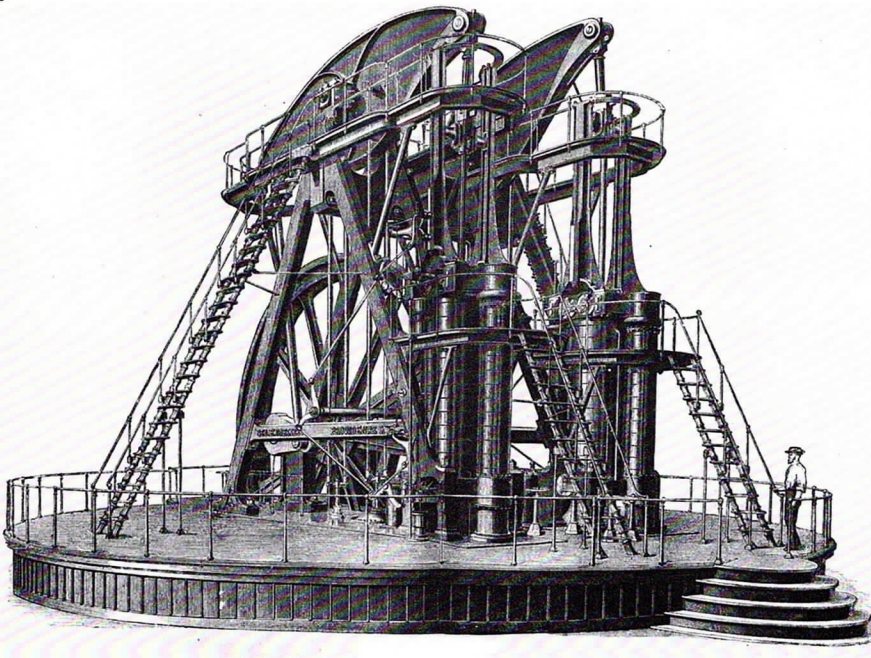
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with problems that encouraged a less absolute division between *Tektonik* and *Stereotomie*. His post-Jugendstil preference for *Stereotomie* came into confrontation with the tectonic qualities of metal-framed factory structures. While a new conception of space assisted Behrens in resolving the contradiction between these two structural principles, this understanding held little reference for the design of industrial objects.

The translation of the ideas behind *Tektonik* into industrial machine construction and machine products had already been made in Semper's time by the noted mechanical engineer Franz Reuleaux.[28] As the head of the German delegation and a judge in the mechanical section of the Centennial Exhibition at Philadelphia in 1876, Reuleaux wrote periodic letters to the *Nationalzeitung* which caused a great stir in Germany. Reuleaux found that the Americans were evolving good form in their machines (fig. 18), a fact which he both appreciated and found tectonically significant:
"Certain details of the steam-engine have been further developed, and they [the Americans] have been able to give it an external finish and appearance which is really admirable. This is a significant sign. For when beauty of form has been developed as the object of especial care, the difficulties of the purely utilitarian design must already have been overcome."
Going so far as to refer to German industrial production exhibited at Philadelphia as *"billig und schlecht"* (cheap and nasty), Reuleaux made a point that anticipates the advocacy of the Deutscher Werkbund around 1910:
"German industry must relinquish the principle of competition in price alone and must decide whether to turn instead to competition in quality or value. Nevertheless . . . German industry must adopt machines . . . when bodily effort can thereby be abolished or lightened . . .; on the other hand, industry must use the intellectual power and the skill of the worker to refine the product, and this to a greater degree the more it approaches to art."[29]

We may now consider this traditional problem of "good" form and use in relation to Behrens's work for industry.

The early nineteenth-century Neoclassical architect Bötticher and the late nineteenth century mechanical engineer Reuleaux held a similar view that there was such a thing as an excellent utilitarian design that was not yet necessarily good form. Good form was a further development. For both these men, good form would express the utility of the object; but, as expression, it had as much or more to do with the perception and psyche of the user or viewer as it did with its actual function.

Semper did not hold the mechanically deterministic view that the satisfaction of utilitarian demands insured an ideal form.[30] But his example of the lead shot would seem to indicate that he would go further than Bötticher or Reuleaux in claiming a symbiosis between utility and good form. One senses, for example, that Bötticher's acknowledgment of good form in a column would be conservative, insisting on the fulfillment of certain traditional expectations. The thrust of Semper's argument suggests that he would be more prepared to alter his understanding and acceptance of conventions in accord with his analysis of the practical problem.

Semper's analysis would appeal to Behrens, one might think, since Behrens was willing to work with industry and to alter traditional expectations; but we have already recorded his antagonism toward Semper. Behrens stands in the classical tradition of Bötticher, although his modern, broadly cultural, and more psychological understanding of Hellenism led him to conceive an even weaker bond between good form and technique.

Like Bötticher and Reuleaux, Behrens accepted the excellence of a utilitarian design; he did little to alter the technical design of AEG products. But whereas Bötticher attempted to rationalize the excellence of Hellenic classicism as a mosaic of expressed functions, Behrens was persuaded by the more complex psychological and symbolic interpretations that evoked the "spirit of the time" and the collective and individual wills of a civilization and its artists. Consequently, Behrens's own work had other more abstract sources than functional expression.

In his designs for industrially produced objects of domestic use, Behrens was often quite conservative. Certainly there had been predilections based now on tradition, now on an ideal geometry, that contributed to the form of the Behrens-AEG electrical heating units (see figs. 5–7, 9). These objects suggest the spirit of Carolingian reliquaries more strongly than the qualities of a revolutionary new heating system. In accord with Behrens's design conceptions, many of the details of these objects derived from other sources than a strict analysis of functional expression.

Similarly, his electric tea kettles (see fig. 8) relied more on late eighteenth-century *chinoiserie* than on a new functional analysis. Or, to make the same point differently, if the handsome Behrens teapots had relied for their form on the expression of function, they would not have appeared simultaneously in three different forms and several finishes (including two "machine-hammered" ones).

In domestic or luxury objects, and in domestic or institutional architecture, Behrens was prepared to have established expectations influence the form. Even if electrified, a teapot or a source of warmth in the home had to participate in human expectations beyond functional expression. He stated specifically that manufactured objects which would come into close contact with people permitted a richer forming, better materials, and ornamentation—though the ornamentation should be economical and "impersonal" as is the case with simple geometric figures.[31]

Only in a secondary sense were the non-domestic arc lamp (fig. 4) or even the simplest tea kettles (fig. 8) or electric fans more functionally direct than their predecessors (fig. 2); fans with similarly ornamented motor housings were also produced. Both Walther Rathenau of the AEG and Behrens accepted the role of science and technology in modern society with a pessimistic resignation. Where traditional forces were not dominant, Behrens felt a historicist compulsion to use his artistry to create an image of technological efficiency and perfection beyond that which the engineered object would have provided. That is, he sought such an image because he believed his place in history compelled him to do so. It is a curious position of an individual human will dominant over material matters but subject to the collective spirit of a people and its history. Thus Behrens was willing to seek new forms; but as the theoretical discussion of Part I of this article (*Oppositions 11*) suggests, he sought the conventions of a new sensibility which encompassed functional expression rather than being determined by it.

Within this context we may return to question Behrens's precedence in the field of industrial design. One aspect of industrial design is surely the design of capital goods and major machinery for public works and for industry itself. The turbines and large equipment of the AEG were prominent items in this category, but there is still no hard evidence that Behrens had any more than an indirect influence on the design of these products.[32] That indirect influence stemmed from his well-known designs for mass-produced objects.

If "industrial design" means design of mass-production, mass-distribution goods, certain of the potential candidates for precedence in the field can be eliminated on the grounds that they were designing for handicraft production or, at most, for machine-augmented handicraft production. In the late nineteenth century, first in England and then on the continent, artists and craftsmen banded together to form workshops where they might produce and market objects meeting their own standards. These workshops were too closely tied to the handicraft tradition to lay claim to an innovative position in design for industry. In 1908, J. A. Lux went so far as to compliment the Wiener Werkstätte as one of the few remaining shops where the worker could devote a labor of love to a single object.[33] At times, much has been made of the "machine furniture" of Bruno Paul or that of Richard Riemerschmid designed for the Deutsche Werkstätten of Hellerau, near Dresden. The Werkstätten published Riemerschmid's designs in a book in which they were at pains to designate themselves as a workshop rather than a factory, and devoted to careful handwork.[34]

19 Bentwood furniture exhibited at
Crystal Palace, London, 1851.
Michael Thonet.
20 Bentwood furniture made in
Boppard, Germany. Michael
Thonet, 1836–1840.
21 Bentwood chair No. 14. Michael
Thonet, 1859.

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In point of fact, the Dresden Workshops were quite large, and might have some claim to serial production of furniture. However, that claim could be pressed earlier and more convincingly for certain other industries, e.g., glass, ceramics, wallpaper, linoleum, and the like. Many of the Art Nouveau and Jugendstil artists, including Behrens, had created designs for firms engaged in such manufactures. Sevres in ceramics, Wedgwood in china, Boulton in iron casting,[35] and the English Arts and Crafts Movement[36] provide earlier instances of designers for large-scale production working both within industry and as "consultants."[37] In such industries as ceramics, glass, and weaponry, the existence of "design for industry" must trace back to antiquity. Clearly, there is ample precedent for the design of objects for mass production and mass distribution. The question, then, would seem to be whether the twentieth century, and Behrens in particular, developed an innovative approach which can be called "industrial design."[38]

An attempt might be made to distinguish Behrens's contribution by the modernity of the industry for which he worked. But the electrical industry was not totally new in 1907; and the Industrial Revolution had introduced other technologies, such as steam power, which had posed the full range of industrial design problems. These problems had brought forth the sometimes functional and sometimes rather loosely conceived design contributions of engineers and *Fabrikzeichner*, as we saw in the instance of the AEG arc lamps.

Nor was the scale of mass production of the AEG a distinguishing characteristic. The bentwood furniture manufacture of Michael Thonet may be cited as an earlier example of design for large-scale production; this example also demonstrates a methodology in contrast with Behrens's industrial design. The furniture that Thonet produced in Boppard in 1836–1840 (fig. 20) represented a study of his new technique and the reminiscences that came to him in his role as his own "factory draftsman." Had Thonet stopped there, he might be viewed as little more than another *Fabrikzeichner*; but in Austria, Thonet and his sons went on revising their designs until they

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achieved the still admired bentwood chairs with wicker seats, one version of which appears at the upper right of Figure 19. In the researching of their material and technique, and of the more general problems of seating and furniture, the Thonets achieved a variety of seemingly timeless designs. This furniture was made in such numbers (approximately forty million chairs of the basic style No. 14 [fig. 21] between 1859 and 1896) as to clearly establish the Thonets as mass-producers.[39]

A chair, as a traditional object, contrasts with the technical objects of the electrical industry. But the important difference between Thonet's design and that of Behrens is in method, not in the type of object or scale of production. Generations have now taken pleasure in Thonet chairs, the design, development, and production of which suggest comparison with Semper's idea of *Tektonik*. For Thonet, as for Semper, there was no conception of a technical form that an artist should improve. The fully developed and beautiful form was to be achieved along with the refinement of the material and technique—and this need not imply a deterministic, one-way path from technique to form. According to this conception it was the oneness of technical and visual excellence that was important, whether the man who achieved it was labeled engineer or artist. Under this interpretation, design for industry was not new with the twentieth century, certainly not with Behrens.

As we have seen repeatedly, Behrens made a definite distinction between technique and art. Behrens was influential in diminishing the aloofness of early twentieth century artists to industry; but his acceptance of industry was fatalistic rather than optimistic or wholehearted. Even the best products of the engineer, whether mass-production or capital goods, were eliminated from the canon of good form on the basis that they participated in a pseudo-aesthetic. These products or machines, according to Behrens, had an "organic" lawfulness just as nature does; but just as nature is not yet art, so neither is an "organic" machine yet good design, art, or culture. The work of the engineer is a given of modern Western civilization, but an independent *Kunstwollen* must operate upon it if there is to be a modern Western culture.[40]

It comes as no surprise, then, that one of the early claims for Behrens's contribution to design for industry was based on the dualism of technique and art, the engineer and the artist—and on Behrens's desire to aggregate these parts rather than to conceive of a single creative process. Wolf Dohrn, in speaking of the AEG arc lamps, considered Behrens's method to be a model for the future development of German industry. His lamp designs were the result of a cooperation in which the engineer became half an artist and the artist half an engineer. Behrens was the first, Dohrn said, to put his capability in the service of industry; the AEG had innovated in an exemplary fashion in achieving the cooperation of engineer and artist. It was widely recognized that the AEG had shown the greatest capacity to employ the results of German science for economic benefit, so it was no accident, Dohrn concluded, that this same industry had understood how to adapt the artistic capabilities of the time to its economic life.[41]

In summary, Behrens was not the first person to contribute designs (even "good" designs) for the fabrication (even by mass production) of products (even peculiarly modern industrial products) by others.

Nevertheless, Behrens was the first artist to devote special care to the beauty of form of peculiarly modern industrial products in terms of some larger cultural conception *external to the immediate processes* of production and use. Industry, the machine, and industrial production had to be accepted because at this point in history they were inevitable. The only remaining opportunity was to bridle this great force of technological civilization under expressive, reductionist artistic forms.[42] The belief that had begun with men like Reuleaux—that a process of technical refinement of a particular machine should be accompanied by a refinement of form—was in danger of subversion. An alternative belief, rooted in a historical determinist account, that the twentieth century was generally characterized by technical refinement, called for the design of forms that were beautiful, precise and expressive—forms that were often independent of the machines they housed.

Much, perhaps even the greatest part, of what has been known as industrial design in this century has assumed the separateness of technique and art, and the need to give a sympathetic, yet independent, artistic expression to a technical civilization. The broad acceptance of this particular conception of design for industry may indeed be traced back to Behrens and give him precedence within that interpretation of industrial design.

Before going on to Behrens's industrial architecture in Part III of this essay, it will be well to review the task Behrens and the AEG established for the designer. Behrens was not hired as an engineer with a sensitive eye. He was retained as an artist who could provide the signs of technical perfection through beauty of form, whether this involved a well-formed housing for the electrodes of an arc lamp, a well-formed factory building for a work force which the AEG was proud to say operated almost militaristically, or an elegant letterhead for an intelligent and complex executive staff.

The extensive adoption of Behrens's expressive design by the AEG served to create a corporate image,[43] a precedent for such mid-twentieth century firms as Olivetti and IBM. IBM in particular has used reductionist forms in graphics, industrial design, and architecture to express technological efficiency and to establish an image. It may be the desire for such an "image" that has made Behrens's conception of industrial design dominant. The fruits of an inexorable search for the best solution to each problem (in the manner of the Thonet chair) would relate to one another only in terms of excellence and process, but the application of a dominant artistic will can assure a constant image through a great range of problems (the white plastic boxes of Braun electrical appliances, for example).

In Germany, industrial design is known as *Formgebung* and Peter Behrens is generally acknowledged as the first of these "form-givers." Industrial design may be said to range from product engineering to sales cosmetics. It is significant that Behrens was not engaged to work at either of the poles of this spectrum where engineers or draftsmen had already worked. Behrens was the first *Formge-*

ber through his being engaged in exploring the rather elusive concept of the "giving of forms" which would signal technical perfection, corporate image, and something still more obscure. Beyond the sign language of technique and of corporateness, Behrens was still more interested in finding the symbols, proportions, and constructs which he believed would accord with and reveal the "rhythm of the time." There was also the further, self-imposed demand that this whole endeavor should achieve its "classical" form. Since steel, electricity, rapid transportation, modern industry, and modern enterprise were regarded as the sources of this rhythm, and therefore of the new culture, Behrens's cultural ambitions found support among his employers.

Source Note: This essay is adapted from chapter six of my doctoral dissertation, "Peter Behrens and the New Architecture of Germany: 1900–1917" (Columbia University, 1968). It is complementary to chapter five, which was published in Oppositions, 11 *(winter 1977), pp. 52–71: Please see p. 69 of* Oppositions 11 *for other references and acknowledgments.* —S.A.

1. N. Pevsner in Paris, Musée national d'art moderne, *The Sources of the XXth Century* (Paris: Musée national d'art moderne, 1960), p. 53.

2. N. Pevsner, "Architecture in Our Time," *The Listener*, LXXVI (Dec. 29, 1966), pp. 953–55, and LXXVII (Jan. 5, 1967), pp. 7–9.

3. Two recent works assigning this priority to Behrens are G. Dorfles, *Il Disegno Industriale e la sua Estetica* (Bologna: Cappelli, 1963), p. 74; and O. Bartning, "Zur Eröffnung der Ausstellung Peter Behrens" (Darmstadt: Institut für neue technische Form, Sept. 14, 1957), mimeograph. This exhibition showed certain AEG products the design of which was wrongly attributed to Behrens, including a simple chromed electric iron and a simple tall electric kettle. Well attuned to the sympathies of later viewers, these works tended to enhance the reputation of Behrens without clarifying his actual contribution.

Most works on the AEG, on Behrens, and on the history of modern architecture give some attention to Behrens's work in industrial design. See the notes to the article in *Oppositions 11* and: K. Scheffler, "Kunst und Industrie," VI (July 1908), 430–34; W. Dohrn, "Das Vorbild der AEG," *März*, III (Sept. 3, 1909), pp. 361–72; A. Fürst, "Blech, Beton und Kunst," in *Die Wunder um uns* (Berlin, 1911), pp. 186–98, ill. 74–82; E. Kalkschmidt, "Deutsches Kunstgewerbe und der Weltmarkt," *Dekorative Kunst*, XIX (July 1911), pp. 465–80; C.-E. Jeanneret [Le Corbusier], *Etude sur le Mouvement d'Art Decoratif en Allemagne* (La Chaux-de-Fonds, 1912); H. Lanzke, "Industrielle Formgestaltung und Formentwicklung," *AEG Informations-Mappe 99* (Berlin, 1954); R. Villigier, *Industrielle Formgestaltung* (Winterthur, 1957); mimeograph transcripts of speeches by Ludwig Prinz von Hessen und bei Rhein, Otto Bartning, and Hermann Lanzke at the opening of the AEG-organized exhibition "Peter Behrens. 50 Jahre Formgebung in der Industrie" (Darmstadt: Institut für neue technische Form, Sept. 14, 1957); H. Lanzke, *Peter Behrens. 50 Jahre Gestaltung in der Industrie* (Berlin?, 1958); B. Siepen, "Peter Behrens. 50 Jahre Formgebung in der Industrie," *Die Innenarchitektur*, V (April 1958), pp. 669–70; S. von Moos, "Die Erneuerung," *Werk*, LIV (April 1967), pp. 211–15. See now Tilmann Buddensieg et al., *Industriekultur. Peter Behrens und die AEG* (Berlin: Gebr. Mann, 1979).

4. H. Lanzke, "Industrielle Formgestaltung und Formentwicklung" (Berlin: AEG, 1954), p. 1; and Berlin, AEG, *Peter Behrens. 50 Jahre Gestaltung in der Industrie* ([Berlin: AEG], 1958), p. [2]. The same incomplete comparison also appears in early publications; e.g., Wolf Dohrn, "Das Vorbild der AEG," *März*, III (Sept. 3, 1909), pp. 362–63. See also the preceding note. Even the recent extensive work of Buddensieg chooses an intermediate model (comparable to our Fig. 3), the cap and reflector of which allow a comparison more favorable to the evaluation of Behrens's innovations (*Industriekultur*, figs. 39 and 40 on p. 45;

the discussion on p. 46 misidentifies these as lamps for indirect light).

5. Arnold Schürer is an industrial designer who while in the employ of the AEG researched the design development of the products of the AEG. See his *Der Einfluss produktbestimmender Faktoren auf die Gestaltung* (Bielefeld: the author, 1969).

6. Berlin, AEG, *Elecktrische Kraftübertragung und Kraftverteilung* (Berlin: AEG, 1901), 3rd ed., p. 327.

7. It is this phenomenon which Arnold Schürer studied in great detail. To give one general example, Schürer has demonstrated that increasing understanding and improvement of materials, productive technology, and electrical and mechanical technology contributed to a progressive miniaturization and formal simplification of the products of the electrical industry.

8. Translated from a speech delivered by Behrens at the 18th annual convention of the Verband Deutscher Elektrotechniker in Braunschweig in 1910. Published in the *Elektrotechnische Zeitschrift*, XXXI (June 2, 1910), pp. 552–55.

9. This paragraph is based on the succeeding part of Behrens's Braunschweig speech, ibid., p. 553. The original reads:
Kunst entsteht nur als Intuition starker Individualitäten und ist die freie, durch materielle Bedingungen unbehinderte Erfüllung psychischen Dranges. Sie entsteht nicht als Zufälligkeit, sondern als Schöpfung nach dem intensiven und bewussten Willen des Befreiten menschlichen Geistes. Sie ist die Erfüllung psychischer, das heisst ins Geistige übersetzter Zwecke, wie sie sich als solche in der Musik am klarsten offenbart. Das Musikalische, das Einfach-Rhythmische ist das wesentliche Moment künstlerischer Gestaltung. Oder wie der Wiener Forscher Riegl dies ausdrückt: "Im Gegensatz zu der Semperschen mechanistischen Auffassung vom Wesen des Kunstwerkes muss eine teleologische treten, indem im Kunstwerk das Resultat eines bestimmten zweckbewussten Kunstwollens erblickt wird, das sich im Kampf mit Gebrauchszweck, Rohstoff und Technik durchsetzt." Diesen drei letzteren Faktoren kommt somit nicht mehr jene positive schöpferische Rolle zu, die ihnen die sogenannte Sempersche Theorie zugedacht hatte, sondern vielmehr eine hemmende, negative: "sie bilden gleichsam die Reibungskoeffizienten innerhalb des Gesamtproduktes."

10. This design was published as early as September 1907 in *Mitteilungen der Berliner Elektricitätswerke*, III (1907), p. 130. Beginning in January 1907 the cover of this journal used a design by Behrens. This indicates that Behrens had completed graphic and industrial design commissions for the AEG before he assumed his new position in Berlin.

11. Concerning this lamp, Behrens said that the housing had an "aesthetic requirement; it should remove from the viewer's sight the naked, barren electrodes and conceal these in what should preferably be a pleasant form." *Mitteilungen der Berliner Elektricitätswerke*, IV (March 1908), pp. 43–44. As we would now expect, this statement hardly constitutes an endorsement of new functional forms. Behrens's attitude stands as testimony to R. Banham's assessment that "The 'Machine Aesthetic' of the pioneer masters of the Modern Movement was thus selective and classicizing . . . and it came nowhere near an acceptance of machines on their own terms or for their own sakes." From "Machine Aesthetic," *Architectural Review*, CXVII (April 1955),

pp. 224–28.

12. Dohrn, *März*, III (Sept. 3, 1909), p. 371. Fritz Mannheimer, "Arbeiten von Professor Peter Behrens für die AEG," *Der Industriebau*, II (June 15, 1911), p. 124, claims that the AEG invested 200,000 marks in the design and models of Behrens's arc lamp designs, but that this was recovered in one year's production savings and increased sales.

13. The flower-like quality of the lamp is worth noting since the early volumes of almost all the Art Nouveau periodicals presented designs for domestic electric lamps which predictably took flower forms. This lyrical form is something of a throwback for Behrens at this time (note his own early lamp, illustrated in *Architectural Design*, 39 [February 1969], p. 73); but it again illustrates the distance between Behrens's *Kunstwollen* and a "machine aesthetic."

14. F. Schmalenbach, "Jugendstil und Neue Sachlichkeit," *Kunsthistorische Studien* (Basel, 1941), pp. 9–21, is suggestive for this discussion though he is not specifically concerned with Behrens.

15. K. Bötticher, *Die Tektonik der Hellenen* (Potsdam: F. Riegel, 1852), 3 vol. Hermann Muthesius, "Die Asthetische Ausbildung der Ingenieurbauten," *Zeitschrift des Vereins deutscher Ingenieure*, LIII (July 31, 1909), pp. 1211–17, refers to Bötticher and his tradition (p. 1213).

16. "The form of the body is the mirror of its essence!
"Master it and the seal of the riddle is broken."

17. Ibid., p. 6.

18. G. Semper, *Über die bleiernen Schleudergeschosse der Alten und über zweckmässige Gestaltung der Wurfkörper im Allgemeinen* (Frankfurt a.M.: Verlag für Kunst und Wissenschaft, 1859), p. 1.

19. Ibid., pp. 1–5.

20. Ibid., p. 6.

21. Ibid., pp. 59–60. There is an engaging anecdote about the Fogg Library's copy of Semper's work on ancient lead shot. Inside the front cover is written in ink, "The first pages of this curious treatise are of importance. Semper was a man of genius, and his remarks on aesthetics, on the use of sections, ground plans, and outlines, and on the fundamental principles of Greek art are admirable. C[harles] E[liot] Norton. 1880."

22. Le Corbusier, *Towards a New Architecture* (London: The Architectural Press, 1946; first pub. 1923), pp. 101–02. Le Corbusier also speaks of the necessity of a standard for perfection; this he illustrates with photos and discussion of the Parthenon and a 1921 Delage automobile (p. 125). A similar linkage, but with characteristic irony about the modern situation, had already been made by Walther Rathenau: "an automobile is more important to him [the modern worker] than the Parthenon." From Rathenau, *Auf dem Fechtboden des Geistes* (Wiesbaden, 1953), p. 39.

23. Because "organic" has so often modified "architecture" to mean different things, I have used the rather awkward form "organismic" to mean "like, or resembling, an organism." Bötticher tended to see this in the individual building elements, and the Greek temple became a "mosaic of functionally expressive elements." Van de Velde had a stronger sense for continuities and the organism-like quality of the whole, characteristics that

96   were associated with Gothic and Baroque-Rococo architecture. Organism, the ideas behind *Tektonik*, energy, Gothic and Rococo precedent—all these and more are associated with one another, with a "Germanic essence," and with van de Velde in Karl Scheffler, "Henry van de Velde," *Zukunft*, XXXIII (1900), pp. 465–67.

24. G. Semper, *Der Stil in den technischen und tektonischen Künsten oder Praktische Aesthetik* (2 Vols., Munich: F. Bruckmann, 1878–79; first pub. 1860, 1863), 2nd ed., I, p. 9 (a full discussion of Semper would have to include his two other principal categories—*textile Kunst* and *keramische Kunst*) and parts 7–10.

25. Ibid., p. xlii.

26. Ibid., p. 9.

27. Ibid., II, pp. 341–42. Gustav Adolf Platz, *Die Baukunst der neuesten Zeit* (Berlin: Propyläen, 1927), pp. 132–34, continues Semper's division of architectural constructs—*Tektonik* referring to membered structures and now including iron and steel; *Stereotomie* referring to wall structures now including concrete.

28. F. Reuleaux (1829–1905), though especially noted for his very inventive studies in kinematics and machine construction, was a man of broad scientific and cultural interests. He and Semper were colleagues at the Polytechnic in Zurich (Semper, 1853–1871; Reuleaux 1856–ca.1866). On Reuleaux, see: H. Zopke, "Professor Franz Reuleaux," *Cassier's Magazine* (1896). The implications of Reuleaux's statements pass far beyond the naive early nineteenth-century conceptions of propriety in machine design exemplified by S. Clegg, *Architecture of Machinery* (London: Architectural Library, 1842), which concerns itself with such matters as the choice of the proper antique order for the static superstructure of a machine. The moving parts of machines were rarely forced into traditional forms (though Arnold Schürer has drawn my attention to a charming Doric piston for a steam engine in the Deutsches Museum, Munich), but only slowly, and through such men as Reuleaux, were machines fully recognized as dynamic mechanisms for the transformation of energy and therefore in need of a new and dynamic form language. The competition between traditional architectural forms and "dynamic" forms is a recurrent theme. Walter Gropius's Adler automobile of 1930 is still a static architectural concept in contrast to R. Buckminster Fuller's ground taxiing unit of 1933 (which curiously resembles Semper's aerodynamic shot [see fig. 11]). On the Gropius-Fuller comparison, see R. Banham, *Theory and Design in the First Machine Age* (London: Architectural Press, 1960), p. 304.

29. From F. Reuleaux, *Briefe aus Philadelphia* (Brunswick: F. Vieweg, 1877), translated and cited in F. Klemm, *A History of Western Technology* (New York: Scribners, 1959), pp. 326–7. S. Giedion, *Space, Time and Architecture* (Cambridge, Mass.: Harvard University Press, 1941), gives mention of Reuleaux's favorable impression of American tools at Philadelphia. For Reuleaux's understanding of a technological civilization, see his *Technology and Civilization* (Washington, D.C.: GPO, 1891).

30. Semper, *Der Stil . . .*, I, pp. 6–7.

31. Behrens, "Kunst und Technik," *Elektrotechnische Zeitschrift*, XXXI (June 2, 1910), pp. 554–555.

32. One exception to this statement is the AEG electric railroad passenger car attributed to Behrens by W. Franz, "Peter Behrens als Ingenieur-Architekt," *Dekorative Kunst*, XX (Feb. 1917), pp. 150–51. Both the title and the date indicate an assessment ten years after Behrens innovated in design for the AEG. There is no discussion of what part Behrens played in the design of the car. At any rate, it was not new to design a passenger car, and what is distinctively Behrens's work is encountered in his other design work.

33. J. A. Lux, *Das neue Kunstgewerbe in Deutschland* (Leipzig: Klinkhardt und Biermann, 1908), p. 248.

34. Dresden, Deutsche Werkstätten für Handwerkskunst, *Handgearbeitete Möbel* ([Dresden: Deutsche Werkstätten, c. 1908]), *passim*.

35. F. D. Klingender, *Art and the Industrial Revolution* (London: Carrington, 1947), chap. iii.

36. N. Pevsner, *Pioneers of Modern Design* (London: Penguin, 1960), 3rd ed., p. 26, gives special emphasis to Lewis F. Day (1845–1910) and John D. Sedding (1837–1891). In a personal communication, Prof. Edgar Kaufmann, Jr., emphasized the somewhat earlier A. W. N. Pugin (1812–1852) and Sir Henry Cole (1808–1882). See also S. Giedion, *Mechanization Takes Command* (New York: Oxford, 1948).

37. Christopher Dresser (1834–1904) was such a consultant to various producers of objects for domestic use. That position is applauded and termed "commercial designer" in Anon., "The Work of Christopher Dresser," *International Studio*, VI (Nov. 1898), pp. 104–14. The same article refers depreciatingly to the—presumably poor—designers within industry as "trade designers"; the terms would seem to be the English equivalent of the German *Fabrikzeichner*.

38. M. Armengaud, *The Practical Draughtsman's Book of Industrial Design* (New York: Stringer and Townsend, n.d.), indicates that in the mid-nineteenth century the term "industrial design" meant what we would call "mechanical drafting"—in both cases including some understanding of the technical problems involved.

39. On the Thonet industry, see *Michael Thonet* (Vienna: n.p., 1896), and now the catalogue of an excellent exhibition: Hans H. Buchwald, *Form from Process: The Thonet Chair* (Cambridge: Harvard University, Carpenter Center for the Visual Arts, 1967), which supplies a slightly more modest figure on the production of model No. 14: thirty million chairs between 1859 and 1920.

40. See Behrens's discussion of the engineer's pseudo-aesthetic in the material with note 8 above and the illustrations of AEG arc lamps (figs. 2–4).

41. Dohrn, *März*, III (Sept. 3, 1909), p. 372. Colin Eisler of the Institute of Fine Arts of New York University has drawn my attention to an article which indicates that the alliance of art and industry represented by the Behrens-AEG enterprise was also appreciated in the United States through a series of exhibitions in Newark, St. Louis, Chicago, Indianapolis, Cincinnati, and Pittsburgh: Anon., "Modern German Applied Arts," *Art and Progress*, III (May 1912), pp. 583–87. This traveling exhibition had been prepared by Karl Ernst Osthaus and the Deutsches Museum für Kunst in Handel und Gewerbe which operated out of the Folkwang Museum in Hagen. Prof. Edgar Kaufman in-

forms me that photos and documentation of this exhibition still exist at Newark.

42. Behrens, "Professor Peter Behrens über Ästhetik in der Industrie," *AEG-Zeitung*, XI (June 1909), pp. 5–7, states that the "aesthetic improvement" of industrially produced utilitarian objects must rely upon simplification and good proportions.

43. This image is now well documented and illustrated in Buddensieg et al., *Industriekultur* (see end of note 3).

Figure Credits

2–16, 18–21 Courtesy the author.

1 From *Lotus International*, 12, September 1976.

2, 3 From *AEG Zeitung*, respectively in issues of May 1905 and May 1907, *Beilage*.

4 Courtesy AEG Photo-Archives, Frankfurt am Main and Berlin.

5–7, 16 Courtesy Dr. Franz Stoedtner, Düsseldorf.

8, 17 Courtesy Foto Marburg.

9 Courtesy S. R. Gnamm, Munich.

10, 11 From G. Semper, *Über die bleiernen Schleudergeschosse der Alten* (Frankfurt am Main, 1859).

12 From *Linie und Form* (Krefeld: Kaiser Wilhelm Museum, 1904).

13 From R. Schmutzler, *Art Nouveau* (New York: Abrams, 1964).

14 Courtesy Klingspor-Museum, Offenbach am Main.

15 From F. Ahlers-Hestermann, *Stilwende* (Berlin: Gebr. Mann, 1956).

18 From U.S. Centennial Commission, International Exhibition 1876, *Reports and Awards Group XX*, F. A. Walker, ed. (Philadelphia, 1878).

19, 20 From *Michael Thonet* (Vienna, 1896).

21 From Hans H. Buchwald, *Form from Process—The Thonet Chair* (Cambridge, Mass.: Carpenter Center for the Visual Arts, 1967).
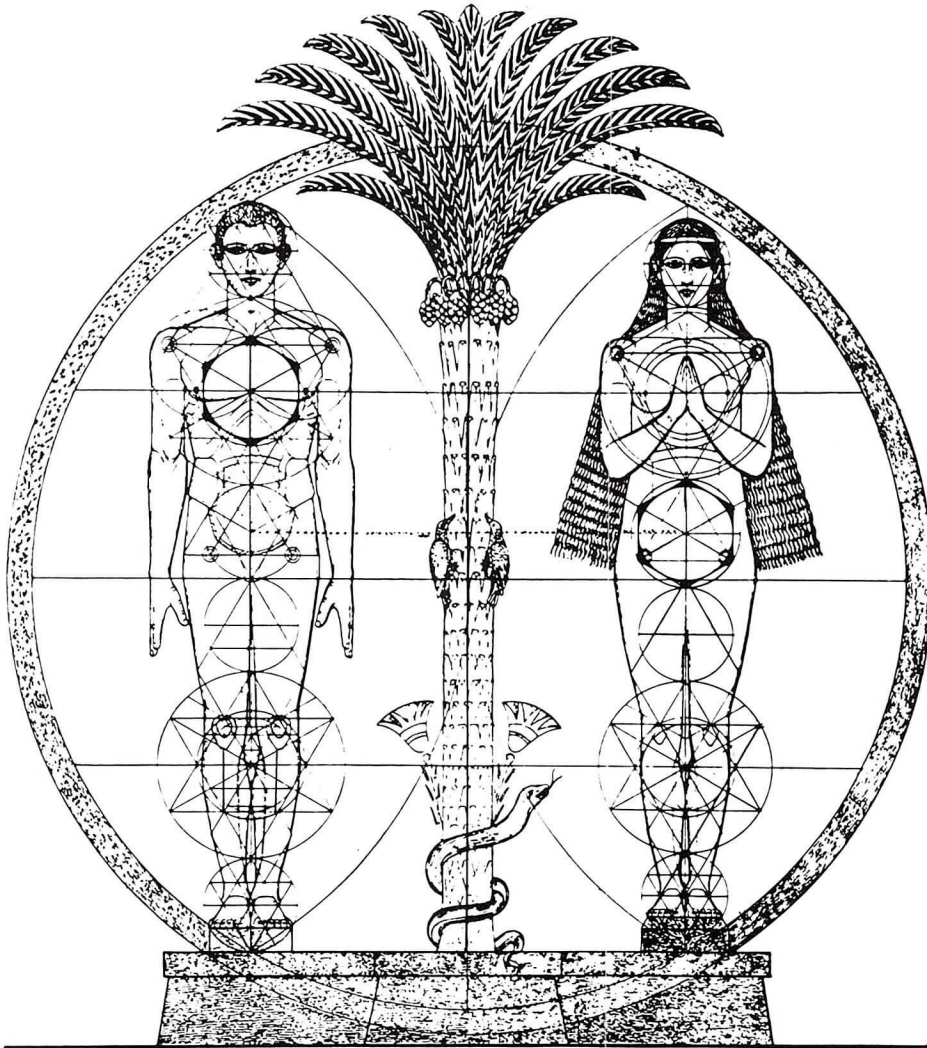
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Didier Lenz and the Beuron School of Religious Art

Charles Chassé
Translation by Stephen Sartarelli

Introduction by Kenneth Frampton

One of the underground myths of the early history of the Modern Movement is unquestionably the Beuron school of religious art and its apparent influence on the work of Peter Behrens from 1905 onward, an influence that is first declared in Behrens's Oldenberg Pavilions of that year. Behrens in fact came into contact with this 'school' in the previous year when, as director of the School of Applied Arts in Düsseldorf (to which he had been appointed in 1903), he invited the Dutch architect, theosophist, and aesthetic theorist J.L.M. Lauweriks to join the faculty. The extent of Lauweriks's influence in Düsseldorf is further indicated in certain early designs by Adolf Meyer—particularly a house projected by him in 1911, which patently was based on Lauweriks's *quadrat* system of proportional planning.

Although Chassé never mentions it, Didier Lenz wrote a book entitled *Zur Aesthetik der Beuronce-Schule*, and we have evidence that Lauweriks already knew of this book by 1899 since he mentions it many times in his article "Schoonheidsleer" written for the magazine *Architectura* in that year. This confirms that it was Lauweriks who made Behrens aware of Lenz's aesthetic theories in 1904. Lauweriks was himself profoundly influenced by Lenz and he was to adopt Lenz's proportional system as his own in his *quadrature* proportional method, published in the *Ring* magazine in 1909.

The stripped neo-Quattrocento Beuronic aesthetic, with its emphasis on the structuring of a surface by an austere network of lines, first became manifest in the Beuron chapel built under Lenz's supervision in 1868 and in the decorations he also carried out at Monte Cassino in 1877. These works appear to have been the point of departure for Behrens's "crystallized" atectonic style which lasted from 1904 to 1909. Behrens's Quattrocento manner reaches a height in the "sacred style" that he adopted for the crematorium built at Hagen, Westphalia, in 1907. It says something for the discredited theory of the *Zeitgeist* that Behrens should have gone to Düsseldorf in 1903, that is, in the very same year as Kaiser Wilhelm II visited Monte Cassino in order to congratulate Lenz on his "invention" of a new sacred style. Four years later the Kaiser opened Behrens's AEG Pavilion which had been designed expressly for the Berlin Shipbuilding Exhibition of 1907. This structure, inspired in part by the eleventh century baptistry and lady chapel in Aachen, seems to have been conceived by Behrens as a vehicle for the secularization of the Beuronic style.

It is interesting to note in passing that the whole of the Dutch geometrical school, that is to say, P. J. H. Cuijpers, H. P. Berlage, J. H. de Groot, J. L. M. Lauweriks, and K. P. C. de Bazel, were all preoccupied with the revitalization of Christian art, Lauweriks designing an exhibition on this theme for K. E. Osthaus in 1909.

Didier Lenz and the Beuron School of Religious Art

Charles Chassé
Translation by Stephen Sartarelli

2 Portrait of Father Desiderius Lenz.

The Beuron school of religious art did not arise from a collective, spontaneous movement within a mid-nineteenth century Benedictine monastery. It was the result of the energetic determination of a single individual, Didier Lenz (later called Father Desiderius), who entered the order for the sole purpose of spreading an idea that had possessed him for a long time and which he knew could only be realized through this channel. This idea did not conform to the artistic tendencies of the Benedictines of his group, who on the contrary had a preference for the Baroque and did not support Lenz's tenets even after his death.

Although granted the respect of everyone around him, Lenz was often in conflict with his superiors through the entire course of his long life (he died in 1928 at the age of ninety-six). They repeatedly forbade him to fully apply his pictorial principles and, not considering his ideas on the Canon of Human Forms and the Holy Measurements to be wholly orthodox, they prevented him from publishing them in their entirety. For many years, despite his respectfully admired asceticism, Lenz did not rise above the level of brother and, even though he eventually became a father, he never got higher than a sub-deaconship. This is all the more surprising as considerable tasks were entrusted him and as the Papacy highly praised his accomplishments at Monte Cassino with messages addressed to all of Christendom. Apparently the Holy See considered Lenz to be the only man with enough talent and personal authority to impose a collective work project on his collaborators who themselves, whether it was Father Gabriel Wüger or Father Willibrod Verkade, entertained artistic conceptions far different from his own. It even happened that certain monk-painters of Lenz's crew openly protested against his theories, and when this happened his superiors generally did not hide the fact that they were not displeased to see his ardor thus checked by his subordinates.

The reason that none of Lenz's story has been brought to light by French art criticism to this day is that most of the documents concerning the activity of Father Desiderius were drafted in German, including the detailed biog-

raphy of Lenz published in 1932 for the abbey of Beuron by Father Gallus Schwind, who knew the deceased very well, and whom I have had the pleasure of meeting at the Beuron monastery in Hohenzollern. Much valuable information about Lenz may also be found in the writings of Father Verkade, particularly in his memoirs of a monk-painter, *Der Antrieb ins Volkommene* ("the Drive to Perfection"), a work which has not yet been translated into French. But Father Verkade's impressions of Lenz are even more clearly stated in his correspondence, in French this time, with Maurice Denis, parts of which the latter cites in his posthumous *Journal* (Editions de la Colombe). There is also valuable information to be gleaned from the letters of Paul Sérusier which Mme. Sérusier and Mlle. Boutaric have published in the preface to the most recent edition (Floury) of the ABC of Sérusier. Both Sérusier and Maurice Denis did in fact go to Beuron, and kept in constant touch with Father Lenz as well as Verkade who, before embracing a monastic career, had been a Nabi and a disciple of Gauguin.

I have spoken of the doctrines of Father Lenz as unique to him; it is, however, useful to mention that, when a layman, he had been strongly influenced by the mysticism of Overbeck and more importantly of Cornelius, who helped him obtain a scholarship to study in Rome. But Lenz was quickly to break free from the rather confused doctrines of the German Pre-Raphaelites and soon establish a body of his own doctrines. In his wake would follow a companion of his, Wüger, who, although of Calvinist origins, would also become a monk at Beuron under the name of Father Gabriel.

One idea of particular importance to Lenz was that of transposing into the domain of plastic art the admiration he felt for the Gregorian chants, which the Benedictines had revived. He wished to complement their musical simplicity with a simplicity of line and tone. For Lenz, Christian art had taken the wrong path in the Middle Ages in orienting itself toward the Gothic style and in depicting an all-too-human sensuality in its figures.

But it was not only against Raphael that he rebelled; he also reproached Fra Angelico for the softness of his figures. Above all he disapproved of the artists of the Renaissance—whom he considered to be pagans—for having applied the laws of perspective (a method of optical illusion which forgoes absolute truth) and for having taken their models from nature, whereas man's duty was to devote himself to the glorification of God, who was much greater than nature.

Strangely enough, Lenz's uncompromising Christianity did not look to the art of the first Christians for inspiration, as one might expect; instead, he drew from Egyptian art, because it was clearly architectural in its principles and because he saw a profound religious sentiment contained in it, a sentiment even stronger than that of the first Christians, even though the Egyptians had not had the true God revealed to them.

Apparently, the Benedictines did not accept this art without certain reservations. What convinced them, however, was Lenz's intention to place its realization under the supervision of the monastery, thus leaving no freedom of expression to the monk-painters working under the command of a single master, the conductor of this new Gregorian chant. Instead of using models, Lenz proposed that the figures represented in the work be made to conform to a geometric "Canon" inspired by the Scriptures and always having the same proportions. Since God at the beginning of time created man in his own image, symbols of the Trinity would appear at various points within the idealized contours painted on the walls, and at the same time would appear the measurements that Yahweh prescribed for the construction of the temple at Jerusalem.

It was in 1864 that Lenz's convictions began to take shape definitively. He addressed many prayers to the Virgin asking her to let him know if he was not committing a heresy by granting such a considerable place in his doctrines to the Egypt of the Pharaohs; but little by little, he forever convinced himself that only Egyptian art, provided that it be enriched with Christian beliefs, could serve as the indispensable foundation for his work. On Christmas Eve, 1864, he drafted the statutes for a frater-

3 Main Altar of the Beuron Chapel,
1868.
4 The Beuron Chapel, 1868.

Figure Credits
1–4 From *Gazette des Beaux-Arts,*
series 6, vol. 38 (1951).

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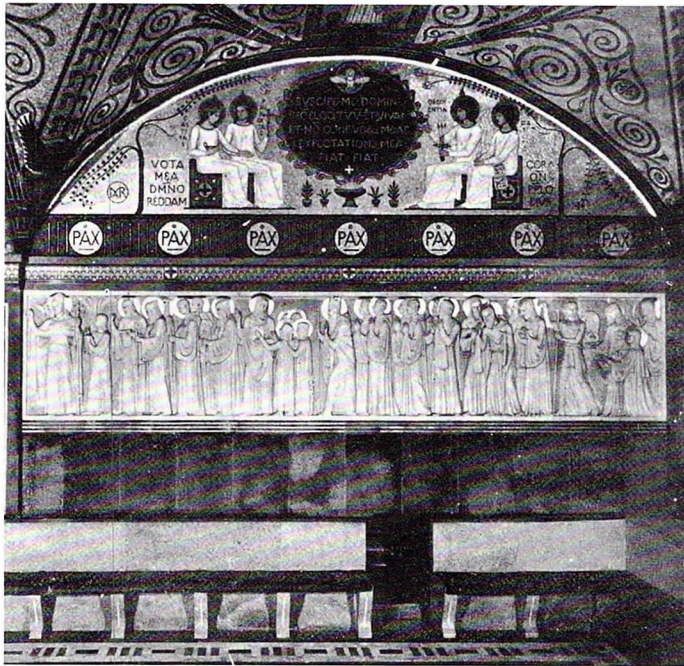
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nity, at this point still half-secular, of men and women who would devote their talents to the service of the Church, for the purpose of founding a religious art worthy of it. Shortly thereafter he would proclaim that, as there can be only one true dogma, there must be only one art to express this dogma. Among other reproaches, he censured Gothic art for having allowed itself to be contaminated by medieval Germanic art building towers above the churches, the tower being an element of military construction. In 1868, Lenz entered into conversation with the Prior of the Beuron Abbey, who entrusted him with the task of building the small chapel of Beuron, right next to the monastery. Both the design and ornamentation of this chapel were decided upon by Lenz, with the help of several friends from his group.

Not until 1872 did Lenz decide to enter the monastery, as an oblate. In 1876, the Prior, not without certain apprehensions, decided to recognize as a 'Brother' the man he had become accustomed to calling "Mr. Lenz." His apprehensions were caused by his impression that the whole lot of Lenz's projects were "truly monstrous from all points of view" and "hostile to any Catholic sentiment."

Meanwhile, however, the Council of Monte Cassino in Italy, planning to celebrate the hundredth anniversary of the foundation of the order by St. Benedict, was urgently in need of a crew of decorators. This turned out to be Lenz's big chance. At Monte Cassino he encountered much less opposition to his ideas, and it was there that, in 1877, he was allowed to go through his novitiate and was later, in 1878, appointed choir-monk. The renown that he won at Monte Cassino soon got him commissions in Belgium and Prague. At Beuron, however, several of his projects were rejected. They lacked, said the Prior, "Christian sentiment"; "A body of art is all the more without purpose when it is not understood by those for whom it is intended." Even at Monte Cassino, however, he sometimes encountered adversity because of his unwillingness to accept as valid the criticism that his work was incomprehensible to the public. "Monks," he asserted, "have not the right to lower themselves to the level of the people."

In the Rhineland in 1892, the cardinal-archbishop invited him to cover with a curtain a *Pietá* he had executed there. Lenz himself had been quite pleased with it but the congregation was apparently unable to appreciate it. For their own part, subordinates Father Lukas and Father Goser broke their ties with their uncompromising foreman, whose ideas had become all the more rigid with the death of Father Gabriel (Wüger), who was no longer there to moderate them.

But a source of reassurance to Father Desiderius at this time was Pope Leo XII who, as a devotee of the cult of St. Benedict, fully supported Lenz's enterprises. He saw in Lenz the only organizer capable of successfully accomplishing his projected tasks.

Lenz himself maintained that in a dream (and, he said, "it was more than a dream") Father Gabriel had said to him, "Continue! You are on the verge of success!" In 1903, Kaiser Wilhelm II made his way to Monte Cassino for the express purpose of congratulating his fellow countryman. In spite of all this, however, Desiderius did not succeed in obtaining the authorization to publish, in their entirety, his theories on the Canon, which he hoped to transform into theological dogma.

A rather agreeable occurrence for Lenz took place at Monte Cassino in May 1913, when the crypt he had restored was solemnly consecrated by an Ecumenical Council of the Benedictine Order gathered together for this purpose. At this time the Pope sent out a message affirming that, as the art of music had been founded by the Benedictines when they created the Gregorian chant, so religious art had been revived by them in the nineteenth century, likewise in painting, sculpture, and the realm of decoration. Thus the highest authority of the Church confirmed to Desiderius that he had fulfilled the vow he had made when still a young artist: he had founded the religious art that the Church was lacking.

During the last years of his life, Lenz persisted in trying to get his superiors to accept his ideas on the Canon. Six times he revised his text and six times the theologians of Beuron, to whom had been assigned the examination of Lenz's theses, suggested that he make more modifications. But what is most curious about this whole affair is that, according to Father Schwind, Lenz's manuscript itself disappeared in the course of its last trip to the censors, "leaving no traces." It was never seen again.

Unfortunately, I have neither the time nor space here to go into any detail about the works of religious art realized under the direction of Father Desiderius, nor am I able to describe, year by year, the general reactions to the theories of Lenz and the monk-painter Verkade (always a fervent admirer of Gauguin), as well as the reactions of Sérusier and Maurice Denis—or how these theories shocked Vuillard and captured Pissarro's interest.

"His oeuvre," wrote the prior Ildefonse Herwegen at the time of Desiderius's death in 1928, "marked the break from sentimental art and its replacement by an art totally dogmatic and objective." Was art of this sort viable, or could it in any case, if it were to last, ever be anything other than a purely monastic art?

In a very insightful booklet on the art of Beuron, the Jesuit Father Kreitmaier explains how the art of Father Desiderius, conceived with the noblest of intentions, did not have as its goal the conversion of unbelievers or the strengthening of the faithful's beliefs, as is usually the case with church art; this is why most of the high ecclesiastical authorities distrusted Beuron's art and found it useless for religious propaganda. Such art was not intended for man, it was rather "an art for God," a product of the cloistered life, an art which presented itself with the task of serving theological ends by means of the fundamental geometric and aesthetic forms that God had used in creating his universe. In this art one finds no anguish or sensuality, as in Greek art. "There is no art," says Kreitmaier, "that more completely depicts the peace found in God." It is the manifestation of a mysticism expressing its gratitude to God and its understanding of divine thought. It is because of the mediation of sympathetic ecclesiastics that this art was able to enter into churches where it had no future.

Reviews

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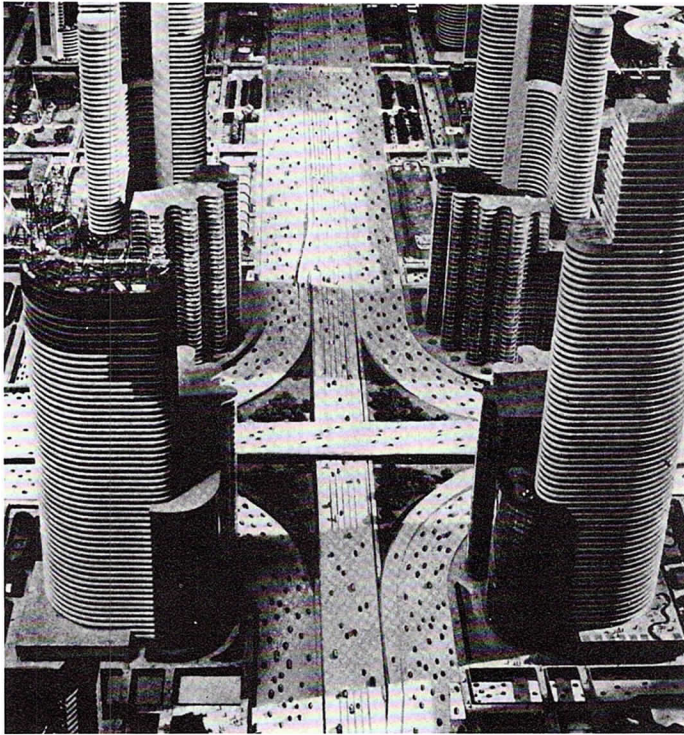
Manfredo Tafuri and Francesco Dal Co's
book *Architettura Contemporanea* (*Mod-
ern Architecture*) ends with the name of
Heidegger. "Difference" and "renuncia-
tion" constitute the *tragic* point of view
from which the developments of this ar-
chitecture are described.[1] The book there-
fore has nothing to do with "history"—but
rather with the problem of modern archi-
tecture, with its *Fragwürdiges*: its fun-
damental relation to the world and to
things, its language as the existence of
such a relation. To invoke Heidegger thus
is *necessary*, since he had long since given
thought to precisely that which seems
"worthy of question" in architecture's
present situation. But that is not all; he
formulated it in such a way as to render
impossible or inconceivable the Values
and Purposes on which this architecture
nourishes itself. The "desperate" analysis
of this inconceivability constitutes the ful-
crum of Tafuri and Dal Co's work. But its
relations to Heideggerian criticism are
complex, numerous, and themselves ir-
reducible to reconcilable unities. By de-
constructing these relations, subjecting
them to analysis, we shall perhaps enable
ourselves to see the fundamental aspects
of this development that we call "contem-
porary architecture" in a disciplinarily
less tenuous light. At stake are not the
old criteria—the political, the sociological,
the aesthetic, which from time to time are
used in order to seize upon this "name"—
but this "name" itself. Why "architecture"
today? *Wofür Dichter*?

It is the *tectonic* aspect of architecture
that interests Heidegger. Architecture
produces—in the Greek sense of "tech-
nique" (*tekne*), which signifies "neither art
nor handicraft, but rather: to make some-
thing appear, within what is present."[2]
Architecture builds in so far as it pro-
duces, in so far as it conducts something
to presence. This something is dwelling.
Dwelling is not the result of building, but
is that which building pro-duces into pres-
ence. It becomes pro-duced, made to ap-
pear, not determined by building. "Only

if we are capable of dwelling, only then can we build."[3]

Lodging (*l'allogiare*), not dwelling, may be conceived as the result of building. Building as the pro-duction of dwelling, however, posits an original identification between the two terms "building" and "dwelling." By means of a typical etymo-logical-allegorical chain Heidegger explains: to build (*bauen*) originally also meant to reside, to remain in a place—but remaining is the form in which "I am" (*bin*). The mode in which "I am" is the "cycle": dwelling-building-dwelling. Not to dwell in a lodging, nor to build a lodging; but to remain, as *colere* or to cultivate, as *cultura* or cultivation: to be in the *Geviert*, in the fourfold—on the *earth* and beneath the *heavens*, before the *gods* and in the community of *men*. To build is to pro-duce dwelling, but dwelling is being in the *Geviert*: architecture is tectonic activity in so far as it makes the *Geviert* happen, makes it appear, and *preserves it*.[4]

We might also ask: what is a built thing? A *bridge*. The bridge makes the banks appear, reunites the earth around itself, "gathers" its elements; it reconciles "in its own way, earth and sky, divinities and mortals."[5] The bridge is a location: "building puts up locations that make space and a site for the fourfold,"[6] that guard it, that take care of it. Before the bridge only spaces exist—*a* space, by virtue of the bridge, becomes a site. To build means to make place, to give rise to. To build is to make a place for the *Geviert* and to stay there.

But what is problematic in all of this? Why should this discourse call building-dwelling into question? There is a vulgar, idiotically rationalistic way of reading this part of Heidegger, reducing him to a "philosophy of architecture" à la Spengler. Spengler spoke of the absence of "house" in the world-city, the absence of houses where "Vesta and Janus, Penates and

Lares" might be able to reside. The house appears uprooted and man lives there only as tenant or guest. The spirit is a stranger in this space, whose landscape is systematically destroyed by mere *aedificare*, by mere *ars aedificandi*. This spirit, no longer a "plant," no longer organically connected to "heaven and earth," becomes sterile and leads an errant existence amid the "artificial natures" of the metropolis.[7] All of this is at the origin of "radical" architecture and the billions of pseudo-sociological pages on "alienation." But it is the exact opposite of the intention implicit in Heidegger's argument. The uprooted spirit of the metropolis is not "sterile," but *productive* par excellence. It is the definitive rupture of the Subject's natural-being that permits it the will-to-power over nature. Heidegger knows this. And Simmel had already said this. But there is an even more substantial difference. The problem is not with the form of building in itself. What is absent is not the "fitness" of building to spirit, in which case spirit would be foreign to its home. The problem lies in the fact that spirit may no longer dwell—it has become estranged from dwelling. And this is why building cannot "make" the Home (*Dimora*) "appear."

How does Heidegger proceed? Simply by radically assuming *the claims and the intentions* of architecture, carrying them to their logically extreme consequences: "You say build. But perhaps building is simply a means to dwelling? You build lodgings—and yet you assert that man 'resides' in these lodgings. Your end is to make man 'reside'. But how can you claim this end if you are unaware of the fact that to pro-duce dwelling is conceivable only if dwelling is first connected to building? You must then demonstrate to me the *existence* of this connection. And does 'to reside' only mean 'to shelter oneself' or not also 'to cultivate' and to 'build bridges' between the elements of the *Geviert*?" Such indeed is architecture's response: it preaches the relation between

lodging and labor, between shelter and nature. It appears to tend toward this end. And yet this end is never called into question; it is assumed to be "natural" when instead it is part and parcel of the *Fragwürdiges* of architecture's present situation—not as a means with which to resolve the *Fragwürdiges*, but as an end in itself and for itself. No nostalgia, then, in Heidegger—but rather the contrary. He *radicalizes* the discourse supporting any possible "nostalgic" attitude, lays bare its logic, pitilessly emphasizes its insurmountable distance from the actual condition.

It is not a matter of changing the forms by means of which architecture thinks of building homes. One must ask oneself what kind of thing the home (*Dimora*) is. The Home *is* only if residing (*dimorare*) exists as a precondition for building, only if residing is connected at its origins to building. The Home *is*, only if building pro-duces the place of the *Geviert*. "Aesthetic" or "economic" accommodations to this exigency are not possible. But this does not mean that such accommodations do not exist; what is illusory and mystifying is the belief that interior design or the construction of housing resolves the problem of dwelling. To avert the housing crisis is necessary and fundamental. But this program should be kept *radically distinct* from any other claim, especially that of the problem of the home. The problem of dwelling lies not in the quality of the edifice, of services, or of design. We should either speak of it in its own language or not speak of it at all: dwelling is being in the *Geviert*, experiencing dwelling as a fundamental condition of one's own being, feeling oneself to be a "dweller." But is it possible to build *for* "dwellers"? Only "dwellers" can do so. And it is precisely the "dweller" that is absent today.

Heidegger limits himself to reconfirming man's uprootedness in the face of false and useless attempts to recompose him organ-

ically, to make him again organism, plant, root. That architecture which pretends to this "recompositioning" should be asked, "You want to produce homes [*dimore*]? Then do you know how to dwell?" Heidegger says that it is necessary to "learn to dwell." He keeps listening for the call to dwell. But no god calls. It is rather the present crisis itself that calls. But how can the crisis call to dwell? Heidegger cannot say. In fact, his essay confirms the *non-existent logic* of the dwelling-building-dwelling cycle—and thereby dismantles *a priori* any claim that assumes such logic to be purposeful or denotative. This logic, in a Wittgensteinian way, says nothing—it only forms premises.

Heidegger so detaches from us the idea of building-dwelling that he renders absolutely problematic not only its effectuality, but even the nostalgia for it. There is no doubt that Heidegger keeps listening for the call to dwell. But this listening is just silence. What speaks is not dwelling but the *crisis* of dwelling. And its language is *critical*: to be exact, division, detachment, difference. In illustrating the conditions of dwelling, Heidegger describes the difference that divides us from dwelling—in demonstrating the built thing in terms of a bridge, he shows us the actual inconceivability of a bridge. Indeed, he shows us the actual wretchedness of accommodations that would call themselves bridges. He tells us of the total impotence of shelters disguised as homes, of cities disguised as places.

In Heidegger, this critique appears in the form of listening, of waiting. But this wait is recognized to be *a priori* indefinable. The reasons for our separation from dwelling-building are contained in the overall history of Western thought—in the very translation of Greek *tekne* into European technique. The representation, the presentation of the present, has been up to this day the fundamental characteristic of thought. Western thought treats being as presence.

But *where* does our thought relegate that which we call presence?[8] Being-present presupposes an "unconcealedness." In Being conceived as presence a fundamental unconcealedness is in force which, however, Western thought is unable to grasp. Western thought assumes the equivalence of being and presence to be natural, and its efforts are concentrated on the technical analysis of this presence, on its understanding, and on its use. On this note ends Heidegger's essay "What is thinking?" But what is building if not the bringing to presence of the fundamental unconcealedness of dwelling? Dwelling and the thinking about the essential origins of being are connected: thinking for dwelling. But this essential origin remains hidden and mysterious for Heidegger—his thought does not reach that far. In addition, history and the destiny of Western thought are moving in the direction of technique—not in that of pro-duction, but in that of scientific productivity. Can a sense of dwelling re-emerge in this destiny, a sense of building as the pro-duction of the unconcealedness of dwelling? In his waiting, Heidegger unmasks all false appeals—but he remains waiting, listening. Nor could the implications of his inquiry be conducive to anything else. The irreversible "translations" that have marked the history of thought have left their mark on the history of dwelling as well.

To repeat: the form and quality of the edifice are not at all at issue here. In reality, it is only about them that we are able to speak; but form and quality have nothing to do with the *Fragwürdiges* of architecture: to build is to dwell, to dwell is to build. But since today this idea is given neither to be realized nor even effectively heard, there remains but the continuous wait in the silence of listening, or the option of building lodgings or constructions. Heidegger does not call for the construction of homes—he doesn't criticize, like Spengler, the absence of homes. Instead, he debunks the pretense of calling homes those buildings that are just lodgings or constructions; and debunks the incredible linguistic confusion between lodging and nostalgia for home that constitutes the specific form of architectural ideology.[9] How could Heidegger call for the construction of homes by those who are no longer dwellers? For he knows that this is an essential condition, the fate of contemporary man.

But Heidegger, of course, remains waiting, listening, hoping for the call. The essence of dwelling lies in "remaining," in "staying on"—not in any place, but in a place that provides peace. Dwelling is being-in-peace; it is not a passive protection, but rather a causing of the fourfold to appear where mortals dwell. Here, not in refuges, not in hidden places, but here, in the unconcealedness itself, lies being-at-home.

Shepherds, says Heidegger, dwell in this unconcealedness outside of the desert of the desolated earth.[10] They guard "the hidden law of the earth" against the violence of the technical will that drags it toward exhaustion by forcing it beyond its possibilities. But these shepherds are *invisible*, and the law that they guard, in which the earth stays within the safety of its limits of possibility, is also *invisible*. Nostalgia vanishes in the very same moment in which it is first glimpsed. No subject remains in the home, in an essential relation with the earth. The subject is manifest solely in its relation with the will to power over the earth. In defining dwelling, Heidegger describes the possible conditions of a mode of living that today is impossible. To be-at-home is to be *invisible* guardians of *invisible* laws.[11]

Nietzsche's thought in the face of the "great city"[12] is of course harsher, more sobering (*nüchternes*), since he is no longer even listening. His thought begins where the very silence of the wait breaks off and the analysis of homelessness (*Heimatlosigkeit*) begins.

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What is meant by not-being-at-home, not being a "dweller"? We Subjects who make nature *mathémata*, who violate the earth beyond its possibility, we are the non-dwellers. For us Subjects, what counts is the essential uprootedness of technique, of the will to power. Contrary to what is commonly believed and said, the Subject does not live in the home, nor does he yearn for it, but can exist only in the absence of home and in uprootedness: only here is he *able* and potent, is he *productive*. The language—the functions and conventions—through which the subject expresses his will to power is the sole theme of Nietzschean thought. Spengler, not Heidegger, is Zarathustra's monkey, who would like to drive the sage back to the mountain in the face of the "great city." And yet, Heidegger remains waiting for the Event, the *Ereignis*, that will transform man and bring him back to the path of building-dwelling. But that is not all; even though he cannot see any homes being constructed (and he denies himself any illusions of hope on this matter), at times he indicates traces of them. The home has left traces in the word of poetry. Into poetry, into the poetry of this epoch of misery, the home has withdrawn. Poetry *is not*, is invisible—and yet poetry is Word—the word of the retreat of the home, of the fourfold.[13] Poetry preserves (in the non-being of its word) that tectonic element of architecture to which the edifice, in so far as it participates in the devastation of the earth, can only allude tragicomically.

This characteristic reversal of Heideggerian disenchantment—or better, this oscillating dialectic between *Andenken* as tragic theory and *Andenken* as nostalgic pro-position, which I have analyzed elsewhere[14]—seeks a foundation for the building-dwelling-building cycle in a late poem by Hölderlin, *In leiblicher Bläue*. The essence of the poem consists for Heidegger in the affirmation "*dichterisch wohnet der Mensch*"—poetically man dwells. Dwelling is thus grounded in poetry. The build-
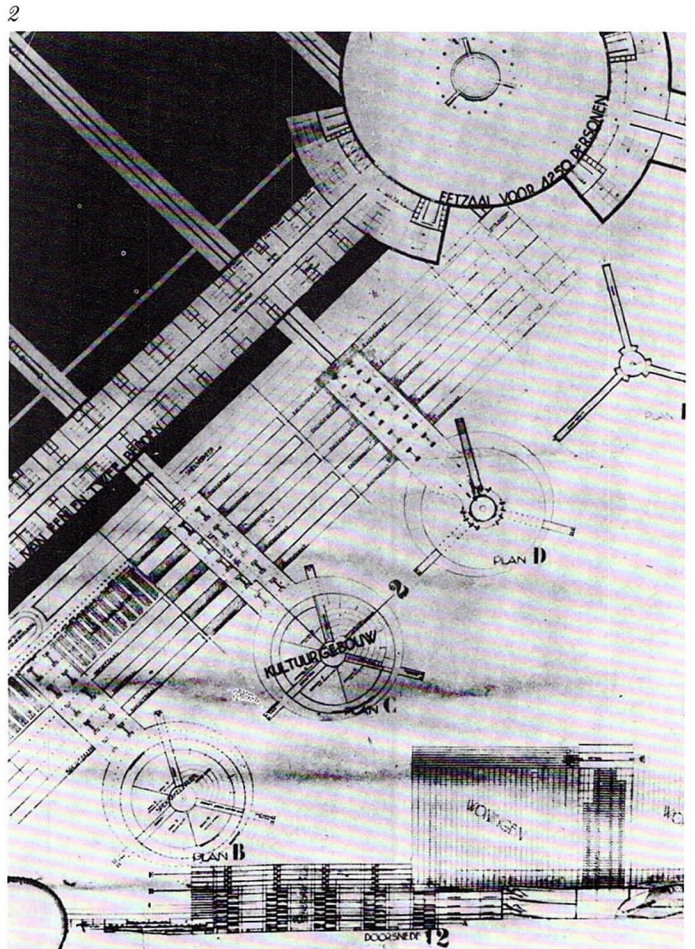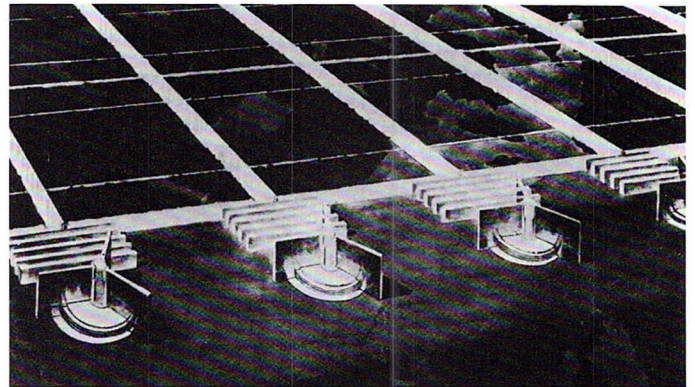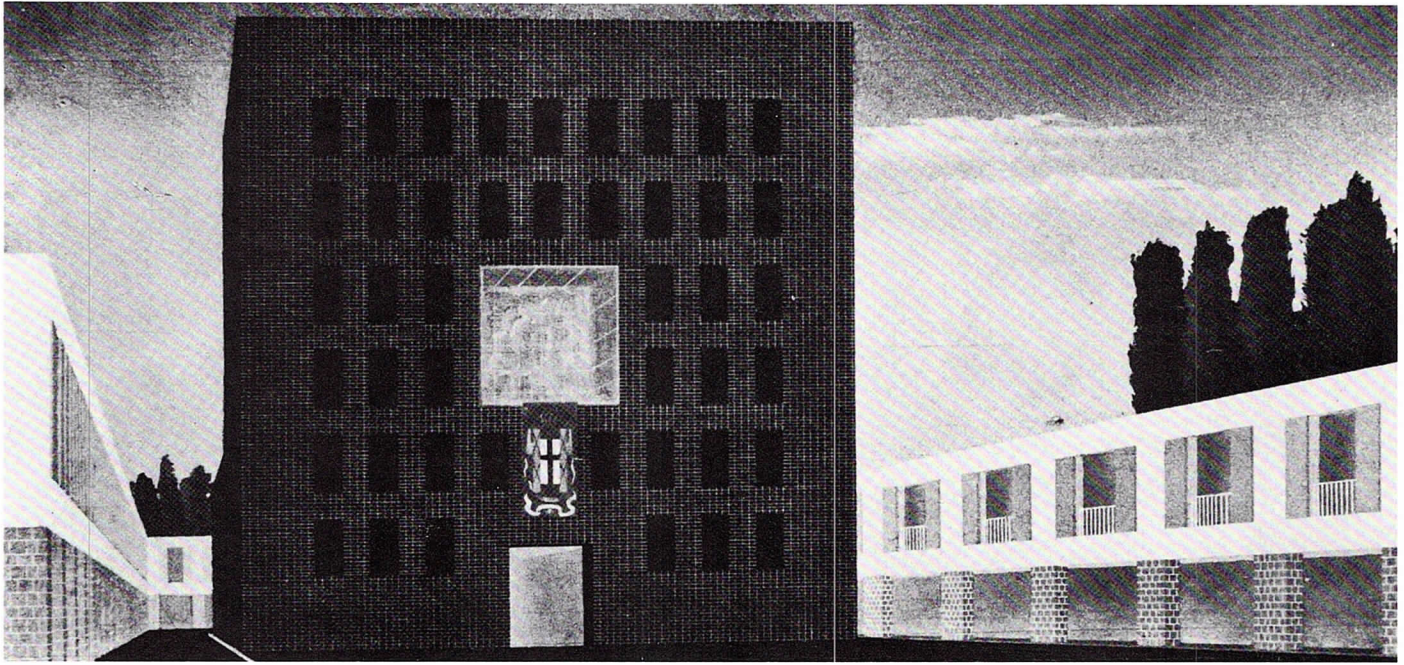
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4 Proposal for the central plaza,
competition project for Aprilia.
Adalberto Libera, 1936.
5 Kohlenbergwerk, Essen-Katernberg.
Fritz Schupp and Martin Kremmer,
1928–1932.

5

ing that dwelling allows is poetic: to build is to make poetry, its doing is *poiesis*. The essence of writing poetry is a measure-taking, "in the strict sense of the word, by which man first receives the measure for the breadth [*Weite*] of his being."[15]
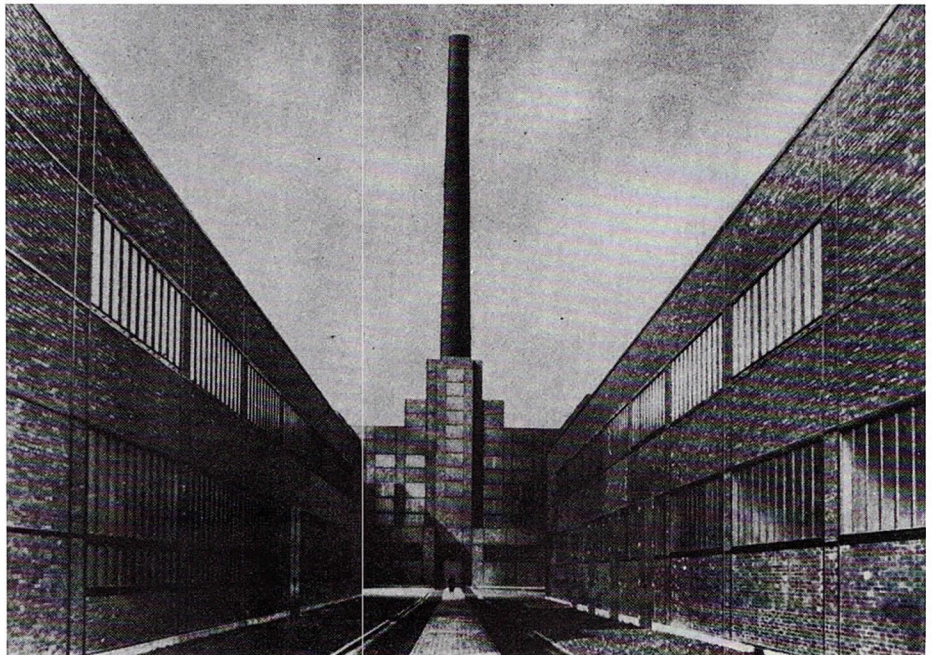
This measure is God, not as he is known in himself, but as he is manifest in the heavens. The divinity is absent as such, but precisely as *hidden* he is manifest in the heavens. The heavens manifest the divinity as unknown: and this relation *measures* the being of man—it is the measure of *poiesis*. In this measure man dwells—in it, he is a "dweller." "Poetry builds up the very nature of dwelling."[16] Only if man builds, in the sense of the poetic taking of measure, does he dwell. *If* he dwells, man dwells poetically.

Do we dwell poetically today? Heidegger is quick to point out that Hölderlin does not speak of the real conditions of modern dwelling. He adds that the poetic taking of measure is foreign to us today, and that only our intuition of poetry enables us to experience the fact that today we dwell in a totally unpoetic world: *undichterisch wohnet der Mensch*. But the reversal of this condition is explicitly hoped for. The attention turned upon the poetic permits *hope*. Hölderlin's lines are commented upon with this in mind but in my opinion, however, this intention seems to be totally lacking. At the beginning of the poem, the unconcealedness of a place is described: the church's tower "blossoms into sweet azure"; "like doors to beauty" are the windows from which the bells ring. So "simple and sacred" (*einfältig und heilig*) are the images (*Bilder*) "that often I truly fear to describe them." This is the place of dwelling—it is the fourfold. But man may measure himself against it only "as long as Kindness, the Pure, still stays with his heart" (*so lange die Freundlichkeit noch am Herzen, die Reine, dauert*). *Freundlichkeit*, as Heidegger makes clear, is the translation of *kàris*, a condition of mutual belonging between man and landscape, man and home. But the measure of which Heidegger speaks is only possible here, in the poem. On the earth that has destroyed the bridge along with the other elements of the *Geviert*, on this earth no longer "beneath the heavens," no measure is conceivable. "Is there a measure on earth? There is none." (*Giebt es auf Erden ein Mass? Es giebt keines.*) Man's living-as-dwelling, the *wohnend Leben*, fades into the distance, *in die Ferne geht*. It does not call him back, but detaches him—it is not reclaimable; it is conceivable only as form, form that measures difference.

Undichterisch wohnet der Mensch. . . . The manifold forms of this *undichterisch wohnen* comprise the subject of Tafuri and Dal Co's "history." *Dichterisch wohnen* is never directly named, but it is the "absent form" that makes possible the critique of the ideology of the home and the ridiculous claims that architecture puts forth (which *are* architecture itself) regarding the reconciliation of man and landscape, man and city.

It is strange that alongside the name of Heidegger and in this context Tafuri and Dal Co should make no mention of that of Paul Valéry.[17] And yet in his essays on architecture Heidegger takes up again the fundamental themes of Eupalinos, whose motto is, in fact: *pròs kàrin*. Phaedrus tells Socrates the story of Eupalinos of Megara and his architectural work. By means of nothing other than "orders and numbers," that is, by *measuring*, he built homes. There were no "details" in his execution[18]—all was essential, of equal value. To build, for Eupalinos, was to know oneself—since building is dwelling, and dwelling is being, being-in-peace, being-at-home. To build is to know oneself as a dweller. And homes are cherished by the dweller as beloved objects.

Eupalinos expresses the original, tectonic meaning of architecture. Building is *poiesis*. There exist *mute* edifices—constructions and lodgings; and there exist edifices that speak; but there are others still—and they are the most rare—which *sing*. The edifices which speak must *limit themselves* to speaking clearly: "here the judges deliberate. Here captives moan." In the residences of justice, everything must pronounce sentences and speak of penalties. "The stone gravely declares that which it shuts in; the wall is implacable, and this work of stone, conforming so closely to the truth, strongly proclaims its stern purpose. . . ."[19] Markets, tribunals, prisons, theaters speak of *stern purposes*—and they are able to speak of nothing else, not without "disguising" themselves.

The architect must control these purposes, but he must recognize at the same time that they do not express the essence of the dwelling, not do they fulfill by any means the essence of building poetically. A radical distinction intervenes between them and the masterpiece that seems to "sing for itself." The edifices that sing are Homes. Only there is man a dweller. They are the monuments that measure man's being: "being inside the work of man as fishes are in the sea, being entirely immersed in it, living in it, and belonging to it."[20] These monuments must have solidity and lastingness,[21] since they express the mutual, original belonging between building and dwelling. This is the same *limit* that Loos imposed on the architecture of the edifice, the technique of the lodging—the same Loosian affirmation of the shadowy possibility of consonance between music and monumental architecture; the same Loosian form in the sense of Hölderlin's "void," of architecture as *poiesis*.[22] It is according to these "Loosian dialectics" that Valéry's dialogue also proceeds.

But which are, indeed, the monuments that sing? Where is the city as harmony? In Valéry's dialogue it seems that the tectonic element of architecture is propounded for the sake of its effect, in con-

trast with the dialectical element: "It served no purpose, I fear, to seek this God, whom I have tried all my life to discover, by pursuing him through the realm of thought alone. . . . The God that one so finds is but a word born of words, and returns to the word."[23] Thought has been severed from building—or has rendered building merely technique. However, it is building—in the strictest Heideggerian sense—that appears to Socrates to be "of all acts the most complete"; by comparison with "this great act of constructing" he considers incomplete the work of the Demiurge who "organized inequality," who "in his rage to disunite everything" formed and separated the elements. "The converse of this must come to pass":[24] namely the fourfold, the home "on the earth and beneath the heavens," the conciliatory Muse.

Is this an appeal to pass beyond the listening wait? Is it a real possibility? Loos believed that only in sepulchral monuments could architecture become *poiesis*. Socrates erects his own architecture in the word after his time is irreversibly spent. He is an architect *in death*. Not only does he conceive the form of building in the word alone—but his is the word of a *dead man*. It is silence. Socrates and Phaedrus come together on the banks of the Ilissus, in the transparent realm of shadows, in a *here* that does not exist—and all that they have said "is as much a natural sport of the silence of these nether regions as the silly fancy of some rhetorician of the other world who has used us as puppets."[25]

Undichterisch wohnet der Mensch. . . . The home is past, it no longer is.[26] The unity of dwelling and building, which forms the home, has become nothing. The nullification of the home is a fundamental aspect of the conviction peculiar to Western metaphysics, that pure Being (*l'ente*) is nothing (*niente*). The separation of lodging from home, in which the lodging *is* only in time, is not a literary allegory for the fundamental separation of being-in-time (*esse*) from pure Being (*ente*)—the separation through which the Subject of metaphysics takes possession of pure Being—but *is* this separation itself. The home is posited as nothing, or is made to remain solely as ruin or memory, for the purpose of demonstrating even more clearly its nullity, its achieved nullification. On this basis, the Subject is "free," it can *move* freely, can carry on its work and its destiny of separating all atemporal Being from being-in-time, of reducing all Being to time—to the time of the Subject's own movement. The Subject lodges in time—it does not dwell in homes. The difference between dwelling, building, and making poetry is not reversible or reconcilable; and the significance of this difference is essential for the understanding of the fundamental nihilism of Western metaphysics-technics. For this reason, architecture takes on great importance in this "history." It represents one of the decisive forces which separates pure Being from its connection to being-in-time and which obscures the vision of Parmenides, for whom all Being is eternal and united, at its origins, with being-in-time. Architecture *may* be valid as one of these forces—as silence may also be valid, the silent custody of the home's empty form. What condemns architecture to the most despicable misery is the adornment of our deserts with traditional forms and archaic ruins, the disguising of artifice with nature and of Being with eternity, the branding of technical functions as "poetic," and the "ennobling" of the harsh conventions of the *diverse politics* that comprise technique.

Undichterisch wohnet der Mensch. . . . In no way should this be taken in a moral or "literary" sense; what we are concerned with here is the practical result of the analysis of form, or the *a priori* conditions of possibility, of *dichterisch wohnen*. This result should be kept "pure" of any form of nostalgia or utopian transcendence. Of interest here are only the conditions and the phenomenology of *undichterisch wohnen*. Such is the theme—and method of approach—of Tafuri and Dal Co's "history."

This "history" describes a result: the result is *undichterisch wohnen*. But how does this non-dwelling manifest itself concretely? Non-dwelling is the essential characteristic of life in the metropolis.[27] When speaking of poetic dwelling neither Heidegger nor Valéry mentions the metropolis; and yet it is here that dwelling is really debased. The "history" of contemporary architecture is therefore a phenomenology of metropolitan non-dwelling. Or it should be such, since contemporary architecture aims at restructuring itself as the possibility of dwelling *within* the metropolis.[28] The preaching of such a possibility is at the base of "urban planning" as a discipline within contemporary architecture. And therefore the acknowledgement of this variegated terrain implies the need for a structural analysis of metropolitan functions. Through its very origin and nature, "urban planning" creates a change in perspective: the impotence of "classic" dwelling; but it also addresses the multiple languages of metropolitan functions (and the consequent destruction of the very possibility of dwelling) as languages intrinsically capable of being "sublimated" into a logical system, into the very logic that "urban planning" would represent or incarnate. Although "classic" dwelling is acknowledged to be henceforth impossible, the idea of city as *organism* remains *possible*: a Plant growing from the root of the architectural-urban planning Logos. The idea of such a Plant represents the imperative, the *Sollen*, of metropolitan organization.

We could say, "'urban planning' originates in the effort to represent contemporary *undichterisch wohnen* as an *organism*." But of what does this "unpoetical dwelling" consist if not of the multiplicity and the "homelessness," the becoming *hei-*

matlos, of the various disciplines making up the metropolis? Thus, while "urban planning" advances the claim to an "organic organization" of "unpoetical dwelling," it affirms the *possibility* of reducing to a unity the multiplicity of these languages and functions—it claims to be able to represent a sort of logic of them. But "urban planning" can neither provide the foundations for this claim, since it is itself a language among all the others, nor can it show its Logic to be effectual. For this reason it is forced to transform Logic into *Sollen*, into ethical imperative, into paradoxical ethics—or to assert it as *pure form*, within the other-than-form, within a play of reason centered about the composing, de-composing, and re-composing of the signs of the metropolis. Logic, ethics, and play thus follow one another in the formulations of contemporary "urban planning" as more or less disenchanted variants of a fundamental "misery": the idea of the "harmonization" of metropolitan functions, of the creation of a "homeland" common to all of them—and of the assessment of their real conflict as a mere appearance that hides and mystifies a "profound," "substantial" *Gemeinschaft*. This "homeland" claims to announce "urban planning"—and it is this "annunciation" which provides the foundation for its diverse "compositional" proposals. But what indeed would this composition "recompose"?—of what is this composition composed if not of the "substantial" community of dwelling?

This language of "urban planning" is as logically unfounded as it is historically blind. Contemporary "urban planning," on the basis of its "logic," *does not see*—or, better yet, sees the "vampire of speculation" wherever the industrial capitalist metropolis thrives; it sees social and political disintegration wherever the functional multiplicity of metropolitan "disciplines" finally "liberates" all of its conflicting valences; it sees individual solitude and nostalgia for *dichterisch wohnen* wherever the composition of classes is

transformed and the *diverse* political organizations of the *Gesellschaft* spring up. Between this "vision" and the metropolis itself is generated an irresolvable tension—an incurable contradiction within the particular historical context. The discourse does not change when "urban planning" "gives in" to the metropolis, since this too is not *seeing*, is not *making-visible*: the metropolis is assumed to be the natural and obvious scene of compositional planning participation; its arbitrary forms are assumed to be laws and its conventions to be immutable rules of the game. And this position ends up by becoming profoundly intertwined in the false disenchantment of the urban planning game.

Of course, "ethical-compositional" *values* are predominant in the origins of contemporary "urban planning." "The depersonalization, alienation, and disintegration in the large metropolis seem to be able to be overcome by the articulated and organized re-emergence of nuclei in which 'quality' and 'community' are once again protagonists"—Parker, Unwin, and Howard work within this perspective.[29] But soon enough the "model" tends to move away from the "ethical-compositional," to use the above terms: "urban planning" tends to assert itself as a possible *logic* of metropolitan organization. This "turning-point" manifests itself in many different forms, without however altering the idea of "urban planning" as a *rebalancing*: there is the rationalization of urban growth, the territorial equilibrating of productive factors, the "harmonization" of city and country—the idea of urban planning as "a process of *apolitical* integration of the historical contradictions, which are redressed by an optimistic technological evolutionism."[30] In this way the work of Olmsted "seriously turns on the problem of political and institutional reforms . . . the control over the exploitation of resources at the territorial level . . . the deterioration of the old methods of urban management, as evidenced in the failure of Pullman Town," and it is *at once* a

struggle against the deterioration of the community and a utopian alliance of science, technique, and *nature*—nature, which becomes once again "a formidable source of urban income."[31] In this way the ideology and language of the Beaux-Arts are "harmonized" in "City Beautiful" with the reaffirmation of the "absolute priority of free-market mechanisms."[32]

Even the proclaimed "realism" of German urban planning, which "aims at reconstituting a condition of *naturalness* for the mechanisms of income" through "the elimination of any artificial 'distortion' of the land market brought about by the monopoly over buildable ground," is accompanied by "implicit nostalgia for the pre-metropolitan 'city'."[33] The pure free-market vision remains an ideology of balancing. Moreover, within the metropolis that has been rendered a "balanced organism," the role of architectural form is justified as an "event and creation," without which the individual can never feel "in his element."

The plays of reason and the poems of forms[34] of the Masters—who remain awaiting the new Colberts ready to realize their utopias, which will be political in the "classic" sense of the term or philanthropic-collectivist, but in any case anti-metropolitan—are thus profoundly rooted in the ideology of contemporary "urban planning."[35] Nor is the "disenchantment" of Hilberseimer's *Großstadt-architektur* an effective critique of the ethical formalism of the Masters: his image of the city-machine with its integrated function, of the city as "naked structure," is typical of the naive "machinism," the mechanistic obsession pervading all of the criticism within the metropolis of traditional conciliatory "urban planning." Hilberseimer sees no "alternatives" to *this precise image* of the metropolis. The refutation of utopia thus finishes by reconfirming the reasons for the utopian tension. And the idea of the "alternative city," the "communal island," enjoys its most extreme and perhaps
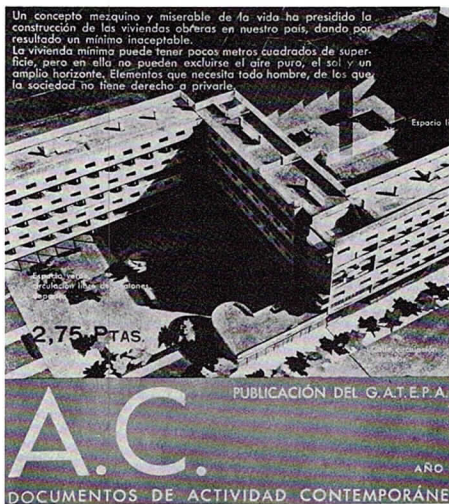
highest manifestation in the Viennese *Höfe*—the residence of those individuals proudly opposed to metropolitan reality, Schillerian heroes, as it seems to me still more than, as Tafuri and Dal Co explain it in several very beautiful pages, protagonists of the great bourgeois novel, of "the haut-bourgeois myths [that] shape the most highly achieved 'magic mountain' of Austrian Marxism."[36]

"Urban planning" as logic and play—in an uncritical framework, amid unclarified languages intrinsically equivocal with regard to their own limits—dominates the scene following the decline of the synthesis between form and ethics, the decline of form as an expression of the *ethical* criticism of the capitalistic metropolis. The utopias of post-World War II "urban planning" are logic and play only. But even these occur as intrinsically contradictory terms. Such utopias present themselves, in fact, as *totalistic* conceptions: no longer *Höfe* or *Siedlungen*, no longer specific functions of the metropolis (however much they are emphasized), make up their content, but rather the *totality* of functions. The consciousness of the utopian nature of this "design" does not change its *groundlessness*: play exists only *in the singular*. To attempt to play a totality of games—or to represent all of them in one game—is intrinsically nonsensical. For this reason "the totalistic conception is again reduced to a decorative enrichment of the metropolitan chaos that it intended to dominate."[37]

This totalistic image is in reality the metropolitan "aura." Far from being the ironic play that it often claims to represent, this image, which has overcome the ethical denunciation of the metropolis (or, in so far as it has overcome it), often emphatically "publicizes" the metropolis's functions, transposing them into the dimension of sacred aura. Metropolitan "aura" surrounds the skyscraper-monuments of New York, Chicago, Boston, "confident that the fascination for the ex-

ceptional which had dazzled the tycoons of 1890 Chicago still obtains."[38] But in the "aura" of a naively all-inclusive technological utopia—a simplistic apology for a metropolis assumed to be an unstoppable "creative nature"—also sprang up the monuments of the Brutalism and Neo-Expressionism of the fifties and sixties.[39] It is necessary to reflect upon the presence of the monument: whether in the "technological" versions of it just mentioned, or in its forays into "memory" (a constant sign of the nostalgia for dwelling, a constant struggle to exorcize the "loss of center," as in Kahn), its refusal of the "negligible object" of a contemporary architecture "without quality"[40] is a struggle to prevent the already achieved desacralization of time from ultimately extending to a desacralization of space. The significance of this latest vicissitude of "urban planning" can only be explained in the terms of Foucault.[41]

We are in an era, says Foucault, in which the world is perceived as a network that simultaneously joins juxtaposed and distant points. This space alienates the "pious descendants of history," for whom the world was like a large street which developed different "meanings" through the different ages. Neither does this space resemble the hierarchical space of the medieval city, where the juxtaposition of places referred to the "value" of their respective functions. The present-day space of the metropolis is made up of the non-hierarchical flow of information connecting disciplines and functions, of discrete, aleatory currents, whose movements are not teleologically comprehensible but only stochastically analyzable.

But this desacralization of space—which is in the essence of metropolitan life—is far from complete. It is unfinished not because the "singing" edifices of Eupalinos are still flourishing, nor because dwelling might still be possible; but because in this space, whose *function* is by now perfectly desacralized, real edifices still find place,

but as though entirely out of place—they are at once actual and absolute (*ab-soluti*): they are heterotopias. Foucault speaks of these heterotopias as "constants" of the practical organization of space. But they become important only when they contradict the purely *sequential* nature of metropolitan organization, when they attempt to stand in opposition to it as new "places of worship," as "symbols resisting history."[42] Wright spoke of his Guggenheim Museum as a new Pantheon.[43] Heterotopias are places where "abnormal" individuals "set themselves apart"—places of "exceptional conduct" against which the metropolitan space breaks like the waves of a rising tide. But the heterotopia also often inserts itself within "normal" functions, within the metropolis's "normal" systems of information: for example, this happens within the "empty and transparent" inside world of the Ford Foundation, which is "treated like a giant hothouse."[44]

The heterotopia becomes interesting when it develops a function of compensation and consolation in the face of the space that surrounds it. It wants to appear as a denunciation of the desacralization of the surrounding *space*, as the "salvation" of the hierarchical and cultural values of the city's *time*. The "Good Form" to which the heterotopia tends would decry the disorder, the bad management, the loss of center of the metropolis. The monument, the perfectly organized "colony," the garden, are not utopian designs, but real places, although *other* with respect to the information of the metropolis. It is not an issue of the logical organization of the metropolis, nor of the play of reason in the combination of its signs, nor of a utopian overcoming of the alienation which prevails there—but rather of space for the construction of monuments, that is, for the defining of places of worship as monuments for nonexistent "peoples," *functions* and *languages* of the metropolis itself. The intrinsic falsity of the heterotopia ultimately does not allow it to consider itself a new

home—even if certain memories, certain "recaptured pasts" of contemporary architecture touch upon such nostalgia. But the heterotopia is still always Home: not for the individual, not for the dweller, but for the Values of the community of individuals. They themselves remain forever errant, but in this way they regain possession of places to return to, of promised lands, of churches which console one against the diaspora of languages and disciplines.

But in the "ideological continuity" of contemporary "urban planning"—or in the architecture which attempts to remedy the problem of dwelling in the metropolis—one like Mies van der Rohe finds no space. The final words of Tafuri and Dal Co's book revolve about Mies—and it is with Mies that we "resolve" the problematic initially set forth in terms of Heidegger. Let us begin with the 1923 text *Building*: "We want building to signify truly and only building." Therefore, *not* dwelling. And indeed, in his 1923 project for the brick house, "the fragmentation of the spatial components is total: the continuity of volumes with respect to the plan is only a seeming one, since the arrangement of the parts does not create a path of circulation, does not refer to any order; yes, they are *markings*, but they suggest that the labyrinth has no exits."[45] And in the German Pavilion in Barcelona of 1929: "the building is an assemblage of parts, each of which speaks a different language, specific to the materials used."[46] Only building: *assembling* different languages, attending to details without looking for the "great syntheses" of classical Form, without pretending that this trade of building can satisfy the nostalgia for the Home. This nostalgia even has its own language, but it is untranslatable into that of architectural techniques. The sign must remain a sign, must speak only of its renunciation of having value—and only by means of this renunciation will it be able to recognize its true functions and its own destiny: only a language illuminated by its

own limits will be able to operate.[47]

Mies's use of glass manifests his anti-dialectic. Glass is the concrete negation of dwelling. Not only because architectural form drowns in it, but because glass, when so used, renders visible those who seek shelter within it. From the 1920–1921 project for a glass skyscraper in Berlin, an extraordinary negation of Expressionist transcendence à la Scheerbart, up to the Seagram Building in New York, one can trace this constant in all of Mies's work: a supreme indifference to dwelling, expressed in neutral signs: "to the maximum formal structuring corresponds a maximum absence of images."[48] The language of absence here testifies to the absence of dwelling—to the consummate separation between building and dwelling, which no heterotopia is capable of remedying. The "great glass windows" are the nullity, the silence of dwelling.[49] They negate dwelling as they reflect the metropolis. And reflection only is permitted to these forms.

Notes

1. Manfredo Tafuri and Francesco Dal Co, *Architettura Contemporanea* (Milan: Electa Editrice, 1976), p. 379.
2. Martin Heidegger, "Bauen Wohnen Denken," in *Vorträge und Aufsätze* (Pfullingen, 1954). Eng. trans. by Albert Hofstadter, "Building Dwelling Thinking," in *Poetry, Language, Thought* (New York: Harper & Row, 1975), p. 159. Heidegger treats the same problem in *Einführung in die Metaphysik* (1953) and in *Gelassenheit* (1959). The essay "Bauen Wohnen Denken" goes back to 1951.
3. Heidegger, "Building . . .", p. 160.
4. Ibid., p. 151.
5. Ibid., p. 153.
6. Ibid., p. 158.
7. Oswald Spengler, *The Decline of the West*, Charles Atkinson, trans. (New York: Knopf, 1957).
8. Martin Heidegger, *What is Called Thinking?* J. Glenn Gray, trans. (New York: Harper & Row, 1968).
9. Cf. Manfredo Tafuri, "Per una critica dell'ideologia architettonica," *Contropiano*, no. 1, 1969.
10. Martin Heidegger, "Overcoming Metaphysics," in *The End of Philosophy*, Joan

116 Stambaugh, trans. (New York: Harper & Row, 1973), p. 109.

11. Here the reference to Kierkegaard's "knights of the faith" should be evident.

12. Cf. my own *Metropolis* (Rome, 1972), and G. Pasqualotto, "Considerazioni attuali," in *Nuova Corrente*, no. 68–69, 1975–76.

13. Martin Heidegger, "What Are Poets For?" in *Poetry, Language, Thought*; and "Language in the Poem: A Discussion on Georg Trakl's Poetic Work," in *On the Way to Language*, Peter D. Hertz, trans. (New York: Harper & Row, 1971).

14. In "La Vienna di Wittgenstein" in *Nuova Corrente*, no. 72–73, 1977, and in the "Introduction" to E. Fink, *La Filosofia di Nietzsche* (Venice, 1977).

15. Martin Heidegger, ". . . Poetically Man Dwells . . ." (1951), in *Poetry, Language, Thought*, p. 222.

16. Ibid., p. 227.

17. Paul Valéry, *Eupalinos ou l'architect* appeared in 1921, and can now be found in *Oeuvres*, vol. II (Bibliothèque de la Pléiade), pp. 79 and following. This essay was broadly directed toward the "poets of architectural form" between the two world wars, but its tragic-disenchanted aspect remained totally misunderstood, and it is this aspect that I should like to emphasize here. It is perhaps for such reasons that this work was not analyzed by Tafuri and Dal Co. Page nos. correspond to vol. 4 of the Bollingen series of *The Collected Works of Paul Valéry*, W. M. Stewart, trans. (New York, 1956).

18. Ibid., p. 71.

19. Ibid., pp. 83–84.

20. Ibid., p. 94.

21. Ibid., p. 129.

22. Cf. my essay "Loos-Wien" in M. Cacciari and F. Amendolaigne, *Da Loos a Wittgenstein* (Rome, 1975).

23. Valéry, *Eupalinos . . .*, p. 145.

24. Ibid., pp. 145–148.

25. Ibid., p. 180.

26. In relation to the following paragraph, cf. the important essay by E. Severino, "Temporalità e alenazione," in *Archivio di Filosofia* (Rome, 1975).

27. One ought therefore to expand in this direction the analyses of Simmel and Benjamin and my own study on this subject in *Metropolis*.

28. The strength of anti-urban ideology is not only owing to architectural ideology. It is a general function of contemporary culture—up to and including the "new philosophers." The "nomadism" which they preach, unable to be remedied by the institution, is defined by D. Grisoni in *Politiques de la Philosophie* (Paris, 1976), as a refutation of the codes of techno-urban civilization. Even the *Zivilization-Kultur* dichotomy is solved by these "new ones"! Not to mention the "reactionaries par excel-lence," the "Germans" of Nietzsche! And of course the avant-garde! Even the miseries of ideology present themselves again only as farce.

29. Tafuri and Dal Co, *Architettura Contemporanea*, p. 39.

30. Ibid., p. 56.

31. Ibid., pp. 24–25.

32. Ibid., p. 48.

33. Ibid., pp. 51–52. A decisive development in this period, however, is the formation of the "discipline" of the technical administration of territory, of "bureaucrats" of territory. It is a "discipline" having Weberian tendencies, and its "culture" profoundly influenced the politico-intellectual climate of Wilhelm's Germany. Cf. G. Piccinato, ed., *La costruzione dell'urbanistica. Germania 1871–1914* (Officina, 1977).

34. This is the title of the chapter on Le Corbusier in Tafuri and Dal Co, *Architettura Contemporanea*, p. 133.

35. It is true that in his old French edition of *Zarathustra*, next to Zarathustra's first words to the dawn, the nascent sun, "I should like to share my gifts, until wise men should come to rejoice at their folly and the poor at their wealth," Le Corbusier noted down, "-la Main Ouverte" (Tafuri and Dal Co, *Architettura Contemporanea*, p. 143); but this is evidence not of Nietzsche's proximity to, but rather total absence from, the "architectural ideology" of the "Master." What gift does Zarathustra bring to men? Is it fidelity to the earth? Simply pagan "good form," Celsus versus Origen? He tells of "the hour of great disdain" when the meaning of the earth is not man himself, but the *overcoming* of man—the sea that *can* receive the "dirty river" that is man, as final shelter, as the ultimate refuge of the dead God. Certainly Le Corbusier has nothing to do with the Nietzsche transformed by Van de Velde—and Nietzsche's sister—into a Nuremberg "Champ de Mars" (cf. Van de Velde's project for a Nietzsche *Denkmal* at Weimar, a project which shows how one can "stretch" the research of Mosse, which was conducted anyway on too *völkisch* ground). Nor does Le Corbusier give any indication of the subtle understanding of the Nietzschean "sign" that is discernible, as we shall see, in Mies.

36. Tafuri and Dal Co, *Architettura Contemporanea*, p. 193.

37. Ibid., p. 396.

38. Ibid., p. 403.

39. Cf. chap. IV, p. 371.

40. Ibid., p. 408.

41. Michel Foucault, "Des espaces autres," in *Cercle d'Etudes architecturales*, Mar. 14, 1967.

42. Tafuri and Dal Co, *Architettura Contemporanea*, p. 408. The reference is to Kahn.

43. Ibid., p. 362.

44. Ibid., p. 403.

45. Ibid., p. 153.

46. Ibid., p. 154.

47. Cf. pp. 342–345.

48. Ibid., p. 346.

49. The dialectics of "glass" is, however, much more complex than appears here. I intend to address myself to it in subsequent works.

Figure Credits
1–6 From Manfredo Tafuri and Francesco Dal Co, *Modern Architecture* (New York: Abrams, 1979).

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Arquitecturas bis —which first came out in 1974— is published by La Gaya Ciencia S.A., Bertrán 107, Barcelona 23, Spain.

Subscription rate for six issues (air mail postage included) $40.

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