CITY AS A MEMORY: FORMAL TYPOLOGY AND MORPHOLOGICAL DISTORTION

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ABSTRACT:

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Nikola Polak

submitted to the Department of Architecture on May, 10, 1979, in partial fulfillment of the requirements for the degree of M. Arch. A.S.

The problem of the city is a cultural expression of its political bias: political action and culture as symbol of permanence of this action are establishing the idea of the city of dialectical meanings. Because environment itself does not make people or society better, as architectural theory presumed for three centuries, without corresponding social content, it is of fundamental importance to ask for dialectical conjunction both of architectural form and social content, to re-approach the problem of architectural method.

The proposal of this discourse is that of architecture and the city as a product of dialectical culture. A new method therefore must regard architecture as a selfconscious discipline that contains tremendous potential in its basic medium - built form, potential that is only readable from totality of the past, and upon which a new task-structure imposed by a particular society should be projected. It is in the nature of the dialectic that it ask for both past achievements and critique imposed by present expectations, a new understanding, and a new tasks. It is in this thesis and antithesis that we are asking for, and which Modern architecture abandoned, where the possibility exists for solving the dead-end of cultural abortion of the technocratic 'rationalist' city.

Therefore, it is in the rediscovery of the cultural value of the city as a proscenium for collective action, by responding to traditional meaning of the urban space as symbol of public realm and organizer of anonymous private realm, in this conjunction of architecture and building where dialectical method for architecture exists. The problem of method is that of dialectic between the typological and inventive aspect of the creative process involved in architectural design. Consequently the reference embodied in
the derivation of typological models from the architectural past is that of ambiguity involved in the process of architectural production within the society, as opposed to that of ultimate objectivity imposed from outside of architecture and based on idea of Zeitgeist and false scientism of discredited progressivism of this century.

Architecture is therefore redefined for the purpose of this discourse about a new understanding of its formal medium, as a cultural phenomena of dialectical meaning. The discussion that follows examines the problem of architectural method and reference as an underlying value-system, proposes change in approach to reference and new critical architectural method(s), examines the evolution of the idea of form as an essential medium of architecture, formal type, its meaning, and cities as dialectical complexity of forms and meanings, on the basis of which one should criticize the pseudo-aesthetic of Zeitgeist and false cultural consciousness of Modern architecture rationalism, and finally elaborates the idea of 'intelligence of architectural history'. In this rediscovery of architecture's past as history of formal types, it must be absolutely clear that it is neither historicist sentiment nor a new determinism of yet another Zeithgeist, but man's conscious desire to express his vision of himself within the society, that makes architecture more than a problem of outillage. Architecture is a cultural phenomena of dialectical meanings.

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Simonides, the poet from Ceos, was called outside by the gods, Castor and Pollux, from a banquet. Once outside, the roof of the banquet room collapsed and all guests were killed. Simonides was able to identify the badly mutilated bodies because he knew where they had sat around the table. He noticed that the combination of a place: the banquet room, and images the people invited, allowed him to remember and identify the corpses, and then he understood that 'places are the wax tablets on which one writes; the images are the letters that are drawn'. The art of memory was founded.

Antoine Grumbach: "The Theatre of Memory"
OVERTURE: PROSCENIUM OF DIALECTICAL MEANINGS

It is useless to expect that architecture can come up with new solutions to the problem of the city which is now thought to constitute a crisis, merely by resorting to increasingly advanced technology, or through non-critical transplantation of reference from other fields, such as sociology, behavioral sciences, information theory, or even computer technology. The problem of the city is a cultural expression of its political bias: political action and culture as symbol of permanence of this action are establishing the idea of the city of dialectical meanings. The Modernist concept that a new formal order must produce new social content failed in its expectation, but paradoxically succeeded by producing an oppressive environment of such scale that the fallacy of zoning became self-evident. The segregation of urban 'subject-matter' helped to create a full scale materialization of alienation and existential misery of industrial culture. It is the dream about this culture, as deliverer of the future, the utopia of a posteriory society, that is embodied in the historicist idea of Zeitgeist that should be thoroughly examined and questioned in order to re-define values and means involved in the process of architectural production. Consequently, it is not the problem of the method that can be solved with yet another method, but it is the problem of a value-system asking for a particular type of knowledge as exclusive reference for justification, that should be critically discussed. Therefore it should be clear that as far as the
result of a particular method is concerned, modern architecture was not a failure, rather it was complete underlying value-system that absolutely failed.

Because environment itself does not make people or society happier or better, as architectural theory presumed, without corresponding social content as a result of action recently called the decision-making process, it is of fundamental importance to ask for dialectical conjunction of both architectural form and social content, to re-approach the problem of architectural method. And because it is the complexity of relations in society that architecture should express, relations between individual and collective, architectural form is regarded as primarily a cultural artifact that in order to be responsive to society must have political bias as its back-up.

The proposal of this discourse is that of architecture and the city as a product of dialectical culture. A new method therefore must regard architecture as a self-conscious discipline that contains tremendous potential in its basic medium - built form, potential that is only readable from totality of the past, and upon which a new task-structure imposed by a particular society should be projected. No definite future, no technological panacea, no exclusive knowledge can solve the problem of cultural complexity which the modern city is lacking. It is in the nature of the dialectic that it ask for both past achievements and critique imposed by present expectations, a new understanding, and new tasks. It is in this thesis and antithesis that we are
asking, and which Modern architecture abandoned, where the possibility exists for solving the dead-end of cultural abortion of the technocratic, rationalist city. It is, therefore in rediscovery of the cultural value of the city as a proscenium for collective action, by responding to traditional meaning of the urban space as symbol of public realm and organizer of anonymous individual realm, in this conjunction of architecture and building where dialectical method for architecture exists. But, it is not yet another method that should be exclusive, it is instead the importance of cultural symbolism that should be exclusive. To symbolize the existing dialectical relations within society which emerges, architecture must use adequate dialectical method for its elaboration, and at the present moment when reconstruction of the city as a polis became our most important task, it looks as though the new Rationalist formal typology can offer the most valuable reference. It offers new understanding of a built form on the basis of which the present confusion of languages can recover mutual understanding between the parties involved, in the overall division of labor that produces building, and architects themselves that are involved in the long forgotten 'art of building.'

Therefore the sequence of the discourse that follows, examines the problem of architectural method and reference as an underlying value-system, proposes change in approach to reference and new critical architectural method(s), examines evolution of the idea of form as an essential medium of archi-
tecture, formal type, its meaning, and cities as dialectical complexity of forms and meanings, on the basis of which one should criticize the pseudo-aesthetic of Zeitgeist and false cultural consciousness of Modern architecture rationalism, and finally elaborates the idea of 'intelligence of architectural history.' In this rediscovery of architectural history as history of formal types, it must be absolutely clear that "history does nothing, it owns no tremendous wealth, it fights no battles... instead it is a man...for history is nothing but the activity of man pursuing its ends..." From Marx's notion of history one should understand that it is neither historicist sentiment nor determinism of Zeitgeist, but man's conscious desire for symbolic expression of his vision of himself, that makes architecture essentially different from the ocean-liner, pipe, advertising or pure consumption. Architecture is far more than a problem of outillage, it is a cultural phenomena of dialectical meanings.
CHAPTER 1: THEORY AND IDEOLOGY: CONFUSION OF LANGUAGES

He called it Utopia, a Greek word meaning there is no such place.

- Quevedo

I owe the discovery of Uqbar to the conjunction of a mirror and an encyclopedia.

- Borges

The Mirror: distorted world of twin phenomena, symbol of imagination, Utopia; The Encyclopedia: treasury of all knowledge, circular book within which the very system of reference indicates scepticism about final knowledge. Two concepts of events and things, imaginative and scientific, utopian and traditionalist, iconic and canonic projects of the mind. The biblical story about the Tower of Babylon may be a first Utopia as well as a metaphor of Modern architecture's confusion of languages. The idea that architecture of the twentieth century, was simply an utopian enterprise deserves some closer observation, because there is a general feeling that such a critique involves the same mental apparatus that already was behind the cultural abortion of the city in the second decade of this century.

Utopia is a critique of our social being. The very fact that there is a dilemma about the origin of our society may be the basis for our distinction between types of knowledge aiming at its explanation. For, if our individuality does not exist and if we are, according to empiricism, completely the product
of stimuli, then we can be distinct only by our learned, social being. On the contrary, the structuralist approach that includes our genetic structure as filter, through which we transform stimuli into knowledge, is trying to recognize both our individual and our social being. An epistemological problem therefore includes an important distinction: theory as opposed to ideology. For a sociology of knowledge, ideology is a false consciousness, knowledge whose true nature is concealed. A distinction between theory as 'objective knowledge' and ideology as its operational distortion is possible only when different value-systems are recognized, and the evaluation of ideology as distorted knowledge is only possible according to the complex value-system by which ideology is judged. Therefore our definition of utopia as a critique of the social being should be clarified through the notion of utopia as an ethical codex and ideology as its operational knowledge.

When the Modern city is blamed for its failure on the basis of its 'utopian content' this critique refers to the assumption that certain cultural achievements did not occur, and differentiates between the failure and success of this particular architectural concept. But, when an opposing critique tries all too easily to dismiss utopia as an irrelevant partner, it only obscures a far more complex and irresponsible mental apparatus that was behind the 'pioneering attempt' of the Modern city: that of narrow-minded technocratic positivism which regarded progress as the sole expression of the age, and consequently
lost interest for the cultural content of our built environment, which cannot be reduced to the simplicity of a production-consumption cycle. In its jesuit marriage of goals and means, urban planning presumes only the extreme possibilities, never in between. Because an "in between" is too ambiguous, too rich with alternatives and too complex to be handled as a system that is totally predictable, and therefore totally controllable, we may be pushed far enough so as to surrender to the "artificial intelligence" that will elaborate its predictions on the basis of a quasi-objective quantitative schemata.¹ For the first time in history the minority will have exclusive power of controlling the tool which by definition, however dubious, has the capacity of ultimate objective. Indeed, as some authors have already indicated, computer technology may close the sequence of 'utopias' with the most hypocritical one where the quasi-objective decisions of the machine should not be challenged. In some devastating way Menheim's ideal of detached intelligentsia may succeed through its electronic coming into being, proposing the future as an exclusive truth and universal messianism.

The problem of ultimate objectivity is basically a problem of doctrine: a certain type of knowledge tries to exercise its ideological potential at the expense of other types of knowledge, and in order to succeed it aims toward objectivity, supported

by what is regarded as valuable methods. In order to give his quest for knowledge an apparent firm foundation, man cannot do otherwise than accept certain facts as indisputable and base his conclusions upon them. But the longer one builds on such fictitious points as hypothesis, the more probably will the original daring assumption that the basic points underlying our hypothesis seem real; but, a hypothesis may have been constructed in such a way that the experiments dictated by it are bound from the beginning to confirm it. Such was a case with behaviorist doctrine that underlies the connotations given to form and organization of our built environment for the last two centuries, and was exerized perfectly in the prediction of 'utopian culture' of the Modern city. It is a given truth that all men should have equal rights to the same chance of development, but this truth was all too easily converted to the untruth that all men are potentially equal individuals and, a step further, that all men would be equal if they could develop under the same external stimulus conditions, and indeed that they would become ideal people if only those conditions were ideal. Therefore people cannot, or must not possess any inherited individual properties, particularly those that determine their social behavior and their social requirements. This scientific doctrine, was based on a scientific paradox built in the way science defines itself: the basic error in the thinking and working methods dictated by the behaviorist doctrine, based on the tabula rasa concept and reflex theory, lies in its neglect of the structure. Being essentially
functionalistic, and regarding only statistical and operational methods as legitimate, it described the living system independently of its structure: structure is regarded as insignificant by the behaviorist because it does not offer the possibility for affirmative experiment that could confirm it. From an ideological point of view, an unlimited conditionality of man is highly desirable: why not obscure ideological content by clothing it in scientific facts, constructed in such a way that this conditionality could be justified by what is accepted as 'scientific method.'

The methodical error called reductionism, that is, the tendency to regard research on the lower integration level as 'more scientific,' lies in the fact that in its attempt to objective explanation we fail to consider the immeasurably complex structure into which the subsystem is integrated, and by which alone systemic properties of the whole can be explained. When such functionalist simpleness was projected on the field of built environment, and architecture, it produced quantitative methods that were given, not only by public opinion but also by architects themselves, the notion of scientific exactness. Although these pseudo-wise dicta are demonstrably false, they still dominate the picture of science, technology, and a technocratic vision of architecture and cities. If these indoctrinations all streaming from the fact that there is a gap between prediction and reality, lack objective values that are sought so too does the criticism that tries to re-
place them with yet another exclusive type of knowledge. When Popper stated that ideology rests on a logical mistake, namely that history can be transformed in science, he properly understood the ideologists' attempt to produce predictions on the model of what were supposed to be scientific predictions. However valuable his sharp skepticism about method was, his own disposition toward pragmatic, scientific approach to politics and ethics based on traditionalism, can barely pass yet another ideological trap. Popper's traditionalism seems to be as much determinist in projection to exclusive historical usefulness of tradition as his condemnation of utopia stated to be; because an ideological or utopian element as ethical codex is excluded, a priori, there is no dialectical tension between elements that represent different types of knowledge, or different explanations of reality from which a field for experiment could only benefit. And Colin Rowe exposed this paradox clearly:

"The abuses of tradition are surely not any less great than the abuse of utopia; and if one may feel obliged to concede the accuracy of Popper's condemnation of prescriptive utopia, one may also ask: how is that, if enlightened traditionalism may be distinguished from blind traditionalist faith, the concept of utopia cannot be comparably articulated."¹

¹Rowe, C., Collage City, Cambridge, 1979, p. 124.
was exposed, is no less or no more 'empty' than prescriptive
utopia's: both have a chance to survive only as exclusive
properties of a singualr method. But, being two faces of the
problem, tradition and utopia, science and creation, may have
to search for a solution in their dialectical conjecture, and
that is what 'utopia as metaphor' proposes.

'Utopia as prescription' can hardly be discussed as utopian
because its definition through 'status quo' offers only quantita-
tive growth as an alternative to qualitative change. On the
contrary, utopia as metaphor is an open concept deriving its
dialectical *modus vivendi* from a theoretical critique of ideology,
its final task being dissolvement of utopia itself. "And one
is again obliged to struggle with the manifold emanations,
legitimate and illegitimate, positive and negative" of both
mirror and encyclopeda.

Form as cultural sediment

"The word Type does not so much represent the image
of something to be copied or perfectly imitated, but
rather the idea of an element which itself serves as
the rule to the Model: the model in the arts is an
object according to which one can conceive works which
do not resemble one another at all. Everything is
precise and given in the model: everything is more
or less vague in the Type..."

- Quetremere de Quincy

As previous architectural concepts searched for justification
outside its own discipline referring to the Universe, God, natural
sciences, Modern architecture referred to machine production. The
only element that previous references shared trans-temporally
was their basic medium: translation of built form into architectural symbol which was understood as a continuous cultural effort. The miscarriage of Modern theory and praxis embodied in the Modern city is due to the conscious neglect of different structural levels on which built form participates, neglect to the extent of destruction of urban space as expression of cultural heritage, not only by superimposition of scale, but far more essentially by inadequate configuration. Although we can trace a process of the dissolving of formal patterns through both theory and praxis of architecture in the last three centuries, the problem of the Modern city is a problem of the exchange of quantitative for qualitative schemata. Architectural education based on the aforementioned presumptions deprived architecture not only of its medium, but also of its active agent - the architect himself, for the sake of *individualism praecox* where "forms should be invented anew" and where "we have to start from zero." Where architects are involved happily in play "where each individual is the master and the rule:" this architectural education made the architect illiterate in his own discipline, and exposed its servile ignorance by submerging his creative potential to, what Rowe called "architect's less lustrous and well-pedigreed cousin - urban planner." And all recent attempts to reconquest the cultural dimension of building using the past as a rule for correcting abuse, must recognize that the power that 'cousin' earned on architecture's temporary decline, will now be turned against them, and that which the creative mind
may admire, the technocratic mind has now to approve. This sad
conditio sine qua non brings us to the problem of city as an
agglomeration of building and architecture:

"For, the requirement of professional empire building
apart, the demand that all buildings should become the
works of architecture (or the reverse) is strictly
offensive to common sense. If it is possible to define
the existential predicament of the art - or whatever -
of architecture (and there can be no simple formula
implicating bicycle sheds and Lincoln Cathedral), one
might possibly stipulate that architecture is a social
institution related to building in much the same way
that literature is to speech. Its technical medium
is public property and, if the notion that all speech
should approximate to literature is, ipso facto, absurd
and would, in practice be intolerable, much the same
may be said about building and architecture..."1

But to ensure a happy marriage between two, both are supposed
to have one major concession to another: both need to share
their formal principles to the extent of coexistence. It is
required that urban fabric provide some kind of neutral frame-
work, or gentle setting for architectural pieces, as it is re-
quired that architecture stop its present schizophrenic destruction
of urban fabric by imposing its solitude of object.
Because we have to make a distinction that recognized both build-
ing and architecture, it is only in form where offence could be
made to both, and where it was actually done, at a time
when the idiosyncratic statement "form follows function" was
ruling. The distinction of major importance between those two

1 Rowe, C., Collage City, Cambridge, 1979, p. 100.
elements in that function is often a predetermined system, given to the architect by clients and other specialists, while form represents his own particular means by which he fulfills certain tasks in the overall division of labor. The problem of form, formal structure, and formal patterns, or texture, to be more precise, is the proposed subject of this discourse: because we are strictly opposing the methodical error of reductionism, it is on the higher level of formal structure that the problem of form will be approached, and from which we will derive some of the characteristics that are the property of particular constituent elements. By introducing a concept of formal reference, the property of architecture as an independent discipline, we may propose valuable discourse that shall not ask for justification outside its own phenomenal structure, but on the contrary, will elaborate this structure and its internal principles and expose them as architectural concepts that can respond to any dialectical criticism that may be imposed by parties with differing intentions toward architecture.

Form and Content

The exactness of the structural similarity should therefore be briefly discussed. Through generalization we may establish classes of building tasks and develop a corresponding formal system (style): such a general form system will only allow for an approximate adjustment to the individual building task. In this case we will obtain immediate satisfaction but
also a certain lack of flexibility and visual order. The real
solution therefore seems to be the creation of multiple structures,
where one level remains fairly constant and suggests that the
built form belongs to a certain class (type) while the other
levels are adjusted to individual situations. This is what
Aldo Rossi means by distributive indifference, which is in the
nature of architectural form. Built form is ambiguous in
relation to function; it transcends the circumstantial condition
under which it has first been materialized. Buildings are
also ambiguous in relation to their meaning, in that though it
is difficult to eliminate the symbolic value of outstanding
buildings it is possible to manipulate it so that buildings
will represent something different from that which was originally
intended. Indeed, if a basilica was able to transform into a
church, a temple was able to transform itself into an exchange.
It is form that has a multivalent capacity for reference and
multivalent structural levels. One of the major contributions
that computer programming has made to this problem is the under-
standing of a level of determination: there are always numerous
solutions that result from a particular program, and from the
moment the agreement about a particular functional diagram is
arbitrarily achieved there is still a number of formal invariants
that are all equally satisfactory from the standpoint of solving
the relationship between function and enclosing form. There-
fore if we understand that a chosen formal variant participates also
on a higher level of formal structure then it is the
higher level that should be determinant instead of the lower
level.
Formal Structure

The formal structure, by definition consists of a complexity of elements: the primary elements are basic to the formal structure and without them the composition disintegrates; the secondary elements participate with a higher degree of freedom but only in relation to the primary ones, and therefore should not interfere. By definition the elements are objects used as dimensions of comparison, and relations denotes a lawful way of distributing them. Formal relations are three-dimensional or spatial, as the elements are mainly solids or resulting voids where topological and geometrical schemata can be distinguished. The relation that bridges the gap between them is similarity, because similar elements form groups. This phenomenon is of fundamental importance to all higher types of formal structure. Abstraction of similarities form the basis for the very concept of order which is of fundamental importance to the concept of typology. It is important to stress that particular relations demand particular elements with suitable properties: when relations are purely topological, the properties of elements are irrelevant though we may recognize certain preferences for ordering geometrical elements geometrically. A structure whose geometrical elements are related topologically therefore looks unsatisfactory, and the only topologically determined totality which is able to comprise strong Gestalten is the enclosure; within a clearly defined frame anything is possible.
Most architectural formal structures can be analysed as combinations of topological and geometrical relations. We may say that the meaning of an architectural object consists therefore in its relation to other objects, that is in the structure, as the meaning of architectural elements consists in its relation to other elements. Consequently, architectural form is a complex of such relations on different structural levels. We shall later talk about the capacity of formal structure to receive contents which is determined by its degree of articulation. A total lack of articulation is chaotic, but an exaggerated articulation can also be confusing. This is the result of the fact that form has to generalize fundamental similarities in order to be recognized, or meaningful, i.e. to allow repetition of a limited number of elements and relations, which should allow the combinations necessary to cover a majority of possible situations. Therefore out of a formal 'capacity for reference' the very concept of formal type can be extracted as a conceptual device by which incidental classification is replaced by a rational taxonomic process organizing types, due to the different structural levels on which they participate.

Model and Type

It is, therefore necessary to postulate the problem of typology as a function both of the historical process of architecture and also of the creative elaboration of the individual architect. Type as a conceptual reference to a particular formal solution appears basically as an idea of the preservation of certain solutions that are viewed as being outstanding. There
Gestalt laws, (after C. Norberg-Schulz)

Structural relations according to Frankl.
is an obvious analogy between typology and iconography, both being commonly understood, although not always obvious reference. Type may appear as a derivation of certain formal principles from a number of existing similar solutions; alternatively, type may be sought as symbol of a new, or different content, and differing from existing solutions, type may appear as readable and distinctive. Therefore existing formal structures can be described as having a capacity for reference out of which any formal type derives its explanation in terms of both formal structure and symbolic content.

Quatremere de Quincy's definition of Model and Type may appear to be confusing: Model being precise as artistic model, and Type being vague as abstraction. We will therefore propose the distinction that to some extent, does the opposite: Model should be understood as abstraction and Type as real object. Or to be more precise: Model is a formal abstraction, Typological Model is a schematic derivation of similarities, and Types are particular members of the typological series. We should also introduce the concept of typological distortion to describe the process that occurs when a certain typological model as schematic reference transforms into any particular type as a real solution. The typological model can be defined only through a process of reducing a complex of formal variants to a common root form. The birth of type itself is therefore dependent on the existence of a series of buildings sharing an obvious functional and formal analogy, and on the basis of this
analogy the typological model can be described, from which a particular type can be elaborated through the process of distortion. Therefore a typological model that can produce a particular typology is only that which is described as a principle rather than definition, preserving the possibility of infinite formal variations and further modification of the typological model itself. The end of any particular typological series is therefore a new typological model as beginning of a new series. (It is not necessary to demonstrate that if the final form of a building is a variant of the typological model deduced from an existing series of buildings, the addition of another variant to the series may affect the typological model to the extent of definition of a new typological model, and consequently produce the possibility for a new typological series.)

But if the typological model as reference is described as a certain principle, as a schematic formal grid, then it inevitably embodies a certain rigidity and moment of inertia. It is in the process of inventive elaboration of principle where the creative answer to this problem lies. This leads us back to the relation between artistic creation and historical experience, since it is from historical heritage that typological models as reference for typologies are deduced. In other words when the typological model is determined in the theory and practice of architecture, it already has an existence as answer to the particular complex of demands which arise in a given historical condition of whatever culture. (A complex of demands
FORMAL MODEL (after Alberti)

TYPOLOGICAL MODEL (after Vitruvius)
TYPES: Tempieto, Temple of Vesta, Temple of Portumnus
and conditions defined as 'phenomenal site.') Only through a reduction of preceding works of art into a 'typology' does the artist free himself from being conditioned by a definite historical form, and is thereby enabled to neutralize past achievements; the problem of 'Type' therefore appears only when the past no longer serves as conditioning model to a working artist, only as a necessary cultural reference.

The problem of reference, or choice of a particular typological model implies a certain value judgement, but at the moment when a statement about typological model is made, the individual action of the designer can proceed in any direction: the acceptance of typological definition at any moment implies the suspension of historical judgement of the final reality of a particular solution. Real type, as a new solution has its own 'phenomenal site' and it is directed toward a critical formulation of a new kind of value. The conclusion must be that the typological and the inventive aspect of the creative process are continuous in their dialectical interference, the inventive aspect referring to the existing 'phenomenal site' in an attempt to criticize past solutions that are historically deposited and schematically synthesized in the formulation of typological model. This distinction between the abstract and real, between reference and invention, may even serve as a definition of a dialectic of the creative process involved in architectural design.
Reference and Distortion

As with any other architectural principle, our choice of particular formal structure is a question of reference. The difference between the conceptual model, as abstract category, and type as its particular solution, is due to the fact that any model can be type, when literally translated, but all types cannot be models, when distorted through the influence of particular 'phenomenal site.' The definition of 'phenomenal site' is based on a complex influence that place, time, task-structure, etc. are imposing on the particular model when becoming type: it is only through highly organized formal structure that this influence can be controlled, while still preserving typological reference and responding to task-structure that model as particular building is facing. It should be understood that a preference for particular formal structure is basically a cultural one. Whatever the definition of culture may be, its complexity cannot exclude the concept of historical heritage; therefore when a certain 'phenomenal site' develops a certain set of formal structures, and derives its basic formal principles from them, it responds to all previous sequences of the same cyclical process that influenced the development of these formal structures. Obviously, the particular choice of formal structure is essentially a cultural act, and it preserves the possibility for continual reference to the form
of environment, whatever its future 'task-structure' may be. It is exactly through a formal capacity of reference that all possible functions, or task-structures could find their place within certain formal structures, through the distortion of basic principle. Now, if not before, we have to make a clear distinction between distortion and destruction. When Modern architecture proposed a functionalist reference, exchanging image for form, presuming that buildings should not only be designed to function like, but also to look like ocean-liners; the only possible way to achieve success with such an idea was by abandoning the concept of 'phenomenal site' as a cultural determinant of architectural and built form. Therefore at this point only one question is left: do we need culture as an historical category; if yes, then hopefully only through such a process of extraction of models and types from previous, and their distortion by present 'phenomenal site' can we achieve any cultural reference with our built environment. It is the moment in which we shall refuse connotations that simplifies architecture through its functional usefulness: a functionalist concept which obscures cultural references for its own purposes, neglecting all those elements of architecture that are not belonging to any category of use. But, if use is an expression of our intentions toward architectural objects, how is it that these objects cannot, or worse yet, should not, respond to those dimensions that are expressed in the concept of 'Bauen and Denken'
(to build and to think)? This concept assigned to building the qualities of transcendental, therefore transformable, therefore transtemporal, is asking for a cultural reference that includes in architecture what A. Grumbach called 'its evil part.' Architecture does belong to the art of wastage: but this immediate waste, this unproductive activity is such an essential part of our conscious being, making the distinction between incidents and intentions, that we should not forget that the Latin, monumentum, means memory, remembrance. That is why we must try to concentrate our efforts on the re-definition of our values and our discipline, to enable architecture to retain its own intelligence, and to expose itself as one of the essential and culturally indisposable partners in the overall dialogue about the act of building.

The form and the designation constitute two levels from which a dialectic of architectural phenomena emerges, and the complexity of aesthetical intentions is welcome, precisely because there is a firm basis for common understanding dealt with in the area of decision about form and formal relations. We neither have to be suspicious about literal translation or another formalism, nor to push our imagery to the extent of new absolutes, substituting architecture with other 'languages or techniques:' it is exactly in between where the potential for creative effort exists. On the basis of this approach it looks like the confusion of languages or a new and purely stylistical exercise we are witnessing today, may be solved
by 'etimological' similarity rather than a purely aesthetic doctrine. And it should be clearly stated that whatever alien terminology we may use must be understood with quite a metaphorical margin: (it shows a terrible lack of adequate architectural terminology on the subject) whatever benefits from other disciplines architecture may have, we must be aware that no 'single language,' however definite it may seem, can describe the phenomena of art to the point of definition, nor has it to. Any formal description, therefore, will be insufficient for exactly as much creative effort is required to translate an abstract model into a real type.

For the purpose of this discourse we will define cities as an encyclopedia of 'phenomenal sites' from which formal typology should be rationally derived and creatively elaborated as a displacement of concept, because art is capable of 'indirect speech.' And obviously we will talk about morphological distortion, and designation in general, as a mirror. To generate any possible layer of meaning that could be attached to any formal concepts, in other words, to enable form to be a theme, and designation to be its orchestration, we presume that "it may be that universal history is history of only a handful of metaphors."¹

INTERLUDE: REASON AND REFERENCE

The proposal we made concerning the problem of reference involved in structuring a new value-system for possible architectural method requires some basic explanations. As a result of the nineteenth century functionalism perpetuated by its twentieth century descendants, architectural theory argued that pre-eighteenth century architecture had the same objectives and methodologies in its design process as modern 'rationalism,' without being conscious of that fact. This discriminatory approach, as we have seen, is in the nature of doctrine that presumes by referring to empirical confirmation, that its working method is, therefore rational. But the research in anthropology shows that rationalist post-eigteenth-century development in the theory of design does not represent a qualitative progression from sub-conscious to conscious, but simply from one model to another, from one basic reference to another, both dealing with the same logical process. Later development constitutes only an alternative identity, due to the formulation of different reference, as exclusive justification of new objectives and methodologies. But for the part of this thinking that represents a conscious desire to replace old models or references with new ones, experiments are involved in the intention of justifying new methods to the extent of new absolutes. It is this desire to force people to submerge to the propaganda of contemporary rationalistic approach as the only one in which the designer possesses objective facts as an underlying reference for his method, that also draws a misleading conclusion about
rationalist system, (Implying that it consist purely of a complex process of selection of facts and mechanical verification without dependencies, preconceived hypothesis, value systems power motivations or any possible arbitrariness) in its attempt to force people to swallow disastrous cultural simplicess of such an approach to production of architecture today.

The pre-rational systems are explanation theories based on a classification whose initial hypothesis have no empirical significance. It is a common frame for cultural symbolism. But as we described, there is no difference between this underlying presumption and presumption upon which a rational hypothesis is passing the test of empirical verification. Indeed, the method of this verification is often part of the definition of a system of explanation: reference as value system, therefore has the same effect and significance for utilization of pre-rational and rational method. The similarity between pre-rational and rational design is far more evident when we understand the nature of logic involved in both: like pre-rational design referring to the presumption of absolute value of divine model, rational design is referring to the absolute value of empiricist justification of its own presumptions. Furthermore, if we remember the problem of scientific method and the question of dialectical critique discussed before, rational design has very little if any advantage in its search for absolute objectivity. Even worse, by relying on problematic predetermination of its reductionist
method for justification, it projects poverty of formula that completely excludes 'non-measurable' cultural dimension.

But if there is no basic difference in logic involved, then the problem again becomes a basic reference as value-system. In pre-rational design taxonomic process is involved in arranging the environment in a manner that reveals relations between elements of environment and initiates a response to one's impulse for grasping similarities and deriving abstraction that corresponds with model as predecessor, (as the representation of the divine model as harmony of circle, square, and sphere was in the Renaissance). This method constitutes basic data, some sort of 'memory-bank' for later rationalist elaboration based on a production process which tries to transform environment through maximization of material utility. The essential quality of the first approach is exactly a constant avoidance of rationalisation to the extent of excluding cultural reference because culture is more than production, and if the first can include the second, vice versa is hardly imaginable. A cultural model is common to all, and therefore work of community: it develops a method that reinforces collective consciousness by leading individuals to produce environment as a signifier of cultural concept, appreciation of which is a social act. Therefore pre-rational design does not economize. The cultural significance of this act is such an important task for architecture that it has to be maintained at all costs. Architecture as an 'art of vastage,' as cultural signifier of productive relations, cannot be replaced by production itself,
which imposing standardization, minimalization, economicization, first as a basis for the accumulation of capital, and later as an essential part of the process of industrial production, acts through exclusiveness of rationalist design.

Therefore, the collision between those two concepts that emerged when the Scientific Revolution replaced religious ideal with a variety of ideas (ideologies), produced a split personality of architecture. On the basis of currently valid or verified rationalism, the cultural dimension of architecture became the 'evil part' of the building, recalled only in the clotning of rationally produced building into pseudo-aesthetic imagery of production. The appearance of that outfit as rational, became even more important than rational production of the very same building itself. This sad misunderstanding, this strange desire to possess a key to ultimate explanation through rationalist formulae can be reduced to its prime duty, cultural expression of relations in society instead of production of society, only in a society that knows enough about dialectical nature of its relations and its culture. Out of this consciousness only, new social content can project certain metaphorical utopia as reality of a cultural model to which society should refer building its environment, and appreciation of which will again become a social act.

It is therefore useful to observe historical development of discussed collision, to grasp causality and understand anomaly of this process. Consequently, only by discussing material that
the eighteenth century inherited from Renaissance transcription of ancient concepts can the complexity of this anomalia at least be generally described.
CHAPTER 2: CITY AS A WALL: Ambiguity of Enclosure

You will have the power to sink to the lower forms of life, which are brutish. You will have the power, through your own judgement, to be reborn into the higher forms, which are divine.

-Pico della Mirandola

Beauty will result from the form and correspondence of the whole, with respect to the several parts, of the parts with the regard to each other, and of these again to the whole: that the structure may appear an entire and compleat body, wherein each member agrees with the other, and all necessary to compose what you intend to form.

-Andrea Palladio

I would say that the final stage of all styles is baroque when that style only too obviously exhibits or overdoes its own tricks.

-Borges

If it is true that without Gutenberg's invention it is impossible to conceive that the Reformation would ever have been more than a monkish quarrel, or that the Scientific Revolution, which was first the cooperative effort of an international community, would have occurred at all, then the printed Bible not only replaced the intellectual criticism of Erasmus with militant nationalism of Luther, but being the first mass-produced 'merchandise,' it played a role as the growth of New
Monarchies, the discovery of the Western Hemisphere, and the economic boom of the sixteenth century, in shaping a definite Industrial society and its capitol, the Industrial city. The European cities of the Middle-Ages provided what the classical cities had not: the precondition for uninterrupted social development. The guild character helped to create a specific economy and made the surrounding country subserviant to the town's interest. The typical conflict between landless and landed, replaced with the basing of wealth on trade and industry, rather than on land and warfare, helped the process of secularization which created, in conjunction with political and religious changes, a stable basis for industrial revolution.

In Pico della Mirandola's dual connotation we may discover how strongly Christianity of the past and present are held together; there was a similar feeling among writers, who believed that the Early Christian authors were an inseparable part of the classical heritage, that Lactanius was correct in his belief that Christianity needed the pagan past for its own enrichment as well as a means of mental training, to assist the formulation of doctrine. The view of Rome as a citadel of the new empire of Christ, produced not only transcendental continuity but an interest for real facts, the formal perfection of ancient building. The City, this unique cultural entity in Italy owed more than perfection of plan to its Roman origin, it owed Rome its organizational efficiency and capability of self defense as a physical entity. The concept known as Roman Campus, a
MILETUS: Figure-ground plan
1. Augusta Taurinorum

2. Turin at the close of 16th century

3. Turin at the beginning of 17th century with a citadel and first extension

4. Turin with a second extension from about 1670

5. Turin at the end of 17th century
superb instrument of colonization dependent on the network of roads, was actually the original layout of the majority of Italian communities utilising this concept of defense, in a continual political struggle between German and Papal influence. But while castrum was a 'city as a wall' based upon a maximum area within a minimum enclosure, referring to the square as an instrument of subdivision, the ideal city of the Renaissance referred not only to the outside but also to the inside struggle producing centralized layout; "The Prince, or how to get power and keep it," the Machiavellian concept that established a theoretical approval of what already was common practice, was the center that replaced the public image of both agora and theatre, and the city became an instrument of information to the ruler. The redefinition of center and information, nevertheless preserved the concept of wall and surrounding: even when the city projected itself beyond its walls, it was done as another wall, occupying the field primarily by definition of enclosure and distribution of void.

The story of classical utopia is one that discussed social order but did not interfere with the physical, the distortion of concept was merely due to the bifocality of pressure, and even when it was elaborated as in Palma Nuova, its hypothetical layout was adjusted to more practical purposes, and the center lost the tower of its ruler.

"An icon of the good society, the terrestrial shadow of an idea, the classical utopia was... to be adored and was -
up to a point to be used; but as image rather than prescription."

The same could be a definition of what E. Kaufman calls Baroque system. Iconic reference expected to establish the link between the design and its divine model. Therefore architectural investigation aimed toward accomplishing two tasks: the identification of the structure of divine model and the invention of means for implementing it in the architectural product, where the essential hypothesis was that the divine model consists of pure relations. According to St. Augustine "design is the opportunity through which these hidden structures in nature make the appearance." Design is therefore considered to be a process of generating analogies through a set of rules such as "number, magnitude, and degree" in space and time, and the design product is defined as an "analogy where the homology between the prototype and the product can be established through a three-dimensional formal pattern which corresponds with idea of geometry."3

The geometrical definition of God through the symbol of the circle or sphere is of Platonic origin. And, although none of

2 Tzonis, A., Towards a Non Oppressive Environment, 1972, p. 20.
3 Ibid, p. 21.
"An architect of the Renaissance, had he felt it necessary to argue about circular, centralized, and radial exercises such as Palma Nova, to justify them might possibly have quoted the account in the Timaeus where the Demiurge is described as fashioning the universe "in a spherical shape, in which all the radii from the middle are equally distant from the bounding extremities; as is the most perfect of all figures and the most similar to himself". And thus, the Renaissance architect might have concluded, as an analogy of this divinely created sphere and as an emblem of the artificer who is declared to be immanent within it, the city receives its circular outline.

Colin Rowe, The Architecture of Utopia
Five Platonic solids
as Gods delineation of universe,
as Earth, Fire, Air, and Water

Five solids and harmony of Universe
(after Kepler)

"But there is perhaps another argument involved in this choice of form which is not only Platonic, in its bias but also Christian. For possibly the circle intended both to signify and to assist a redemption of society.... thus, if nature takes pleasure in the circle (and gives second preference to the square), it is to be expected that these forms should recur elsewhere within the fabric of a Utopian town..."

Colin Rowe, *Architecture of Utopia*
the theoretical treatises were completed, the intention of High Renaissance masters can be discovered from their preoccupation with Vitruvius. Placement of the human individual within the divine circle has symbolic value that can be traced through the Burchardian notion of individuality of artist and tyrant, and even more so in Rowe's "replacement of Serlio's tragic scene for comic." The builders of the Middle-Ages laid out their churches 'in modus crucis,' their Latin Cross plan being a symbolic expression of crucification. While from them, man was in pain in his Valley of Tears, for the Renaissance, Christ represented the essence of perfection and harmony: the Panto- crator replaced the Man of Sorrows. This change in religious concept of Christianity enabled the Renaissance to add the criterion of human judgement to their artifacts. Design is not only judged by its reference to the divine, but also through the mind of the individual designer whose excellence is the measure by which the design pattern should be justified. As opposed to an hermetic architectural ideal, disorder of ideas entered the scene: therefore architectural forms should not be expected to have meaning per se, but only to create feelings that man is capable of enjoying. Thus the role of geometry was gradually transformed from "that of mirroring the secret map of 'Celestial

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Francesco di Giorgio, Drawing from Cod. Magliab

Vitruvian figure from Fra Giocondo's edition of Vitruvius, Venice, 1511
City' to that of creating a concrete reality of 'Pleasing Object.'"¹ This transposition could be achieved by a designation that established a "search for the secret Argument and Discourse implemented in The Mind" that resulted in the birth of the speculative designer who would not barely imitate his model but rather, ask for "the beauty of illusion and agreeable disorder."²

For Vitruvius, the classification of temples was mainly concerned with categories that have quantitative significance: the ideal of quantitative beauty appears in ordinatio as well as in symetria and eurythmia. Each column on the front of the Greek temple is of equal rank with the others, and no single element is surperior to another. They are coordinated; they constitute form as equal. Renaissance concept, even when dealing with the same gestalten and elements, used a designatory power of subordination to each other and to the whole. More importantly and fare more significant than the reintroduction of ancient formal principles, was the Renaissance distortion where the parts should now be presented not only in an aesthetically satisfying relationship with the whole in size and mathematical reciprocity, but they should be differentiated as superior and inferior components. The means by which these goals were achieved were,

²Ibid.
COMPARISON OF TWO PRINCIPLES:

Temple of Hera, Paestum
Pazzi Chappel, Florenze
according to Kaufmann, concatenation, integration, and graduation.\footnote{1} The whole system can be easily observed in the example of Pazzi Chapel (1430): the most remarkable aspect is the five part portico with its stress on the central portion, the pattern which later becomes a famous Palladian motif, and the structural climax of the dome.

This emphasis on two axis, horizontal and vertical, that corresponds hierarchically within a chosen formal concept, can be observed in the Leonardo drawings for a centrally planned church. These were systemic studies that developed a morphological series which demonstrated a generation of configurations on the basis of the circle and square, which never "deviate from the basic principle, and its basic geometry loses nothing of its clarity and effectiveness in elevation."\footnote{2} Such a proto-typological approach to a formal problem was even more evident in Serlio's eight basic plans for a central church. Certainly the power of this taxonomy was the wealth of its transformative rules on which each generation can be elaborated, and the distortion of principle is exactly the result of testing the extent of "intellectual exhaustion of possible variant." However, it would do injustice to common sense to demand such an elaboration to be the

\footnote{1}Kaufmann, E., Architecture in the Age of Reason.

\footnote{2}Wittkower, R., Architectural Principles in the Age of Humanism, 1962, p. 17.
Formal variants of centralized plan, from Serlio's Fifth Book on Architecture, 1547.
FORMAL PROBLEM OF RENAISSANCE:
(after Bruschi)

Formal schemes based on the cross

1. Filarete, Cappella per l'Ospedale Maggiore 2. Incisione Prevedari 3. Piantaksen
Gebbo e Giuliano.
Formal schemes based on the square, or derived from square

1. Firenze, Sacrestia Vecchia di S. Lorenzo

Formal schemes based on the octagon

main characteristic of form and formal structure: the final judgement were certainly due to a much higher complexity of cultural intentions. And if the last one of Serlio's plans clearly announced a later baroque distortion of axially and its final disintegration of formal harmony, the Vitruvian figure of Leonardo is an even more striking memento to the emerging Mannerism. *Uomo Universale par excellence*, he used his scientific experience and read from his anatomic exercizes a picture of the 'Universe' that is not exactly as fitting as that of Fra Gicondo was: scientific scepticism, and exclusiveness of erudition are hidden in a remarkable metaphor of distortion of relations within the circle, square and human figure.

What makes Mannerism so distinctive is its disintegration of unity between parts, while still preserving their unity with the whole, with the formal concept itself. The example of Michelangelo's Laurenziana reveals not only this clash between the horizontal and vertical definition of form, but also the rival claims of framework and filling. Only the framework, not the massive wall, is able to convey the ideas of concatenation and gradation, and consequently the antagonism between the horizontal and vertical became that of a horizontal longer axis and a vertical accentuation of facade separated as a feature from the whole: the whole submerged to one of its parts, form surrendered to designation. Later exaggeration of detail and expression animism were the consequence of this process toward self representation. On the other hand, once submerged to
Vitruvian figure after Leonardo

FRAME AGAINST INFILL:
Michelangelo's Laurenziana
narration of facade, form became distorted to the extent that an over emphasis of internal spatial interrelations was more important than the external overall appearance, the character of which the separated front embodied. This trend is already perceivable in Palladio's churches in Venice: there, and as in his Villas, the idea was one of turning away from isolation to integration. Therefore, yet another contradiction emerged deriving directly from a general tendency of the system: in striving for a unity of house and its surroundings, architects were forced to give up the compactness of the buildings within a solid pattern as they were trying to preserve it within nature.

The general trend toward distortion and disintegration of form can be therefore defined as the main characteristic of the 'Baroque system,' where the physical transformations were affected by metaphysical aspirations as well as external conditions, above all, by the desire to melt into the universe, to pass from finite form to infinite illusion. The increasing dominance of the voids over the solid walls, the vistas open through the interior, the replacing of the panels by mirrors, and the illusionistic painting on ceilings and walls helped to define later designations through 'character.'

The fact that Palladianism became the most influential teaching opposed to Baroque was due to the preservation of formal clarity and prime geometry that Palladio's transformative principle achieved. Once he discovered a model for his Ideal Villa, of which the Rotunda is atypical, or the most mutated member of the
Three-partite plan of Roman house compared with Venetian and Florentine Palazzo

Schematized plans of eleven of Palladio's Villas (after Wittkower)
species, he enabled preempted form to become the organizer of an immense number of potent variants according to the mathematical harmony that held unity together.¹

Palladio may be characterized as a fulcrum of both tendencies, formal unicum of early Renaissance and spatial extension or continuity of later Baroque, both readable in his totally controlled plan.

If we compare the Florentine Palazzo type with its square plan and central focus as correspondent to the idea of a centralized church and Venetian Palazzo type, with its axial continuum and focusses at its ends as correspondent to the earlier basilican plans, we may analyse the Palladian Villas as a type in which both tendencies are transposed through the motif of the Roman house, with its tree-partite sequence of atrium, tablinum, and peristyle. In the Palladian scheme, the axial articulation of Venetian type is compressed by this new spatial sequence and elaborated on the basis of the square of Florentine type. As Palladio stated, everything else that represents a collision with conditions of site or an extension of secondary bodies, is attached to both utilize and emphasize axiality.² This particular way of elaborating extensions, together with a

separation of parts, particularly the facade, (whereas in Palladio's work, there is still a unity with the whole), represents the Baroque's approach in which the discontinuity between the exterior requirements and interior, or private utilization became evident. It may be defined as exchange of primary organization of the whole to which Palladio's mathematical harmony referred for the secondary effect to which Baroque character referred. Therefore an internal sequence of the rooms was used as back-up or post to the central 'figure' which became a function of the outside rather than inside, site rather than interior demands.

A particularly extreme example, when translated in the formal pattern of the city, was that of Place Vendome, where a completely free-standing facade was erected to control the formal imagery of the square, and where a back-up was then elaborated by private developers that could not interfere with the public entity of the Royal statue. Secondary accents of Palladian enclosure became a primary dictate of the Baroque void. Rococo became a style of intrigue as Baroque was a style of pageantry to paraphrase Hamlin, and "which began to take the place of eloquence."¹

The whole conflict of French theory which we will analyse later, began to cluster around these two opposites, and that which theory elaborated and executed in public buildings, practice abandoned and transformed in domestic building. But what characterized the sequence of plans from Serlio to the Boffrand, all

¹Hamlin, T., Architecture Through the Ages, New York, 1940, p. 464.
Villa Rotonda as primary solid

Villa Trisino as primary solid vs secondary facade

Place Vendome as primary facade
being examples of domestic architecture, particularly the distinguished French Hotel, is that they belong to the city as a wall. They are elaborating a conflict of public facade and private poche on the level that introduces a platonic void as a mental and physical necessity to solve the problem of external conditions of site, where the building becomes an infill. As early as Serlio's example shows, the prototypical characteristics of a building which surrounds a closed inner courtyard with the public entrance and a complete introverted condition of infill can be traced. However, Serlio's is a symmetrical and regularized version of the early French townhouse. (The relationship between the structural setting and treatment of public facade is one of the Roman Villa Rustica where, in an overall system of colonization, the Villa first served as a fortress being flanked with bastions, and later when settled in a politically controlled environment of the Empire, it applied porticoes to identify itself with the overall process of 'Romanization,' a cultural as well as political status-symbol.¹) The shift in symmetry from forecourt to a garden that occurred in the example of Breton-villiers is that of an exchange of public image for a private one. This recentering which is still covered with a regular facade can be then traced through a number of examples where more and more, the interior does not correspond to the exterior. This

trend culminates in Le-Vau's Hotel Lambert where the public image completely subordinates the private, where an inner sequence of rooms serves as poche to the public realm of the vestibule and courtyard. Obviously, local symmetry became more important than a general sequence, even more so in situations where the public image was, literally compressed to the facade, as in the example of Hotel de Beauvais, where the site is so difficult that yet another ambiguity arose. Le Pautre has taken the typical plan and reversed it so that the street took on the significance of what formerly was the front garden. "On the urban level it looks as though the building has been poured into the site, both maintaining the continuity of the street and discontinuing the street by the device of elevational difference." On street level, through symmetry, the facade generates the axiality of a central figure and courtyard, and on the 'piano-nobile' the three-partite plan rules again. Here a completely revised and sophisticated 'promenade architecturale' is introduced. The emergence of a platonic void, the device around which Rococo similarly elaborated, was a realization of a completely opposite tendency for abstraction, than that which theory elaborated at the time, the idea of architecture as platonic solid.

Dennis, M., French Hotel, Cornel, 1977.
BUILDING AS INFILL
AND PLATONIC VOID

Serlio: Le Grand Ferrare
Louis Le Vau: Hotel Lambert

Cerceau: Hotel de Bretonvillers
Le Pautre: Hotel Beauvais
Type and Origin

The Renaissance concept of the dignity of man was an implied criticism of the old belief of Adam's sin. But in an age of rationalist deduction, it seemed axiomatic that God had implanted his reason and his goodness in man. In this view, there was no place for original sin; were it otherwise, the creation would have been montrously unjust, and this was unthinkable. The difficulty about such happy reasoning was to find men who were a convincing demonstration of the thesis, as opposed to Machiavellianism. Because a priori reasoning about man was not very profitable it was in order to utilize a Newtonian scientific method, experimental reasoning, to study human nature. The vehicle was John Locke's epistemology, which demolished all innate ideas and exposed natural man to stimuli: environment made the man, and to improve the man is to improve the environment. The Reformation had thrown out doctrines ranging from primitive communism to the divine right of Kings, but the ancient principle of natural law continued its focus on the state of nature, social contract and natural rights. Well suited to an eager and dynamic new bourgeoisie, a new basis for claiming rights introduced science into politics. When Rousseau proposed a society able to cultivate the individual's moral stature without injury to his freedom he saw the natural condition of man being critique of society. Another character came upon the European stage, the noble-savage, truly a child of innocence, a perfect instrument for the exercise of general will.
This dualism of received and natural laws (and rights) was represented in architectural theory of the eighteenth century with the dualism of the symbolic and pragmatic, obscuring Perrault's fantastic invention of 'Positive and Arbitrary Objectives' with a search for the origin of architecture.

The primitive man that Rousseau employed was however different from one that Abbe Laugier introduced in his *Essai sur l'architecture* in 1753. Being devoid of innate ideas and his social status being insignificant, primitive man, in Lockeian fashion responded directly to the elements of nature by reproducing 'constructions' which nature herself offered as a model. In such a manner, Laugier found the house for noble savage that was his response to the stimuli: the primitive hut, as Laugier sees it, is pure distillation of nature through unaffected reason, prompted only by necessity. This should be a guarantee against custom as well as individual taste employed by society; being non-social in his primitive stage is therefore for Laugier *conditio sine qua non* through which an emergence of the essential is possible.

But, contrary to the Lodoli's great invention that everything has a naturalness true to itself, and Perrault's critique of 'arbitrariness,' Laugier understood natural as the affinity to nature. This is an important point. As Rykwert stated, if we observe Laugier's thesis as being rather notionally primitive, being a conceptual model *a posteriori* rather than a condition to repeat; then it is only another 'historicist' model which to follow. Referring to the essential beauty streaming out of the
Primitive hut and the origin of orders
(after Milizia)

The personification of Architecture and the primitive hut (after Laugier)

R. Morris: House based on the three cubes
"The little hut which I just described is the type on which all the magnificences of architecture are elaborated. It is by approximating to its true simplicity of execution that fundamental defects are avoided and true perfection attained. The upright pieces of wood suggest the idea of columns, the horizontal pieces resting on them, entablatures. Finally, the inclined members which constitute the roof provide the idea of pediment... Never there has been a principle more fruitful in its consequences; with it as a guide it is easy to distinguish those parts which are essential components of an order of architecture from those parts which are only introduced through necessity or added by caprice."

Abbe Laugier, 
_Essai sur l'architecture_

Primitive hut and the origin of orders (after Chambers)
natural he established origin as a unique authority. For earlier theory, connections between the origins of architecture and its principles were visualized but never discussed: being received from higher instance the divine model is to be obeyed. But, the natural is to also be obeyed, and asking for structural truth, Laugier asked for purity, fully recognizing the powerful imagery of basic geometry. With Lodoli, Laugier, and particularly Morris the significance of designation as a property of form reestablished an admiration for purism.

Both views, that of nature and reason, that Laugier took for granted, were neither universal nor granted. His strict materialism was confronted with another idea of origin that attempted to preserve Christian unity of thought and established a clear battle between the concepts of received and natural law. Was the original model the Divinely designed Temple of Solomon or was it an imitation of nature itself.\(^1\) The model of the temple preserved a symbolic connotation in the forms of architecture, as opposed to scientific, in the structure of architecture. A later approach employed by Laugier was not able to explain the symbolic properties of architectural form; neither was de Chamoust who in 1883 tried to unify those two principles by distinguishing between type and archetype, between natural and received.

"De Chamoust, as late as 1783, attempted to sustain both the symbolic and the materialist in the single type form for a new 'French Order'. Adopting the Freemasonic triangle as the basis for his proposed trippled columns, and a species of temple as his type model, he nevertheless subscribed to the "natural"origin of this forms...

"I mean by this word Type, the first attempts of man to master nature, render it propitious to his needs, suitable to his uses, and favorable to his pleasures. The perceptible objects that the Artist chooses with justness and reasoning from Nature in order to light and fix at the same time the fires of imagination I call archetypes". That is trees were archetypes and wooden columns types of the fundamental elements of architecture."

A. Vidler, The Idea of Type
The reign of classical serenity in Italy that culminated with Boromini and Guarini led finally to Lodolian's pure functionalism. His 'structural efficiency' was supposed to rewrite the history of all architecture in such a way that only rigid and simplistic expectations from human artifacts could be evaluated. He could be criticized for an arbitrary reduction of architectural tasks, but his attempt to apply a non-arbitrary 'positive' rationalism principle was of tremendous influence. Rigorist, as opposed to Piranesi's fantasies, clearly introduced the agony of the Baroque system. A similar opposition emerged in France, with Blondel who, when teaching his students "Old Rules" stated that anthropomorphic forms are inconsistent, and that 'character' means more than 'beauty,' simplicity more than embellishment, and atmosphere more than artificial regularity. Formality itself was assailed and the hierarchical pattern rejected by the belief in individualism. He made two concrete suggestions: either formality should reign on the exterior with the practicality in the interior, or the former should be applied to public buildings and the latter to private ones. This interesting paradox will remain the theme of an enormous number of buildings, and finally the split between facade and form, a characteristic of late Baroque that revolutionary architects tried to avoid, will reappear when form will be defined as a neutral 'rule for correcting abuse' in the organizational plan of Durand.

It was Boulee who first understood the challenge of this apparent unsolved problem of the separation of enclosure and plan,
when he raised the level of discourse from the natural model to Gestalt, revising the question of origin. "Conception is essential to execution; our first fathers did not build their huts until they had conceived an image of them. It is this product of the mind, it is this creation which constitutes architecture."\(^1\) The absolute request for individuality as opposed to absolutism, a metaphor which is too obviously loaded with socio-political implications of decline of the Ancient Regime, was what made Boullee 'revolutionary.' Such an important epistemological question was not a concern of Milizia, Lodoli or Laugier. But since Boullee preferred the idea of hut before the natural model itself, seeing nature providing a conceptual resemblance even before the necessity for shelter, type reappeared with its symbolic dimensions again. Although he was echoing Alberti's division between conception and execution he was defending the individual capacity of the mind to create against those who, as rigorists, saw it as a pure act of the construction of buildings. The appeal to the concept is a true model for the architect. But, Boullee was still a naturalist, and being so he admired art as 'imitation of nature.' Nevertheless the individual ratio was an active agent of society, and nature his material. The distinction between the scientific and creative enabled him to separate the mental effort from the very act of execution, thus reducing aesthetics to the single principle of imitation of nature, which cannot be reproduced directly but

through resorts of symbolic expression.

The question of character with which he was preoccupied still produced an ambiguity; the inherent conflict between the idea of type in general and the idea of character, centered on the problem of individuality, was more a matter of academic speculation when Boullee stated that he had "to fear that in talking the way of picturesqueness he might become theatrical, but he was anxious to renounce that purity which architecture demands." However, the problem of method clustered around the way in which perception leads to the notion of regularity; regular forms are most concordant with our human institution and their artistic effect is of prime importance for the way we conceptualize reality. This new interest in the elementary geometry was a clear expression of the general trend toward individualism. The formal patterns of repetition which indicates a calm coexistence, those of antithesis which reveal an antagonism and rivalry of the elements and their reluctance to subordinate themselves to the whole, as well as a multiple response to the interplay of single forms, or their interlocution, - all leave their independence to the individual motif. "They can avail themselves only of such forms which are apt to stand alone. There is no place in the new system for features which seek contact with others, such as volutes and naturalistic motifs."¹ A similar development in graphic arts replaced the technique of mezzotint, which allowed

a blending of masses through the technique of engraving with its clear delineation. Clearly the new role for surface emerged. Boullee declared himself "the architect of shades and shadows." His Newton Memorial, two drawings, Night and Day, show how perfectly his motto ("It was in the heavens that I wished to place Newton.") was executed. The sarcophagus is lost in the immense immaterial space of the sphere; the spectator is obliged to stand at the lower pole where the sarcophagus is the only point of reference.

**Type and Institution**

The triumph of the reaction explains the oblivion that was soon to shroud the creators of what was ridiculed in the nineteenth century as 'architecture parlante' or referred to as 'Messidor architecture' by Hugo.

"As with languages there are many ways [in architecture] to speak against the rules of grammar," wrote Quatremere de Quincy in his reaction against the formal character of Revolutionaries in 1788. Not leaving the natural origin of architecture as a point of departure, he proposed a more conservative theory of character distinguished and classified on different levels. He proposed the existence of general character as independent of the maker (like great national styles), then essential character common to all epoch and places, and finally, relative character as a property of each particular building's expression of use. For him, relative, or what he called imitative character, might
be evoked in a building of one type or another—therefore
separated from the form itself. Imitative character was purely
decorative, the tool par excellence for establishing outside
imagery, facade as independent of form and type, but not, as
in the Baroque, through distinction between front and axis,
but as an enclosure of platonic solid. When he finally wrote
his article "Type" in 1825, the idea of type was truly meta-
phorical: he distinguished the positive model from imitation
and he attacked those who reduced design to a play "where each
individual is the master and the rule—hence the most complete
anarchy in the whole and in the details of every composition."¹
To clarify his use of the words "individual" and "anarchy" we
have to remember the conservative ideas of reaction: his
position is neither positive, nor optimal, as some recent critics
are trying to impose, because for conservatives there was an
enormous significance in the institution of type as a restrictive
operator. It was instead idealistic and absolute. He proposed
the notion of ideal type, but not as a result of our capability
to conceptualize: we can argue that paradoxically it was de Quincy
who finally "destroyed the type" by lowering the level of dis-
course on character, from volume to surface, from form to orna-
ment. Combined with decoration which was for him, "truly a sort
of language, the signs of which should have a necessary relation
with a certain number of ideas;" type became organizational rather

¹Quatremere de Quincy, Dictionnaire Historique d'Architecture,
Paris, 1832
than formal, and reference became stylistic rather than typological.

Classification, as a fundamental and constituent problem of natural history, took its position in typological taxonomies between a "theory of mark and theory of organism." When Blondel transferred ideas of physiognomy from the natural sciences to architecture, the idea of character as a distinction between the members of species (types) was founded on the outward sign. \(^1\) The method of expression was that of language that "speaks to the eyes." The culmination of the method in architecture parlante of Boullee and Ledoux offered for the last time, the situation where specific form (species) and type as a symbolic mark (character) were held together, with a type as origin (concept). But when taxonomic structure became fundamental for classification in the natural sciences, the appearance of species was submerged to the anatomical structure.

Operating in the manner of the new taxonomists, J.N.L. Durand assembled a series of plans that illustrated the known building types "classified according to thier kinds, arranged in order of degree of likeness and drawn to the same scale." \(^2\) The preliminary step for such a classification was the assembly of a comparative taxonomy that surveyed the whole of architectural


**TAXONOMY BASED ON OUTER APPEARANCE OF SPECIES:**

Blondel's "character"

**TAXONOMY BASED ON THE ANATOMY OF SPECIES:**

Durand's organisation and perfection of plans
production throughout history. The comparative method allowed Durand to arrange his specimens on the page as if in natural progression from the most primitive type to the more refined version of the present. In his aspiration to develop rules for these combinations that went beyond the formal patterns of neo-Palladianism, to establish characteristic forms for each type of building, Durand challenged both the idea of character and the idea of imitation: character was now replaced with constitution, and imitative replaced by generative. By means of constitutional relations, type became the concept out of which morphology could be generated. Type does not barely imitate nature, it has its own inherent 'nature' as being essentially opposed to nature itself: this recalls the Lodolian, and to some extent Laugiers structural diagram. In his On Adam's House in Paradise J. Rykwert gave us a brilliant passage, using an analogy between Hegel and Durand:

"...Until a few years before Hegel used this example, it would have been an unthinkable one: although the house was used to exclude elements, as well as various enemies, it was never thought of as being against nature. For the elements, in their hostile manifestation, were only that aspect of nature against which men found in nature itself the remedies of human weakness. A radical shift has taken place. And it was curiously enough Durand's Lectures that give this shift emphatic expression in terms of architectural theory."  

Indeed, if the Hegelian concept of form and meaning as imposed to the objects of nature by our spirit, as a result of our intention to change the natural (objective) conditions, is fully executed, architecture is not natural but against nature. This radical shift prevented a kind of "natural history of architecture" to proceed much further:

"The final effect of Durand's system was in a very real way to introduce, however unwittingly, the concept of historicity into architecture...for while a simple notion of progress might aspire to the 'perfectability' of each type, only an internal understanding of the constructive laws of types, and the dynamic transformation of these laws under the threat of external change or internal demands, could open the way to comprehension of a kind of evolution in architecture..."  

It remained to set the terms for judging these solutions, and Durand in describing social needs began the nineteenth century project of typological construction on the basis of the inner structure or programatic functioning of things. The act of combining the elements was guided by program, and subjected to the economy. Durand's axiom became one in which "the source of beauty in Architecture is Economy joined to convenience." The notion of internal evolution of types, and perfection through organizational change, together with the plan and section based on a grid that allowed a standardization of elements, Darwinist and rationalist notions in Durand ideas, were indicative of the machine which was about to replace nature as a major architectural

Durand: Organizational Principles based on the perfection of 'species'
reference.

For Durand, form was an envelope that holds together and restricts the number of variations: the variety may be obtained by playing at a combination on a repertory of closed form. Although he never stated a priori preference for the solids, it is clear that 'elementary geometry' that provides a rational basis for the formal organization of plans should exclude or restrict ornament. However, this was not the case in praxis. Although for Durand and Quetremere de Quincy there was never a question as to the true style of architecture, styles entered the scene of architectural production on the basis of their theoretical assumptions. Thanks to the notion that character can be established through the meaning of ornamental message, a sign, species of ornament developed that owed its designatory power to its linguistic potential - the Styles. Type and style, as organization and character, became instrumental in promoting the emerging ideologies of progress through consumption and technological positivism \textit{per se}.

"The early nineteenth century witnessed the final economic emancipation of the Ricardian bourgeoisie. Advertisement, the showcase, the commercial poster, the diorama, the shopping arcade were all born during this period. Consumption, at least that stage articulated by Ricardo and Adam Smith, developed a need to label its objects of production, for it was by means of the designatory role of labeling that consumption owed it effective functioning; consumption without a designation that assigned value to objects was impossible. A designatory architectural logic
was thus welcomed in nineteenth century commercial life at precisely the time when fashion and the applied arts were being mobilized by commercial enterprise. And since sensuous appearance was becoming the designatory vehicle that enhanced the stability of a product, it is by no means surprising to find architectural thought developing a parallel attitude, by which style and form were treated much in the same way as clothing - the marks of character and status continually varying with the dictates of fashion. On the other hand, for the idea of architectural expression as clothing to have become possible, it was necessary to have assumed the separation between the outer appearance of the building and its organisation - the distinct identities of style and type.  

The narrow Lodoli's view of architecture as the process of making buildings found in this gap between form and meaning that nineteenth century provided an excellent opportunity to deprive architecture of both, by imposing the essence of architecture as true style. For Violet-Le-Duc the nature of building is interwoven with the act of making it, and the act of making determines style. Style is significant not because of its ability to designate but, on the contrary, because of its license to merge its identity with the very nature of building. This ontology of style prevented the historical migration of styles from its ideological context, but it also changed Boullee's conceptual creation into a simplicity of structural elaboration. For Violet-

Ornament has become an integral part of the respective structural components. Style resides in the anatomical substantiality of construction.

The traditional ornament is broken to its constructional constituents in a manner similar to the actual structural members. Style resides in the very act of making.

T. Porphyrios, The 'End' of Styles
Le-Duc making has nothing to do with speculation, time as historical time, or architecture as reference: in a word, with thinking about making. This orthodoxy denied the possibility of any capacity for reference, and "condemned architecture ever to think anew, never to profit from the past, and, in the end never to be able to codify its own achievements."¹ It entered architectural theory as a reaction to the nineteenth century socio-political disillusionment of enlightenment expectations, embodied in the 'complexity and contradiction' of the capitol of industrial society, the industrial city.

INTERLUDE: EXPERIMENT WITH PAST

The formal problem of what E. Kaufmann called 'Baroque System,' was that of classificatory elaboration of received material out of which an abstraction of the 'Divine model' was derived. Architectural form was viewed as a received Model, corresponding to harmony and perfection of prime geometry. Referring to the ideal status of mathematical order, the designer's interference was that of producing an arrangement of elements and parts that are corresponding to each other while still corresponding to the whole. Form as a regulatory element allows the distinction that was made between quantitative relations of the ancient temple, (in which all elements are of equal importance), and a new design method, that produced a hierarchy of elements.

Form was therefore not viewed as having meaning itself, but only together with the action of the speculative mind of the designer that produced agreeable disorder, in search for the expression of concrete feelings that a building should initiate as object of contemplation. This powerful formal reference allowed production of an immense variety of arrangements of elements that all preserved its basic capacity for cultural reference, and yet, changing as intentions toward building changed. Therefore, the problem of Mannerism, as we discussed it, was that of interruption of internal harmony to the extent of expression of individual challenge of the 'Divine model.' This speculation allowed final separation of certain parts that be-
came iconic signifier per se rather than pure elaboration within strong gestalten. Consequently, the Baroque produced separation of front facade as image from its subordination to basic form, and elaborated the significance of succession of interior spaces aiming at dissolution of form.

With Palladio's Ideal Villa, the problem of Platonic solid emerged, as opposed to later Baroque illusionism, that preserved homogeneity but could not be applied to the strong formal pattern of Medieval City: there the platonic void was the main task of architecture, as a maximum controlling device for overall cultural function of the city, and the ideal plan was always distorted. The distortion produced a plan that served as infill for the previously defined void, and this tendency survived through the Baroque, integrating building within a strong formal pattern of the city where dissolved form produced back-up, or *poche* for articulation of void.

Although Palladian concept offered a generative model, the problem of taxonomy emerged as opposition to congestion and over-articulation of Baroque as a result of the rediscovery of aesthetic preference for primary geometry. The discussion clustered around the problem of re-definition of Model, and from natural sciences that challenged religious symbolism, a new Natural Model emerged as question of origin of architecture. The problem of origin replaced historicism with reference to the architectural past connected with received Divine model of Christianity, with another
historicism with reference to the natural past connected with received Natural Model of primitive hut. Formal type, as a problem of scientific classification aiming at explanation, was invented and consisted of form and character. Distinction between form as concept and character as appearance was made on the basis of new science, form referring to descriptive geometry, and character to physiognomy of species.

The Neo-classical problem of form became that of prime geometry and solitude of Platonic solid. The reference to the structural diagram as nature of building produced rigid meaning for Laugier, Lodoli or Milizia, but the reference to the pre-concept of creation that elaborates images of nature, before one had the necessity for shelter, became ambiguous and challenging for Boulle, recalling Perrault's immensely important discovery of Positive and Arbitrary Objectives in architecture which was obscured by the naturalists. The problem of Platonic solid was its preference for ideal site, and this was nature, not city.

Reaction against Baroque and Revolutionary architecture finally produced consistent distinction between Model and Type. For de Quincy, there was no question about a literal translation of the abstract Model into vague Type. Only elaboration of Model when it became real Type, through distinction between characters (levels of meaning), can prevent abuse. The problem that emerged out of this definite separation of facade and form was perpetuated by Durand's discovery of elements of architecture arranged in Plan and Section within certain form as container and organizer. The
enclosure became abstract, and structural more than signifier: it permitted the emergence of Styles as clothing, and Type as institution. Plan was elaborated as the organization of certain institutionalized functions (School, Hospital, Prison...) and facade as a fashionable image of architectural consumption of styles. Hegel's idea of architecture as opposed to nature with Durand, entered its industrial production.
CHAPTER 3: CITY AS A FIELD: Hypocrisy of Plan

Perinthia's astronomers are faced with a difficult choice. Either they must admit that all their calculations were wrong and their figures are unable to describe the heavens, or else they must reveal that the order of gods is reflected exactly in the city of monsters.

-Italo Calvino

This will kill that. The book will kill the building. That is to say printing will kill architecture.

-Victor Hugo

Laugier's and Lodoli's structural diagram introduced a level of abstraction to which only a later elaboration of the free plan was able to respond. When Durand ridiculed Laugier's "doing it without walls" he was obviously unable to visualize that his method of grid, on which plan and section are elaborated, needed only new materials such as cast-iron and, later, reinforced concrete to bridge the gap between plan and enclosure. We should therefore discuss the architecture and urbanism of Neoclassicism as the real beginning of Modern architecture in terms of change in formal concept. For, what before was the axial sequence of articulated voids that organized a poche of solid, became for Neoclassicists, a highly articulated freestanding solid that masked the asymmetry of a 'functional' plan inside. As early as 1762, Gabriel's Petit Trianon was a
response to Archeology and Reason that had opened a new panorama of possibilities to feed the appetite of the rising nouvelle-riches; but if Winckelmann and the discovery of Pompei were reflected in the Platonist formality of isolated pavilions, then Piranesi represented the romantic aspect of antiquity to which character and architecture of shadows responded.

Although Petit Trianon, with its English garden that Migue added as homage to noble-savage, destroyed the idea of formal contrapunct, the significance of this inversion of Platonic void into a Platonic solid remained relatively insignificant as long as the question of large scale utilization of new principles did not arise. It is therefore easy to understand Schinkel's ability to prevent expansion for the sake of penetration into the context, upon which Sitte's urban morphology was evaluated. That which classical utopia was not able to do, because the structure of the ideal city could not overlay the existing formal concept of the Medieval city, absolutism was first able to do, by working on nature itself. The phenomenon of Versailles was thus not only the ultimate exercise of absolute will that centered the world in the bedroom of Roi-soleil, but even more so a criticism of the Medieval city through city as forest. Bearing characteristics of a typical exaggeration of Baroque, it was a perfect model to be utilized by Hausmanesque renewal imposing yet another kind of absolute authority: that of urban engineer.
The question of quality was replaced with the problem of quantity when production moved to the cities: a revolution in transportation enabled industry to employ a vast number of workers available in the cities and to replace small industrial communities in the country with large and powerful accumulation. From the insertion into the landscape, by imitating its surroundings, to the increasingly brutal affirmations of the industrial image, via transition from hand to machine production, the first industrial revolution did not represent the immediate result of mechanization since basic preconditions occurred much earlier under the sole pressure of political and demographic circumstances.

While the character of "Carceri" was first simply a carrier of information on an external level, as soon as the system of values was affected by the conditionality of economical dependence, the relevant information became a particular institution. The level of designation was changed from the problem of formal character, to the facts organized by means of control through the instrument of plan. It is of particular significance that the change in approach to control by image occurred within the domain of housing production itself. Only very gradually was the organization of the interior seen as a more fundamental instrument of control than formal character. Under the laissez-faire practice the worker was considered as rigorously placed under the authority of the master, and labor of workers was seen as an obligation to the State. In the process of defining the plan and the elements of the factory community at its first stage of growth, the
real architect was the owner itself (Owens' New Lanark should be a sufficient example) as he tried to isolate the worker, first by force and later with more perverse environmental and productional control through planning.

The similarity with Palma Nuova that is evident in Ledoux's project for the Salines of Chaux is clearly organizational, with only one substantial difference: what was the image of the Prince became the institution of the Director. For Ledoux the members of society were cared for according to their estate: "the workers are lodged healthily, the clerks comfortably." Production continued around the clock under the cover of a circular building, and nothing escaped the observation of the Director. To facilitate constant supervision a small garden is given to the worker to occupy his leisure time in 'useful pursuits." Industry and pleasure: these two pursuits distinguished urban life for Voltaire and together they produced 'civilization.' But Disraeli's paraphrase "increased means and increased leisure are two civilisers of man" introduced growth, the very notion of progress through growth. And the problem of accumulation which the industrial city produced, was due to the profit-oriented capital that, once industry became stationary and raw materials and merchandise movable, had no need to either house the worker healthily or to control him directly. His bondage to the factory resulted from yet another form of slavery, economical dependence on the level of survival.

Therefore it is understandable why Engels' attitude toward
"Now it is by association with the emblematic significance of the sphere that we can understand the persistence of the circular form throughout by far the greater number of architectural Utopias; and so long as our mental inflection is Platonic, as a setting for the headquarters of an ideal state the ideal form of the circle, the mirror of a harmonious cosmic order, follows quite naturally. Thus, on through seventeenth, eighteenth, and even nineteenth century - even as late as 1898 in Ebenezer Howard's prototype for Leichwort Garden City - we still find the circle or conspicuous traces of it."
FORM AND BETTER SOCIETY:
Fourier's Phalanstery recalling Versailles

W. Cubitt's Radial Prison, 1821

Panopticon House of Industry, 1797

E. Howard's theory of three magnets
the modern city paralleled exactly Marx's attitude toward capitalism: both were equally dialectic. While still rejecting the industrial city existentially, they affirmed it historically. "Only the proletariat...herded together in the big cities is in a position to accomplish the great social transformation which will put an end to all class exploitation..."\(^1\) But, however visionary this analysis was, Engels was still a victim of the image of a negative transformation of the social landscape projected against the optimistic background of enlightenment expectations, such as we can see in Voltaire, Smith, or Fichte. However, neither he nor Marx supported the 'model community' solutions so favored by the nineteenth century philanthropists that turned to a prescription of the plan to solve the problem of the jerry-built industrial town. The echoing of Versailles in Fourier's Phalanstery of 1829 is a clear example of the idea that liberation will come through form that should solve the problem of how the working class is housed, by not touching the problem of why it is housed as Engels described.\(^2\)

What the establishment learned from this was much more than a recognition of the necessity for immediate action to improve such poor conditions; it nevertheless became urgent only when the

\(^1\)Engels, F. & Marx, K., Housing Question

division between the slum and French hotel was unable to prevent the spread of cholera. The legislation proposed to solve the political inconvenience of density with a new profitable building industry and land speculation. As city life became the most evident threat to the growing power of the industrial bourgeoisie, the Garden-city as a device to lessen density became the universal panacea for the political explosiveness of the nineteenth century. As the consumption of styles in architectural production became the ideological system to bridge the alienation of intellectual and manual labor, modern functionalism only radicalized this consumptive process: the giving up of styles culturally labelled as moral obligation against distaste, was welcomed from industry to finish what was by then an obviously unnecessary cultural facade.

Two different approaches to the formal problem emerged: the tenement model in New York by George Post and George Dresser, the set-back model in Paris by Eugene Henard and the set-back terrace in London by Unvin and Parker were endemically anti-street approaches that constituted a conscious disruption to the enclosing continuity of the traditional street. By contrast, the Middle-European models maintained the street: from the Berlin tenement reform law of 1897 to Berlage's plan for Amsterdam South of 1917, design aimed to preserve the public imagery of the street providing an open courtyard in the middle of the block as an enclosed private space, recalling something of the Neo-classical grandeur. Both of Rotterdam's
1. E. Henard: Boulevard a redans, Paris, 1903
3. Krupp worker's housing, Essen, 1870
4. Gropius' study for parallel row model, CIAM, 1930
5. Nazi-colony 'Am Sommerwald', 1937
1. Courtyard tenement model, Berlin, 1897

2. Legal maximum development of peripheral block, Berlin, 1925

3. J.J.P. Oud: Tusschendijken housing, Rotterdam, 1919

4. C. Ehn: Karl Marx Hof, Vienna, 1920

5. Le Corbusier: Peripheral courtyard block, Paris, 1922
COMPARATIVE ANALYSIS OF
THE DISSOLVEMENT OF FORMAL
PATTERN (after L. Krier)
designs, J.J.P. Oud's Tuschendykehn housing of 1910, and Brinckman's Spangen housing of 1921 are good examples. Without pushing our comparison too far, by stressing too much of a political significance at the expense of a cultural one, the final disolvement of the perimeter block, and the happy marriage between theory and practice that join nature and machine together, cannot but be observed through both. That Karl Marx's Hof in Vienna survived, although it was blamed as a potential "bastion of political anarchism" was due only to the dedication of the socialist government in charge. Atavistic fear that the notion of continuity, density, social life and cultural exchange in the traditional city produced, resulted in the paradox that the Garden-city became a model for de-urbanization of Fascist Germany with its rebirth of the ceremonial city with its Achse,"where rurally regenerated youths could ride their roaring motorcycles in black uniformed formations."¹ As Broadbent says "the political system can be defined by building types it uses."

It is hard to judge which of two proposals, Ville Radieuse or Hilbesheimer's Central Berlin scheme finally did it: Zeilenbau with its rigid discipline and uniformity of machines destroyed formal continuum as much as Corbusier's automobile promenade did. "If however Corbusier's mode remains so different from late capitalist reality by its tremendous cultural amnitions, the reason does not so much lie in the ideological difference, but in the fact that the growing monopolization in the building
ARCHITECTURAL PROMENADE AND GEOMETRY OF THE AUTOMOBILE CITY:
Le Corbusier: Une Ville Contemporaine, 1922
industry by speculation and petty-bourgeoisie ideology has freed itself from any cultural aim or even excuse," says L. Krier."¹ But there is no excuse for the architectural profession either, because it behaved as did Dr. Faustus in its attempt to sell its skills to industry, and to exchange immediate success of Egoistensminum for political speculation and cultural assassination of the city. Therefore we must discuss the position vis-a-vis industry, from which we may discover some of the mental apparatus that was behind the theoretical discourse at the turn of the century.

While the main concern within the practical German body of thought was that of mechanism, the relationship between architecture as an art of design and its machine production, its English predecessor the Arts and Crafts movement, was still preoccupied with the re-establishment of direct craftsmanship as the primary means of cultural production. Its orientation to the pre-industrial past, organic social harmony as opposed to the modern techniques was divorced from any productive base. Nouveau that criticized achievements of the late nineteenth century by proposing the idea of holistic Nietzschean culture as opposed to the positivist scientific civilization, did not stem from a criticism of production, but rather, certain characteristics of culture itself and its extension to intellectual, cultural, and spiritual realms. Van de Velde argued for the mutual support of art and industry; this hope for the use of the industrial production as a tool was, however, the

result of an essential misunderstanding of the inherent relations in which this production operates in industrial society. The failure of Art Nouveau was exactly in its program, the resistance to the 'Wissenschaft' through which scientific positivism operates and converts art to a tool of industry, instead of vice versa; the industry can produce anything, but cannot sell everything: any small, elite oriented production, therefore is not the concern of a wide market of consumption on a sufficient scale, and of an 'industrial culture.'

The idea that culture and civilization are opposed, civilization being one of applied knowledge (science and technology) found its critique in Behren's redefinition that they are not opposing forces, although preference on civilization was characteristic of the beginning of the century. The disgust with analytic character that science and technology imposed, resulted not only in his view of the Engineer as pseudo-aesthetitian, whose method is based on the lawfulness of mechanical construction, but also in a switch from Semperian materialistic analysis to the synthetic, intuitional understanding provided by Riegel in his concept of Kunstwollen. Lawfulness that was related to that of organic growth in Nature is not cultural, Nature being opposite to culture, - nor can the mere fulfillment of purpose be culture. Instead art and technology should influence each other to provide both civilization and culture that are

of machine-age origin, but art being a dominant partner serving a culture that should take leadership in the progress of civilization. These, basically became the proposition of Deutscher Werkbund, achieving the first extensive and well-regarded union of art and industry. What seems strongest in this position is clearly the mistrust of a narrow, positivistic scientism; but what was obvious weakest is historical determinism, Zeitgeist, to which finally Kunstwollen had to surrender.

Having industrial societies as its sponsors, architecture of the twentieth century was viewed as a steady uninterrupted process of invention: "every problem should be approached with a mind that is tabula rasa; the architect must have no cultural expectations or assumptions, no idea of what he wants his artefacts to look like; the form of his building must be dictated entirely by their 'function.'"

Consequently, to achieve such a freedom, to be what Gropius called "the ethical necessity of the New Architecture [that] can no longer be called in doubt" it must exchange its cultural premises for a Pevsnerian definition of economic, political and social (in that order) norms to which it must be subordinated and which are the ultimate explanation and spirit of the age.

"Now such fantasies, it should be necessary to demonstrate, are among the cruder outcroppings of a theory of historical determinism, a sort of Reader's

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Digest version of Hegel which was abundantly taken in by the architectural and planning profession in the earlier years of this century. For certainly at no other time than the present could so many architectural quasi-academics have devoted so much Sitzfleish to the completely extraordinary question: What shall we do so as to prevent future from not coming about.\(^1\)

Such a notion of the spirit of the age proposed two instruments for control, both utilized by industry on a remarkable scale: invention and prediction. Although, culturally they were represented by a number of theories, the most influential being Purism and Bauhaus, for industry invention became equal to consumption as invisible control, and prediction became equal to plan and planning as visible control. And they were paralleled by the idea of type, and free-plan, from which Modern architecture was launched.

**Type and Production**

While Picasso and Braque, who asked for relations rather than things sacrificed subject-matter for the sake of the picture, Marcel Duchamp first sacrificed the picture for the sake of subject-matter, with his "Bicycle Wheel" of 1912. This ready-made object introduced displacement of concept to which Purist painting widely refers. Utilization of an industrial product without any transformation or qualification resulted in a pseudo-aesthetic of the "creative act" toward object that is not meant as art but as function. This resulted in a later idea that

\(^1\) Rowe, C., *Collage City*, Cambridge, 1979, p. 104.
M. Duchamp: Bicycle Wheel, 1912

Le Corbusier: Peinture, 1920
Abstract art, machine design and absolute beauty are interconnected on some higher level; the concept opened up a whole new area for the artist to conquer, that of a mass-produced work of art. The idea that only geometrical, simple designs are inexpensive enough to be reproduced on massive scale, combined with the theory of outillage through types resulted in the Purist object-object. The arguments, carried on in L'Esprit Nouveau lead up to the concept of the object-type that represented the fusion of Futurist, Cubist and Classicising themes: to Cubist disorder and collage relations they confronted Zeitgeist defined through economy, separation of technique from aesthetics, and dominance of simple geometry by which both art and technology should be judged. The double status of geometry as both something new and perennial, established that, in order to be reproduced objects tend toward the type that is determined by the evolution of form, between the ideal of maximum utility and the satisfaction of necessities of economical manufacture, i.e. natural and mechanical selection.\textsuperscript{1}

A formal problem for Le Corbusier was that of evolutive form because "form is not, as yet, functional, economic and settled... we have instead to start from zero." The invention of new forms, and rejection of purely Platonist ones, on a functional basis, had to be solved by superimposing plan as functional diagram, over form as producible type. The forced

\textsuperscript{1}Banham, R., Theory and Design in the First Machine Age, New York, 1960, p. 204.
connection between Classical and Mechanical aesthetics, by a proposition made by Le Corbusier, was on the level of "selection applied to a standard" and "separation of incidents from a type." The obvious connection with Durand and his enclosure versus plan concept could be instrumental toward our understanding of Neoclassical elements in Corbu's work. It was Gaudet who, by stressing that in the overall climate of the nonquestionable axial plan and use of styles, the main task for the architect is "the study of composition of building in their elements and their totality and that to compose is to make use of what is known."¹

The Elements of Architecture are assembled together to produce Elements of composition, small structural and functional members that are assembled together to produce a whole building. In view of the dependence of Gaudet upon a Neo-classical writer such as Durand, it should be simple to find that this separation of parts of the building has been clearly identified as a formal characteristic of Neo-classical composition in general, by both Kaufmann and Witkover. In this context it is interesting to observe use of this principle in a sequence of projects for the League of Nations, by Corbusier and for both Fagus and Bauhaus Dessau by Gropius: both architects employing the "same elements of composition" in developing formal variants through various design stages.² It is indeed dubious whether or not to label

Le Corbusier:

First project for the Palace of the League of Nations

ELEMENTS OF ARCHITECTURE AND NEOCLASSICAL COMPOSITION

Le Corbusier:

Second project for the Palace of the League of Nations
W. Gropius and A. Meyer: Plan of the Fagus Factory, Elementary composition as functional discipline

W. Gropius and A. Meyer: Plan of the Werkbund Pavilion, Elementary composition as academical discipline

W. Gropius: Plan of the Bauhaus, Composition as elementarist discipline, (after R. Banham)
this method as Modern, but the main point is that once Gaudet's Elements were viewed as utilized throughout the structure or function, a new dimension for fusion through a free plan emerged that lost its basic formal frame of reference, that of primary enclosure. The problem of enclosure, therefore became, instead of one of minimum surface for maximum space, its opposite that of maximum surface for minimum space; a clear process of disintegration of strong Gestalten. Analyzing this process on the level of configuration, or composition, means that organic functional growth of compositional members was allowed through assembly of primary geometry according to functional diagram. Such a process of organic extension as a result of the functional nature of the building produced forms that lost their capacity for succession, therefore lowering the level of formal relations from geometrical to topological schemata.

The most important of Choisy's contributions to this process was the notion of axial and axis that rely on such a topological setting within nature. In his description of the Acropolis "the apparent asymmetries are only a means of giving a picturesque aspect...as a result of respect for the site, where by benefiting from the given and balancing masses a final overall quality streams from changing position of the viewer at ground level...symmetry reigns in each part, but the whole is subject only to those laws of equilibrium for which the word balance is at once the physical expression and the mental image."¹ Out of this

observation we may directly read Corbusier's 'promenade architecturalle;' and if we understand it correctly, to Corbu plan means a sequence of volumes in the interior as the visitor actually experiences them, and axis means the route, or vista along which they can be seen. "...L'axe est dans les intentions." What we must investigate in this context is the problem of enclosure as a powerful frame of reference that was separated from texture, and lowered on a structural level of formal relationship, that of a plan that proceeds from within to without, where there is no without, and which ascribed topological expression to the strong Gestalten, even when they followed an attempt to subscribe to Chartesian geometry. As if Acropolis "pretended" to be Agora.

Continuing with the French Hotel as a model for our analysis, we shall define for the purpose of this discourse, a sort of inverted logic that appeared when the question of overall relationships between form, plan, and promenade was elaborated inside and outside. The relationship between form and plan is organized on two levels: static level of enclosure and dynamic level of promenade. These two elements produced a transformational sequence within Le Corbusier's maison-type that was from its early introduction, based on two structural principles: 'Dom-Ino' system that could be characterized succinctly as sandwich-like, and 'Citrohan' that could be characterized as megaron-like.  

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COMPARISON OF RELATIONSHIP BETWEEN ENCLOSURE AND PROMENADE IN TYPOLOGICAL SERIES OF CITROHAN AND DOM-INO CONCEPTS
ENCLOSURE VS. PERIPHERAL PLAN
(CENTRIFUGAL COMPOSITION)

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PROMENADE AS MENTAL ORGANIZER

composition of Garches
PROMENADE AS PHYSICAL ORGANIZER

ENCLOSURE VS. CENTRALISED PLAN
(CENTRIFUGAL COMPOSITION)
In the example of Weisenhof, the best elaborated 'Citrohan' type, enclosure is represented by a tunnel structure that introduces horizontal direction; a double space salle introduces vertical direction that is consequently emphasized on the front facade, thus establishing an almost classical spatial contradiction. The organizing element that solves this tension is the promenade, one flight of stairs that run perpendicular to the front facade. In the first project for "Maison La Roche" the ramp is for the first time employed as a promenade, and a connection with the later "Villa Meyer" is obvious. What is not so obvious is the significance that that same element took when placed outside the enclosures in the first project for "Villa Meyer," where a separate entity indicates the later hybrid condition of "Garches," - a total lack of the promenade as physical element is replaced by a point outside the building from which the reading of planes can decode the spatial sequence of the interior. In "Villa Meyer II" the ramp moves from the double space itself to an articulation of its own double space, that is the predecessor of another hybrid condition, the partially open and partially closed ramp in "Villa Savoye." For, if "Garches" is still one-directional, "Villa Savoye" is multi-directional, losing its contradiction of two axes as a condition of plan and facade, and replacing this contradiction with the purely dynamic organizer of a ramp. In "Villa Savoye" the real axis and imaginary communication, the promenade, is a
Paris, Hotel de Beauvais, plan

Villa Savoye, plan

SPACE DEFINERS
SPACE OCUPIERS
direct translation of what the external focus in "Garches" represents, with a change in plan. Consequently, enclosure plays a different role: being ambiguous in the case of "Garches," it became pure container, pure sign in the case of "Villa Savoye."

The same line of development can be traced in Corbu's housing schemes: extroverted, open and space-defining, block in the city for three million inhabitants is replaced by an introverted, closed and space-occupying slab of 'Unite.' The promenade that was a double gallery open to the semi-private courtyard became a claustrophobic corridor serving cells, small 'Citrohans' that are only a reminder of the original concept. But let us extend this speculation a bit farther. "Maison Citrohan" was a house like a car, a concept that introduced the aesthetic of utilization, of equipment versus furniture, mass-production of "machine à habiter." And it was the car to which 'L'Urbanisme' was devoted, a car as instrument of political control. Let us explain this more thoroughly. Not only is the straight line seen as an automobile corrector of Sitte's curvatures, but also a change of speed on the dynamic level of automobile promenade. To go a step farther, the concept of space was exchanged for the concept of time. Paradoxically enough, a change of speed was followed with a change of distance. Instead of having the ambiguity of a different time in the same formal structure, "Ville Radieuse" invented zoning as an instrument of control serviced by a new mode of transportation. Objects, as in intro-
verted and atomized materialization of functional privacy, were confronted with abstract discontinuum of public space. As a result, neither privacy, nor public benefited: privacy was compressed to the functional *Egsistensminimum*, and the public spread to the point of impossible direct communication. The exploded city remained a succession of points of interest that, as when reached by underground, annihilated all that existed between.

"The ensuing crisis within the architectural culture was caused both by the increasing consumption and destruction of alien cultural codes and - more important even - by the functional and social decomposition of the city by the means of zoning and in the end zoning must be isolated as the cause at the root of the linguistic decomposition of Architecture and Building...

"...the concentration in clinically controlled and policed zones of housing, culture, places of production meant in reality the destruction of the dialectical nature of PUBLIC and PRIVATE, of individual and anonymous, architecturally of the STREET and SQUARE."¹

Open space, being essentially a cultural quality through collective memory and individual associations can hardly be consumable on any profitable level. It is precisely because of this public image that space is exchanged for time. Losing its significance, except perhaps on the iconographic level of the Las Vegas strip, texture is replaced by object, and,

consequently, the perfect object requires the perfect site. There is no deformative capacity that a functionalist ideal object can sustain changing its external condition on different sites. As we have seen in Corbusier's transformation of basic type, the ideal object does not communicate with site at all, texture is non-existent, and although promoting a theory of types, every member of the species derives its existence only from its own inherent concept. "It is precisely because it was unwilling to consider iconic significance as a concrete fact in itself, unwilling to imagine particular physical configurations as an instrument of communication that functionalism can have very little to say with reference to the deformation of ideal models." ¹

The Introvert Distortion of 'Free Plan'

The Alger slab, with its idea of participation, was probably due to the lesson of Pessac: without dwelling too long on the Kitch situation from which the idea of re-introduction of individual taste derived and generated all kinds of neo-vernacular do-it-yourself consumption mentality, we can observe the free-plan as generator of yet another paradox of functionalist doctrine. What 'Dom-ino' proposed was basically a preempted form that has to respond to the new curious task - flexibility. And it is this new demand that throws some light on the incapacity

¹Rowe, C., Collage City, Cambridge, 1979, p. 77.
GRID AS ORGANIZER OF SPACE OCCUPIERS

Mies van der Rohe: ITT campus, Chicago, 1939

ENCLOSURE AS ENVIRONMENTAL MEMBRANE

Mies van der Rohe: Barcelona, German pavilion, 1929
of functionalism to respond to change, except by image, by detachable properties of architectural phenomena. Functionalism produced the single level or one-to-one reading of glove-enclosure for every particular functional diagram without a basic concern for formal structure. The whole story of Mies may be summarized by the following comment that he made about his ITT design: "...I put a grid over the whole campus; that was more a mechanical help. After that we had not to speculate where we put our columns. We put our columns on the crossing points of the grid, all the way through..."\textsuperscript{1} Destruction of enclosure as a definer of space may be derived from this canonize statement: form elaborated on the mechanic of grid that had nothing to do with the content, further reduced enclosure on replaceable elements. Therefore whatever flexibility and participation later meant, they entered the scene on the level of image through consumptive and replaceable elements, instead of through form itself. It is obvious that whatever Venturi may ascribe to the decorated shed and sign as communication, it is an unfortunate excuse for participation through the typology of signs that denies the possibility of creating places of socially different reality.

"To make commerical iconography and its dimensional hollowness become the most important carriers of cultural endeavor and expression is but a thinly veiled attempt to life narrow minded commerical imperialism onto a badly needed cultural pedestal."\textsuperscript{2}

This quotation brings us to the problem of Kitch and its causes, which are basically promoted by the idea of participation through image, as being equal to participation through consumption.

The integration of technology and science enabled industry to achieve a tremendous increase in productive power, and introduced a new dimension of marketing based on manipulative 'effective demands,' ignoring authentic urgency. Scientific marketing research, behavioral sciences, decision theory, psychology and medicine, are utilized in a huge need-stimulation industry that, in turn, provides a secure, stabilized, and status-symbol oriented consumption. Since the progressive shrinking of the capacity to experience pleasure generally results from adaptation to strong and ever stronger stimulus situations, it is not surprising that blase people are seeking new stimuli; this neophilia created by uncontrolled consumption applies to nearly all the relations to environmental objects that man is capable of forming. This phenomenon is the basis of the mass-producer's success in indoctrinating people through mass-media in necessity of ownership of goods as representative of status. The actual user-needs of those who cannot demand effectively enough are consciously eliminated, - a state of affairs that causes not so much their material misery, as a cultural one through a growing alienation.

"The elusive signification of a social status and the very frustration of what it promises, are the central

functions of a Kitch-object. Instead of satisfying the senses, it merely satisfies the instinct for beauty and social position. Thus Kitch is fulfilling its economical function to increase consumption and ease production. The delaying of satisfaction and the necessary basis for this apparently unceasing cycle of industrial production and consumption. The frustration caused by this superficial consumption is only relieved by a ritualized chain of trivial improvements."

And it is Kitch which must be identified as the most important general cultural phenomenon of the industrial age, as the real Zeitgeist of the machine age. "Kitch is no styles and all styles at once:" it is ugly because its function is not to be beautiful but to represent beauty, replace and signify the beauty to imply a desired status.

A growing alienation that results from the division of labor as two faces of industrialization produced existential misery to such an extreme, that people resist less and less its total exploitation of consumption as fuel for the cycle. In order to 'survive' in a technocratic, competitive and consumerist society, man's individual being, or 'inner self' as R.D. Lang stated, is seen only through fantasy, dream, or imagination. The social being, or 'outer self,' the person's active personality, his 'false self-system,' mechanically participates in society so that that person feels no need to attack or destroy an alien reality within themselves: the person's well-exercised social being engulfs his total system

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and he loses his critical personality. Real possibilities for him to spontaneously manifest in action his individual definition of who or what he wishes to be, cease to exist. For the middle-class consumer mentality, a few status-symbols, such as car, job mobility, possession of land or house, and the ideology of free choice, replace the complex consciousness of his existential cultural and political misery.

New "stability oriented" (read stability in pejorative sense) planning and intervention methods for city-society become the most important element at all social and technical levels: accordingly, the new technological utopia of urban planning cannot be understood to be simply an organizer of urban functions (the production, distribution, and consumption of goods, energy, information, and people - a devastatingly complete definition), or simply planners of a better environment. In this they labor under the illusion that their plans are somewhat autonomous and effective, having methodological apparatus for scientific prediction behind them.

"For the predicament of architecture - which, because it is always, in some way or another, concerned with amelioration, by some standard, however dimly perceived, of making things better, with how things ought to be, is always hopelessly involved with value judgements - can never be scientifically resolved, at least of all in terms of any simple empirical theory of 'facts.' And if this is the case with reference to architecture, then, in relation to urbanism (which is not even concerned in making things stand up) the question of any scientific resolution of its problem can only become
more acute. For, if the notion of a 'final' solution through a definitive accumulation of all data is, evidently, an epistemological chimera, if certain aspects of information will invariably remain undiscriminated or undisclosed, and if the rates of change and obsolescence, then here and now, it surely might be possible to assert that the prospects of scientific city planning should, in reality, be regarded as equivalent to the prospect of scientific politics...

...For, if the planning can barely be more scientific than the political society of which it forms an agency, in the case of neither politics nor planning can there be sufficient information acquired before action becomes necessary."

Therefore, Modern architecture has marked out its own fate by making itself the carrier of rationalization by which participation is concerned with advertising, instead of with form as symbol of typological order of building and spaces that are understood as a cultural core around which the individual and community build their reality.

"The profound human alienation of the industrial division of labor finds in zoning an adequate urban form. Movement and speed become the instrument for the necessary ritualization of an otherwise unacceptable way of life. The following quotations of Le Corbusier's Urbanisme (1928) give an almost poetic description to this dehumanized of modern rites:

'L'heure du travail
-Nine o'clock in the morning

From its four vomitoria, each 250 mile wide station is spewing out the commuters brough by the trains from the

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Rowe, C., Collage City, Cambridge, 1979, p. 105.
HORIZONTAL EGALITARIANISM
OF POLITIC OF ZONONG
suburbs. As by a continuous (one way) movement these have been following closely each minute.

-Speed is not a matter of dreams, speed is a brutal necessity...why neglect the times of the shepherds.

-Little time after midday, the deed is done. The city will empty itself as by a deep aspiration of its underground. The life of the garden-cities will deploy its 'effects' (L'Urbanisme, p. 171-183 L'heure du travail).

Therefore we can introduce now Le Corbusier's 'Vitruvian Figure,' taken from his Modulor; there he stand, noble-savage equipped with machine productible, standardized objects that correspond to his average measurements of homo-type; it ultimately pushed design to the single meaning of merchandise, and our cultural intentions close to that too, and it produced a state of affairs in which scientism and technological idolatry turned people into a problem of architecture, not fitting in its schemate, neither responding to its political urban imagery, nor submerging to the Zeitgeist of machine a habiter.

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FROM A BUILDING AS A 'PLANT'
TO THE CITY AS A 'CYBORG'
INTERLUDE: EXPERIMENT WITH FUTURE

Form reduced to the enclosure needed only the invention of the free-plan as a device for total destruction of formal capacity for distortion. Early indications that industrial production of building will use this new device to ease consumption of architecture not only on the level of external appearance of styles, but also on an internal level of plan, became the underlying notion of a new typology. Type became evolutive object inherent to the process of machine production; it is a literally translated abstract Model, represented by prime geometry, suitable for machine production and obscured by cultural impotence of rationalism based on doing without thinking. Ideal abstract type needed an ideal site and the Neo-classicist desire for platonic solid as qualitative accent in the city became a nightmare of quantitative industrial production of formal monotony. Nothing new was discovered in what is supposed to be regarded as a Revolution in architecture in this century, except for trivial technological and functional improvements. This is even more obvious if we remember how the idea of infinite, floating, abstract space of the Modern city is only a sad recalling of Baroque tendency of form to disappear; while in Baroque and Neo-classicism this was only indicated within a clear corresponding formal frame, asking additional speculative effort of the observer search for meanings, in the Modern city it was actually done, thanks to a complete misunderstanding of tension between abstract concept and reality of architectural form, producing
meaningless space, object and city.

By postulating separations of functions within the city by separation of object from texture, the politics of zoning clearly expressed a desire for control of relations within society by isolating their constituent elements. Zoning aiming at such a control, not only invented the artificial problem of transportation but produced disastrous effects on both the public and private realm, leaving monuments of civil engineering as its momento. Consequently postulating the solitude of object, architectural form lost capacity for distortion, layers of multiple meaning, and produced monotony, alienation and cultural frustration embodied in Kitch. The complete disintegration of formal patterns of the traditional city can be described only as a result of blind spot effect due to the political implications of technocratic expectations, or even worse to the absolute inadequacy of architectural education in the last fifty years, that completely destroyed cultural sensitivity of its future protagonists in dialectical dialogue about architecture and the city.

In the first two typologies we can identify the following as a common basis: architecture tries to justify its premises as a natural phenomenon referring directly to nature, or to the analogy that corresponds with development of the production process itself. Such a cultural, and political model, was based on a rationalist belief in the premise that form of the environment might, as nature herself, affect and hereby control the individual and collective relations of man. Both theses typologies
were firm in their belief that natural sciences and technological progress represent the most progressive expression of the time, and that the mission of architecture is to imitate a non-existent cultural model, where progress was mistaken for culture, production of goods, information, or architecture for expression of relations in society that underlies this production. By this architecture was unable to explore its own exclusive medium, architectural form, as expression of real social content, of cultural dialectic.

This cultural destruction and the problem of dialectic we are imposing, raised the issue of typology once more. Type should not search for its justification outside architecture, but within architecture as an expression of both the individual and collective realm. The fundamental difference of this approach is in the replacement of reference outside architecture as a justification of method, with reference addressing the ambiguity of relations involved in architectural production itself. There is no abstract nature, no technological utopia that architecture should imitate: there is only architectural history and culture of cities as an encyclopedia of types, artifacts accumulated over time, that should be the locus of our concern. Although new typology is based on reason and taxonomy, it claims only a rational basis for theoretical discourse in which the art of building can enter its own intelligence and offer a different cultural reality than that of the urban planner, and this is a valuable alternative for dialectical critique, as far as our cultural preference is concerned.
Therefore the idea of Model as abstract reference, and its concrete real implementation as Type, that appears through distortion of a particular phenomenal site, must be understood with its full dialectical potential. By this we should consequently oppose to the abstract Space with reality of Place, to the concept of Time with notion of Occasion or Event, and to the abstract category of Urban Space with the architectural vocabulary of formal elements understood as types, Street, Square and Block. And thanks to the rediscovery of Quarter by Leon Krier we will even oppose the diagram of Zone, where scale will oppose distance. Expression of density of uses and, therefore relations, and therefore cultural intentions, opposes the alienation and segregation, and therefore false artificiality of the automobile garden-city.

And we can finally elaborate the idea of particular tension that exists "in-between" Model and its coming into being as Type, the distortion as dialectical method, that offers a potent frame for cultural discussion about symbolism as multiple layers of meaning that are welcomed precisely because "within clearly defined formal frame anything is possible." The solution of new Rationalist Typology is variety of Methods, offering cultural diversiety of unlimited formal relations, as long as they remain an expression of relations of a particular culture of a particular society. It is in the cultural mission of architecture, building places for occasions, where new social content can find adequate procenium for its continuous existence and rediscovery.
CHAPTER 4:  CITY AS A MEMORY: The Intelligence of History

The City, according to the philosophers, is a kind of large house which, conversely is itself a small City...

-Leon Batista Alberti, 1452

...Besides, rereading, not reading is what counts. Printing - which is now abolished, since it tended to multiply unnecessary text to the point of dizziness - was one of the man's worst evils.

-Borges: Utopia of a Tired Man

In these two quotations one may discover metaphors of both architectural twin-phenomena and simplicity of technological waste. There are five centuries between these two thoughts and it is this "in-between" that we have to reconsider.

It is false to assume that architecture is not an experiment: it always has been. But the question is to what our experiments should refer. Modern architecture proposed to experiment with the future; it took fifty years of immense material and human expense to prove the failure of the hypothesis that built its experiments without the ability to establish constant and variable ingredients, ever changing and never profiting from its stages. Such an experiment, split apart by the schizophrenic mechanism of deterministic thinking produced both time and space that remained frozen abstractions. In an attempt to be scientific, architects never learned what scientific thinking was, and handicapped by a lack of creativity they were easily
indoctrinated, as we discussed earlier. They mirrored their own confusion in the green inferno of stochastic spaces, in which our bodies may survive the essential joys to which the modern city was assigned, but our intellect, lowered to that of yet another noble-savage, may not survive culturally. We may ask ourselves: is it true that what nature is to things, history is to man? And because we built our argument on this hypothesis we may then proceed and ask: if yes, what happened to our memory, to collective memory of the city and architecture?

If we are different from nature because of memory, our consciousness about the past on which to proceed and elaborate future ideas, then architectural history is the only field in which our present formal problems may find their negative judgement. Having insight to its past achievements architecture may easily discover an immense number of potential solutions never dealt with before, only if 'form' as a medium of architecture is regarded as a constant entity from which transformational qualities may replace the glowe-syndrom of clothing the bubble-diagram dealt with in functionalist and structuralist hypocrisy of plan and section. Therefore it is the history of formal patterns and transformations where our experiment can find its 'negative judgement' with no material or human expense, only with a substantial intellectual effort, in avoidance of literal translations. We may carry this argument further, disconnecting industry as a determinant factor in the production of forms, because the driving force behind industry is profit, and the
capacity of the machine is far more than production of yet another machine. We may disconnect ourselves even from the strange moral notion of machine esthetics because it is as amoral to produce handmade objects that look like machine-made as it is the reverse. For both it is only a question of arbitrariness in our approach to aesthetics and designation.

The meaning for every particular type is in its transformative characteristic through distortion of the 'phenomenal site,' and it derives its quality from the dialectic of urban twin phenomena: private and public, present and past, and the morphology of solid and void. It is in principles derived from this formal relationship rather than treating them as sentimental motifs which leads us back to the formalist historicism and stylistic regionalism, where typology begins to exercise its distinction between the model and the type. We may refer back to Durand and de Quincy in search for this principle: for both of them model and type are distinctive entities, model as an abstract concept and type as a translation of model into a particular context; type is therefore never literally translated and always generative _de jure_ and distorted _de facto_.

We have analyzed the city on the basis of two formal concepts, "...and in terms of figure-ground the debate which is here postulated between solid and void is a debate between two models and, succinctly these may be typified as acropolis and forum."\(^1\)

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1 Rowe, C., _Collage City_, Cambridge, 1979.
ACROPOLIS AND FORUM

(PATTERN OF SPACE OCUPIERS)

(PATTERN OF SPACE DEFINERS)
On the other hand we have discussed formal structure as composition in terms of two systems, baroque and neo-classical. The question now is what kind of alternative may appear from the introduction of dialectic that will result from the overlapping of both principles, in which building and spaces exist as equally important formal discourse. A debate in which the elements of mannerist formal hierarchy are challenged by neo-classical individualism, but where only the "in-between" offer a potential for process, extremes being finite variants of the past.

To discuss the problem of 'urban space' we must analyze the possibilities for its definition: if we have lost its traditional understanding within the urban structure, does that mean that we have destroyed the structure? If, based on functionalist premises such a structure does not exist, with what can we replace it? And finally, if neither are true, what can we do to recall not only functions, but symbolic meaning and cultural quality in what was known as urban space?

Obviously, functional demands imposed by transportation and urban hygiene, abstract connection of separated objects where a continuum of urban space is exchanged for the sake of one of its functions. Consequently the meaning of street and square as an articulated void disappeared, and a stochastic space prevailed. The problem is that this separate function had not influenced our behavior to the extent that was expected, such as not having a need for physical continuum of urban fabric, not having a need for all functions that the street and square were spatially
1971. L. Krier: Lienfelden
Structure of public spaces
1748. L.B. Noli, Plan of Rome
defining: these function were simply translated through the imposed necessity of one. This translation of similar functions in other spatial relationships is what neither corresponds with functionalist doctrine, concerning each separate function, nor can be approved by a structuralist approach that tries to avoid reductionism on any functional levels involved.

The traditional meaning of urban space therefore is the result of the perfection of functions, and a consequent utilization of certain formal relationships, that cannot be dismissed by any means; particularly because not only as cultural continuum, but also as functional demand even in its narrow sense, urban space still holds all functions that it had held for centuries. The translation of speed into distance, the exchange of the concept of space for the concept of time is, therefore, a deterministic level on which all other functions of the city can hardly participate.

Therefore we may introduce a completely different terminology that should clarify the difference between abstract concept and its materialization: we may exchange the abstract category of space for the reality of place. We may also replace the definition of phenomena in architecture with a more appropriate one, that of event or occasion. Although such a debate seems to be no more than an academic exercise, it does not look quite as simple when we consider architecture as a kind of 'cybernetic organism:' indeed, without too much speculation, objects of architecture in our memory are places, and their
phenomenal structure consists of events or occasions, if we agree that we are the subject as well as the object of architecture. For, if we proceed with the metaphor of carving into a solid as opposed to the functionalist addition of solids into an empty field, we may easily recognize once again the architectural discourse of the past as being still very much alive and valid. Particularly the problem of facade and wall that are the marginal area of what was described as the "ambiguity of enclosure" in which public/private, front/rear, solid/void, city (as street or square)/house, etc., may recall all the richness that cultural layers of meaning in our memory can discover, not to mention all the misinterpretations of functional usefulness of 'old' models. It is not incidental that the building as object lost its identity and meaning by losing its surrounding of other buildings: it is in a particular formal sequence where order exists, that perception of form is permitted in whatever manner our connotations require. Contrary to the atomist approach, subjectivity as a quality of building, exists only in opposition to another building, therefore only a continuous fabric allows such a recognition. Therefore, the only valid cultural, aesthetical, and even functional criteria, is that of interference and collision, - the "in-between" which is artificial and may, or may not, allow nature to rupture our solids. The formal pattern known as 'free-plan' does not have the capacity for such control, while formal pattern as a result of carving into a solid, has a capacity of such control.
Type as Dialectical Elements

"The 'Art of Building cities' has to find its way into legislation. The complex architectural scheme, precise types of urban space (STREETS, AVENUES, SQUARES, ARCADES, COLONNADES) will have to replace the two-dimensional zoning spaces. A functionally complex and visually simple spatial continuum has to replace the contemporary system of disintegrated functions and buildings... The method we are slowly elaborating is both precise enough to create built and spatial continuity and general enough to allow great functional flexibility and change. It is a method where time and memory become part of a dialectical composition."¹

At this point the question emerges: if we agree that such a critique of quantitative schemata on which modern urbanism is based exhaustively describes the political and cultural manipulation of established methodology, what is the political and cultural bias of the new Rationalist approach? We mentioned earlier false participation through imagery as consumption, as a desperate attempt to hide behind vox populi. For a new formal typology the whole theme is centered around a reintroduction of the city as a polis, as a democratic instrument, as political forum for collective decision making. The form of the public realm, therefore is the prime concern, and public realm is a finite, unitarian, rational space. "PLACE becomes here the LIEU where the individual identifies himself as a being with full cultural and political responsibility."² The city is an

¹Krier, L. "Quartier Versus Zone," A + U, 77:11, p. 75.
²Ibid, p. 75.
agreement between individuals to share places and occasions. And if there is any doubt about the nature of this agreement, we have to refer to the nature of the medium again. As printed work and electronic media released architecture from the role of the 'social book' into its own autonomous and specialized domaine, architecture no longer writes history nor refers to a hypothetical society, making people better, but refers strictly and exclusively to the dialectical relations between the public and individual in which exchange may be only defined on both a political and cultural level.

"...A coherent Marxist criticism of the ideology of architecture and urbanism could not but demistify the contingent and historical realities devoid of objectivity and universality, that are hidden behind the unifying terms of art, architecture and the city...

"...what is of greater interest to us here is to inquire how it is possible that up to now Marxist inspired culture has, with the care and insistence that it could better employ elsewhere guiltily denied or covered up the simple truth. This truth is, that just as there cannot exist a class political economy, but only a class criticism of political economy, so too there cannot be founded a class aesthetic art or architecture, but only a class criticism of the aesthetic of art, of architecture, of city itself...!"¹

This brings us to the problem of the socialist city. Form, by our definition, is not a determinant factor for the emergence of a good society. Instead, form is purely an expression of relations between members and institutions of that society, and

therefore a service to the society. All artistic attempts to mask the nonexistent political participation on a full scale resulted in Kitch, because the giving up of styles without resolving the contradictions at the ideological level, left culture in vacuum that could only produce Kitch as expression of profit-oriented industry. Therefore Kitch was described in our analysis as the most general cultural phenomenon of modern architecture and art.

"It is here interesting to note that the debate on socialist realism in the U.S.S.R. in the early thirties was not concerned with the organisation of production - this problem was merely left to technicians leaving aside the workers - but in a paternalistic way with STYLE. In 'Proletarian Culture in China,' Fei Ling has demonstrated in how fare the fulgurant visions of the Constructivists and the prefabricated Renaissance facades of Schuschev were part of the same revisionist process. If in the nineteenth century industrialisation could still be seen as a necessary condition for the liberation of mankind, the fading myth of technical progress is now causing a qualitative change in the nature of class struggle..."1

Let us elaborate this idea further. Obviously, all the pompous attempts of producing architectural meaning without a very clear political program, as a critique of certain cultural models and their translations into a new social context, are pure cultural travesty. If Kitch is one of the results of the alienation of intellectual and manual labor, of the social division of labor, the problem of socialist realism or any other

socialist cultural models, cannot merely be discussed on a level of form, style or even content. Translated in the language of architecture, this dialogue must center on the question of how a dignified socialist mode of production will affect the form of architecture as an essential expression and symbol of political consciousness and participation in decision-making on all levels of society. Consequently, the only real cultural task, as a result of such a political program, seems to be for architecture to express such a society in the form and design of the PUBLIC REALM. In such a situation, PRIVATE realm, or the individual is not the subject of manipulative control, because such control does not exist in dialectical relations where the individual controls both the public and individual realm.

The politics of zoning, separation of functions, impossibility of human communication, assassination of popular culture based upon tradition, cultural travesty and Kitch-object, has to be condemned as a pure expression of relations in society that cannot be those of a socialist city. On the contrary, density of functions, human communications, public places for constant political action, the public realm of the socialist city, is the task for new reorganized urbanism based on qualitative schemata, and the traditional value of city as a polis. If we propose as a political choice, a dialectic of the dynamic urban culture as against conservatism and reactionary 'culture' of zoning,
Another proposals suggest dissolving the city altogether. This idea is based on a proposal made by Bruno Taut... under the slogan: "The Land as the Good Life"...

... The linear city is structured in such a way that industry-evolving on the basis of internal organisation- is arranged in a linear manner with a parallel residential development, both separated by a green belt a few hundred meters wide...

... as soon as the spaces separating the individual industrial sectors and their corresponding residential districts become very broad, the linear city actually changes into the last form... the satellite city..."
this has to be seen as an integral part of a democratic and socialist vision of society.
Typological elements of urban space

The street and the square represent the only and necessary model for the reconstruction of a PUBLIC REALM. In this context we also stress the necessary dialectical relationship of BUILDING TYPOLOGY and MORPHOLOGY OF URBAN SPACE and inside that dialectic, THE CORRECT RELATIONSHIP OF MONUMENTS (public buildings) AND THE MORE ANONYMOUS URBAN FABRIC (building for private use).

Leo Krier

The building block as a complex typological construction forms the basic elements of the urban composition and urban pattern.

The degree of urbanity of a spatial pattern can be measured primarily in the frequency of streets and squares. This frequency depends directly upon the size of the building block as a space definer.

Two basic types of urban space are formally defined by building block, and function or scale do not affect the constitution of types, but only their morphological distortion.

Therefore there are three basic modes of constitution of urban pattern and space are possible.
The blocks are result of a street and square pattern...

The streets and squares are the result of the position of blocks...

The streets and squares are precise spatial types. The block is a result.
In formulating a typology of urban space spatial forms and their derivates may be divided into three main groups according to the geometrical pattern of their ground plan, FORMAL MODEL: these groups are derived from the square, the circle, and the triangle.

**PROBLEM OF FORMAL MODEL**

Typological models of urban space derived from basic geometrical models are not affected by scale or function.

Problem of TYPOLOGICAL MODEL is that of a concept.

**PROBLEM OF TYPOLOGICAL MODEL**

However, function and scale are defining distortional principles and modulation that can affect typological series to the extent of the establishment of a new typological models.

**PROBLEM OF DISTORTION**
We may summarise the morphological classification of urban spaces as follows:
The three basic FORMAL MODELS (square, circle, and triangle) are affected by the following modulating factors: angling, segmentation, addition merging, overlapping or amalgamation, and distortion.

These modulating factors can produce geometrically regular or irregular results on all spatial types. At the same time, the large number of possible building sections influences the quality of the space at all stages of modulation.

The terms 'closed' and 'open' may be applied to all spatial forms described up to now: ie, spaces which are completely or partially surrounded by buildings....
<table>
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Orthogonal Plans for Squares with Central Building

Open Squares with Buildings Introduced

Spaces Angled, Divided, Added to, Superimposed
Circuses

Buildings in Circuses, Modulations of Circuses

Combinations of Different Types of Circus
Large-Scale Composite Plans

70
After R. Krier's "Typological and Morphological Elements of The Concept of Urban Space"
The idea of the Quarter as a place where this 'new social content' (inevitably Marxist for L. Krier) should find its occasion is based on several important principles. The first, and most important principle is a dispersion of functions:

"By re-integrating all the activities and functions of urban life, work, leisure, living, etc., into the Quarters of the periphery, daily communication between centre and periphery will become gradually eliminated... The exchange of relationships (cultural, economic, social) will be intensified within the Quarter, thereby satisfying the majority of daily or periodical needs. Public traffic, as well as private, will be reduced to only what is essential, unavoidable, or agreeable."¹

This simple causal exercise does not pretend to be a new functional formula: the truth is that there is a need for the automobile within the 'city walls,' and it is also true that this 'animal' brought another dimension of wilderness into our cities-parks and historical city-structures. The problem is the limitation of unnecessary transport, of unnecessary distance, of an artificial division of function which requires enormous traffic congestion and a corresponding landscape of civil engineering monuments. As opposed to the speed/distance concept of Ville Radieuse that we discussed earlier, the problem of scale is imposed, or reintroduced. There is no one single reason beyond 'horizontal egalitarianism' that, proved to be politically

and culturally violent, that the city should sprawl for the sake of the automobile: the dimension of the Quarter is therefore based on daily walking habits of its citizens and necessary communication within the community.

"In opposition to the purely quantitative prescriptions of functionalist town planning, density, use, etc., we propose a qualitative method which has been drawn from the analysis of the physical and social sizes of urban Quarters all over Europe and at different periods in history. We are thus able to quantify the quality of an urban pattern as expressed within a limited social community (and which never exceeds 35ha) by the number of public functions and squares, the number of streets and their length and the number of blocks."1

The formal typology represented here is therefore a qualitative element by which a distinction between different Quarters is made: on the contrary in the zoning technique, the city is a federation of communities dissolved into separate cities for sleeping, working, culture, and consumption, artificially linked by public and private transportation. To eliminate this determinist error, the fundamental technique of morphological intervention into an existing structure is introduced. It offers a new focus and provides new space for the density of new functions dispersed from eliminated specialist cities in which housing must, consequently, be introduced to achieve a similar mode of mixed use.

The examples that are discussed here can be divided into two categories: first, carving into old suburban structure,
blocks or irregular but relatively continuous formal patterns; second, the addition of formal elements to the point of congestion, into a stochastic cities of post World War II urbanism to achieve a continuous formal structure.
The city of dialectical meaning takes us back to the theme of Rowe's *Collage City*. The problem is how to describe collage as technique. We need to return to Cubism, to the point where relations were replaced by objects, where Purist object-object replaced the picture with subject matter, presuming a cultural reference that refused to respond, simply because when Cubism proposed a new vision of old things, Purism proposed a new vision of new things. As aesthetical discussion, and as a question of relationship, collage prefers both/and, while object prefers either/or. Can we therefore, reestablish reference to both/and by presuming that the metaphor of carving into a solid as opposed to the idea of adding into a void, can express a change in attitude from a single-platform of object and functionalist plan, to a multi-platform of formal type and ambiguity of collage?

Collage and the architect's conscience, collage as technique and collage as state of mind: Levi-Strauss tells us that "the intermittent fashion for collages originating when craftsmanship was dying could not... by anything but the transposition of 'bricollage' into the realms of contemplation," and, if the twentieth century architect has been the reverse of willing to think of himself as 'bricoleur' it is in this context that one must also place his frigidity in relation to major twentieth century discovery."¹

But how can 'bricollage' represent a method, when science or engineering cannot? It cannot: collage implies more than

¹Rowe, C., *Collage City*, Cambridge, 1979, p. 139.
one type of knowledge and operates on their dialectic as a postulate. "Simply, the scientist and 'bricoleur' are to be distinguished 'by the inverse functions which they assign to event and structures as means and ends, the scientist creating events...by means of structures, and the 'bricoleur' creating structures by means of events."¹ Therefore they have to be regarded as being necessarily coexistent and complementary conditions of the mind. "The savage mind of the bricoleur" as opposed to the "domesticated mind of engineer/scientist" produced something as an artist or architect who operate in a margin of "in-between." We are finally willing to admit the methods of science and 'bricollage' as concomitant propensities, and that "in reestablishing 'bricollage' alongside science, it might even be possible to suppose that the way for a truly useful future dialectic could be prepared."¹

A collage technique, for Colin Rowe, "by intention if not by definition, insist upon the centrality of just such a balancing act." Therefore it should be discussed as a parallel to the problem of formal typology, as design should be discussed as a parallel to urban planning and never separated from it. If for urban typology Leon Krier's Cities Within the City" was a perfect example, for the technique of collage it would be Stirling's sequence of projects for museums in Germany.

"Stirling uses a wrap-around nineteenth century facade on one side to fit into the context, and crumbles it away on the other side, thus indicating a knowing patiche.

¹ Rowe, C., Collage City, Cambridge, 1979, p. 140.
He pulls the pedestrian route from the more dense urban fabric into a circular court and then invests this, dialectically, into a square object (the ground has become figure, the circle squared). This pronounced object is then inflected on its podium to acknowledge the major city axis and act as a focusing monument—becoming thereby one more in a neighborhood group.¹

If it is obvious that a neo-classical reference to Schinkel, mixed with some of the monumentality of Speer, is combined with the notion of 'promenade' at its best, and the poche creates a crescendo of voids supported by the immense richness of enclosure, then there is the architect "acting with the kind of sensitivity toward the historical context one would expect of a traditionalist, with the freshness and investment of a Renaissance" master."²

This notion obviously has nothing to do with the stylistic characteristic of the period but with the unity of parts and the whole which the Renaissance was able to elaborate with so much intellectual freedom. Here the technique is truly a reaction against vulgar technocratic functionalism, and it became a question of getting away from the abstraction in order to return to the reality of things themselves.

"The character of the environment derives from the nature of things," stated Norberg-Schulz in his *Genius Loci*. Thus we return to the old question of articulation. We can compare Boullee and Aldo van Eyck: for both form is talking through enclosure as a door-step to both individual and collective realms.

²Ibid.
Wallraf-Richartz Museum, Cologne

Staatsgalerie, Stuttgart
analytical drawings showing different relationships between selected elements of the design

Museum for Northrime Westphalia, Dusseldorf
and for both art is the very nature of doing things, a creative departure from the tricks of nature. And we may even go a step further and recall Blondel's confusion of formality and practicality, but the problem remains the same, one of a continuous dialogue of opposite intentions. The question "But, building as infill?" that Rowe asks, which looks like heresy to the inverted logic of the natural/mechanical vision of *urbis et orbis*, seems to be a much more sophisticated metaphor if we remember that built form indeed opposes nature. Therefore the idea of carving which articulates a rupture of our solids, and exercises the only effective control over the nature, may be a model for a number of 'methods' that are elaborating its value-systems from its phenomenal site, that are redefining the idea of formal type as a utilized cultural instrument, that are opposed to instruments of progressivism, therefore preparing benefits for both. And if there is no Modern City built yet, there should be no Collage City, Analogous City, Strip City, or any other city that is a result of "unnecessary printing," but that is a result of a re-reading of a diversity of phenomenal structures. "The function of architecture is not, and never has been, to take one's breath: it exists to create a built environment which is habitable, agreeable, beautiful, elegant and solid" and there is nothing more to be said about the city either: no technological panacea, no singular method, nor general will could create a city as treasury of memory, and if there is the future, instead of the present, to which one should refer, then it has to be through recognition
of a cultural past, because "things without past are things without future."

To evaluate re-reading as something that bridges the metaphorical gap between the mirror and the encyclopedia, we may conclude with Aldo Rossi's definition of city that originated from the re-reading of his book L'architettura della Città:

"...What matters to me is to restate the sense of freedom of the things we do; a freedom which is all the greater when tried by concrete truth or when it springs creatively from it...
"...Between past and present, reality and imagination, the analogous city is perhaps simply a city to be designed day by day, tackling problems and overcoming them, with a reasonable certainty that things will ultimately be better."1

This sharp hypothesis that modern architecture, or the modern city, "which is in any case the same thing," does not exist as a category is confronted with the problems with which to make our comparison. Precisely because the city must be dealt with each time, by gathering and developing its contradictions, day by day, directly, the story of 'Piani Regolatori,' this most devastating quasi-methodological instrument for the destruction of the phenomenology of city may be 'honored' by this brilliant piece on the exactitude of science:

"...In that Empire, the craft of Catography attained such Perfection that the Map of a Single province covered the space of an entire city, and the Map of the Empire itself, an entire Province. In the course of Time, these Extensive maps were found somehow wanting, and so the College of Cartographers evolved a Map

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of the Empire that was of the same Scale as the Empire and that coincided with it point for point. Less attentive to the Study of Cartography, succeeding Generations came to judge a map of such Magnitude cumbersome, and, without Irreverence, they abandoned it to the Rigours of sun and rain. In the western deserts, tattered fragments of the Map are still to be found, sheltering an occasional beast or beggar; in the whole Nation, no other relic is left of the Discipline of Geography.\textsuperscript{1}

It must be obvious, that because our preferences are of Marxist origin, they do not exclude any of the potential that culture offers to provide us with dialectical critique: for if we prefer ambiguous to the plain, fox to the hedgehog, if we think of Mannerism by talking Modernism, and if we describe the city a a cultural history that has political bias, and if we prefer synthesis of opposites rather than prescription of extremes, then the dialectic of such a thought should have some kind of 'Vitruvian figure' by which it can be symbolized. And we did find in Esher's \textit{Belvedere} a representation of the total scope which this particular discussion tries to observe. The story we are trying to tell is that of a man sitting on the bench, confronted with two cubes: one being a plan of the cube, a drawing of form which cannot describe the ambiguity of formal discourse - two dimensional thinking about multi-dimensional phenomena; and the other, an "impossible cube" that cannot exist either through definition of plan, or through reality of form, and yet, it is there, real as only speculative mind can perceive

\textsuperscript{1}Borges, J.L., \textit{Universal History of Infamy}, p. 131.
M.C. Escher: Belvedere, 1958
it, showing its both/and inversion, and pushing our imagination far beyond its appearance. This, by our best knowledge and most honest intention, should be the symbol of architecture as we described it. And if such a symbol will allow an infinite number of quotations from metaphors of architectural history, then this conclusion can only benefit from its last quotation: because, "it may be that universal history is the history of the different intonations given to a handful of metaphors.

...Which is to say that, because collage is a method deriving its virtue from its irony, because it seems to be a technique for using things and simultaneously disbelieving in them, it is also a strategy which can allow utopia to be dealt with as image, to be dealt with in fragments without our having to accept it in toto, which is further to suggest that collage could even be a strategy which, by supporting the utopian illusion of changelessness and finality, might even fuel a reality of change, motion, action, and history.

Colin Rowe, Collage City
Space has no room, time not a moment for man. He is excluded.

In order to 'include' him - help his homecoming - he must be gathered into their meaning. (Man is the subject as well as the object of architecture).

Whatever space and time mean, place and occasion mean more.

For space in the image of man is place, and time in the image of man is occasion.

Aldo van Eyck