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# Type Theory

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Type Theory  
by  
Paris Akio Mood  
Presented to the Faculty of  
The College of Architecture at the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Master of Architecture  
Major: Architecture  
Under the Supervision of Professor Steve Hardy  
Lincoln, Nebraska  
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## Abstract

The concept of type and typology are at the heart of Architecture. Type is the simple act of drawing similarity and difference between a group of artifacts. Typology on the other hand is a bit more complicated. When one engages with typology, they are taking the information they gather from observing the artifacts and transposing it into a new context. Most designers and architects refer to this act as type/typology. The distinction between the two terms is necessary for my work. My work looks at the relationship between these two events. As a collective they are Type Theory.

With the emphasis of my work on Type Theory I set out to see if it was possible to translate type and typology into an open-ended process allowing variation and adaptability to occur.

I looked at the various works to see if I could draw similarity and difference between them. I discovered that similarity and difference do in fact exist but not on the surface level. One must dig beneath the surface and look at the complex logical arguments each of the authors employ.

By looking at the logical operations each author used I was able to put together a catalogue of different operations. These operations appeared to be the essence of a given work. Each author deployed these operations in some combination or another to construct their view of type and typology.

I found that the operations act as a filtering device for our perceptions. And this act of filtering (creating a unique disposition) occurs all over the discourse. Actively changing the way we see and perceive things is just a part of design as it is to know technical skills.

Since the operations are what determine a particular stance on type and typology I could, in theory, explore different combinations of these operations and see what kind of perspective they offer. I have only begun to touch the surface of this methodology.

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## Acknowledgments

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- Thank you all.



## Introduction

The topics of Type and Typology are two fragile and fickle things. By this I mean most intelligible discussion regarding the two have a high tendency to break down into a debate over interpretation of authors. This regression is due to the fact that the only real way to talk about the topic is from the point of view of a particular author (So and so has a such and such opinion on the notions of typology in the urban context). This makes the discussion of type and typology a balancing act making sure not to make any definitive claims about a particular author.

Despite this, my overall goal is to overcome this inherent disposition and put together a collection of musing about the notion of type and typology. Their function and operation come across as a complex network of logic processes. Because of this I focus on the logic of the author instead of the author directly. In some instances, it is incorrect of me to make a universal claim about the intent of an author. My claims are about logical processes that I observe within a work. In reality this a theory about theory.

The strategy of having a theory about the theories themselves is not a new approach. Madrazo's 1995 work 'The concept of Type in Architecture' was just that. An excerpt from Madrazo's work:

*"The purpose of this dissertation is to investigate the meaning of the concept of Type in the field of architectural theory. Even though the use of the term type by architectural theorists is a relatively recent phenomenon, which can be traced back to Quatremere de Quincy in the early nineteenth century, the idea of Type, as opposed to the explicit use of this term by theorists, has pervaded much of architectural theory ever since Vitruvius. In fact, many theorists have been concerned with issues which convey a notion of Type, like the origins of architectural form, the systematization of architectural knowledge and the understanding of the process of creativity." - (Madrazo 1995)*

His work aimed to flush out inherent inconsistency between authors. This strategy of restructuring information to provide new insight is what I am to do as well.

The prologue to this work is Professor Steve Hardy at the University of Nebraska Lincoln. His graduate seminar on typology dropped me into a world I was unfamiliar with but captivated by. We read various works and discussed them in class. One day in an attempt to make a joke I asked why we weren't simply reading 'The Typological Book on Typology'. With a serious look on his face he informed me that no such book existed.

As we moved through the works, I started to pick up on similarities between some of authors. I frequently brought this up in discussion. Having a background in Philosophy I was able to see how some of the works built off of others or deliberately departed from what had come before. In a simply sense if I could group the works into types I could, in theory, produce new ones within the same type category.

With that in mind I set out to scratch beneath the surface of the works I had and add more to my collection. This proved to be the first step in falling down a rabbit hole of typological obsession.

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Type Theory

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## Type, Typology, Type Theory

Throughout the years the concepts of 'type' and 'typology' have become interchangeable in everyday discussion. This is not correct, and leads to an unintended ambiguity within the discourse. Though, in most contexts they can be used to communicate the same thing (type in the broadest sense). Type and typology have a very specific difference that can lead to large implications when operating within the field of architecture. This subtle difference between the terms does not

seek to explore the origin of the words, but rather to communicate the two side of the paradox that is Type Theory in general.

Typology and Type appear to function on a spectrum - one side being that of analysis and the other being synthesis. This dual nature is what leads to the distinction between the two terms. Giulio Corio Argon hints at this dual nature in his work "On the Typology of Architecture" from 1962.

*"The conclusion must be that the typological and the inventive aspect of the creative process are continuous and interlaced- the inventive aspect being merely that of dealing with the demands of the actual historical situation by criticizing and overcoming past solutions deposited and synthesized schematically in the 'type'"* - Giulio Corio Argon (1962)

Type exists, according to Argan, as a purely abstracted entity. Because of its's abstracted nature it can shift along the spectrum between the creative and the analytical. The "Inventive Aspect" and the "Typological" capture these two sides. At its core type is centered around detecting similarity and difference between various entities. The way we recognize this similarity or difference is dependent on the context we are observing them within. To demonstrate the relevance of context on similarity distinctions I purpose a short thought experiment.

I ask you to imagine three objects in front of you. The first is a stool made of wood. The second is an encyclopedia. The third is a metal crate measuring three feet cubed. When presented with these three objects it is not clear how similarity can be drawn

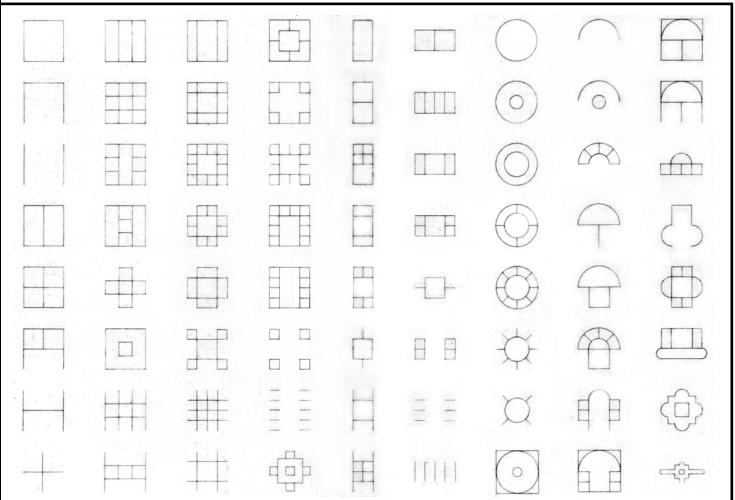


Figure 1

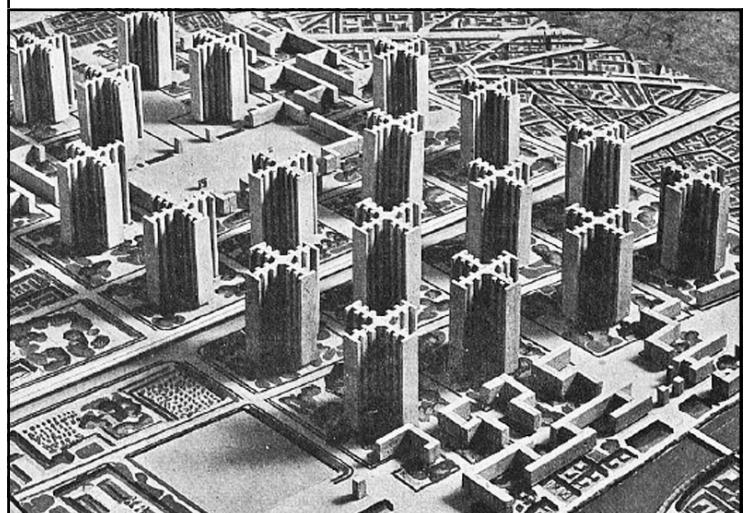


Figure 2

between them. But when presented with a context their similarity can clearly be seen.

Given these three objects if we were in need of a fire it is clear that the metal crate is the odd one out. The stool and the book can be used in making a fire. But when the context is not of combustible things but that of things to be sat upon the book is the one moved to the sidelines.

Granted, this thought experiment seems to rely on observable performance criteria. However, when applied to architecture it develops a wider field of view. Before you sit three different projects A, B, and C. All of which have an entry way of some kind. Given the context of an "entry way" or "ways of entering the building" we can draw similarities and difference among them by how this particular aspect is realized within each of the projects. A is more similar to B than A is to C. However, this statement is only true within the context of an "entry way" or "ways of entering the building". When projects A, B, and C are presented within a new context new similarities are formed.

The "Inventive Aspect" on the other hand deals with type as an abstracted element free of context. If we take the similarities and differences we have drawn from A, B, and C we can abstract them into an entity of their own free of context. It is this new entity Quatremere De Quincy recognizes in his work.

*"The word type presents less the image of a thing to copy or imitate completely, than the idea of an element which must itself serve as a rule for the model.... Therefore, one imitates nature by making as she makes, that is, not by repeating her work properly speaking, but by appropriating the principles that served as a rule for this work, in other words, her spirit, her intentions and her laws."* - Quatremere De Quincy (1785)

Type information can exist distinct from the models instantiating them. When he refers to "her spirit, her intentions and her laws." Quatremere recognizes that type can act as a guiding light in the design process. It guides our had as we make decisions.

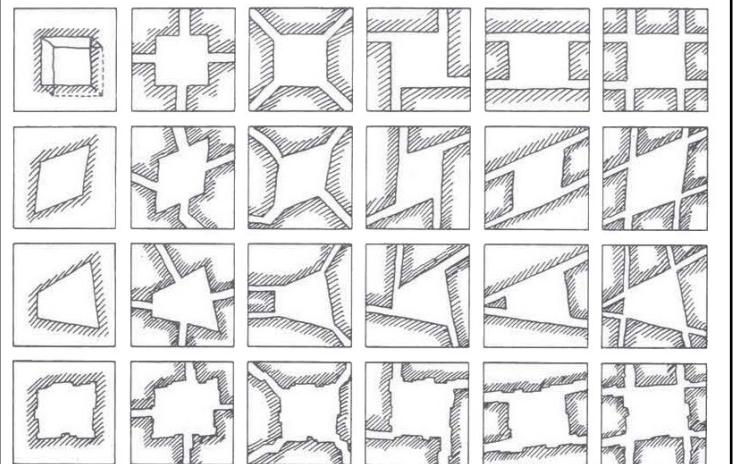


Figure 3

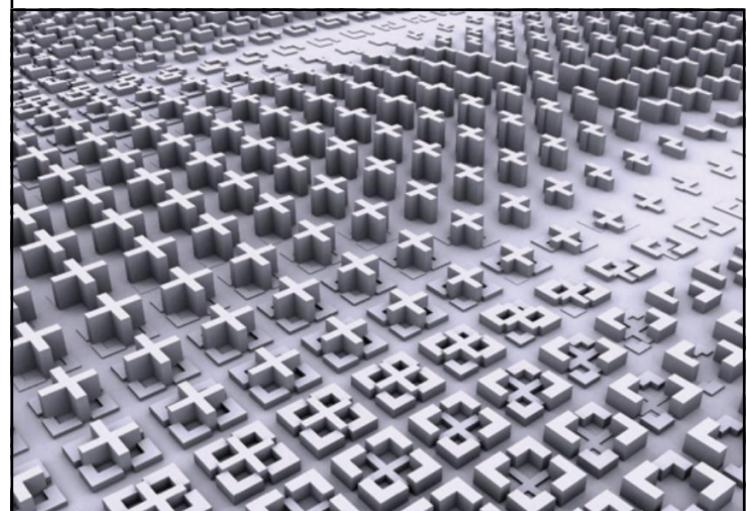


Figure 4

The next step in the process is taking this abstracted type knowledge and applying it to new contexts – “Inventive Aspect”. This event is talked about by Alan Colquhoun in 1981.

*'He is suggesting that the area of pure intuition must be based on a knowledge of past solutions applied to related problems, and that creation is a process of adapting forms derived either from past needs or from past aesthetic ideologies to the needs of the present.... One might postulate that the process of change is carried out, not by a process of reduction, but rather by a process of exclusion,"* - Alan Colquhoun (1981)

This “Knowledge of Past Solutions” refers to the same abstract type knowledge Quatremere De Quincy talked about back in 1785. When we form type knowledge from past solutions and apply them to a new context without first abstracting it, we are met with ill suited results. Colquhoun claims that “...creation is a process of adapting forms derived either from past needs or from past aesthetic ideologies to the needs of the present.” The process of adapting this past information and “excluding” it is the same as abstracting it into a realm without context and then reimagining it with the current context. When this process becomes systematic Typology is born.

The paradox these two concepts form is in relationship to the kinds of knowledge generated in the two instances - “a priori” knowledge vs “a posteriori” knowledge. When knowledge is formed “a posteriori” it is through direct experience. I can come to the conclusion that coffee tastes bitter by tasting it. “a priori” knowledge on the other hand is not dependent on empirical evidence but rather intuition and logic. This can be seen in the wide acceptance of function orientated typology.

I present you with a mysterious architectural project F and all I tell you about it is that this project is a school. Because we know “schools” operate in such and such way and have such and such things attributed to them we are able to form an idea about some of the particular aspects of this project. This ability to create an a priori understanding of this project is because of

the a priori type knowledge.

How does this a priori knowledge about schools come into being? This is due to the abstraction of type knowledge discovered a posteriori. This instance of a posteriori knowledge turning into a priori knowledge is the mystery at our feet. The blanket term Type Theory is used to refer to these two distinct concepts - Type (a posteriori) and Typology (a priori).

Having this distinction allows us to be discrete when talking about various things in Type Theory. For example, when I refer to the various "type structures" of different authors we now know it is distinct from "typology structures". Due to this it is more natural to refer to any form of discussion about type and typology as Type Theory.

If I have lost your attention by this point, I recommend you go read something significantly duller and arguably more important - Saul Kripke's 1980 work Naming and Necessity.

## Traditional Form of Study

Type Theory is the heart of my thesis. What does it mean to talk about type and typology as a union of two contradictory entities? How can we cut a cross section through all of the existing theories and really understand what type and typology are and how they operate?

In my quest to understand Type Theory I confided in the works of type theorists I grouped the works into two distinct groups. The first being theories that took a stance on how type and typology are structured. The second grouping is of works that talk about type and typology in general instead of providing an up-front account.

This method of study provided me with an understanding of each of the accounts as I moved from author to author. This method came with a draw back. Each author gave a radically different account of type and typology.

From Durand to Le Corbusier to Rob Krier to Chris Lee I was left with a bunch of different accounts using different terminology. This standard method gave me no way of knowing what the next chapter in type and typology would entail. The Nth Typology was a mystery.

No matter how hard I studied these works in this standard method it only allowed me to deepen my understanding of that author and how it is positioned to others. It does not provide us a way to understand what type and typology are outside of the limited scope of that single author. We see how type and typology function in one particular way one particular instance. If type and typology are as universal and primitive as we are led to believe there should be some form consistency. The way I was looking at the works was incorrect. We are unable to predict what a new theory would look like.

However, it seemed all was not lost. By looking at the second group of works (the ones about type and typology, that didn't give a specific account) I was able to piece together a complex relationship between the a posteriori aspects and the a priori ones. This connection implied the existence of logical devices connecting the two.

*"He is suggesting that the area of pure intuition must be based on a knowledge of past solutions applied to related problems, and that creation is a process of adapting forms derived either from past needs or from past aesthetic ideologies to the needs of the present." - Alan Colquhoun 1981*

Our ability to call upon past knowledge and abstract it into new forms implies that the driving force of our creativity in design is in fact logical operations.

Logic cannot be faked or construed. The answers to what type and typology are lie within the logic of each of the authors. This shift in study from the traditional method to a more cross-sectional study seemed promising. If it turns out that the various authors do in fact operate using a consistent form of logic then one could project and begin to understand what the Nth typology might look like.

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Account | Type

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## Evidence of Type Distinctions Within Typologies

How can a notion of types of typologies and a unifying theory connecting it all be conceived?". My aim is to isolate the individual parts of a given theory and draw similarities from the way the individual type structures operated. In order to understand what each of the authors are doing within their work I looked at the argument in its entirety and then looked at the individual things being talked about. [16] For example in Durand's work architecture exists as an entity comprised of many different parts. The advantage of looking at architecture in this way is that it becomes relatively easy to teach to people who know nothing about the complexities of the matter. In order to understand what architecture is we must break it into its parts. The organization of these parts rely on composition.

*"From this, once established, we shall naturally deduce the general principles of architecture; and once these are known, it will only remain for us to apply them, to the objects that architecture uses, that is, the elements of buildings; to the combination of these elements, in other words, composition in general; and to the alliance of these combinations in the composition of a specific building."* – Durand (1795)

This passage from Durand tells us a few things. First that the act of breaking something into pieces is a step within his logical process [fig 1]. "to the objects that architecture uses, that is, the elements of buildings" (Durand) Deconstruction can be understood as a Logical Device. "to the combination of these elements, in other words, composition in general;" (Durand)

Architecture has been broken down even further. It is not just the combination of elements that make up architecture [fig. 2] – it is also the larger members that contribute to composition. Within this work the act of deconstruction has occurred twice. There is still one more logical operation within his work here there is a new kind of information being filtered.

*"Four axes may be so disposed as to form a square.... There is nothing to prevent our dividing a square in two with a new axis, either in one direction or the other.... From*

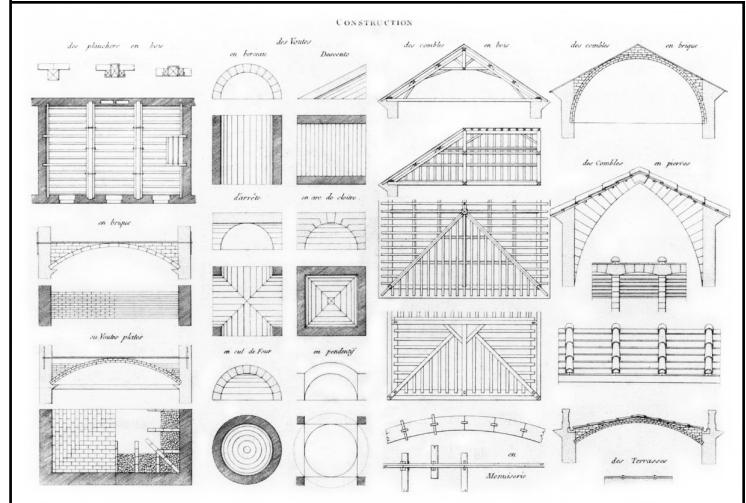


Figure 1

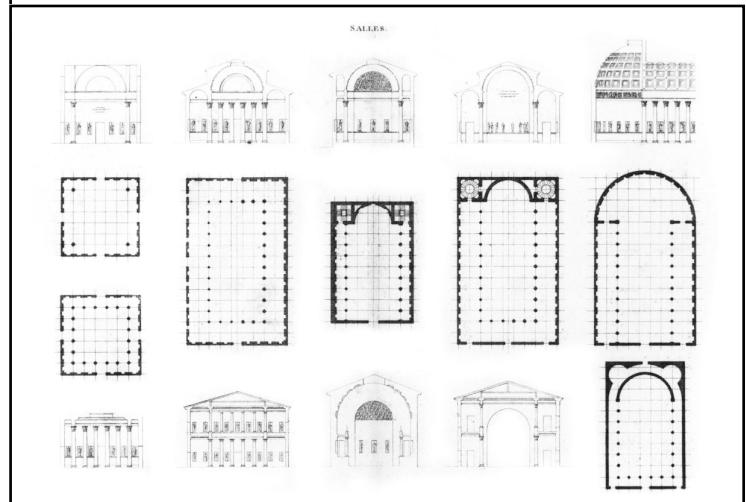


Figure 2

*"these divisions of the square, new plans arise; and if some of the axes are omitted, this in its turn will give rise to different plans."* – Durand (1795)

This is evidence that formal qualities are taken into consideration. The existence of architecture requires three distinct things—part, elements, and some way to combine them. This last step requires the analysis of past architectures to determine what those configurations are. [fig. 3]

A simplification/reduction of form takes place. Each of these produce a specific operation –deconstruction and formal reduction. [fig. 4]

But you see it's not just about breaking stuff apart and simplifying the form of something. The way a thing performs within a context is also important. And Le Corbusier's *The Decorative Arts of Today* from 1925 is evidence of that. Here the performance of an object is taken into consideration when categorizing.

*"The human-limb objects are type-objects, responding to type-needs: chairs to sit on, tables to work at, devices to give light, machines to write with, racks to file things in... They are extensions of our limbs and are adapted to human functions that are type-functions. Type-needs, type-functions, therefore type-objects and type-furniture... Utilitarian needs call for tools bought in every respect to that degree of perfection seen in industry."* - Le Corbusier (1925)

We have the ability to look at things from the point of view of function – what a thing does – regardless of what it is. This quote regards the performance of an object as the sole thing for concern. This kind of reduction is extremely abstract and you will see how many different turns it can take.

An abstract notion of use is pulled out of the object. [fig. 5] Chairs will possess this abstract property of "chairness". The property is derived from how the object performs within a given context. If we were to take these chairs and put them in a context of let's say kindling. The characteristic of "chairness" would have no merit when compared to simple sticks and twigs. The

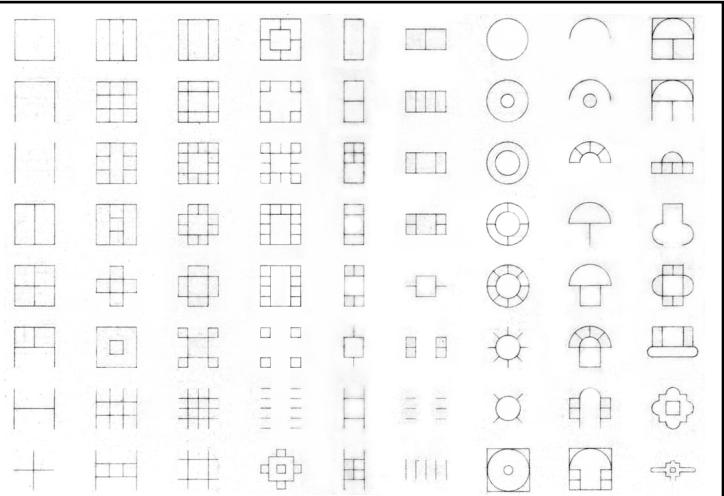


Figure 3

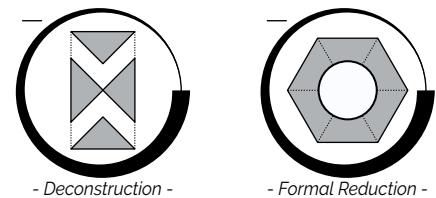


Figure 4



Figure 5

The performance of an object is reduced to an abstract concept. [fig. 6]

This performance reduction is not limited to that of the usefulness of an object. Evidence can be seen in other works of Le Corbusier. Like in his work 'A City of Tomorrow and its Planning' from 1929.

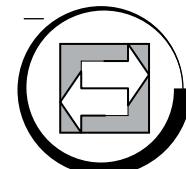
*"Proceeding in the manner of the investigator in his laboratory, I have avoided all special cases, and all that may be accidental, and I have assumed an ideal site, to begin with. My object was not to overcome the existing state of things, but by constructing a theoretically water-tight formula to arrive at the fundamental principles of modern town planning. Such fundamental principles, if they are genuine, can serve as the skeleton of any system of modern town planning; being as it were the rules according to which development will take place." - Le Corbusier (1929)*

Here the performance of the various parts of a city are being evaluated and planned [fig. 7] - Only that of the performance not the quality. This type of mentality is what leads to the perception of Object Buildings, or those that are reduced down to the purest of function. The city exists as collective of functional reductions. [fig. 8]

Up Until this point our logical devices have only been concerned with the object itself. When we deconstruct or look at the purification of function the scope of our concern has been focused inward. The object has been exclusive. Something interesting happens when we switch from an exclusive device to an inclusive one.

The work of Rob Krier deals with urban space. However, this sense of urban space is generated from architectural disposition.

*"If we wish to clarify the concept of urban space without imposing aesthetic criteria, we are compelled to designate all types of space between buildings in towns and other localities as urban space. This space is geometrically bounded by a variety of elevations. It is only the clear legibility of its geometrical characteristics and aesthetic qualities which allows us consciously to perceive external space as urban space." - Rob Krier (1975)*



- Performance Reduction -

Figure 6

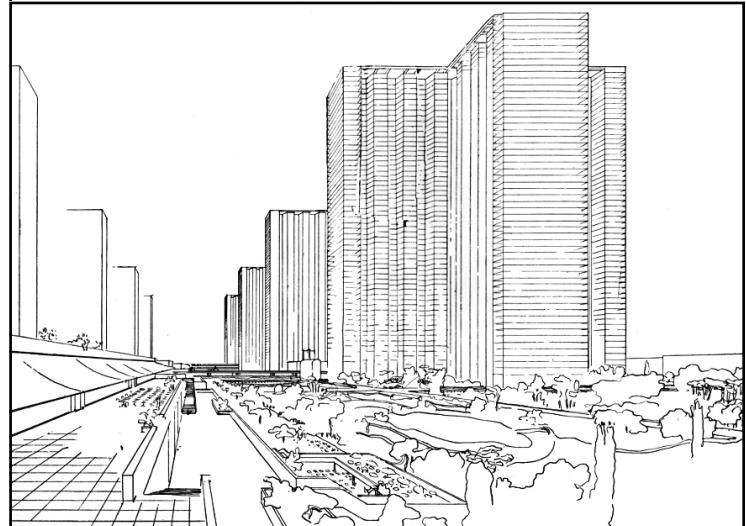


Figure 7

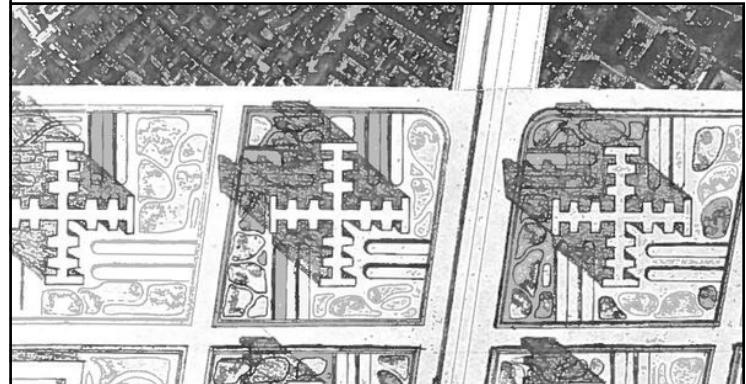


Figure 8

This is similar in a way to what occurred within Le Corbusier. there is a reduction of performance – but this reduction occurs inclusive of context. The difference enables Krier to discuss Urban space and moves the conversation away from functional purism. [fig 9] Within Krier's work we are able to see evidence of the other two logical devices (Formal reduction and deconstruction)

*"In formulating a typology of urban space, spatial forms and their derivatives may be divided into three main groups, according to the geometrical pattern of their ground plan: these groups derive from the square, the circle or the triangle." - Rob Krier (1975)*

Urban space Is reduced to simple forms (formal reduction) – here those forms are then broken into various parts.

*"The three basic shapes (square, circle, and triangle) are affected by the following modulating factors: angling; segmentation; addition; merging; overlapping or amalgamation of elements; and distortion. These modulating factors can produce geometrically regular or irregular results on all spatial types." - Rob Krier (1975)*

Krier systematically deconstructs and reduces Urban Space into a series of complex configurational elements [fig. 10] that effect one aspect of Urban Space or another. The use of these logical operations show up time and time again with the various works. [fig. 11] An example of how these Operations occur but lead to different results is the work of Chris Lee.

*"Understanding, reasoning and then acting upon the urban context typologically should be seen as a means of affecting change at a scale beyond that of the single building... The fourth typology owes its operativity to the ability of its deep structure. It is shaped by a political ideology that emphasizes the efficacy of pragmatism on the one hand, and the nature of multi-stakeholders' developments that favor flexible accumulation and aggregation as growth strategies, on the other" - Chris Lee (2007)*

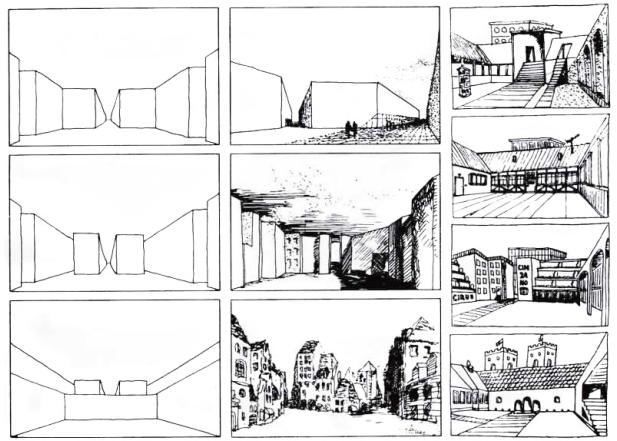


Figure 9

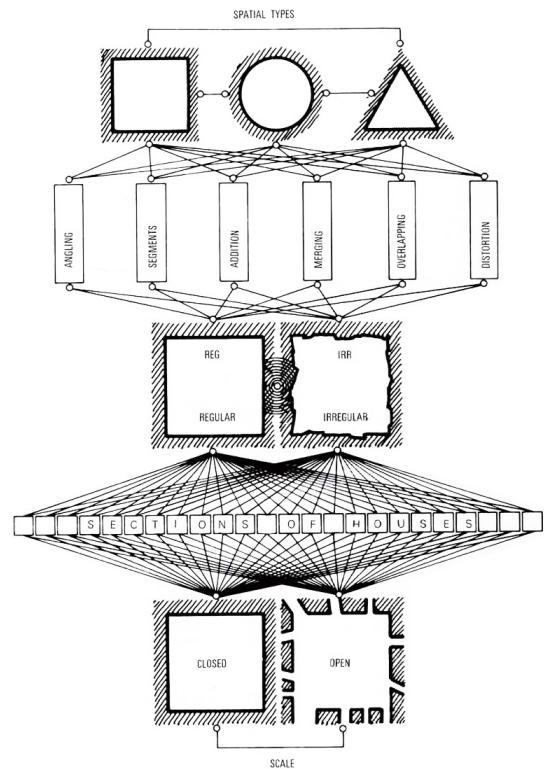


Figure 10

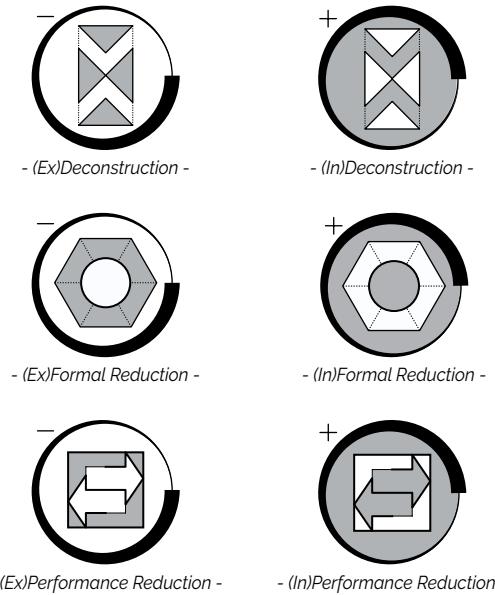


Figure 11

Just as Krier did Lee looks at architecture inclusively and reduces based off of performance. The difference here is that the result of these two similar operations is different. Krier produces Urban Space where Lee reduces the performance and produces the deep structure powered by political forces. [fig. 12] It is apparent that there are many different ways a single operation can affect our perception of architecture. [fig. 13]

All of these authors are filtering their perceptions in one way or another. There is an apparent similarity to way this occurs. There also appears to be a particular order to these individual events. It is as if they are looking at architecture through a series of lenses – operational lenses for operational perception filtering.

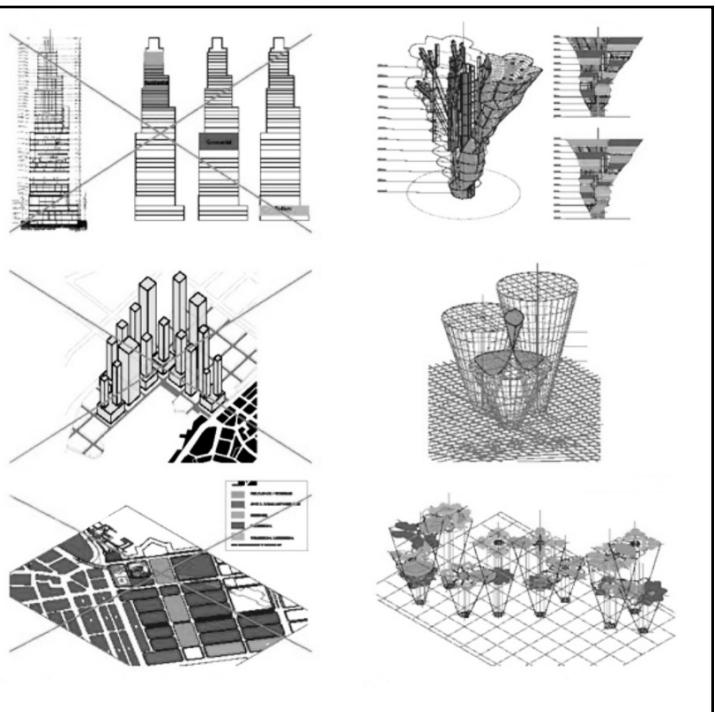


Figure 12

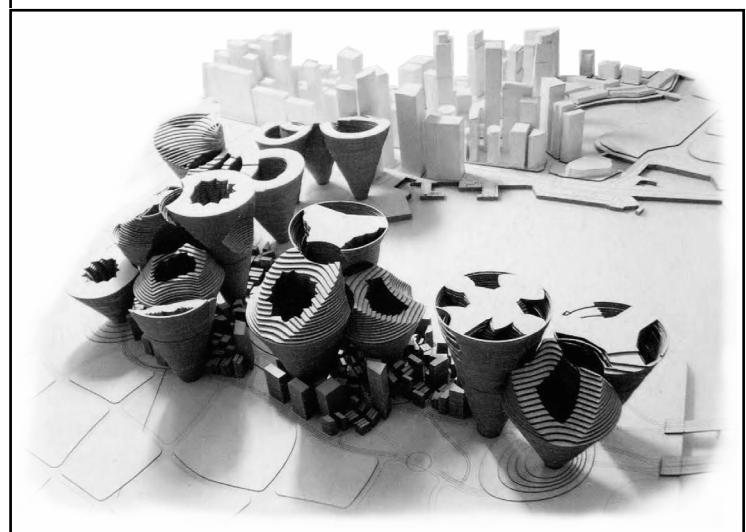


Figure 13



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**Compendium of Account**  
Selected Texts on Type Theory  
with Interpretation From Paris Mood

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Jean-Nicolas-Louis Durand

1760 - 1834

*Precis of the Lectures on Architecture*

1795

*Introduction*

*Architecture has as its object the composition and execution of buildings, both public and private.*

*These two kinds of buildings are subdivided into a great number of types, and each type, in turn, is capable of an infinity of modifications.*

Already it is apparent that Durand's approach is almost entirely analytical

*If, in order to learn architecture, it were necessary to study all the classes of building in succession, together with all the circumstances that are liable to modify them; then, even supposing such a study possible, it would be not only lengthy but highly imperfect. Nothing would be gained but isolated notions that, far from corroborating each other, would often conflict; and the more of them there were, the more confusion they would create.*

*If, instead of pursuing such a course, we were to return to the first principles of the art—that is to say, to the pursuit of certain ideas that are few in number but general in application, and from which all the particular ideas would necessarily derive; then the labor would not only be very much curtailed but rendered more fruitful; for we should have a safe and rapid way to compose and execute buildings of all kinds, in all places, and at all times.*

Speed and simplification are treated more important than accuracy of the analysis.

*But the principles of any art, or of any science, are none other than the results of observation. To discover them, one must observe; and to observe with profit requires method.*

He is only looking for a posteriori information. There exists no generalization of knowledge gathered. With no a priori knowledge type

categorization can only be used as a tool for analysis, not synthesis. He is unable to develop quality criterion.

*In all courses of architecture, the art is divided into three distinct parts: decoration, distribution, and construction. At first sight, this division appears simple, natural, and fruitful. But, to make it so in fact, the ideas that it suggests would have to be applicable to all buildings; they would have to be entirely general, affording elevated vantage points from which to embrace the art as a whole before descending to survey the whole range of particulars. Now, of the three ideas expressed by the words decoration, distribution, and construction, only one is applicable to all buildings. In the sense normally assigned to the word decoration, most buildings are incapable of it. By distribution, nothing more is meant than the art of disposing, in accordance with our present-day customs, the different parts that make up a building intended for habitation; for no one speaks of the distribution of a temple, a theater, a courthouse, and so on. The word construction, which expresses the combination of the various mechanical arts that architecture employs, such as masonry, carpentry, joinery, locksmith's work, and so on, is thus the only one that affords an idea general enough to apply to all buildings.*

*But since architecture is not only the art of executing but also of composing all buildings, public and private, and since no one can execute any building without first conceiving it, the idea of construction needs to be accompanied by another general idea, which would be the source of all those particular ideas that must guide us in the composition of all buildings. As this method fails to supply any such general idea, it is consequently defective.*

*Not only is this method defective, in that it*

*affords an incomplete idea of architecture, but it is also positively dangerous, for the ideas it affords are utterly false, as will soon be apparent.*

Generalizing architectural decoration leads to an 'incomplete' idea of architecture. This blind rejection of ornamentation is what leads to his incomplete type analysis. It becomes too easy for him to disregard what makes individual architectural artifacts unique. The uniqueness is labeled as decoration and tossed out.

*What is more, even if this method were to afford a sound and comprehensive view of architecture, its practical shortcomings would in themselves be reason enough to reject it. To divide architecture into three entirely independent arts, which may and indeed must be studied separately, is to ensure that the aspiring architect will develop a predilection for one of those arts, devote himself to it, neglect the two others, often fail to concern himself with them at all, and consequently acquire only a portion of the knowledge that he needs.*

However, it remains impossible to embrace at one time all the particular ideas comprised within the general idea of architecture. A division is indeed necessary, but far from pitting particular ideas against each other in mutual opposition, as often happens—it must be a division that binds them together through the simple and natural order in which it presents them to the mind.

*To succeed in anything, one must have a tangible and rational aim. Otherwise, success would be purely a matter of chance. But if the aim itself is a chimerical one, then the further one proceeds, the further one departs from the true aim; and this is something that we observe all too often.*

*Nor is it enough to have a tangible aim in view: one must have the means to attain it. And so, our first concern must be with the aim to be pursued in the composition and execution of buildings, both private and public, and the means to be employed.*

*From this, once established, we shall naturally deduce the general principles of architecture; and once these are known, it will only remain for us to apply them, (1) to the objects that architecture uses, that is, the elements of buildings; (2) to the combination of these elements, in other words, composition in general; and (3) to the alliance of these combinations in the composition of a specific building.*

Deconstruction, deconstruction, a reduction of some kind. 'Composition' is such a general concept that it is hard to see specific examples. 'Composition' can only be detected through a generalization of one kind or another.

*Such are the objects of our study and the order in which we shall examine them.*

*Far from being necessary, indeed, such a pursuit is harmful even to decoration itself. For if, smitten with the effect of certain beautiful features in one building, you attempt to transfer them to another, where they are out of place, or if, where such beauties are naturally present, you seek to amplify them further than the nature of the building permits: is it not plain that they will disappear; and, worse still, that they will be transformed into faults? The Medici Venus and the Farnese Hercules are admirable figures. But if anyone, on the grounds that one head is more graceful or has more character than the other, were to set that of Venus on Hercules's body, and vice versa, would not those masterpieces of art become masterpieces of absurdity? And if, because the individual parts of those statues*

*become masterpieces of absurdity? And if, because the individual parts of those statues are admirable, the sculptor had sought to enhance the beauty of the whole by increasing their number, and had given his figures four arms, four legs, and so on, would they not be downright monstrous?*

Durand rejects the notion of precedent. We must take into account the old when we craft things within our current context. Without a knowledge of past solutions, we are aimlessly walking around in the dark. This rejection of type is very unfulfilling and spawns more questions than it answers.

*From all of this, it follows that one must neither strive to make architecture give pleasure—seeing that it is impossible for it not to give pleasure—or seek to endow buildings with variety, effect, and character since these are qualities that they cannot be without.*

*Disposition must, therefore, be the architect's sole concern—even if he were a lover of architectural decoration, even if he wished only to please—since decoration cannot be called beautiful or give true pleasure, except as the necessary effect of*

*Thus, all of the architect's talent comes down to the solution of two problems: (1) in the case of private buildings, how to make the building fit for its purpose as possible for a given sum; (2) in the case of public buildings, where fitness must be assumed, how to build at the least possible expense.*

Here Druand mentions "...in the case of public buildings, where fitness must be assumed." how can we assume a fitness without making generalizations? A knowledge of past solutions would provide us the tools to assume the fitness.

*It will thus be seen that in architecture there is no incompatibility, and no mere compatibility, between beauty and economy; for economy is one of the principal causes of beauty.*

*One example will serve to cast light on these ideas and present these principles with the greatest certitude. The building now known as the Panthéon Français was first intended as a temple. The purpose envisaged in buildings of this kind, whatever the form of worship for which they are intended, is not only to assemble the multitudes but to capture their imagination through the senses. Grandeur and magnificence are the aptest means to this end. It might consequently appear that decoration ought to be, if not the sole aim, at least the principal concern in the composition of such a building; and that expense must be no object. We shall see, however, that if in the building in question, all idea of decoration had been set aside in order to dispose it in the fittest and most economical way, the result would have been a building far more likely to produce the desired effect.*

*Who would not expect such a building as this, of such dimensions, and with so prodigious a number of columns, to present the grandest and most magnificent spectacle? And yet it does nothing of the sort. Inside, the building is only 3,672 [square] meters in true area. The apparent area is even less since the cruciform shape adopted by the architect allows hardly more than half of it to be seen on entry.*

*If, instead of pursuing the forms that the architect considered most apt to produce effect and movement, he had used those that economy naturally suggests for the disposition of a building that is formed of a single room, in other words, a circle; if he had arranged his columns concentric to this circle, so as to reduce the span of the vault on the inside, and to form a spacious portico on the outside capable of receiving a vast crowd*

*from every direction: then what would have been the grandeur, the magnificence, of such a building!*

The form of the composition is important. A determining factor in the success or fail of a building. Deconstruction, deconstruction, a generalization of composition (form).

*These are two very different buildings. And wherein lies the difference? In the former, there was an effort to create something beautiful, and it was supposed that the only way to do so was to spend lavishly; whereas, in the latter, the only consideration was to dispose the building in the fittest and most economical way. And, indeed, the latter, though grander and more magnificent than the former, incorporates only 112 columns; its walls are only 248 meters in circumference; and it would cost just half as much. That is to say that, for the cost of the other, two buildings might have been built, not like the one that exists but like the one that here replaces it; or else one single building, twice the size of the one just proposed.*

*This example, although the least favorable to the system that we propose, nevertheless suffices to make known the truth of our principles and the consequences for the wealth and the comfort both of private individuals and of society at large, that stem from an ignorance of those principles, or from the failure to observe them.*

*Let us recapitulate in a few words what we have found to be true of the nature of architecture, its object, its purpose, its means, and its general principles.*

*Architecture is an art of a kind unique to itself, and its object is the composition and execution of buildings, both public and private.*

*Its purpose, in composing and in executing*

*such buildings, is to satisfy a great number of our needs and to place us in a position to satisfy all the others.*

*The means that it employs to this end are fitness and economy.*

*Fitness includes solidity, salubrity, and commodity.*

*Economy comprises symmetry, regularity, and simplicity.*

*Solidity consists in the selection and use of materials, and in the number and disposition of supports.*

*Salubrity depends on the situation, on the exposure, on the elevation of the ground, on the walls, on the openings in them, and on the covering.*

*Commodity springs from the relation between the form of a building, its magnitude, and the number of its parts, on the one hand, and its purpose, on the other.*

*The most symmetrical, most regular, and simplest forms, such as the circle, the square, and the slightly elongated parallelogram, are the forms most suited to economy since they enclose a given area with a smaller perimeter than other forms; and these forms are consequently to be preferred.*

Only forms reduced down to their purest forms are to be considered. How are these pure forms identified and selected? All things derived have a source. Nothing can come from nothing.

*Decoration is not the architect's business; unless what is meant by decoration is the art of applying painting, sculpture, and inscriptions to buildings. This kind of decoration, however, is no more than an accessory.*

*The orders, as objects of imitation, have nothing to contribute, because they resemble nothing in nature.*

Architecture only exists are a replica of nature. If an idea or an element does not have its basis in nature it has no use within Durand's system.

*Disposition must be the architect's sole concern and this is so, even if his only end is to give pleasure. Character, effect, variety-in a word, all those beauties that are found in buildings or that men seek to introduce into architectural decoration-naturally emerge from any disposition that embraces fitness and economy.*

*But before disposing any edifice, before combining and assembling its parts, the parts must first be known. And they, in their turn, are combinations of other parts that may be called the elements of buildings, such as walls, openings, supports both engaged and detached, raised foundations, floors, vaults, coverings, and so on. First of all, therefore, these elements must be known.*

#### *Part 1: Elements of Buildings Section 1: Qualities of Materials*

*The objects that architecture employs are built with materials of different kinds and consequently possess dimensions, relations, proportions, and forms. We shall consider them under all of these separate aspects.*

*First, let us consider materials, which are the substance, so to speak, of the objects concerned.*

*These may be arranged in three classes: Those that are hard and laborious to work, which are for this reason very expensive. Those that are softer and easier to work and therefore cheaper.*

*Those of the second kind are soft stones, rubble, brick, tile, slate, and timber.*

*Those of the third kind are plaster, lime sand, ballast; the various mortars prepared by mixing these; iron, copper, and lead, and bad qualities and their use in general, but also to convey the variety that their dimensions, their different colors, their regularities or irregularities.*

*Such are the principal materials employed in the construction of buildings. The little that we have said will suffice not only to give an idea of their good should contribute to buildings; when that is, these materials are intelligently combined.*

Again we see a generalization made from past examples. Only by looking at how they have been used can we rationalize using them now. Notice that there is no discussion on why they are used the way they are used.

#### *Section 2: Use of Materials*

*To ensure that the various elements of buildings are solid, the materials must be of good quality, intelligently employed, and set on sound foundations; and these can be sound only if they are built as they should be, and on good soil.*

*The quality of the soil may be established by sounding or by sinking shafts. If the soil is bad, then art must come to the aid of nature. The soils on which buildings can be solidly based are rock, gravel mixed with earth, stony soils, and loam. The bad soils are quicksand, clay, and all disturbed, imported, or marshy soils.*

*There are several distinct varieties of walls: enclosing walls, retaining walls, exterior walls, and partition walls.*

*Walls are sometimes built entirely of ashlar*

*and sometimes entirely of rubble or brick; more often, they are built partly of stone and partly of rubble, burrstone, or brick.*

*Whatever the use and the material of a wall, the courses must always be horizontal and all the joints perpendicular, coinciding neither on the face or in the thickness, but always corresponding to the center of the stones above and below. It would be desirable to have all the courses of an equal height; they must be constructed with setbacks on a course of stone, itself set back on cellar or foundation walls. The whole may be jointed with plaster, but lime and sand mortar is much better.*

*Enclosing and partition walls must be perpendicular.*

The use of words here is interesting "...must be perpendicular." what Durand says is word of law. It isn't the case that the walls are frequently found in this perpendicular arrangement, but they must be in this arrangement.

*Pillars, pilasters, columns, and piers are built in courses or drums if they are made of stone. They are made in one piece only if the material used is wood or marble. Care is taken to make the drums all equal in height so that the compression is equal; try also to ensure that each drum is made in one piece.*

*Columns and pilasters normally rest on a continuous wall of the same height as the elevation of the floor of the building above the natural grade. This wall, which is known as the dado, is built, like all the other walls, on a wider base course of hard stone, the plinth, which is designed to protect it from humidity. It is crowned with a projecting course of stones to throw off the water, which falls on the pavement of the portico formed by the columns. This stone projection is called the cornice, and this whole assemblage of p*

dado, and cornice is known as the pedestal.

These objects are regarded as belonging to the column: they form part of it. The column may therefore be said to consist of three parts: the base; the column proper, known as the shaft; and the capital. But this is not always the case: for sometimes the column consists of two parts only, a shaft and a capital.

Floors were formerly made open, with all the timbers visible below, and plaster in the intervals only. Such floors are no longer made except in buildings to which no importance is attached. Since ideas of architectural decoration have gained currency, the appearance of the members that make up a floor and proclaim its solidity has been regarded as ignoble; by preference, they are masked with plaster ceilings, which, while increasing the expense, cause the floors above to rot and often compel them to be remade shortly after building, to avoid still worse consequences. What a difference, moreover, between the appalling, frigid, monotonous sight of these plaster ceilings and the reassuring, animated, and varied sight of those majestic old open floors, whose joists, and the beams that marked every bay, were constructed with the utmost care and protected from humidity and from insects by the application of the most.

Roofs commonly have two gutters and sometimes four. Where they have only one, they are known as shed roofs. Their ends are called hips if they have the same slope as their sides; and gables, if they are terminated by an upper continuation of the wall. Finally, when the cornice of the building continues along the two inclined sides of the gable, the latter takes on the name of pediment.

The false ideas of beauty and decoration that have crept into architecture are responsible for those enormous roofs to whose construction

such sums have been devoted, only to hasten the ruin of the buildings that they cover and to afflict the eye that contemplates them. It is those same ideas that are responsible for that absurd class of roof, the upper part of which is almost as flat as a terrace and the lower part almost as steep as a wall: a kind that, displeasing though it is, has nevertheless played its part in immortalizing the name of Mansard.

Again he brings up his fear of decoration ruining the purity of architecture.

We shall not enlarge any further on the ways of employing materials in the construction of the elements of buildings. Those who desire more detail may consult the works of Patte, from whom we have borrowed much on the subject. What we have said on this topic will suffice to give a general idea to those who are studying architecture, and to save them from committing the gross and palpable errors that are all too evident in those designs in which decoration is the sole concern: it will, moreover, make it sufficiently clear that decoration—if, by that word, we mean anything beyond the application of painting and sculpture to buildings—is largely to be produced by making the construction evident.

To be sure of this, we have only to look at the imposing remains of the buildings of antiquity; at the splendid fabrics, in every part of Italy, in which stone, brick, marble, and so on, show themselves as they are, and where they should be; and even at the figures of plate 2, although the intention there is merely to show the disposition of materials in relation to their nature, and to the uses of the things they serve to build. This will surely banish the temptation to abandon this natural and satisfying form of decoration and to replace it, at great additional cost, either with the appearance of an imaginary construction—which, not being the real construction of

the building, falsifies the latter, and detracts from its character instead of enhancing it—by an arbitrary decoration made up of an assemblage of unnecessary objects that can never give pleasure but only fatigue the eye, outrage common sense, and displease in every way.

### Section 3: Forms and Proportions

In our consideration of materials and of their use in the construction of the elements of buildings, it must have become apparent that, while nature offers some ready to be used, most of the others have to be worked, either to make them suitable for building in general or to fit them to the uses to which the different elements of buildings are to be put. Thus, timber is deprived of its albumen, and stone is cleaned off; ashlar and rubble are squared to bed them in the construction of walls and cut into wedges in order to construct vaults. We have observed also, that the union of these materials naturally gives rise to forms and proportions: nor could this be otherwise, seeing that matter necessarily possesses forms and that forms have their inherent relations and proportions. It is in the light of these last two facts that we must now consider the elements of buildings.

Elements are composed of parts which are composed of materials. Durand is building a hierarchy into his dissection of architecture. This act of deconstructing architecture is what gives Durand his significance. Quatremere De Quincy simply reduced things into simpler concepts. Durand sees architecture as a composite made up of individual things arranged in a particular way (composition).

Forms and proportions may be divided into three categories: those that spring from the nature of materials, and from the uses of the things they serve to build; those that custom

has in a sense made necessary to us, such as the forms and proportions of the buildings of antiquity; and, finally, those simpler and more definite forms and proportions that earn our preference through the ease with which we apprehend them.

Of these, only those in the first category are essential; but they are not so firmly defined by the nature of things that we cannot add to them or subtract from them, so that there is no reason not to combine them with those of the second class, derived from ancient buildings. Since these vary considerably in the Greek buildings, which were imitated by the Romans, who were imitated in their turn by the modern peoples of Europe, one is at liberty to select the simplest: which, being the most economical, are the best suited to satisfy both the eye and the mind.

The importance of forms and proportions appears most clearly in the orders. Here, as we have seen, the principal forms derive from the use of some of the elements of buildings; as we shall see, the principal proportions have the same origin and no more depend on the proportions of the human body than the forms of the orders depend on those of the hut.

In private buildings of the lowest class, expense is always a consideration; and here, if fitness demands detached supports, they will necessarily be made of the cheapest—which is to say, the least firm—materials. To reduce their number, they will be placed as far apart as possible: an economy that enables the other requirements of fitness to be observed. Solidity, however, must not be too much impaired; and so these supports will be made very short, in order to increase their strength; for the same reason, they may perhaps be made square instead of round.

### Composition in General

#### Section One | Combination of the Elements of Buildings

The elements of buildings may be placed side by side or one above the other. In the composition of a building, both kinds of combination must be kept simultaneously present in the mind; but for ease of study they can, and indeed must, be considered separately. We shall therefore distinguish between two kinds of disposition: horizontal, as represented by plans; and vertical, as represented by sections and elevations.

These two dispositions are limiting in the sense that they do not allow us to experience space. You cannot experience a plan nor an elevation or section. The analysis of architecture is removing the user from the picture. Its like separating the body from the soul.

Columns, as has already been said, must be equally spaced within any given building; but their spacing must vary in accordance with circumstances. In private buildings of the least importance, to limit the expense, the number of columns must be reduced; and they must be spaced as widely as possible; whereas in the most considerable public buildings, for greater durability, they must be as densely arrayed as possible. In any building, columns must be employed only where they serve to form porticos or galleries: it follows that their distance from the wall must be at least as great as the distance between them. Such a disposition suffices where the columns are widely spaced and short, but where they are very tall and very closely spaced, it ceases to be appropriate; for the resulting tall, shallow portico would offer no protection from sun and rain. In such a case, the relation between columns and wall must change, if the portico is to serve the purpose for which it is built;

and the columns will accordingly be set not one but two, or even three, interaxes away from the wall. And then there will be a precise relation between the depth of the portico and its height.

The exterior walls, which are designed to close off the building, must pass directly from one corner to the other, the straight line being the shortest distance between two points; and the partition walls, which not only divide the interior into several parts but also link the outside walls with each other, must, as far as fitness permits, run to the whole length or width of the building. Where there is no avoiding an interruption, they must at least be continuous along the top, either through beams or through arches. For the same reason, if there are columns on the exterior of a building, every wall must correspond to one of them.

Windows and doors not only serve to establish communication between the various parts of a building and to afford the pleasure of seeing exterior objects, but they also admit air and light: they must therefore correspond to each other as much as possible. Site them, therefore, on common axes, which may be determined by bisecting the interaxes of the walls or of the columns.

Where columns appear on the outside of the building, windows or doors may be placed either in all the intercolumniations or in every other one. The former arrangement is suitable where the columns are widely spaced, and the latter where they are closely spaced. The same applies to niches.

In the majority of modern buildings, we see columns placed back to back, engaged, coupled, or even joined; pilasters canted, truncated, splayed, and so on; walls that constantly project and recede from their natural alignment: and all this in honor

of decoration. What a world of difference between such combinations and those just mentioned! The grand effect of the latter may well be imagined—as may the pitiable effect of the former.

#### Section Two | The Parts of Buildings

The principal parts of buildings are porches, vestibules, stairs, rooms of all kinds, and courtyards.

Rooms may be made square, round, or semicircular; they may be wider than they are long, or greater in length than in width: this latter case is the most frequent, and sometimes such rooms end in a semicircle. All are covered either by ceilings or by vaults of various kinds.

Rooms of modest dimensions consist merely of walls and ceilings or vaults; but more extensive rooms are divided by columns or of rows of columns, just as in vestibules and for the same reason. The difference is that in vestibules the divisions may either be equal or unequal; whereas in rooms the central portion must always be wider than the flanking aisles.

The way he is deconstructed architecture into discrete parts does not allow for an interpretation of any other elements. Or even hybridization of elements. Its stagnant and falls flat.

#### Section Three | Buildings as a Whole

All the parts that enter into the composition of buildings are now known to us; and we have seen how to combine the elements that make up those parts. We have now to unite the parts to form a whole.

As we saw in discussing combinations in general, the general principles of architecture require that walls, columns, doors, and

windows, whether in the length or breadth of a building, should be placed on common axes. It naturally follows that the rooms formed by such walls and columns, and opened by such doors and windows, are necessarily also placed on common axes. Along those axes, they may be combined in a thousand different ways. And so, referring the reader to plates 22 and 23, we shall merely say a word on the different combinations that may be applied to these axes within the ensemble of a building.

Four axes may be so disposed as to form a square. One or two of the four may be omitted; and this will produce two new dispositions.

There is nothing to prevent our dividing a square in two with a new axis, either in one direction or the other, or sometimes in both directions at once.

From these divisions of the square, new plans arise; and if some of the axes are omitted, this in its turn will give rise to different plans.

If the simple division of a square into two produces so many simple dispositions, it will be apparent how many new dispositions will result from the division of the square into three, four, and so on; from the divisions of the parallelogram and of the circle; and, finally, from the combinations of the circle with the square and parallelogram. To be convinced of this, it is enough to look at the plate that shows the most important of these divisions, and combine each of the different horizontal dispositions with all the varieties of vertical disposition that one can devise; for there is no telling how many different compositions this host of combinations can produce.

Form is of importance. But it is the form of composition. Composition of form is reduced into simple geometries. This process seems to over simplify architecture and try to fit it into nice neat categories.

#### Type Needs

Here we quit the anguished realms of fantasy and the incongruous, and resume a code with reassuring articles. The poet goes into decline, it's true; he chuckles up cornices and baldacchinos and makes himself more useful as a cutter in a tailor's shop, with a man standing in front of him and he, metre in hand, taking measurements. Here we are back on terra firma. The uplifting calm of certainty!

When one factor in our technico-cerebro-emotional equation grows disproportionately, a crisis occurs, since the relationships are disturbed—the relationships between our cerebro-emotional being and the things we use that are around us: we continue to make them as before, or else we anticipate or react against recognized reality. The feeling for cause and effect falters. We are seized by disquiet because we no longer feel well adapted; we revolt against our enforced servitude to the abnormal, whether it is retrogressive or too far ahead of its time.

The compass will save us from this disturbance; the compass in this case is ourselves: a man, a constant, the fixed point that in truth is the only object of our concern. We must therefore always seek to rediscover the human scale, the human function.

Since the crisis has now come to a head, there is no more urgent task than to force ourselves to re-adjust to our functions, in all fields. To free our attention for a few moments from bondage to its habitual tasks and to think about the why, reflect, weigh up, decide. And to answer the why with innocence, simplicity, and candour. This is as much as to say, to set aside our acquired preconceptions, to deposit our fund of memories in the safe of our bank in the third basement, behind a steel door, and leaving alongside it the whole poetic of the past, to formulate our most fundamental

desires.

To search for the human scale, for human function, is to define human needs.

They are not very numerous; they are very similar for all mankind since man has been made out of the same mold from the earliest times known to us. Faced with the task of providing a definition of man, Larousse calls on just three images to portray his anatomy: the whole machine is there, the structure, the nervous system, the arterial system, and this applies to every single one of us exactly and without exception.

These needs are type, that is to say, they are the same for all of us; we all need means of supplementing our natural capabilities, since nature is indifferent, inhuman (extra-human), and inclement; we are born naked and with insufficient armor. Thus the cupped hands of Narcissus led us to invent the bottle; the barrel of Diogenes, already a notable improvement on our natural protective organs (our skin and scalp), gave us the primordial cell of the house, filing cabinets, and copy-letters make good the inadequacies of our memory; wardrobes and sideboards are the containers in which we put away the auxiliary limbs that guarantee us against cold or heat, hunger or thirst, etc. These apparently paradoxical definitions take us far from Decorative Art; they are the very reason for this chapter.

In speaking of decorative art, we have the right to insist on the type quality of our needs, since our concern is with the mechanical system that surrounds us, which is no more than an extension of our limbs; its elements, in fact, artificial limbs. Decorative art becomes orthopedic, an activity that appeals to the imagination, to invention, to skill, but a craft analogous to the tailor: the client is a man, familiar to us all and precisely defined.

#### Le Corbusier

1887 - 1965

#### The Decorative Arts of Today

1925

Sentiment-objects or objets d'art are nothing but dross in comparison with this inner fire - slight charm and certain encumbrance, most likely trifles, clowns, jesters - intended merely for distraction (I am speaking here of decorative objets d'art). The legitimate sentiment-object lies far off and higher up, in a purified abode on a more elevated plane; then it is a work of art, and as such it is another matter altogether. For we may certainly believe in a hierarchy, and not put a piece of poker-work on the same level as the Sistine Chapel (nor glass beads, embroidery, or ornamental woodwork). But we will return to that later, and rest content for the time being with this initial classification.

For our comfort, to facilitate our work, to avoid exhaustion, to refresh ourselves, in one word to free our spirit and distance us from the clutter that encumbers our life and threatens to kill it, we have equipped ourselves through our ingenuity with human-limb objects, extensions of our limbs; and by making use of these tools, we avoid unpleasant tasks, accidents, the sterile drudgery which according to our interlocutor constitutes precisely the richness and multiplicity of life; we organize our affairs and, having won our freedom, we think about something - about art for example (for it is very comforting).

The human-limb objects are type-objects, responding to type-needs: chairs to sit on, tables to work at, devices to give light, machines to write with (yes indeed!), racks to file things in.

"Type Objects" -- interesting. Type Needs refers to the desired function of something. It then follows that the Type Object is an object that is the purification of that function. Function is reduced to its purest form.

We have now identified decorative art as commensurate with the art of the engineer.

a tool: know-how, skill, efficiency, economy, precision, the sum of knowledge. A good tool, an excellent tool, the very best tool. This is the world of manufacture, of industry; we are looking for a standard and our concerns are far from the personal, the arbitrary, the fantastic, the eccentric; our interest is in the norm, and we are creating type-objects. -- So the paradox certainly lies in the terminology.

But we are told that decoration is necessary to our existence. Let us correct that: art is necessary to us; that is to say, a disinterested passion that exalts us. Decoration, baubles, charming entertainment for a savage. (And I do not deny that it is an excellent thing to keep an element of the savage alive in us - a small one!) But in the twentieth century, our powers of judgment have developed greatly and we have raised our level of consciousness. Our spiritual needs are different, and higher worlds than those of decoration offer us commensurate experience. It seems justified to affirm: the more cultivated a people become, the more decoration disappears. (Surely it was Loos who put it so neatly.)

So, to see things clearly, it is sufficient to separate the satisfaction of disinterested emotion from that of utilitarian need. Utilitarian needs call for tools bought in every respect to that degree of perfection seen in industry. This then is the magnificent programme for decorative art (decidedly, an inappropriate term!).

If it does not belong to function it is cast out.

To provoke elevated sensations is the prerogative of proportion, which is a sensed mathematic; it is afforded most particularly by architecture, painting, and sculpture - works of no immediate utility, disinterested, exceptional, works that are plastic creations invested with passion, the passion of a man - the manifold drama that arrests us, jolts

The art of the engineer extends across a wide spectrum of human activity. If at one extreme it encompasses pure calculation and mechanical invention, at the other it leads towards Architecture.

Can one then speak of the architecture of decorative art, and consider it capable of permanent value?

The permanent value of decorative art? Let us say more exactly, of the objects that surround us. This is where we exercise our judgment: first of all the Sistine Chapel, afterward chairs and filing cabinets; without doubt, this is a question of the secondary level, just as the cut of a man's jacket is of secondary importance in his life. Hierarchy. First of all the Sistine Chapel, that is to say, works truly etched with passion. Afterward machines for sitting in, for filing, for lighting, type-machines, the problem of purification, of simplification, of precision, before the problem of poetry.

Eventually, we leave, take a few steps in the bracing air, and return home. We pick up a book or a pen. In this mechanical, discreet, silent, attentive comfort, there is a very fine painting on the wall. Or else: our movements take on a new assurance and precision among walls whose proportions make us happy, and whose colors stimulate us.

Decorative art is an inexact and wordy phrase by which we denote the totality of human-limb objects. These respond with some precision to certain clearly established needs. They are extensions of our limbs and are adapted to human functions that are type-functions. Type-needs, type-functions, therefore type-objects and type-furniture.

The human-limb object is a docile servant. A good servant is discrete and self-effacing, in order to leave his master free.

When an object is the purification of its function it is no longer noticeable. During your day to day life bet you don't notice the furnace running until it stops. We are blind to it. Or freed from it according to Le Corbusier.

Certainly, works of decorative art are tools, beautiful tools. And long live the good taste manifested by choice, suitability, proportion, and harmony!

#### The Decorative Art of Today

The decorative art of today! Am I plunging into paradox? - a paradox that is only apparent. To include under this rubric everything that is free from decoration, whilst making due apology for what is simply banal, indifferent, or void of artistic intention, to invite the eye and the spirit to take pleasure in the company of such things and perhaps to rebel against the flourish, the stain, the distracting din of colours and ornaments, to dismiss a whole mass of artefacts, some of which are not without merit, to pass over an activity that has sometimes been disinterested, sometimes idealistic, to disdain the work of so many schools, so many masters, so many pupils, and to think thus of them: 'they are as disagreeable as mosquitoes'; and thence to arrive at this impasse: modern decorative art is not decorated. Have we not the right? A moment's thought will confirm it. The paradox lies not in reality, but in the words. Why do the objects that concern us here have to be called decorative art? This is the paradox: why should chairs, bottles, baskets, shoes, which are all objects of utility, all tools, be called decorative art? The paradox of making art out of tools. Let's be clear. I mean, the paradox of making decorative art out of tools. To make art out of tools is fair enough, if we hold with Larousse's definition, which is that ART is the application of knowledge to the realisation of an idea. Then yes. We are indeed committed to apply all our knowledge to the perfect creation of

us, rouses us, moves us. Now and always there is a hierarchy. There is a time for work, when one uses oneself up, and also a time for meditation, when one recovers one's bearing and rediscovers harmony. There should be no confusion between them: we are no longer in the age of the dilettante, but at an hour that is harsh and epic, serious and violent, pressured and productive, fertile and economic. Everything has its classification: work and meditation.

The classes too have their classification: those who struggle for their crust of bread have the simple ideal of a decent lodging (and they love to see the fanciest furniture, Henry II or Louis XV, which gives them the feeling of wealth-an elementary ideal). And those well-enough endowed to have the ability and the duty to think (and they aspire to the wisdom of Diogenes). Previously, decorative objects were rare and costly. Today they are commonplace and cheap. Previously, plain objects were commonplace and cheap: today they are rare and expensive. Previously, decorative objects were items for special display: the plate which the peasant family hung on the wall and the embroidered waistcoat for holidays; grist for the propaganda of princes. Today decorative objects flood the shelves of the Department Stores: they sell cheaply to shop-girls. If they sell cheaply, it is because they are badly made and because decoration hides faults in their manufacture and the poor quality of their materials: decoration is disguise. It pays the manufacturer to employ a decorator to disguise the faults in his products, to conceal the poor quality of their materials and to distract the eye from their blemishes by offering it the spiced morsels of glowing gold-plate and strident symphonies. Trash is always abundantly decorated: the luxury object is well made, neat and clean, pure and healthy, and its bareness reveals the quality of its manufacture. It is to industry that we owe this reversal in the state of affairs: a cast-

iron stove overflowing with decoration costs less than a plain one; amidst the surging leaf patterns flaws in the casting cannot be seen. And the same applies generally. Take some plain calico and soak it in color: the printing machine will instantly cover it in the most fashionable patterns (for example, copies of Spanish mantillas, Bulgarian embroidery, Persian silks, etc.) and without incurring much expense one can double the sale price. I quite agree that it can be charming, as gay, and as shop-girl-like as you could want, and I would want that to continue. What would spring be without it! But this surface elaboration, if extended without discernment over absolutely everything, becomes repugnant and scandalous: it smells of pretense, and the healthy gaiety of the shop-girl in her flower-patterned cretonne dress, becomes rank corruption when surrounded by Renaissance stoves, Turkish smoking tables, Japanese umbrellas, chamber pots and bidets from Lunéville or Rauen, Bichara perfumes, bordello lamp-shades, pumpkin cushions, divans spread with gold and silver lame, black velvets flecked like the Grand Turk, rugs with baskets of flowers and kissing doves, linoleum printed with Louis XVI ribbons. The pretty little shepherdess shop-girl in her flowery cretonne dress, as fresh as spring, seems, in a bazaar such as this, like a sickening apparition from the show-cases of the costume department in the ethnographic museum.

Type Objects are necessary for the continuation of production. Type Objects are for everyone and have no social status associated with them. They are free of the capitalist cycle that sparked their creation in the first place. Architecture that is designed as a Type Object will have no more political status than its function.

The guiding principle of decorators with

serious intentions is to cater for the enjoyment of life by a sophisticated clientele. As a result of fashions, the publication of books, and the assiduous efforts of a whole generation of decorators, this clientele has seen its tastes sharply awakened to matters connected with art. Today there is a lively aesthetic awareness and a taste for a contemporary art responding to very much more subtle requirements and to a new spirit. As a result, there is a distinct evolution towards ideas reflecting the new spirit; the experience of decoration as art from 1900 to the war has illustrated the impasse of decoration and the fragility of the attempt to make our tools expressive of sentiment and of individual states of mind. There has been a reaction to this intrusive presence, and it is being rejected. Day after day, on the other hand, we notice among the products of industry articles of perfect convenience and utility, that soothe our spirits with the luxury afforded by the elegance of their conception, the purity of their execution, and the efficiency of their operation. They are so well thought out that we feel them to be harmonious, and this harmony is sufficient for our gratification.

And so, having opened our eyes and rid ourselves of the romantic and Ruskinian baggage that formed our education, we have to ask ourselves whether these new objects do not suit us very well, and whether this rational perfection and precise formulation in each does not constitute sufficient common ground between them to allow the recognition of a style!

We have seen that freed from all reminiscence and traditional preconception, a rational and reassuring rigor has been applied to their design. Their choice of material, first of all, has been dictated by considerations of strength, lightness, economy, and durability alone; objects for centuries made of wood have been adapted to metal and steel - objects such as office furniture, from which an entirely

new precision of operation is demanded. Thus the 'Voltaire' low armchair has become a totally different machine for sitting in since it was covered in leather.

As a result of this adaptation to new materials, the structure has been transformed, often radically; for a long time these new forms offended us and, by a fatal process of reasoning, provoked a violent nationalist (that is to say, regionalist) reaction, an appeal to handicraft as opposed to the machine, seen as a modern hydra. A sterile reaction: one cannot swim back against the current, and the machine which does its work with purity and exactitude is from today dispelling this anachronistic backwash. Let us allow one or two generations brought up in the religion of patina and the 'handmade' to fade away quietly. The young generations are born to the new light and turn naturally and with enthusiasm to the simple truths. When an electric light bulb is at last weighed, one fine day, in the design office of a manufacturer of chandeliers, its 50 grams will weigh heavily in the scales that determine the fate of industries doomed to disappearance; the technological firm will replace the artistic: so it is written.

Thus, as new materials and forms were inevitably introduced into the decorative art industries, at the dictate of the all-powerful gods of price and performance, some alert and enquiring minds noted the unvarying laws that were shaping the new products. These laws endowed everything with a common character, and the confidence that they gave to the mind constituted the basis of a new sense of harmony.

The concept of a Type Object can operate even when new Type Needs emerge. As we need for new and unique things we can count on the Type Object to come to our aid.

In face of this unbroken and continuing

evidence, good sense has gradually rejected the tendency to luxuriousness as inappropriate to our needs. Its last popular resort has been a devotion to beautiful materials, which leads to real byzantinism. The final retreat for ostentation is in polished marbles with restless patterns of veining, in panelling of rare woods as exotic to us as hummingbirds, in glass pastes, in lacquers copied from the excesses of the Mandarins and thence made the starting point for further elaboration. At the same time, the Prefecture of Police has set about pursuing the pedlars of cocaine. This is all of a piece: feverish pulses and nerves shattered in the aftermath of war like to cool themselves by contact with these inhuman materials that keep us at a distance; in other circumstances, they could well offer us a delicate slice of the miracle of nature; but the matrix of amethyst split and polished, or a lump of rock crystal set on my desk is just as expressive, and a great deal more comfortable as an exemplar of the glittering geometries that enthral us and that we discover with delight in natural phenomena. When we have occasion to enter one of these troubled sanctuaries where so many artful reflections flit about amongst the black or white marbles, the gilt, the red or blue lacquers, we are seized by malaise, by anguish: we long to leave this den, to escape to the open air, and there, reassured and confident, to seat ourselves in a cell such as that in the convent of Fiesole, or better still, to get down to work in the superb office of a modern factory, which is clear and rectilinear and painted with white ripolin and in which healthy activity and industrious optimism reign.

To tie up the final strand: a triggering of our consciousness, a classification, and a normal perception of the objects in our life will emerge, which distinguishes the highly practical things of work from the intensely free, living, ideal things of the mind.

Rob Krier  
1938

Urban Spaces  
1975

#### Typological and Morphological Elements of the Concept of Urban Space

##### Introduction

The basic premise underlying this chapter is my conviction that in our modern cities we have lost sight of the traditional understanding of urban space. The cause of this loss is familiar to all city dwellers who are aware of their environment and sensitive enough to compare the town planning achievements of the present and the past and who have the strength of character to pronounce sentence on the way things have gone. This assertion alone is of no great service to town planning research. What has to be clearly defined is what should be understood by the term urban space and what meaning it holds within the urban structure so that we can go on to examine whether the concept of urban space retains some validity in contemporary town planning and on what grounds. Space in this context is a hotly disputed concept. It is not my intention here to generate a new definition but rather to bring its original meaning back into currency.

##### Definition of the Concept 'Urban Space'

If we wish to clarify the concept of urban space without imposing aesthetic criteria, we are compelled to designate all types of space between buildings in towns and other localities as urban space.

This specific definition of urban space removes all aesthetic criteria. This move is not unlike Durand and Le Corbusier. However, Durand and Le Corbusier focuses on the discrete object. Krier has a more holistic mindset

This space is geometrically bounded by a variety of elevations. It is only the clear legibility of its geometrical characteristics

and aesthetic qualities which allows us consciously to perceive external space as urban space.

"Geometrically Bound" - this implies form (geometry/shape) holds significance.

The polarity of internal-external space is constantly in evidence in this chapter since both obey very similar laws not only in function but also in form. Internal space, shielded from weather and environment is an effective symbol of privacy; external space is seen as open, unobstructed space for movement in the open air, with public, semi-public and private zones.

The basic concepts underlying the aesthetic characteristics of urban space will be expounded below and systematically classified by type. In the process, an attempt will be made to draw a clear distinction between precise aesthetic and confused emotional factors. Every aesthetic analysis runs the risk of foundering on subjective questions of taste. As I have been able to observe from numerous discussions on this topic, visual and sensory habits, which vary from one individual to the next, are augmented by a vast number of socio-political and cultural attitudes, which are taken to represent aesthetic truths. Accepted styles in art history - for example: baroque town plans, revolutionary architecture etc - are both useful and necessary.

The following classification does not make any value judgements. It enumerates the basic forms which constitute urban space, with a limited number of possible variations and combinations. The aesthetic quality of each element of urban space is characterised by the structural interrelation of detail. I shall attempt to discern this quality wherever we are dealing with physical features of a spatial nature. The two basic elements are the street

and the square. In the category of interior space we would be talking about the corridor and the room. The geometrical characteristics of both spatial forms are the same. They are differentiated only by the dimensions of the walls which bound them and by the patterns of function and circulation which characterize them.

After "Urban Space" is identified Krier goes on to break urban space into its components. Deconstruction is at play just like Daland, but this deconstruction is different.

#### The Square

This spatial model is admirably suited to residential use. In the private sphere, it corresponds to the inner courtyard or atrium. The courtyard house is the oldest type of townhouse. In spite of its undisputed advantages, the courtyard house has now become discredited. It is all too easily subject to ideological misinterpretation, and people are afraid that this design may imply enforced conformity to a communal lifestyle or a particular philosophy.

A certain unease about one's neighbours has undoubtedly led to the suppression of this building type. Yet in the same way, as communal living has gained in popularity for a minority of young people with the disappearance of the extended family, the concept of neighborhood and its accompanying building types will most certainly be re-adopted in the near future.

In the public sphere, the square has undergone the same development. Market places, parade grounds, ceremonial squares, squares in front of churches and town halls etc., all relics of the Middle Ages have been robbed of their original functions and their symbolic content and in many places are only kept up through the activities of conservationists.

What are the functions which are appropriate to the square?

Commercial activities certainly, such as the market, but above all activities of a cultural nature. The establishment of public administrative offices, community halls, youth centres, libraries, theatres and concert halls, cafes, bars etc. Where possible in the case of central squares, these should be functions which generate activity twenty-four hours a day. Residential use should not be excluded in any of these cases.

#### The Street

In purely residential areas, streets are universally seen as areas for public circulation and recreation. The distances at which houses are set back from the street, as regulations demand in Germany today, are so excessive that attractive spatial situations can only be achieved by gimmickry. In most cases, there is ample space available for gardens in addition to the emergency access required for public service vehicles. This street space can only function when it is part of a system in which pedestrian access leads off the street. This system can be unsettled by the following planning errors:

1 | If some houses and flats cannot be approached directly from the street but only from the rear. In this way, the street is deprived of a vital activity. The result is a state of competition between internal and external urban space. This characterization of space refers to the degree of public activity which takes place in each of these two areas.

2 | If the garages and parking spaces are arranged in such a way that the flow of human traffic between car and house does not impinge upon the street space.

3 | If the play spaces are squeezed out into isolated areas with the sole justification of preserving the intimacy of the residential

zone. The same neurotic attitude towards neighbours is experienced in flats. The noise of cars outside the home is accepted, yet indoors children are prevented from playing noisily.

4 | If no money can be invested in public open spaces, on such items as avenues of trees, paving and other such street furniture, given that the first priority is the visual appeal of space.

5 | If the aesthetic quality of adjacent houses is neglected, if the facing frontages are out of harmony. If different sections of the street are inadequately demarcated or if the scale is unbalanced. These factors fulfil a precise cultural role in the functional coherence of the street and square. The need to meet the town's function of 'poetry of space' should be as self-evident as the need to meet any technical requirements. In a purely objective sense, it is just as basic.

Can you imagine people no longer making music, painting, making pictures, dancing? Everybody would answer no to this. The role of architecture, on the other hand, is not apparently seen as so essential. 'Architecture is something tangible, useful, practical' as far as most people are concerned. In any case, its role is still considered as the creation of coziness indoors and of status symbols outdoors. Anything else is classed as 'icing on the cake', which one can perfectly well do without. I maintain that a stage in history when architecture is not granted its full significance shows a society in cultural crisis, the tragedy of which can scarcely be described in words. Contemporary music expresses it adequately.

The problems of the residential street touched on here apply equally to the commercial street. The separation of pedestrians and traffic carries with it the danger of the isolation of the pedestrian zone. Solutions must be carefully worked out which will keep the irritation of traffic noise and exhaust fumes

away from the pedestrian without completely distancing one zone from the other. This means an overlapping of these functions, to be achieved with considerable investment in the technological sphere, a price which the motorized society must be prepared to pay. This problem will remain much the same even when the well-known technical shortcomings and acknowledged design failings of the individual car have been ironed out. The number of cars, and their speed, remains a source of anxiety. With the way things are going at the moment, there seems little hope of either factor being corrected. On the contrary, nobody today can predict what catastrophic dimension these problems will assume and what solutions will be needed to overcome them.

It is completely absurd to labor under the misapprehension that one day the growing need to adopt new modes of transport will leave our countryside littered with gigantic and obsolete monuments of civil engineering.

In fact one is inclined to think that, considering the level of investment in the car and all that goes with it, a fundamental change is no longer feasible in the long term.

All this illustrates the enormous conflict of interests between investments for the demands of machine/car and investments for living creature/man: it also indicates that there is a price to be paid for the restoration of urban space. If our society is to continue to value life in its cities.

Back to the problem of the commercial street which has already been outlined. It must be fashioned differently from the purely residential street. It must be relatively narrow. The passerby must be able to cast an eye over all the goods on display in the shops opposite without perpetually having to cross from one side of the street to the other. At

least this is what the shopper and certainly the tradesman would like to see. Another spatial configuration of the shopping street is provided by the old town centre of Berne, in which pedestrians can examine the goods on display protected by arcades from the inclemency of the weather. This type of shopping street has retained its charm and also its functional efficiency up to the present day. The pedestrian is relatively untroubled by the road, which lies on a lower level. This street space can serve as an example to us.

#### Typology of Urban Space

In formulating a typology of urban space, spatial forms and their derivatives may be divided into three main groups, according to the geometrical pattern of their ground plan: these groups derive from the square, the circle or the triangle.

Without doubt the scale of an urban space is also related to its geometrical qualities. Scale can only be mentioned in passing in this typology. I wish to try and deal with the significance of proportions in external space more comprehensively in a later chapter. They do not affect the arrangement of my typology.

#### Modulation of a Given Spatial Type

The matrix drawn up below shows, reading from top to bottom:

- 1 | The basic element
- 2 | The modification of the basic element resulting from the enlargement or reduction of the angles contained within it, where the external dimensions remain constant
- 3 | The angles remain constant and the length of two sides changes in the same proportion
- 4 | Angles and external dimensions are altered arbitrarily
- 5 | Under the heading 'distortion' are included spatial forms which are difficult or impossible

to define. This category is intended to cover those shapes which can only with difficulty be traced back to their original geometric model. These shapes may also be described as species born out of chaos. Here the elevation of buildings may be distorted or concealed to such an extent that they can no longer be distinguished as clear demarcations of space - for example, a facade of mirror glass or one completely obscured by advertisements, so that a cuckoo clock as big as a house stands next to an outsize ice-cream cone, or an advert for cigarettes or chewing gum stands in place of the usual pierced facade.

All these processes of change show regular and irregular configurations.

After Street and Square are seen as having unique properties Krier goes on to look at all of the things that influence the Street and Square. This influence is broken into distinct categories.

#### How Building Sections Affect Urban Space

The basic elements can be modified by a great variety of building sections. I illustrate here 24 different types which substantially alter the features of urban space.

#### Intersections of Street and Square

All spatial types examined up to now can be classified according to the types of street intersection laid out in the diagram opposite. As an example here we have a set of permutations for up to four intersections at four possible points of entry. This chart should only be taken as an indication of the almost unlimited range of possible permutations of these spatial forms. To attempt a comprehensive display here would conflict with the aim of this typological outline.

### *Spatial Types and How They May Be Combined*

The three basic shapes (square, circle, and triangle) are affected by the following modulating factors: angling; segmentation; addition; merging; overlapping or amalgamation of elements; 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 these stages of modulation. All sections are fundamentally applicable to these spatial forms. In the accompanying sketches I have attempted to make clear as realistically as possible the effect of individual spatial types so that this typology can be more easily accessible and of practical use to the planner.

The terms 'closed' and 'open' may be applied to all spatial forms described up to now: i.e. spaces which are completely or partially surrounded by buildings.

Finally, many compound forms can be created at will from the three spatial types and their modulations. In the case of all spatial forms, the differentiation of scale plays a particularly important role, as does the effect of various architectural styles on the urban space.

Design exercises can be 'played' on the 'keyboard' I have just described. Apart from this 'formal' procedure, other factors also have their effect on space, and this effect is not insignificant. These factors are the rules governing building construction, which make architectural design possible in the first place, and above all else determine the use or function of a building, which is the essential prerequisite for architectural design. The logic

of this procedure would therefore demand this sequence: function, construction and finally the resultant design.

Inclusive performance reduction allows one to look at urban space discreetly. It is inclusive because architecture (not seen as simply the building but the space created by building something whether that space is interior or exterior) is seen as belonging and constituting the urban. A deconstruction of the urban space allows one to look at all of the discrete members that constitute it (street and square). By reducing the performance of the street and square we are able to look at their quality as being either 'open' or 'closed'. A final deconstruction of these qualities permits us to understand all of the different things that go into making a space open or closed (elevations, facades, etc.)

### *Morphological Series of Urban Spaces*

The series of spatial forms which I have sketched here is laid out simply according to the geometrical characteristics of the basic shape. It does not claim to be complete. It should indicate to the planner the wealth of spatial forms which is our town-planning heritage, and suggest what he can learn from these examples and apply to his own projects. In presenting this selection of drawings I would like to try and convince architectural theoreticians and historians that in future they must incorporate spatial considerations more exactly into their overall view of architecture and town planning. Such considerations have in fact been criminally neglected.

There is a widespread and naive view prevalent among art historians as well as the general public that this type of irregular or organic architecture is more beautiful than a group of urban buildings planned synchronically. These are 25 simple geometrical variations on

a four-sided square and examples of different types of street intersection. Anyone engaged on research or planning on the subject of urban space will soon find that an almost inexhaustible range of possible forms exists, most clearly in evidence in our historic towns.

Krier emphasizes the importance of the 'historic city'. To him the only way the city can grow productively without creating poor urban space is to fall in line with the 'historic city'. The 'historic city' is the building blocks of his system of analysis - the specific facade or sections.

A clear, geometric urban spatial form calls for architecture of extreme delicacy and high quality. Any architectural error is immediately obvious and damages the overall impression. In the case of irregular forms, variety is the overriding characteristic. Defective architectural detailing is not so glaringly obvious, but is effectively buried.

The great popularity of mediaeval squares is rather more rooted in the fact that, first, they are squares of a type which no modern town could imitate, and second, that they are surrounded by fine architecture. Our age cannot compete with the past in this area either.

Krier created a system not simply used for analysis. After the final step of his logical process (understanding the various things that constitute difference in urban space) Krier is able to use these generalizations to create new never before seen urban spaces. Here *a posteriori* type knowledge (coming from analysis) is translated into *a priori* type knowledge (allowing one to make inferences about how things being created within the typological framework). Krier created a system of creation.

Chris Lee

1965

### *The Fourth Typology*

2012

### *Typological Formations*

Raise the question of type in today's urban context and you risk being branded a historical revivalist or a conservative. Type has not been intensely debated for more than 30 years. Back then, at the demise of modernism, it had become apparent that the generic proliferation of the international style - a prototype born of the union between abstract design and mechanical production - had completely failed to articulate the intricacy and complexity of urbanism and the historical city. A new gospel of type and context in urbanism was promulgated by Colin Rowe and Aldo Rossi but tragically made flesh in the form of pastel-toned classical revival PoMo architecture by the likes of Rob and Leon Krier, Terry Farrell and Michael Graves.

Substitute "digital production" for "mechanical production" and it becomes clear that today's global proliferation of complex forms echoes the conditions of the recent past. A timely moment, then, to reinvoke type? The common understanding of type has become rather stale. For most, it simply means the way in which architects organise their practice profile, classifying work by function - public buildings, residential, commercial, offices and so on. In the context of such stable classifications and groupings, experimentation via type pales in comparison with, say, dabbling in the alchemy of scripting complex forms or geometries.

The notion of type is that of a tool. A tool that seems to be used primarily for organization of existing works. This is not uncommon. However, when we see how Krier uses type to not only organize but generate it begs the question: What is the appropriate use of type in the overall discourse?

### *Dominant Types*

Understanding, reasoning and then acting upon the urban context typologically should be seen as a means of affecting change at a scale beyond that of the single building. However, as the scale slides upwards, broadening the field of operation, the conflicts between the extent and detail of analysis and proposition increase. The more spatially and architecturally resolved an urban plan, the less receptive it is to change or to alternative visions. Yet, urban plan that is described only in terms of policy and land-use does not offer the spatial and architectural richness or allure that is necessary to shore up consensus and galvanise action on the urban plan.

The City is a network of independent parts. This is slightly different from Krier's Historic City; it appears that Lee is anticipating change and permutation in architecture (urban) types. This allows Lee to create a Typology that is adaptive and responsive to the emergence of future types.

Repositioning type as a primary element in envisioning an urban plan allows one to draw on its pliability as a constituent part of the urban context and its effectiveness as a medium for channelling the disciplinary knowledge of the architect. Both of these issues hinge on the ability of type to act as an instrument of control, of varying degrees of flexibility. Both Rossi and Rowe argued that an area of study and subsequent intervention within an urban context could be brought into focus either by a sizeable constellation of similar types or by the uniqueness afforded by an architectural artefact. Rossi emphasised historical monuments and housing. Rowe a coherent, identifiable pattern of type read in a two-dimensional figure-ground plan alongside historical monuments. This leaning towards historical types (Rossi) or city-pattern (Rowe) was in essence a response to

modernism's failure coded with the historical city and the more nuanced complexities of urbanity. These positions are characteristic of the late 70s; they are also indicative of the common divisions in the discourse around type and the urban context; most critics take the view that you either work typologically or abstractly, are either a contextualist or a modernist, conservative or progressive, specific or generic.

This dichotomous approach belies the simple fact that type is still the dominant force in shaping cities today. The high-rise is now the de facto building type of the aspiring global city, exemplified by Shanghai and Dubai. The Burj Dubai Tower is set to become the tallest building in the world, but its final height is being kept a closely guarded secret to preserve the status this will bestow upon the city. The high-rise type (a relic from a previous century) is no longer instrumental on account of its efficient stacking of density or its emancipation of the ground from the building mass. Today, it is its soaring height that is deployable - to imbue iconic status and lubricate global PR machines. Another type, the museum, continues to anchor urban regeneration plans, as a landmark and a type largely reserved for and perfected by so-called Starchitects (as in Bilbao, Taichung, Guangzhou and Abu Dhabi), while high-density housing single-handedly dominates many urban plans (including the whole of London's Thames Gateway, for example).

Given the continuing hold of type, the composite influence of dominant types becomes ever more critical in any attempt to stage alternative visions for our cities. Dominant types may still be identified and defined by their potential to effect change, and they can range from collective types that agglomerate to form sizeable fragments or districts, to similar types that are significant either on account of their iconic status, which

allows them to act as anchors within their individual urban context, or their proliferation, where the sheer force of numbers substitutes for any discernible quality.

#### The Fourth Typology

Based on this reading of the dominant type in the developmental city-state, an attempt can be made now to set out all the characteristics of a possible fourth typology. It differs fundamentally from the preceding three typologies as highlighted by Vidler, but is nevertheless definable only in relation to the first three. The fourth typology is generic, that is, typical with the potential for transformation. It can be concluded here that Singapore as a developmental city-state, in the tropics, starting almost from a blank slate, gave rise to a set of pronounced dominant types - the lower and slab block of HDB housing and the podium blocks. In this way, it differs from the third typology which depends on the historical city for its definition and constitution.

On initial observation, the "Fourth Typology" seems to operate as any other structured type theory. The only notable difference is the development of a City State in contrast to Krier's Historic City, could it be that there are different types of "city models"?

The fourth typology owes its operativity to the ability of its deep structure. It is shaped by a political ideology that emphasizes the efficacy of pragmatism on the one hand, and the nature of multi-stakeholders' developments that favor flexible accumulation and aggregation as growth strategies, on the other. Due to these conditions, from which the dominant types emerged, its origins necessitate that the dominant type is always becoming, in a state of constant development, as long as the political legitimacy of a developmental city-state holds a consensus.

The fourth typology is pervasive, prevalent and dominant. Its dominant type and the idea of the city as a developmental apparatus can be found in cities across East Asia. It is more pronounced in China, with its single-party rule under a communist party that is currently overseeing the expansion of a neoliberal economy. Like Singapore, its present political legitimacy is largely resting on its developmental administrative ability.

The fourth typology is found in the dominant type. This has been demonstrated in the way in which the developmental city-state, like Singapore, is read through its dominant type as both idea and deep structure - as a framework of recognition and as a reified typical architectural object.

The city appears as a significant player just as it did in Krier's work. This city is different however. After inclusive performance reduction is performed the end result is slightly different; the city is not distilled to urban space, but a political engine instead.

The fourth typology is political. In the developmental city-state, the dialectic categories of politics and economy, city and suburbs, monument and housing and its analogous manifestations in the delineation of a legible, definable core in contraposition to an expansive territory, do not apply. Indeed the developmental city is administrative, it is total but it is definitely not an apolitical project. As has been shown, it is a total political project that is tangible and concrete. Whether the developmental city-state can be read at an agonistic space is harder to assert if the above dialectics are applied, which also leads to a certain sense of alienation and disempowerment. This is further exacerbated by the fact that the familiar lines dividing left and right, socialist and capitalist, state and the individual, as a precondition of the political, are difficult to delineate here. For instance, the

provision of public housing is the hallmark of any socialist government and the success of its near universal provision in Singapore, at a high standard of living, is an envy to the former. Yet, this success is crucially underpinned by the logic of the market. The state's embrace of a neoliberal market economy is the defining feature of the right and yet it is an economy that is micro-managed by the state, with direct and constant intervention. The regime is undoubtedly authoritarian and yet it is democratically elected to office in all eleven parliamentary elections since independence and follows all due democratic and legal processes. Indeed, the fourth typology acquires a political agency if it is understood as a common framework that enables an inclusive process of change and transformation. Were, the model of agonism to again useful to conceive of the relation between the sovereign and the subject, as one that maintains its bipolarity but does not seek to confront and displace the other, it seeks instead to achieve an equilibrium and balance, albeit in constant transformation and alternation. This alternation presents bipolarity not as a dialectical relationship that moves from contradiction through synthesis and sublation, but as complementary opposites constituting a totality. Thus, for this common framework to function - to facilitate this alternation - it must be a shared knowledge that is based on rationality, as informed by the example of Durand. The deep structure of the dominant type, as much as it can be appropriated by the state, can also be appropriated by others. It is a medium, a recognizable framework for negotiation and cooperation - a social contract. The awareness of this form of efficacious pragmatism is not solely to enable the operativity of praxis; as a matter of fact, I argue that the ability to detect, describe, analyze and theorize the dominant type is the first step in surpassing it, which involves a choice and decision upon the closure of

analysis; and thus a political act.

In today's context, this notion of shared knowledge as something that can be held in common can be understood as immaterial labor. In *"The Common in Communism"*, Michael Hardt highlights that the struggle against the hegemony and inequalities of capitalism is no longer between capitalism and socialism or between immobile property and mobile property. The latter category typified the struggle between rent and profit in the mid-nineteenth century, where profit extracted from immobile property triumphed over rent extracted from the immobile property. Hardt offers a third way, which he terms 'the common in communism'. He argues that the struggle today is between material and immaterial property. He reasons that immaterial and biopolitical production is emerging as a hegemonic component in today's economy that provides this immaterial property. This form of production covers the production of ideas, information, images, knowledge, code, languages, social relationships, effects and the like," and involves the whole cross-section of societies who use information technology as a means of production. The distinguishing factor of this form of production is that it cannot be completely privatized and does not follow the logic of scarcity. It is imminently and infinitely reproducible and easily shared. Thus, Hardt terms this immaterial and biopolitical production as 'the common' and as a means for emancipation.

... communism is defined by not only the condition of property but also the affirmation of the common — the affirmation of open and autonomous biopolitical production, the self-governed continuous creation of need humanity. In the most synthetic terms, what private property is to capitalism and what state property is to socialism, the common is to communism."

By understanding the fourth typology as shared knowledge, a product of immaterial labor that uses the knowledge of the deep structure of the dominant type as a means of production, it can be constituted precisely as a common framework. It becomes the framework of recognition and a social contract, both as an idea and the idea of the city as a space of agonistic pluralism.

Due to the political nature of the Fourth Typology it has to belong to the Common. Krier made no mention of who/what the "urban space" belonged to. The obvious answer is the public, but this answer is limited by the operations Krier used in construction the type distinctions.

What is being put forth here is the possibility of architecture, through its disciplinary knowledge, as a means for emancipation from within. This involves the identification of the dominant type and the logic of its proliferation. Furthermore, the dominant types of the developmental city-state should not be seen as the culmination of an architecture for a nation or a people, but only a traceable beginning, and one that is still becoming. Thus to understand the deep structure of the dominant types, and redefining the understanding of type and typology here, is a response to a totality of architecture tied to its role in the discursive idea of the city, and thenceforth we can proceed in two ways: to harness the cumulative knowledge and intelligence of the deep structure for further variation or to completely destroy its deep structure, that is to displace its validity on its very own terms, to start anew.

Both Krier and Lee first enact a reduction of performance that occurs inclusive. This allows them both to look at the complexities of the city (Durand and Le Corbusier operate on the exclusive object with limits the scope of items analysed). This next step is subtle



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Logical Operations

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## Logical Operations

The context in which we understand architecture effects our perception of Type, however these contexts can be manipulated to filter our perception of similarity. Turning back to the project example I discussed earlier, before you sit three different projects A, B, and C. All of these projects bare a resemblance in one way or another. Without having any context to filter our perceptions we are left with no clear way to perceive similarity or difference.

An "Operational Lens" refers to the event that has occurred to limit or change our perception of similarity and difference. An operational lens generates a specific kind of information. These events appear to happen sequentially within a given type structure. However, by untangling a grouping of them and looking at the kinds of information being filtered it becomes clear that there exists a finite number of different lenses.

The methodology for discerning these primitive lenses consisted of analyzing the argument of a given type theorist. The various authors structure their points of view

Deconstruction refers to the simple act of breaking something into its pieces. This act does not prioritize any of the broken elements. After something has been deconstructed the original identity no longer exists. The number of objects after the act of deconstruction is always more than prior to the act. After an object is deconstructed the elements can be compared and contrasted according to their individual characteristics.

An example of this occurring looks something like this: you have a pen sitting in front of you. By deconstructing it you are now able to look at any of the parts. The parts hold their own significance. There are multiple ways to deconstruct a thing and there appears to be no limit to the degree in which it can be broken down. The largest galaxy is simply composed of atoms arranged in a particular way.

The act of Reducing something refers to the simplifying of information associated to that object. The number of reduced objects must be the same as the number of objects before the reduction has occurred. Reducing something involves a level of

abstraction. When I have a simple pen in front of me the act of reduction elevates it to the abstracted realm. I no longer have a pen I have the concept of the pen. This kind of abstraction/reduction takes on two distinct form: Formal and Performative.

Formal Reduction deals with the physical observable information. This kind of information can be shape, size, material, texture. The pen is reduced to an elongated cylinder of some kind. This object has a particular weight, length, and diameter. It might be wider on one end than the other. When our perception is limited in this way we compare and contrast the most basic information of a thing.

The way something performs is unique within a system. A complex system such as architecture is no different. When an object is reduced to its performance it is revealed how that object works within the system larger than itself. The role it plays in the grand scheme is revealed. The process of Reduction in general abstracts an object. If I take my pen and reduce it to the way it works within the world, I am left with its function. It is a tool used to make marks on things.

These lenses can be combined to talk about different things. In any given project A I can deconstruct the architecture into its parts, wall, doors, windows, columns, and so on. I can then perform a performance reduction on the individual parts and look at their abstracted form. When I switch the order of the lenses something interesting happens. First a performance reduction occurs and the architecture is abstracted into its function. I can then deconstruct its function into discrete parts: Circulation, entryways, bedrooms, conference rooms, special dividers.

Up until this point there has been one key thing missing from our filtering. We have been operation on a purely exclusive element. If architecture can be understood as being more than the summation of its part and ultimately cause the urban condition, we must be able to shift between these two external modifiers. Inclusive and Exclusive.

The way we compare and contrast is

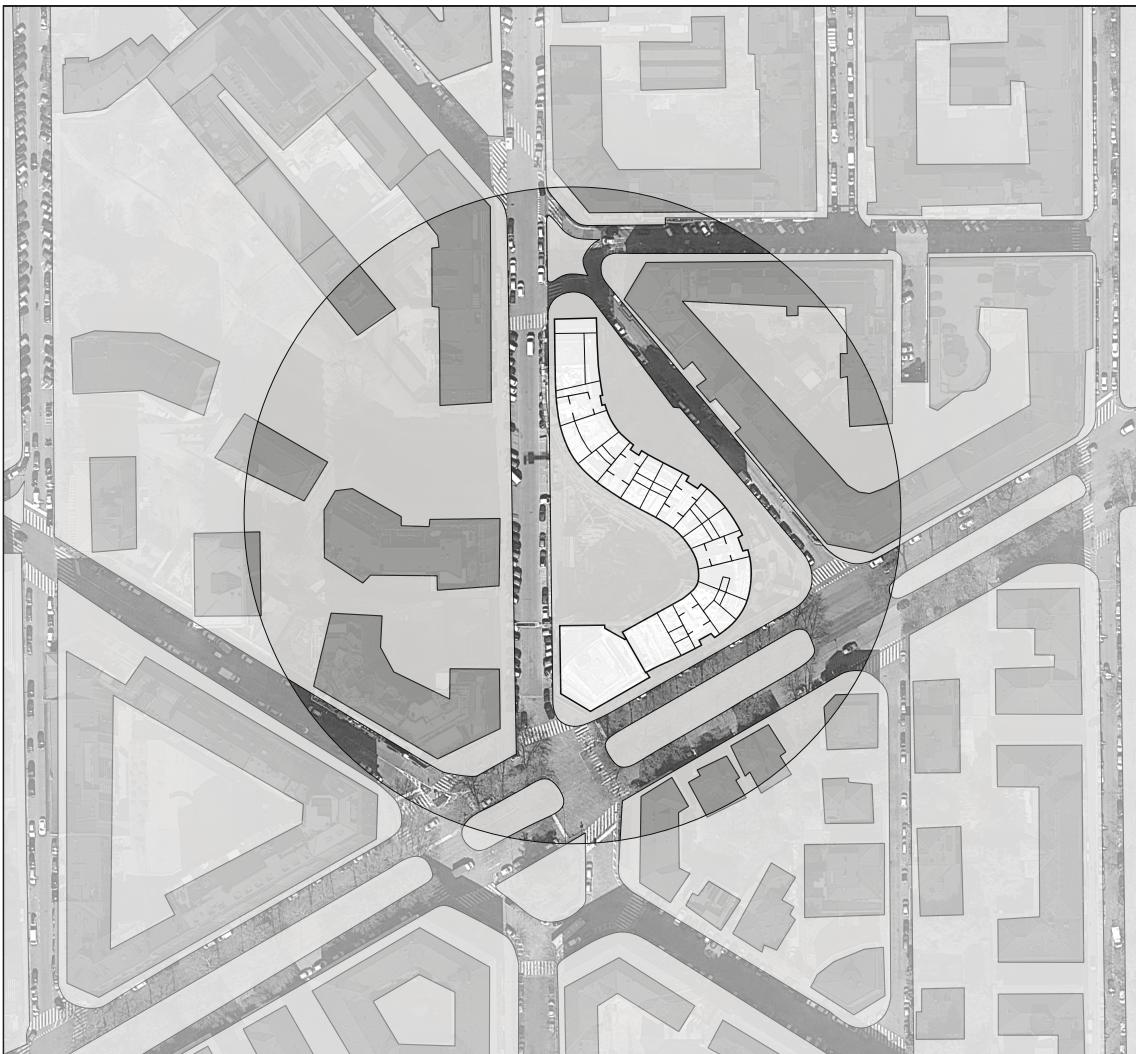
is important. If this is done exclusively the only thing taken into consideration is the object itself. It is put upon a pedestal and looked at within a vacuum. The particular context of the object is removed. Nothing else exist. This is a very limited way to view things. It prevents us from observing or talking about the effect things might have on the larger picture.

In contrast to Exclusive analysis. Inclusive analysis allows for the whole picture to be seen. Larger trends are shown. The architecture becomes more than the sum of its parts. It has a context and a larger purpose. Compared to inclusivity, exclusivity allows for more complex conversations to take place.

A single Lens is nothing more than a specific way to limit or filter the information about something. These operations appear to be the building blocks of they way we sort and understand things. So it seems that Operational are at the heart of Type and Typology not the specific accounts of a given author. The author merely deploys these lenses to construct an understanding of architecture. We use these operations to view architecture as if peering through a lens. How might these operational lenses help us draw connection between things we had previously understood to be different?

Let us look at a single example and see how our perception of the project changes as we apply different lenses.



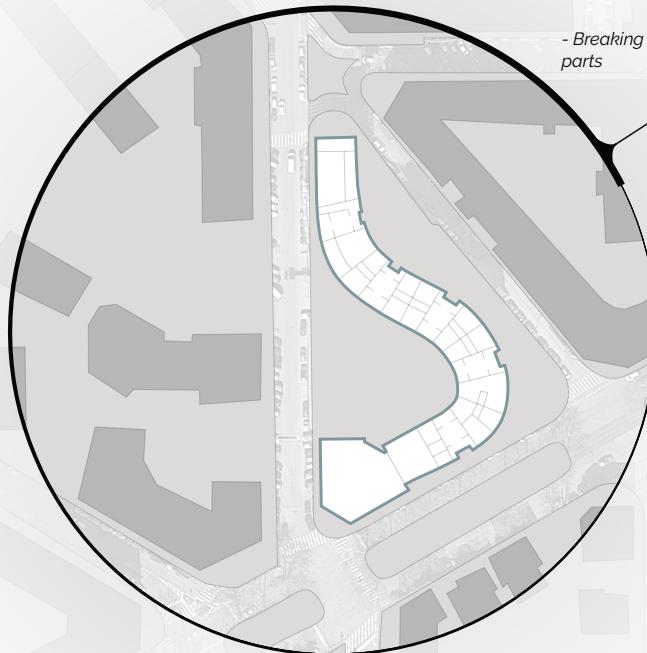


"The building is an intricate superposition of different constraints, internal functional requirements fused with a tripartite Milanese housing typology. These urban contextual discourses are overlaid with a rendering of three different materials: a roman travertine base punched with openings, a grid of metal paneling in the middle section, and a frame of metal outrigging that outlines a Carrara marble upper course. These constitute a series of urban villas on the topmost floors. The whole is slightly shifted to the front, precipitating a front and back. Together, these elements expose a clear dialogue of phenomena and abstraction that suggests an alternate way to frame an architecture of resistance, one that is no longer a condition of either/or, but one which suspends an easy resolution." - Eisenman Architects

This project was selected to allow for many different things to be pulled out of it. Not just the project is important, the way it relates to its context is also key. This project can be analyzed on many different scales. The project responds to the surrounding context. It is unique enough to stand out but it is also apparent that the project belongs where it does.



## Deconstruction | A



*- Breaking an object apart into distinct parts*



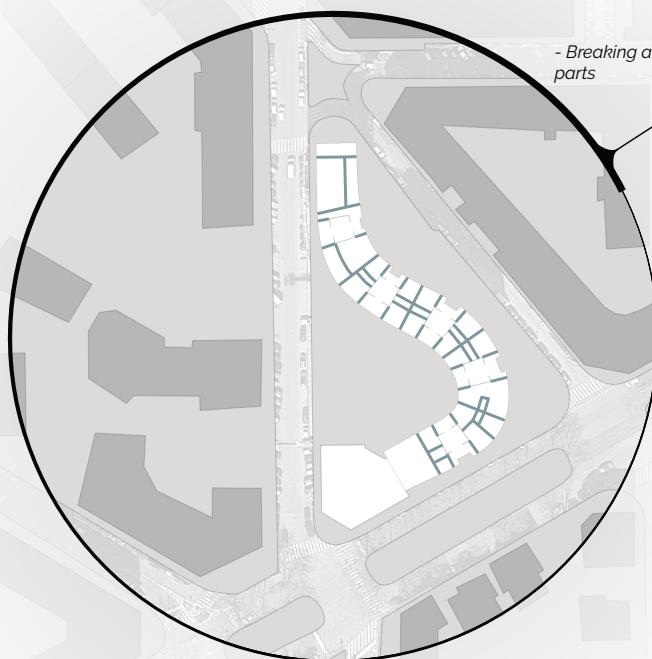
Envelope

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After an object is deconstructed the elements can be compared and contrasted according to their individual characteristics.

There are multiple ways to deconstruct a thing and there appears to be no limit to the degree in which it can be broken down. The largest galaxy is simply composed of atoms arranged in a particular way.

## Deconstruction | B

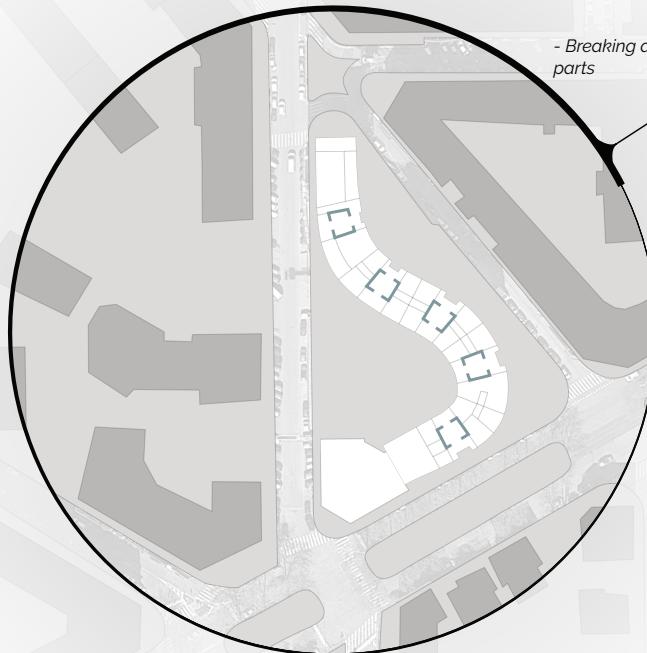


Interior Walls

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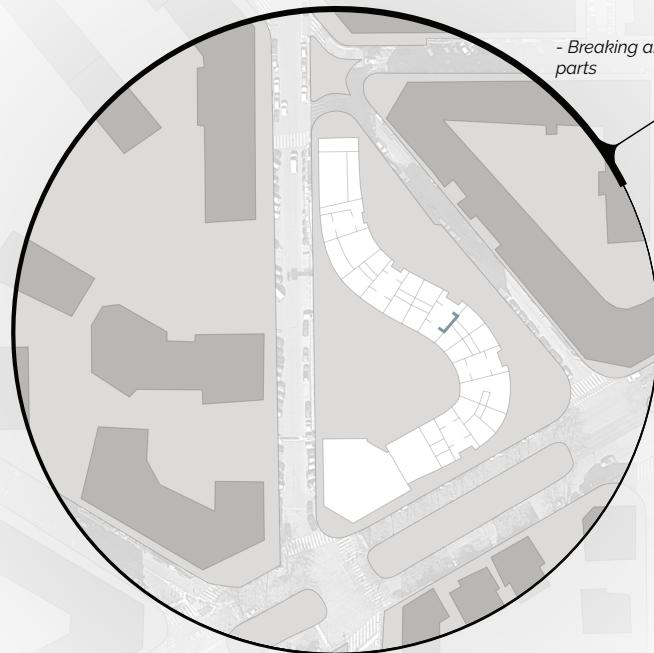
Structural Walls

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## Deconstruction | D



- Breaking an object apart into distinct parts

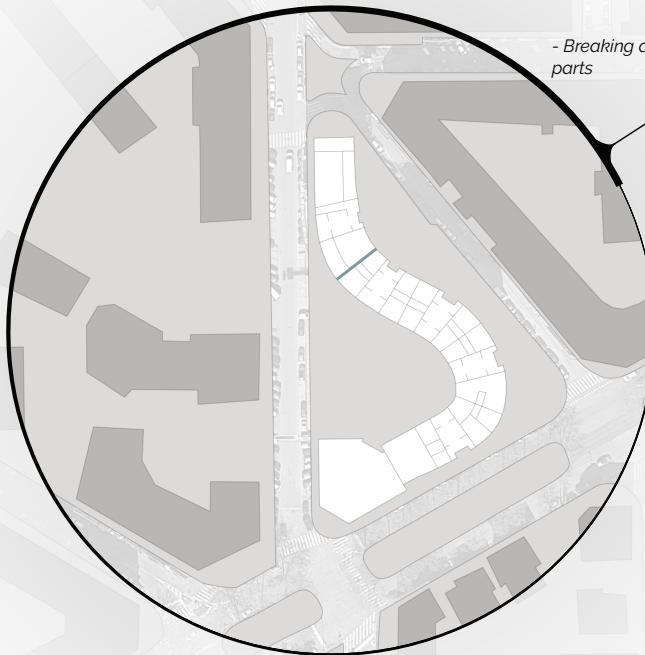


Structural Wall

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*- Breaking an object apart into distinct parts*



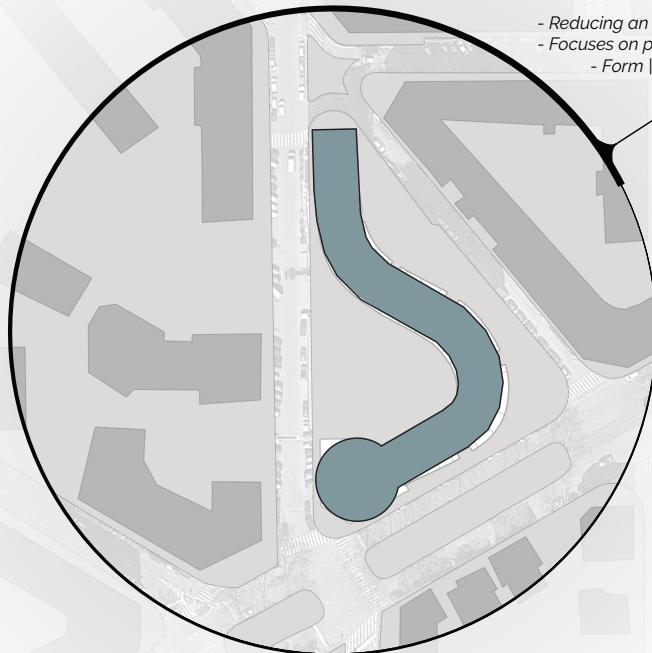
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- Reducing an object into a simpler concept
- Focuses on physical attributes
- Form | Material | Texture



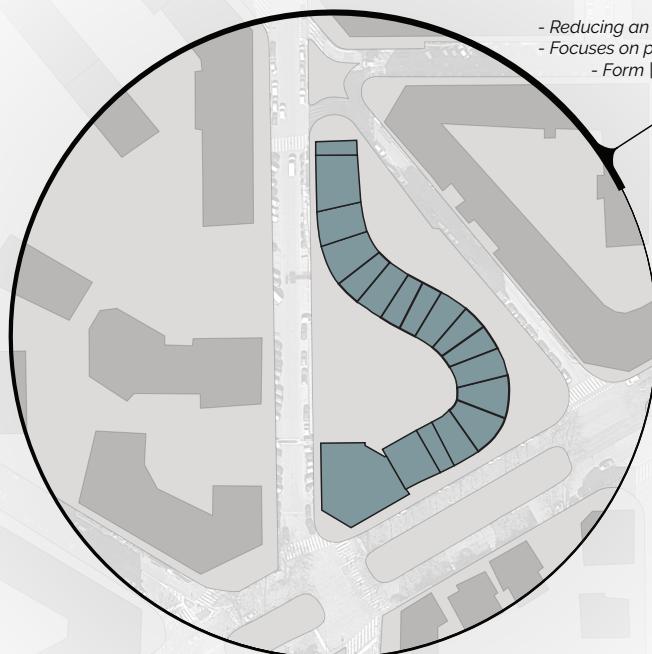
"S" Shape With a Dot

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Formal Reduction deals with the physical observable information. This kind of information can be shape, size, material, texture. The process of Reduction in general abstracts an object. It becomes more vague.

Similar to Deconstruction the number of different ways an object can be formally reduced is hard to count.

## Formal Reduction | B



- Reducing an object into a simpler concept
- Focuses on physical attributes
- Form | Material | Texture

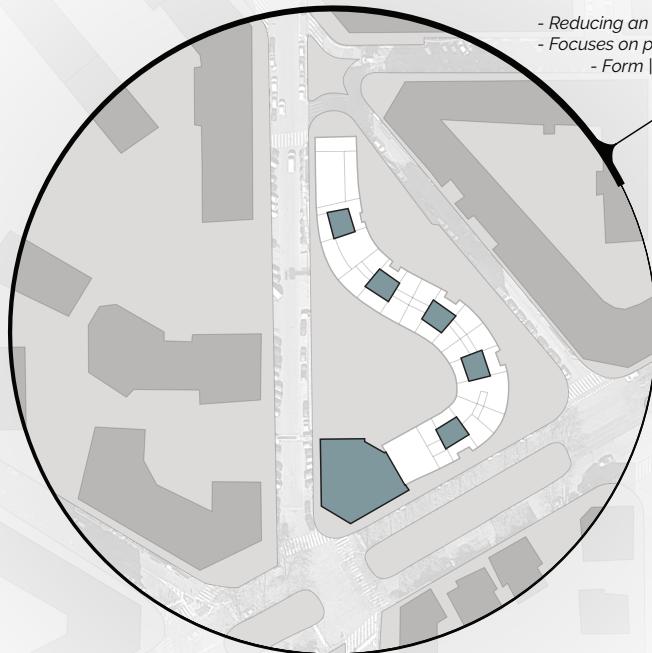


Segmented "S" Shape

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- Reducing an object into a simpler concept
- Focuses on physical attributes
- Form | Material | Texture



Rigid Shape

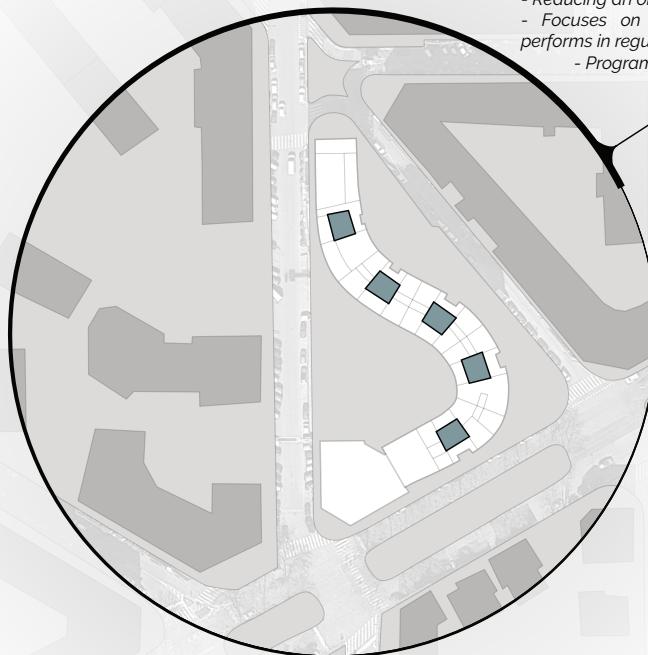
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## Performance Reduction | A



- Reducing an object into a simpler concept
- Focuses on how the particular concept performs in regards to the larger system
- Program | Use | Affect | Role



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The concept of Performance is imposed on an object. Due to this the number of different ways the performance of an object can be analyzed is almost limitless

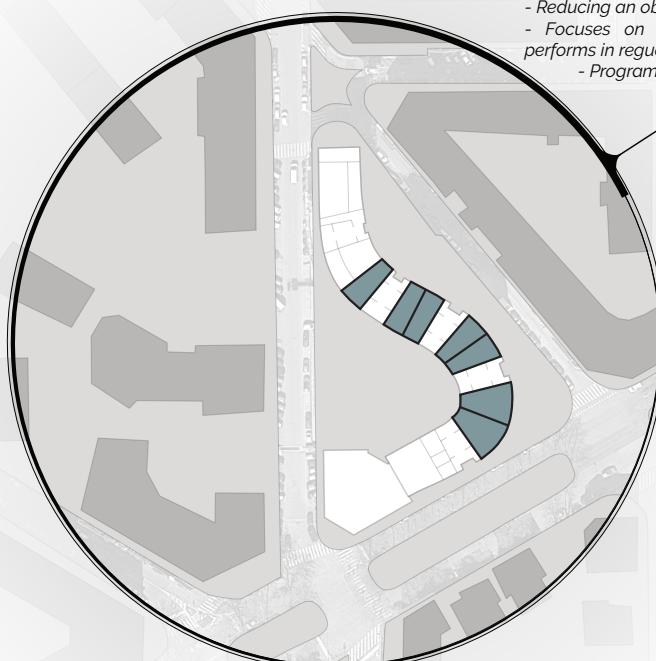
## Performance Reduction | B



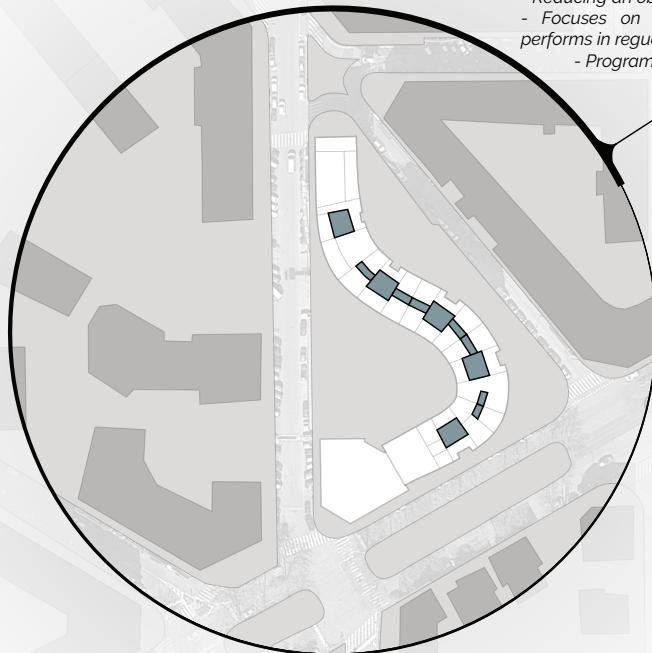
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## Performance Reduction | C



- Reducing an object into a simpler concept
- Focuses on how the particular concept performs in regards to the larger system
- Program | Use | Affect | Role



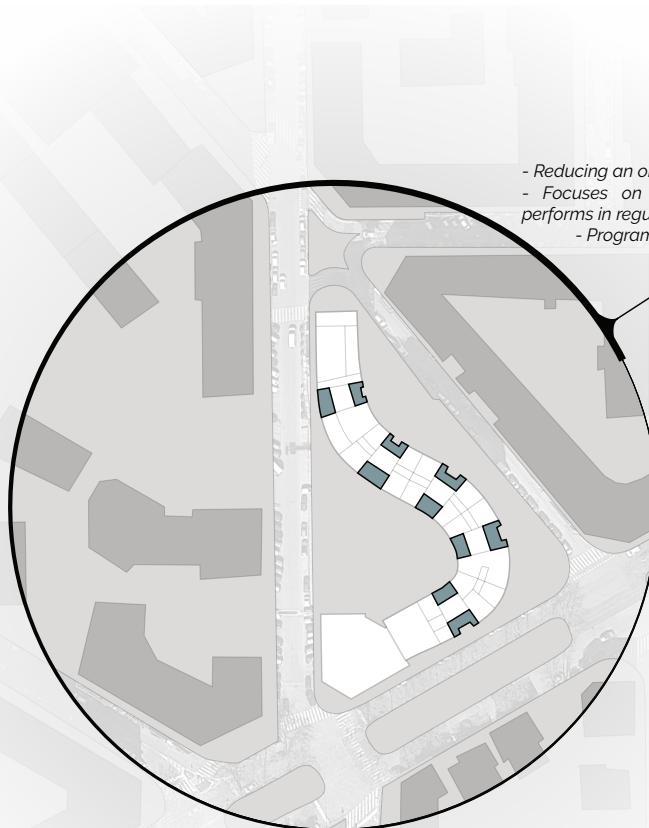
Vertical Circulation

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## Performance Reduction | D



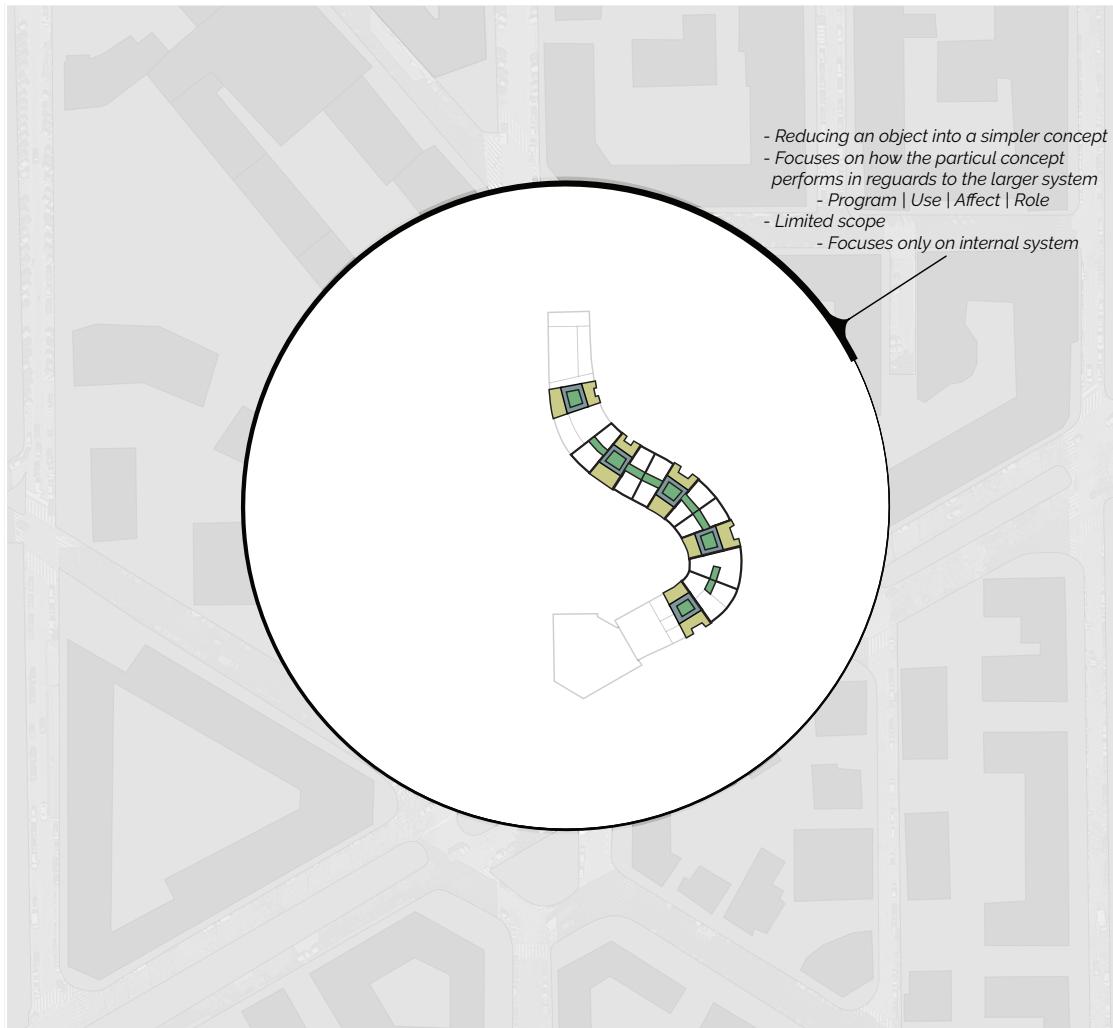
Entryway

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## Exclusive Performance Reduction | A



Structure

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Living Units

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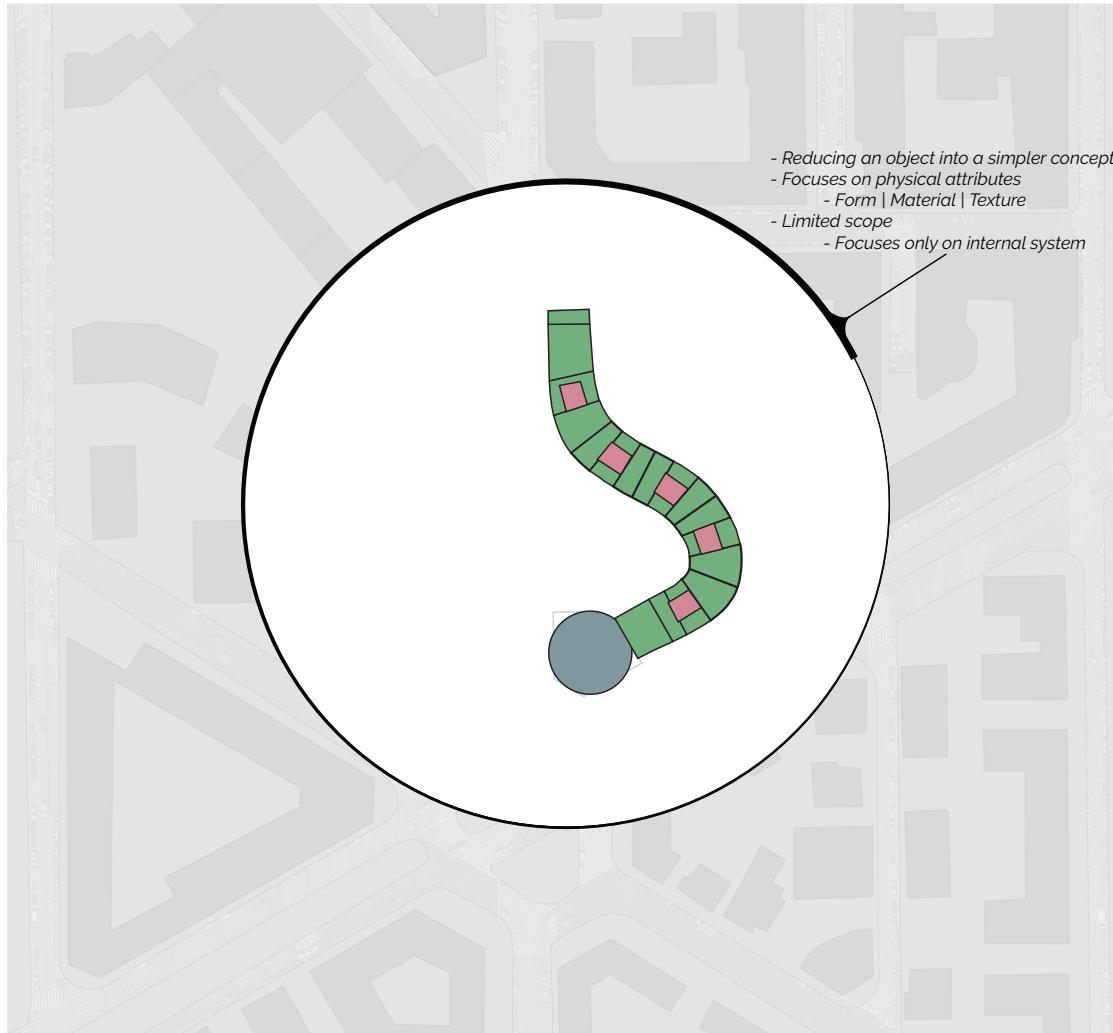
Vertical Circulation

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Entryway



## Exclusive Formal Reduction | A



Dot



Rigid Shape



Segmented "S" Shape

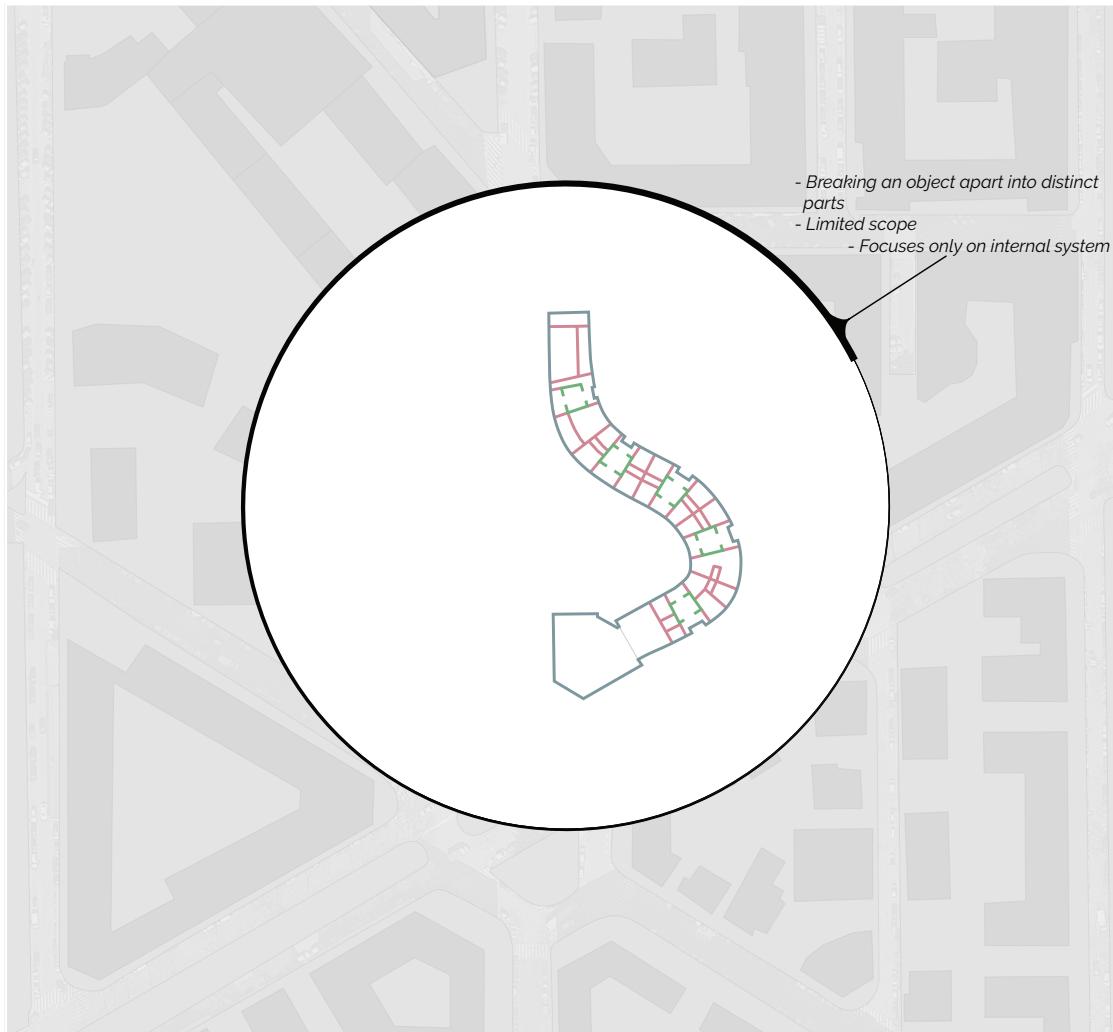
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## Exclusive Deconstruction | A



Envelope

Interior Walls

Structural Walls

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## Exclusive Deconstruction | B



Envelope



Interior Wall



Structural Wall

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## Inclusive Deconstruction | A



Block

Building

Median

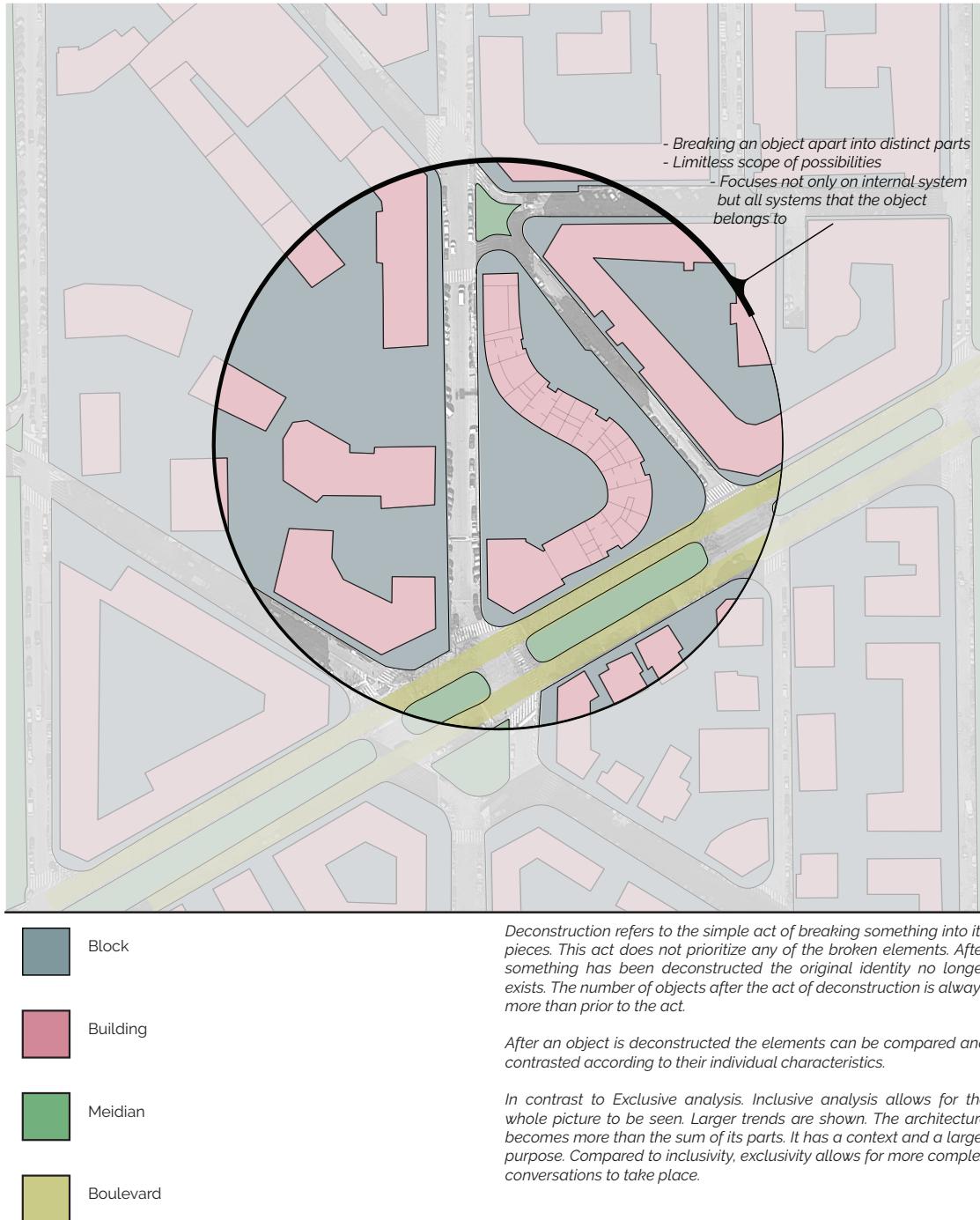
Boulevard

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## Inclusive Deconstruction | B



## Inclusive Formal Reduction | A



"S" Shape



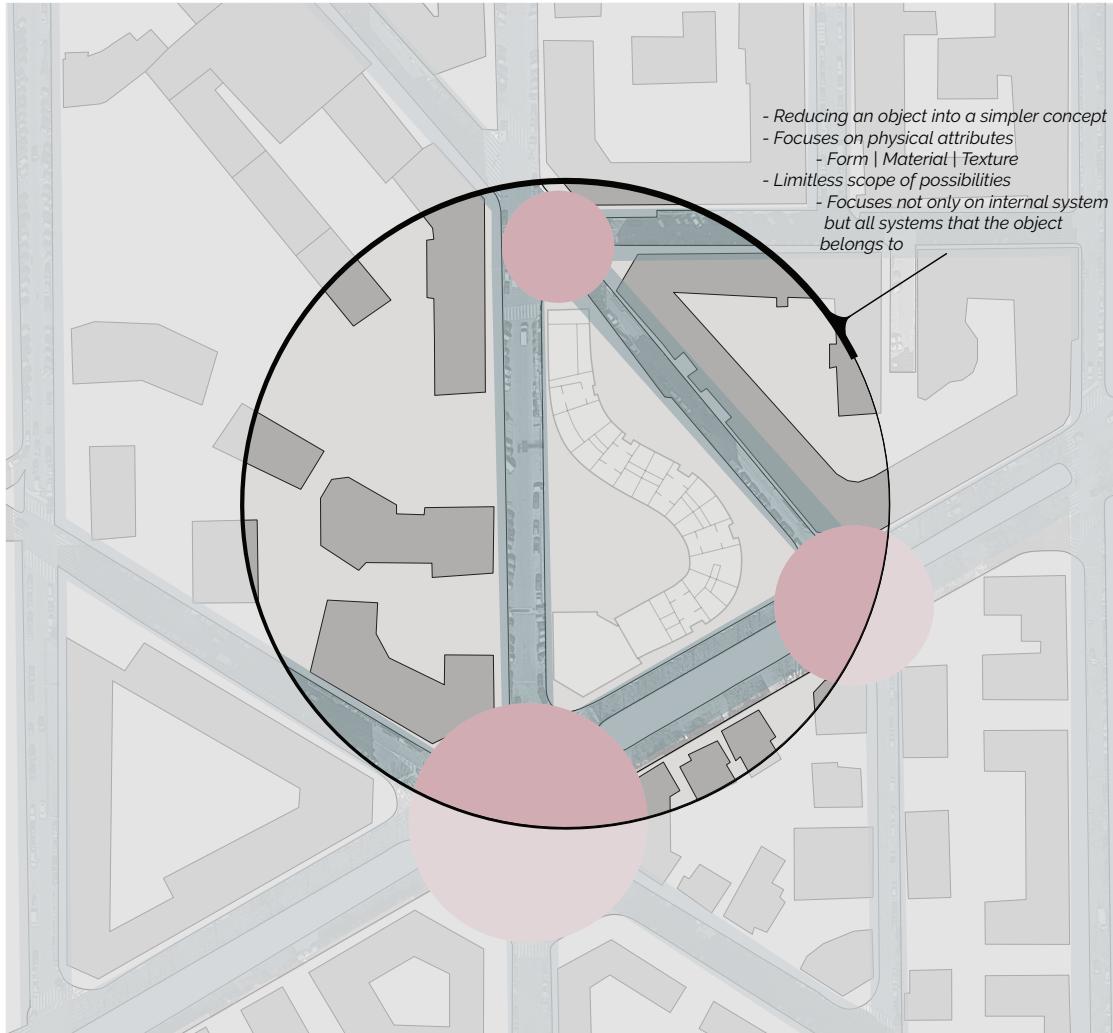
Square Shape

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## Inclusive Formal Reduction | B



 linear Access

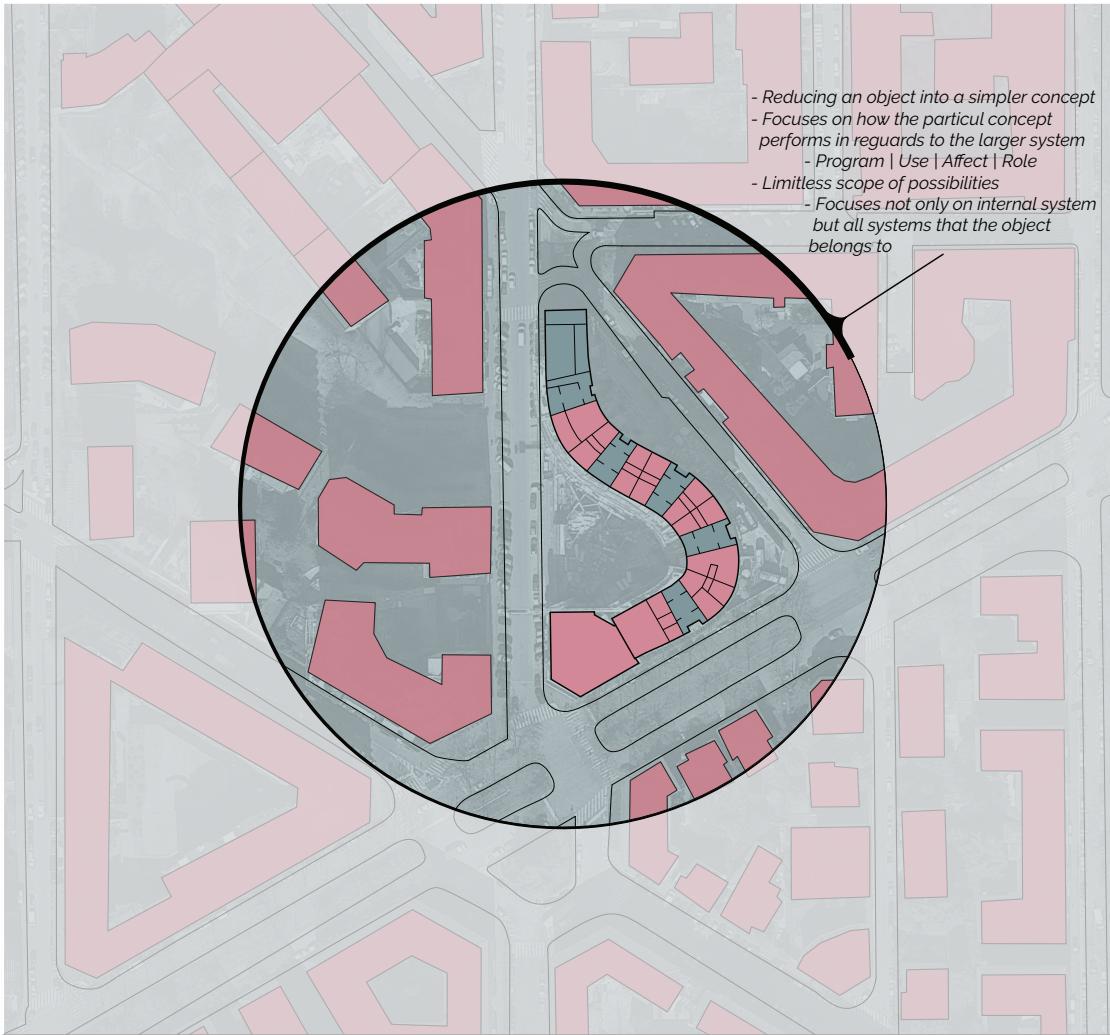
 Nodes

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## Inclusive Performance Reduction | A



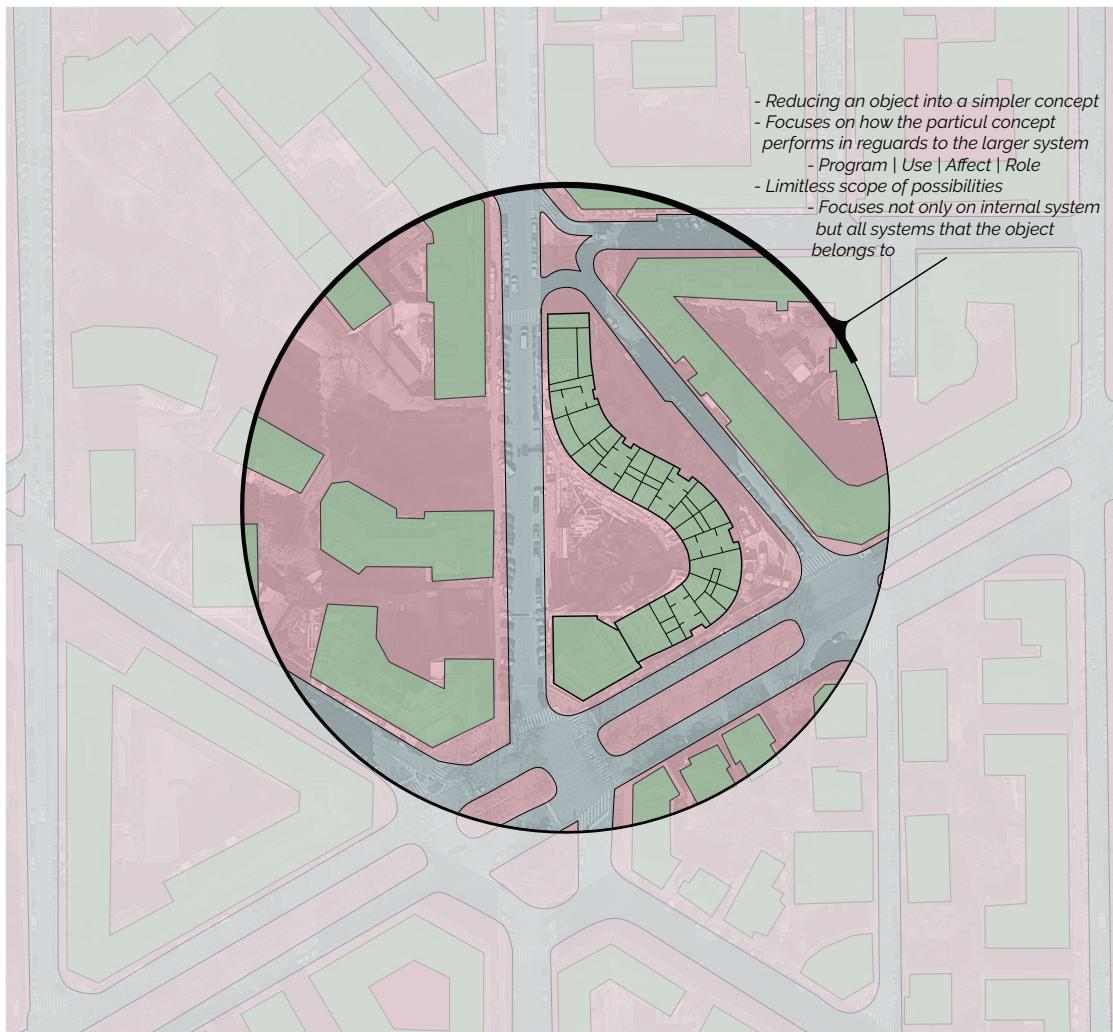
Public

Private

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## Inclusive Performance Reduction | B



Transportation



Public Exterior



Interior

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Impact | Typology

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We are able to recognize the impact something has by detecting its presence in the effect. Given a collection of artifacts we might be able to see that they share characteristics or that there is a deliberate difference between them.

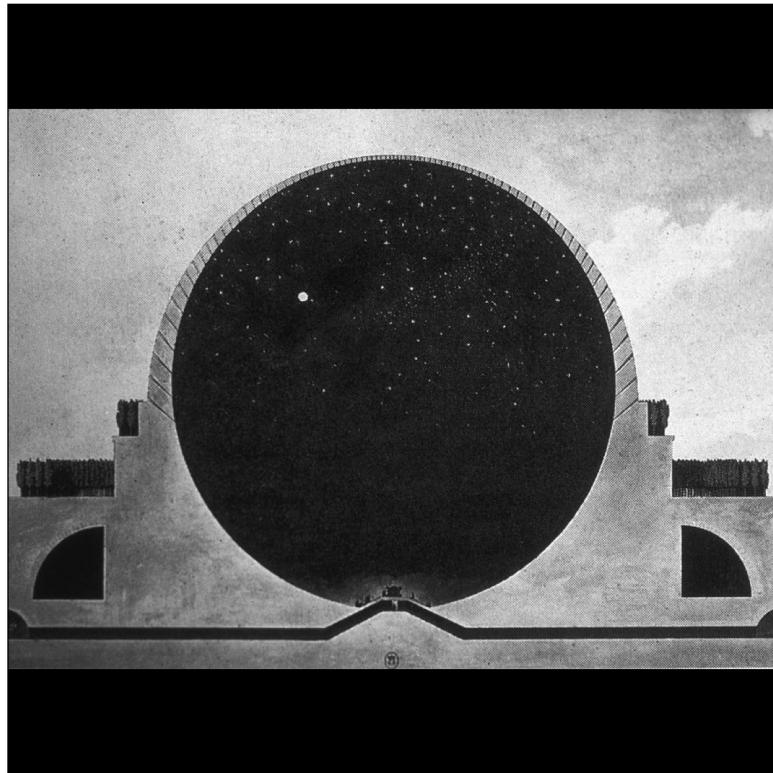
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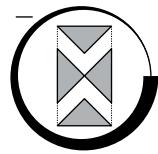




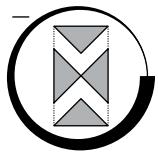
"The Primitive Hut"  
- Marc-Antoine Laugier -  
France  
1755



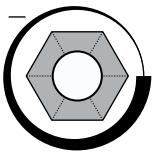
"Cenotaph for Sir Isaac Newton"  
- Étienne-Louis Boullée -  
NA  
1784



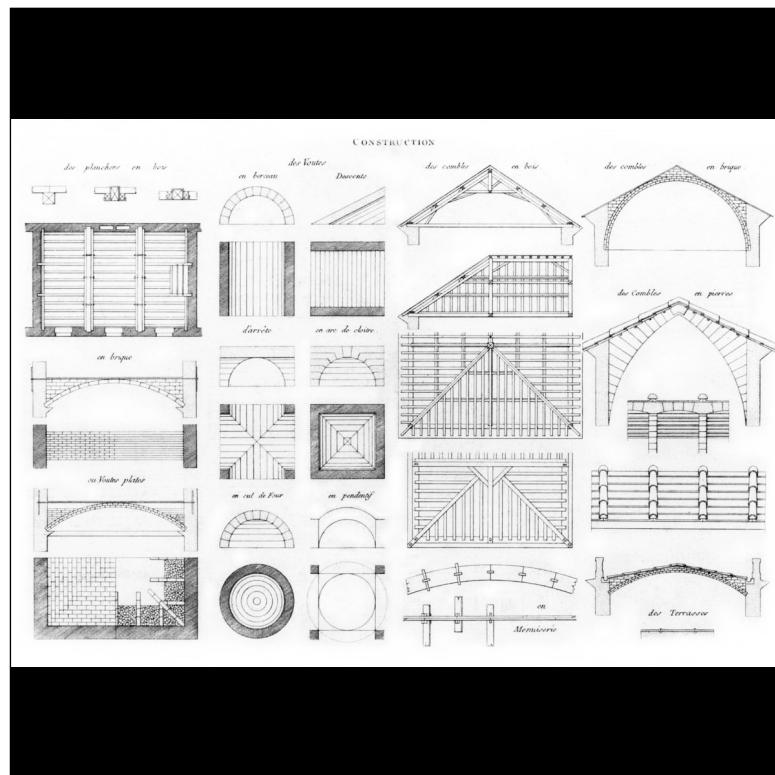
## *(Ex)Deconstruction*



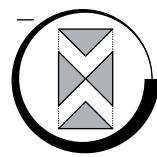
## *(Ex)Deconstruction*



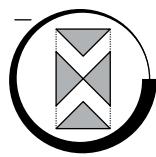
(Ex)Formal Reduction



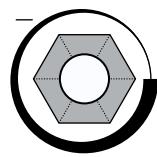
"Constructions"  
- Jean-Nicolas-Louis Durand -  
NA  
1821



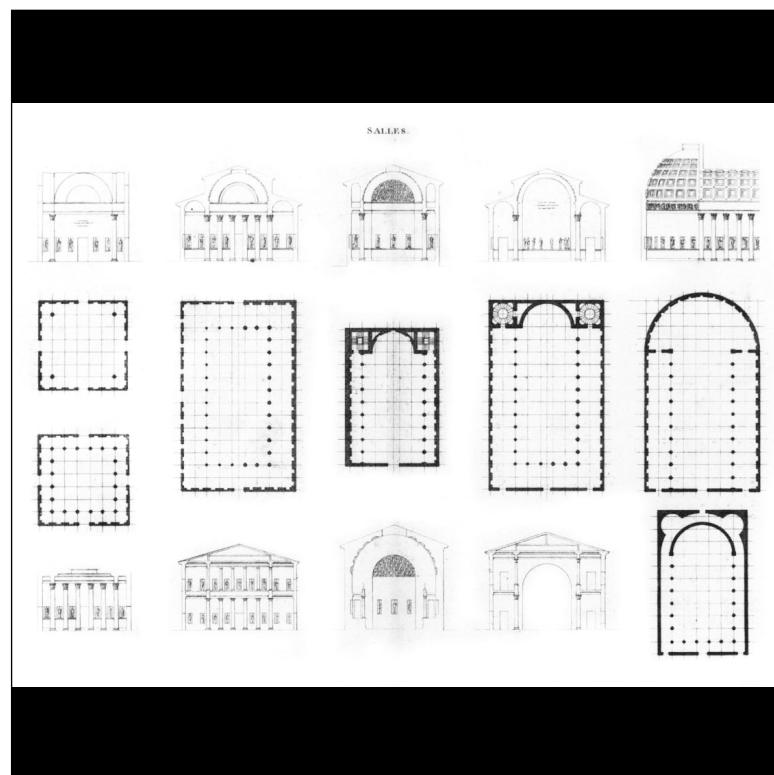
(Ex)Deconstruction



(Ex)Deconstruction



(Ex)Formal Reduction

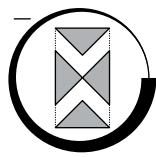


"Samples"

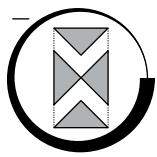
- Jean-Nicolas-Louis Durand -

NA

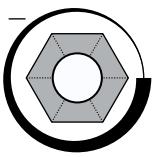
1821



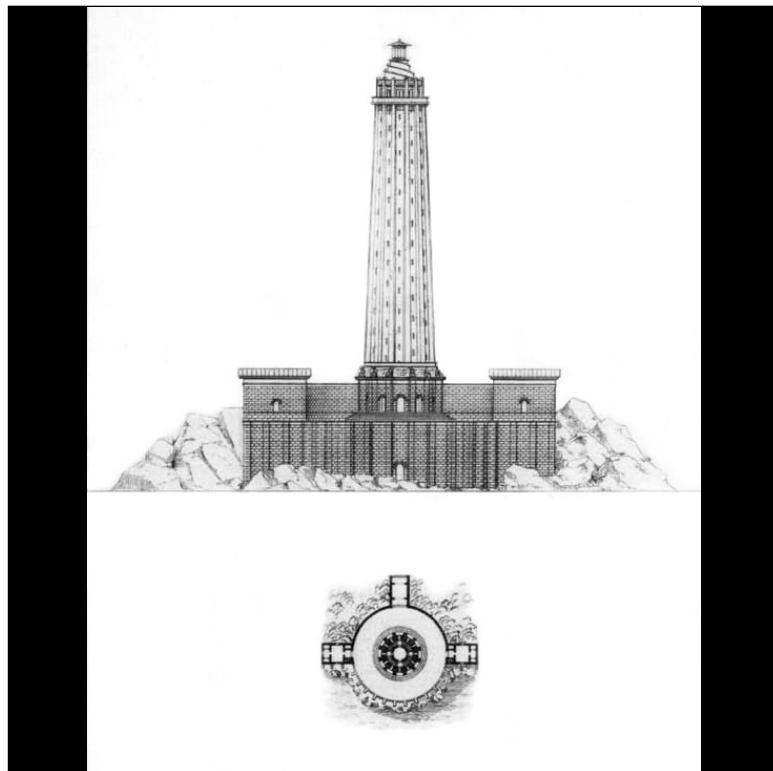
(Ex)Deconstruction



(Ex)Deconstruction



(Ex)Formal Reduction

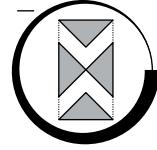


"Principal Kinds of Building"

- Jean-Nicolas-Louis Durand -

NA

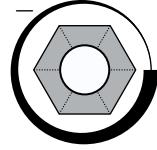
1821



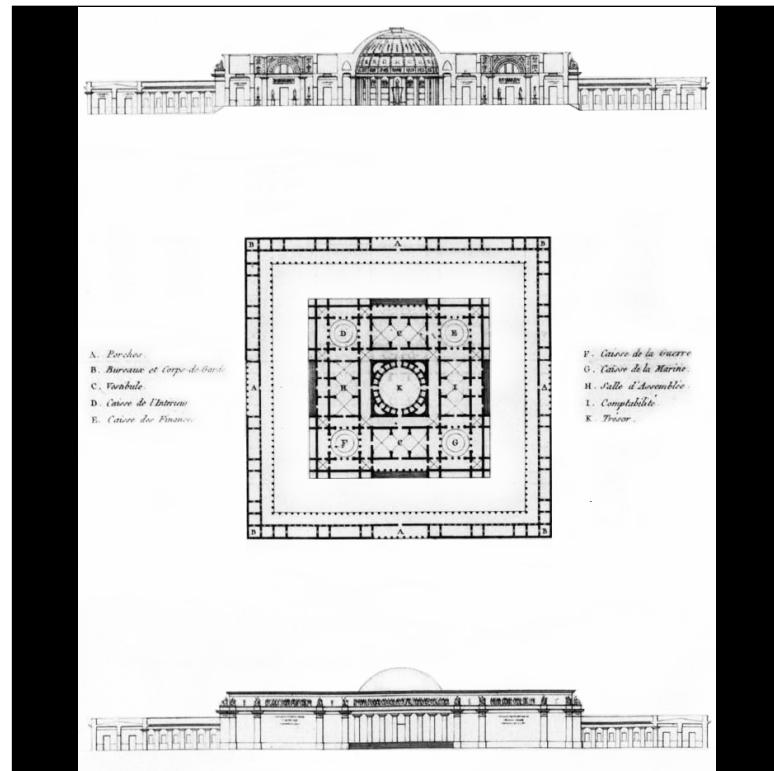
(Ex)Deconstruction



(Ex)Deconstruction



(Ex)Formal Reduction

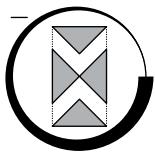


"Principal Kinds of Building"

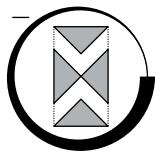
- Jean-Nicolas-Louis Durand -

NA

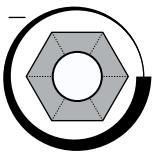
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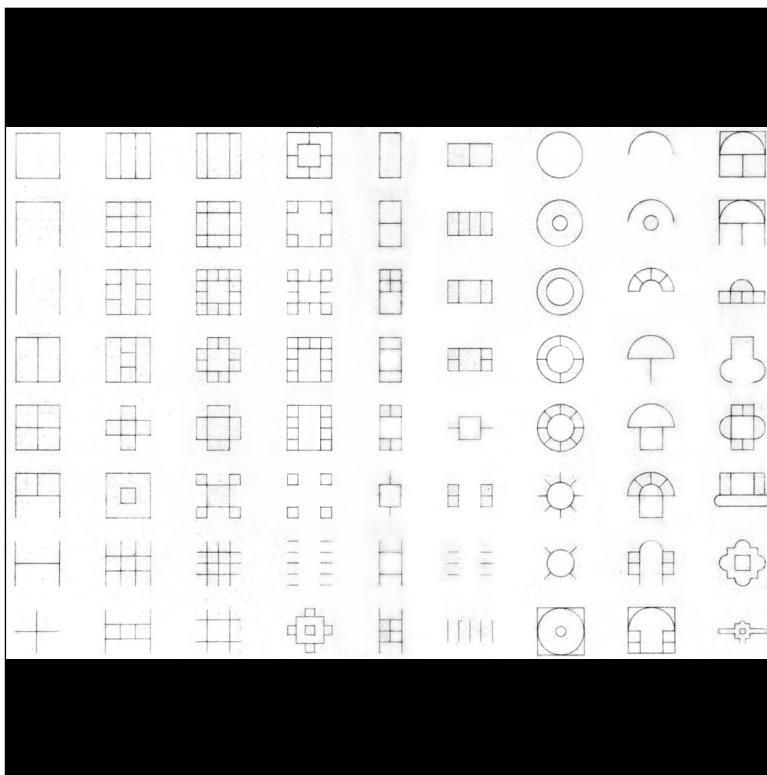
(Ex)Deconstruction



(Ex)Deconstruction



(Ex)Formal Reduction

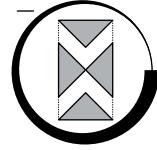


"Composition in General"

- Jean-Nicolas-Louis Durand -

NA

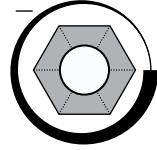
1821



(Ex)Deconstruction



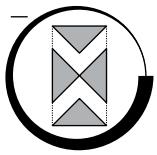
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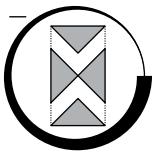
(Ex)Formal Reduction



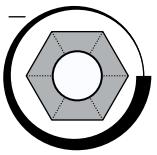
"Palais de l'Industrie"  
- Jean-Marie-Victor Viel -  
Paris, France  
1855



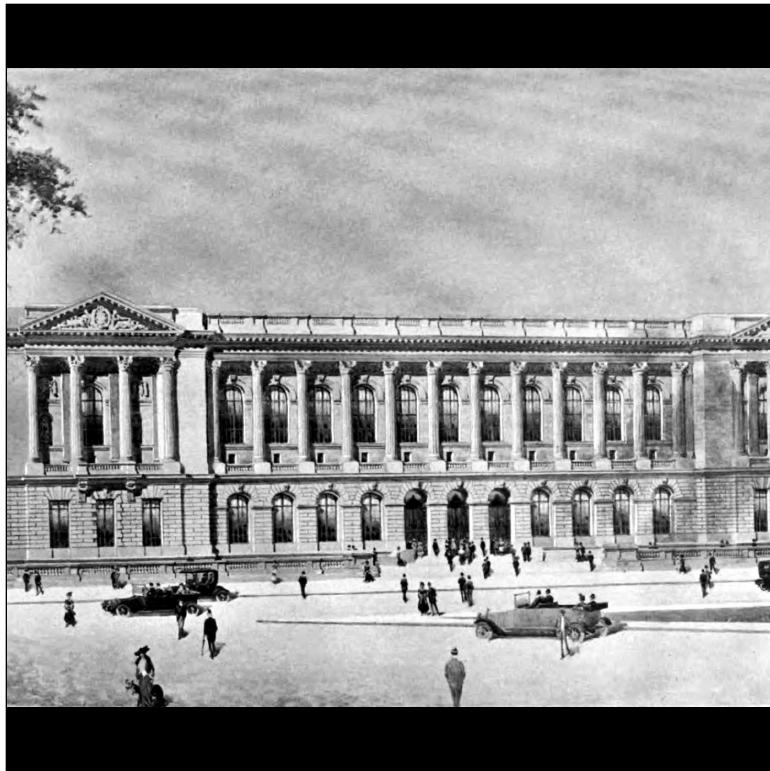
(Ex)Deconstruction



(Ex)Deconstruction



(Ex)Formal Reduction

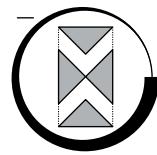


"Free Library of Philadelphia"

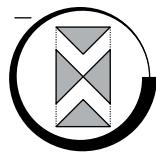
- Julian Abele -

Brussels, Belgium

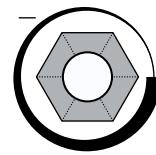
1891



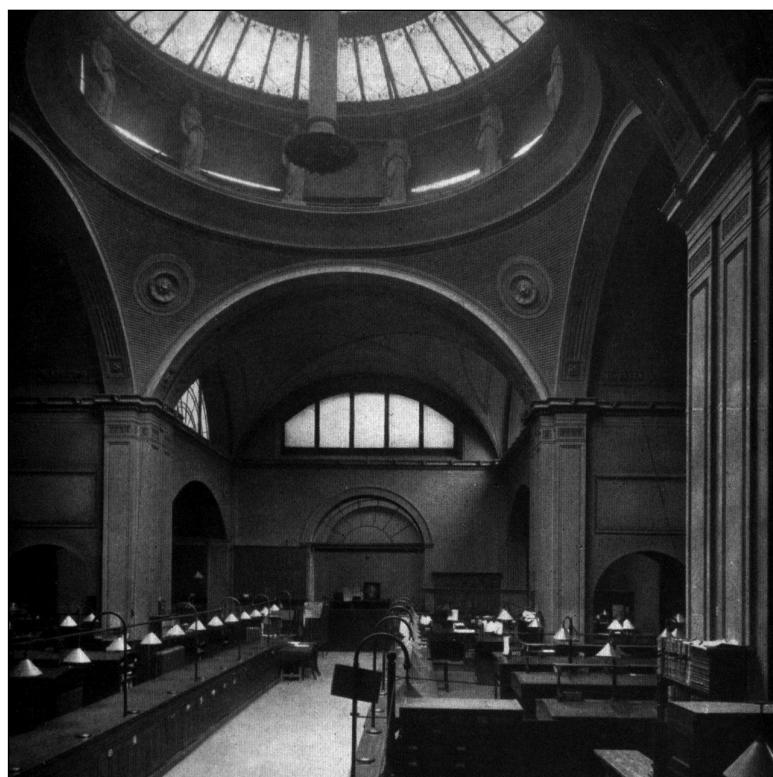
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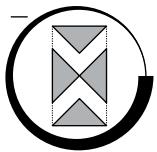
(Ex)Deconstruction



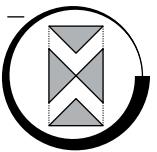
(Ex)Formal Reduction



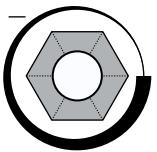
"Bank of England"  
- John Soane -  
London, England  
1818



(Ex)Deconstruction



(Ex)Deconstruction



(Ex)Formal Reduction

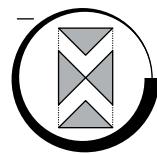


"Third Philadelphia Mint Building"

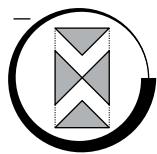
- William Martin Aiken -

Philadelphia, United States

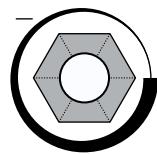
1901



(Ex)Deconstruction



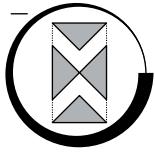
(Ex)Deconstruction



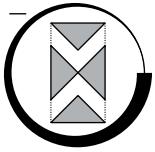
(Ex)Formal Reduction



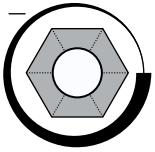
"The Looshaus"  
- Adolf Loos -  
Vienna, Austria  
1911



(Ex)Deconstruction



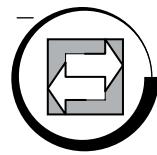
(Ex)Deconstruction



(Ex)Formal Reduction



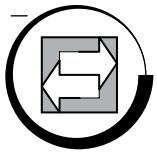
"Hotel Bellevue Palace: Interior"  
- Architekturbüro Lindt und Hofmann -  
Bern, Switzerland  
1912



(Ex)Performance Reduction



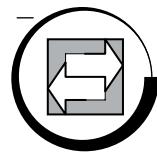
"Palais Des Machines"  
- Ferdinand Dutert -  
Paris, France  
1889



(Ex)Performance Reduction



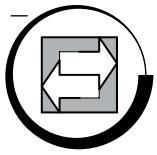
"The Crystal Palace"  
- Joseph Paxton -  
London, England  
1851



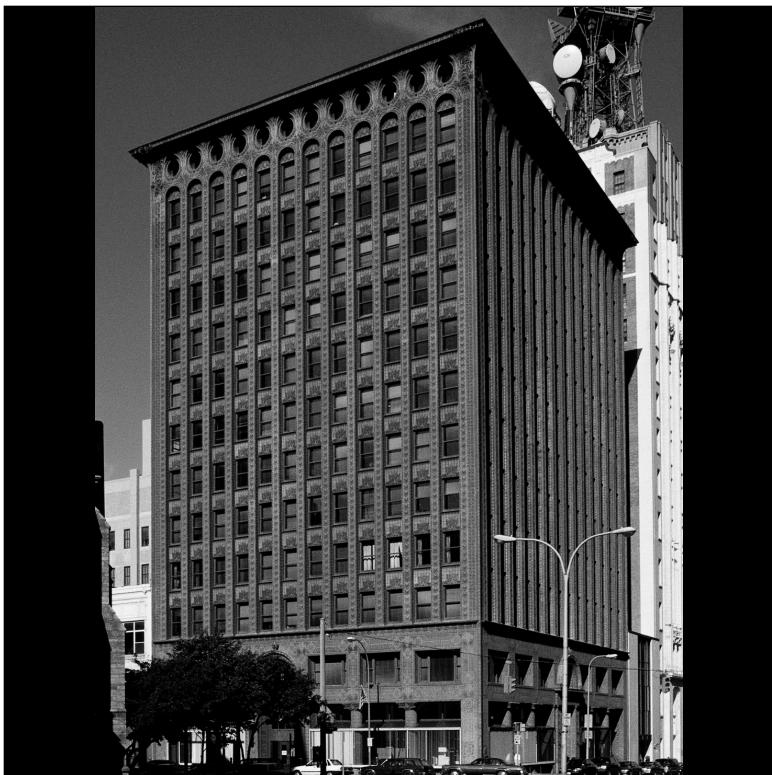
(Ex)Performance Reduction



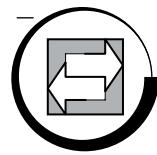
"AEG Turbine Factory"  
- Peter Behrens -  
Berlin, Germany  
1909



(Ex)Performance Reduction



"Guaranty Building"  
- Louis H. Sullivan -  
Buffalo, New York  
1896



(Ex)Performance Reduction

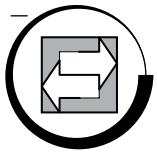


"Type Objects: Currently Available Products."

- Le Corbusier -

Na

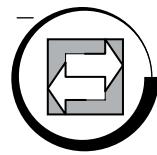
1925



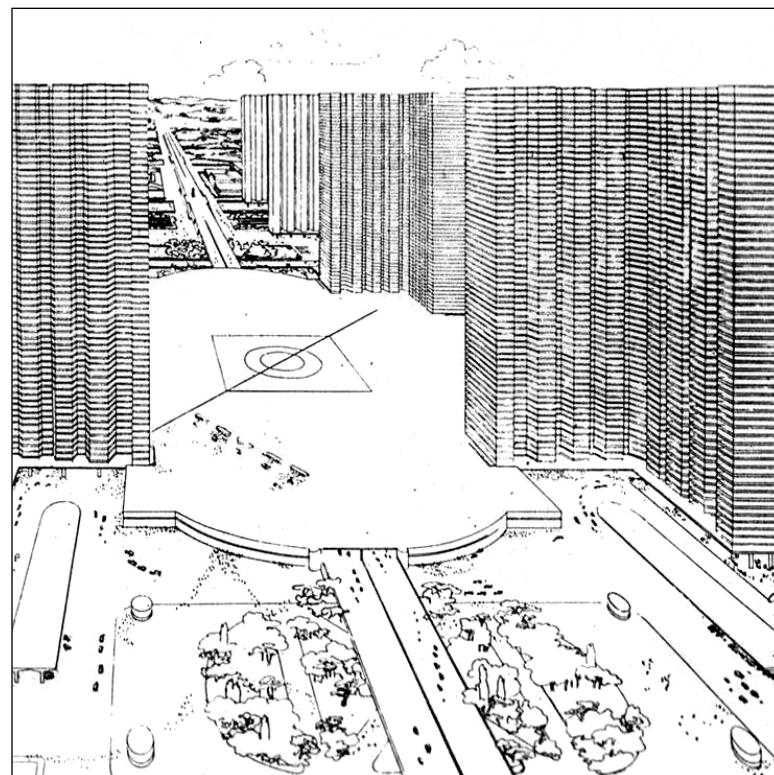
(Ex)Performance Reduction



"City of Tomorrow"  
- Le Corbusier -  
Na  
1929



(Ex)Performance Reduction



"City of Tomorrow: Public Spaces"

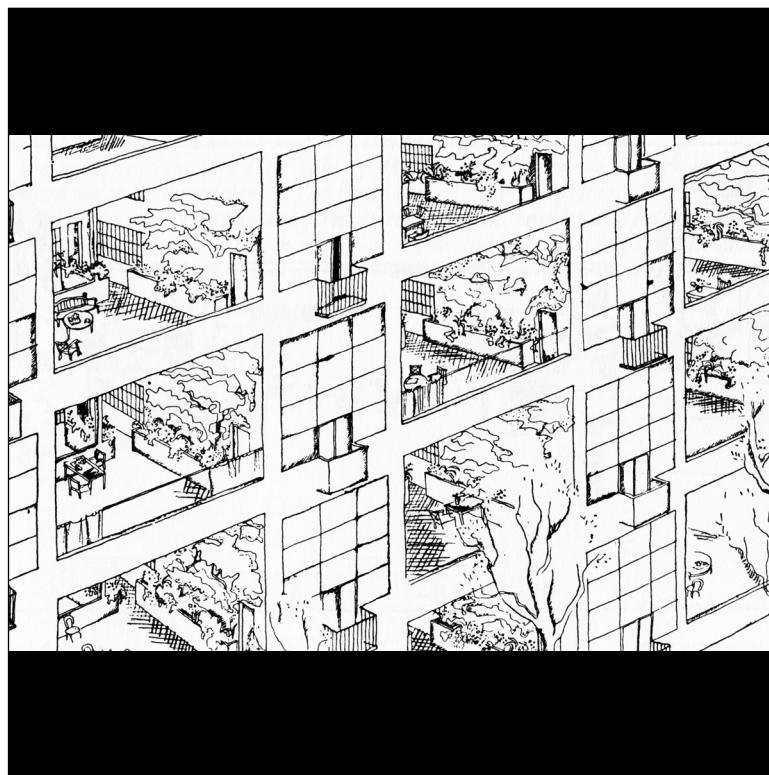
- Le Corbusier -

Na

1929



(Ex)Performance Reduction



"City of Tomorrow: Housing"

- Le Corbusier -

Na

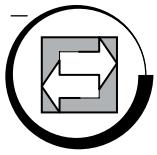
1929



(Ex)Performance Reduction



"Gustavo Capanema Palace"  
- Le Corbusier -  
Rio de Janeiro, Brazil  
1935



(Ex)Performance Reduction

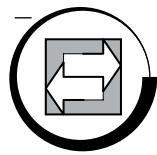


"Johnson Wax Headquarters: Interior"

- Frank Lloyd Wright -

Racine, Wisconsin

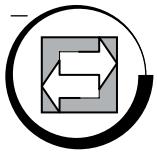
1936



(Ex)Performance Reduction



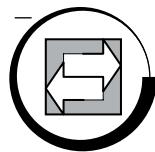
"Town Hall Hilversum "  
- Willem Marinus Dudok -  
Hilversum, Netherlands  
1931



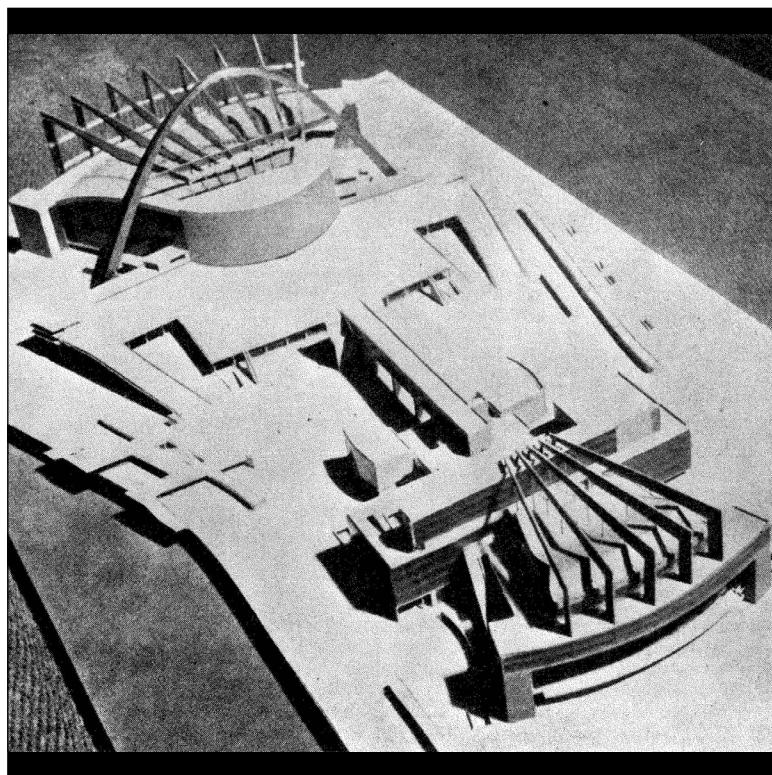
(Ex)Performance Reduction



"Nemausus"  
- Ateliers Jean Nouvel -  
Nimes, France  
1985-1988



(Ex)Performance Reduction

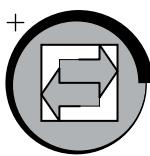


"Project for the Palace of the Soviets"

- Le Corbusier -

Moscow, Russia

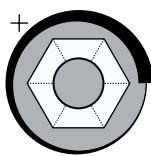
1931



(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

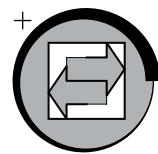


"Cultural and Sports Center: Interior"

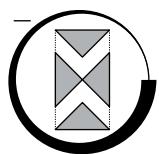
- BRUTHER -

Brussels, Belgium

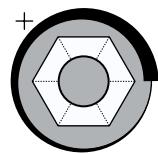
2011



(In)Performance Reduction



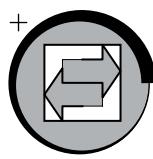
(Ex)Deconstruction



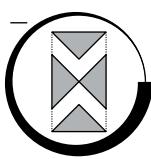
(In)Formal Reduction



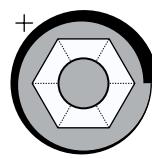
"Neue Nationalgalerie"  
- Ludwig Mies van der Rohe -  
Berlin, Germany  
1968



(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

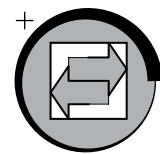


"Soreq Nuclear Research Center: Interior"

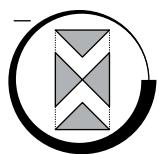
- Philip Johnson -

Yavne, Israel

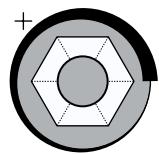
1960



(In)Performance Reduction



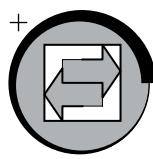
(Ex)Deconstruction



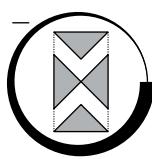
(In)Formal Reduction



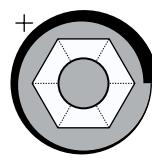
"Sciences de la Vie Building: Interior"  
- BAUKUNST -  
École Polytechnique Fédérale de Lausanne, Switzerland  
2016



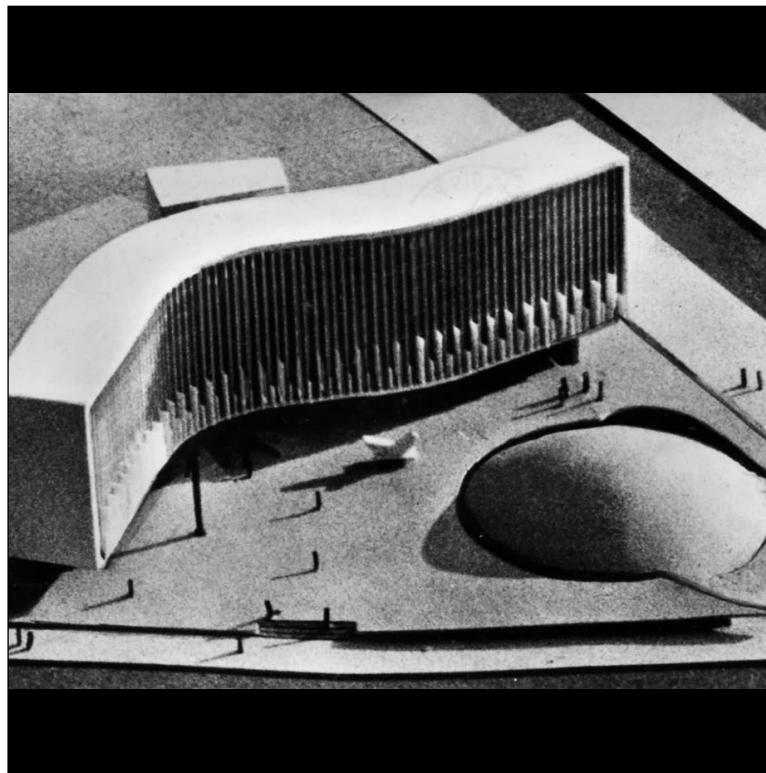
(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

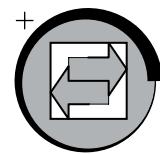


"French Communist Party Headquarters"

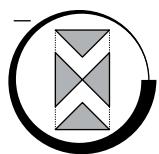
- Oscar Niemeyer -

Paris, France

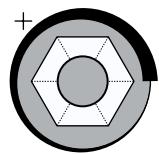
1967 – 1981



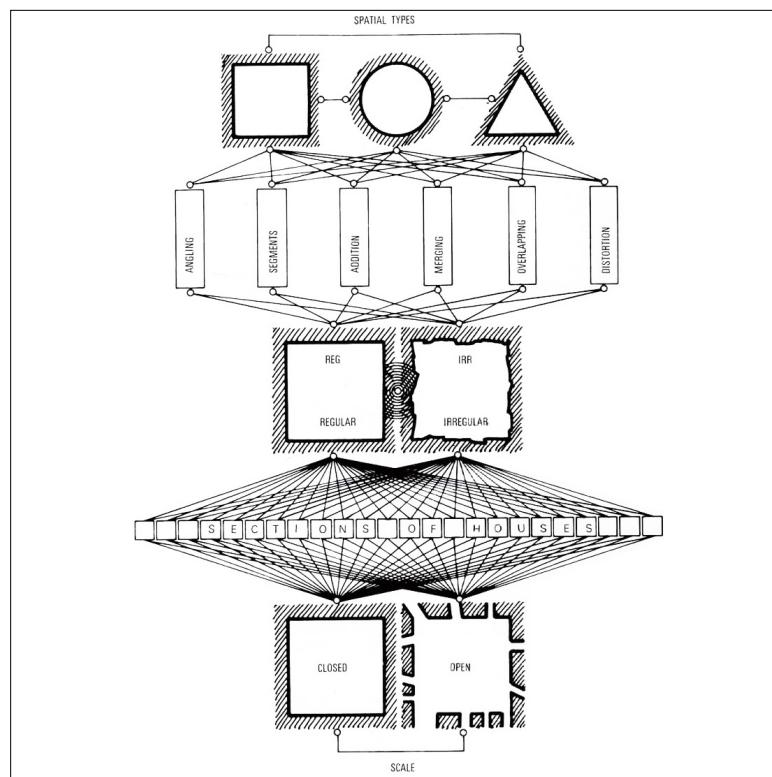
(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

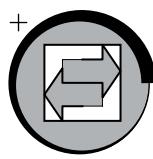


"Typeology of Urban Space"

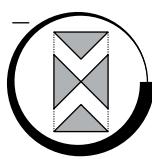
- Rob Krier -

NA

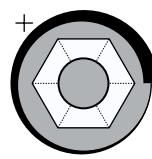
1975



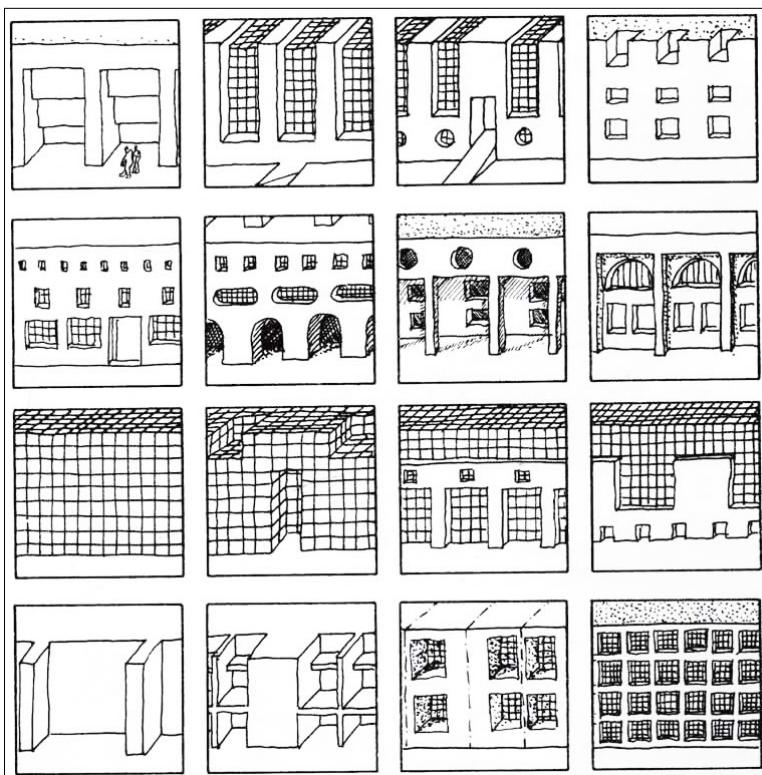
(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

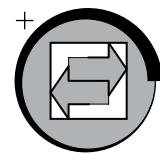


"ELEVATIONS"

- Rob Krier -

NA

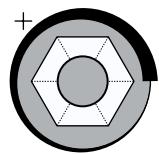
1975



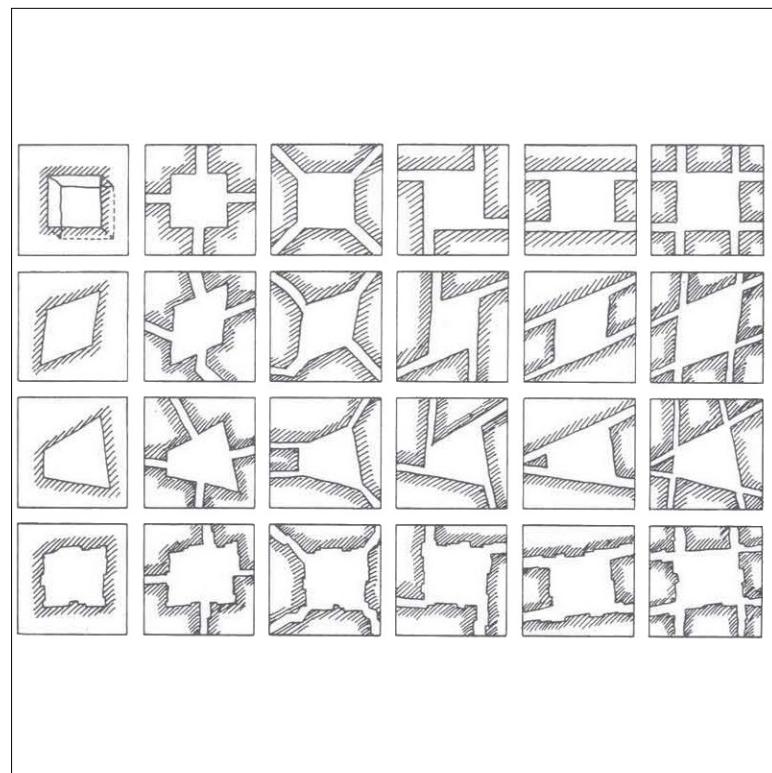
(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

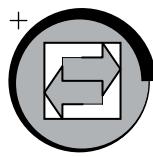


"Morphological Series of Urban Spaces"

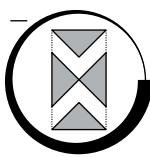
- Rob Krier -

NA

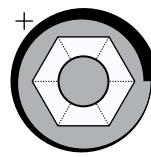
1975



(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction



11 The square as intersection.

12 Arcade running round the square ,high, narrow columns.

13 Lower arcade.

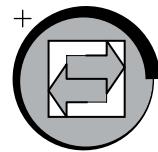
14 Low arcade, wide openings.

#### "Impact of Facade on Urban Spaces"

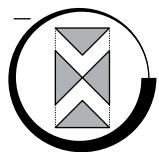
- Rob Krier -

NA

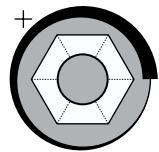
1975



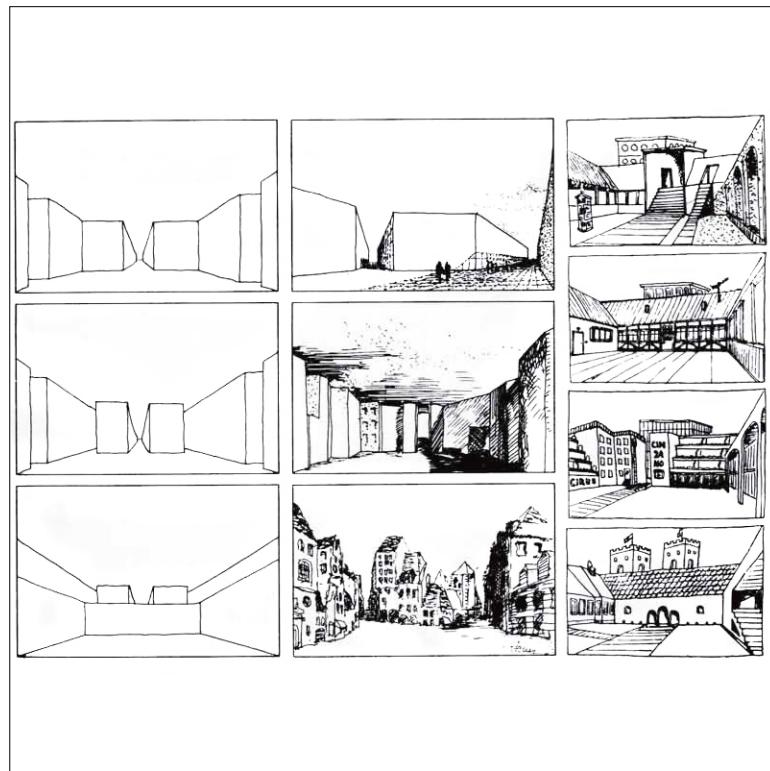
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(Ex)Deconstruction



(In)Formal Reduction

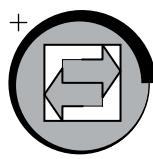


"Urban Spatial Form"

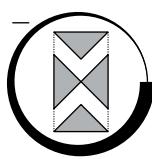
- Rob Krier -

NA

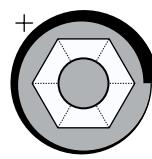
1975



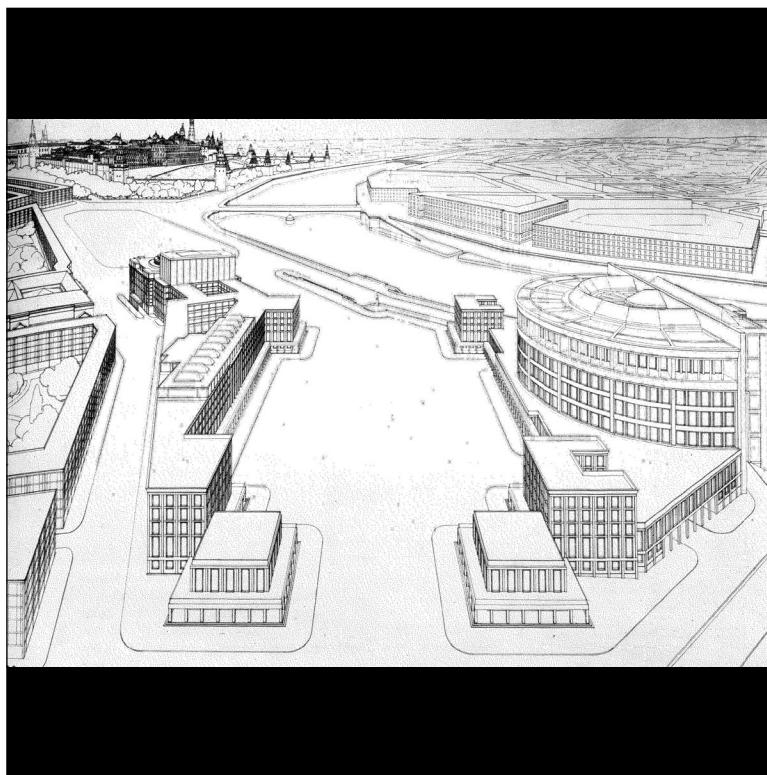
(In)Performance Reduction



(Ex)Deconstruction



(In)Formal Reduction

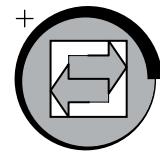


"Project for the Palace of the Soviets"

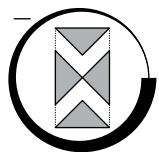
- Auguste Perret -

Moscow, Russia

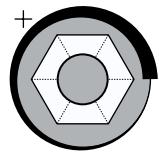
1931



(In)Performance Reduction



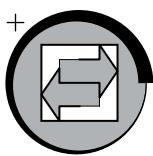
(Ex)Deconstruction



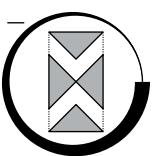
(In)Formal Reduction



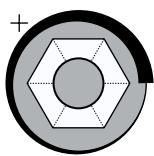
"Structure and Gardens"  
- BAUKUNST -  
Brussels, Belgium  
2009-2014



(In)Performance Reduction



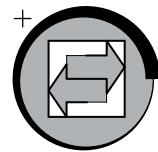
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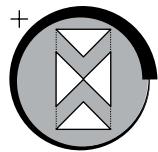
(In)Formal Reduction



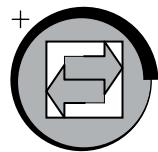
"La Lira"  
- RCR Arquitectes -  
Brussels, Belgium  
2004-2012



(In)Performance Reduction



(In)Deconstruction



(In)Performance Reduction

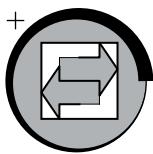


"City of the Captive Globe"

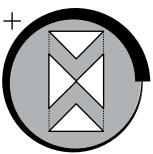
- Rem Koolhaas -

NA

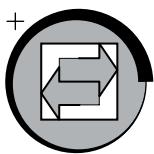
1972



(In)Performance Reduction



(In)Deconstruction



(In)Performance Reduction

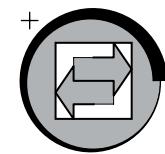


"Banca del Monte dei Paschi di Siena Offices"

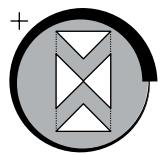
- Giovanni Michelucci -

Colle di Val d'Elsa, Italy

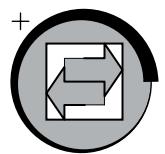
1983



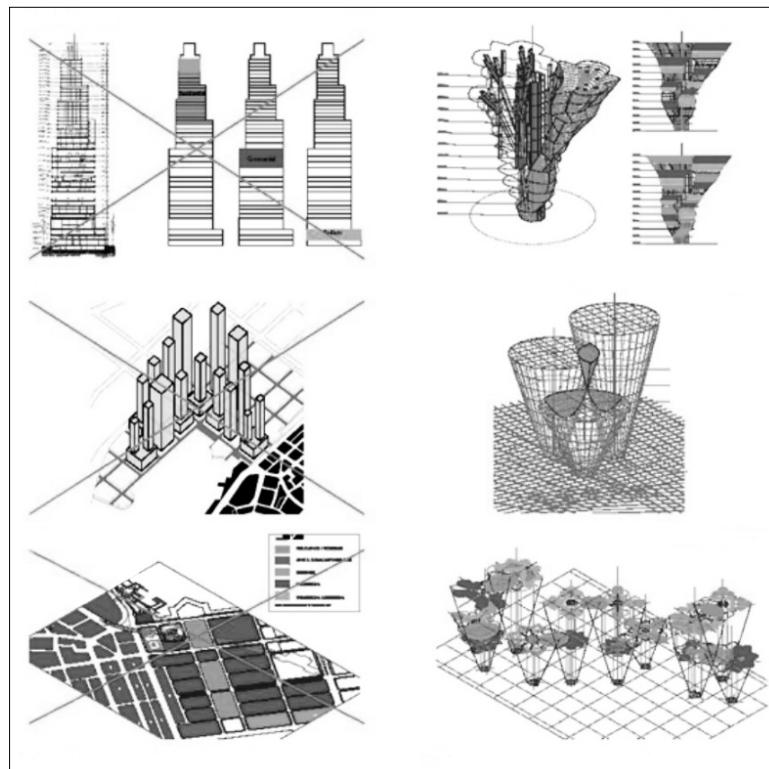
(In)Performance Reduction



(In)Deconstruction



(In)Performance Reduction

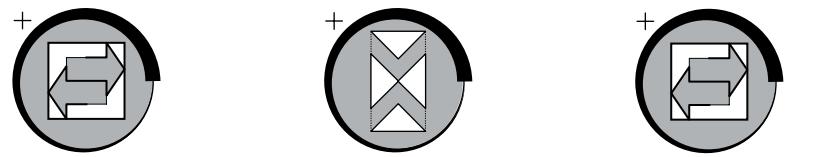


"Resisting the Generic Empire"

- Chris Lee -

Singapore

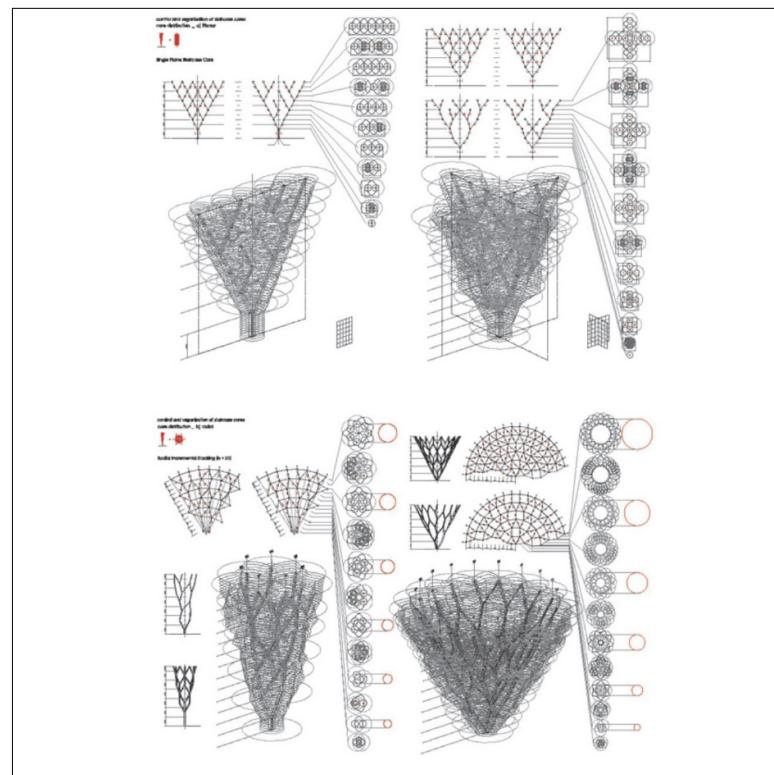
2007



(In)Performance Reduction

(In)Deconstruction

(In)Performance Reduction

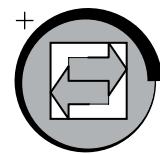


"Resisting the Generic Empire"

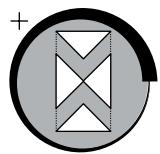
- Chris Lee -

Singapore

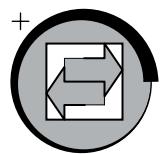
2007



(In)Performance Reduction



(In)Deconstruction

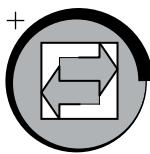


(In)Performance Reduction

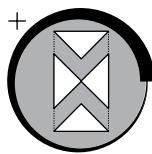


"Resisting the Generic Empire: Student Model "

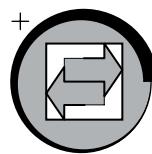
- Chris Lee -  
Singapore  
2007



(In)Performance Reduction



(In)Deconstruction

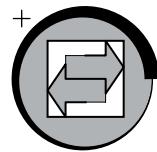


(In)Performance Reduction

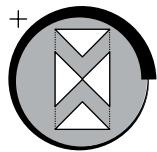


"Sun Tower"

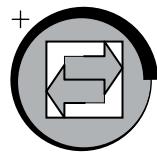
- Serie Architects (Chris Lee) -  
Ho Chi Minh City, Vietnam  
2016



(In)Performance Reduction



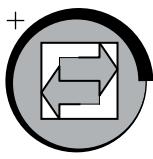
(In)Deconstruction



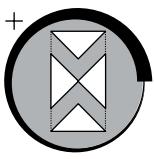
(In)Performance Reduction



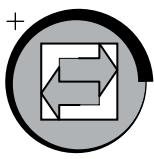
"11 11 Lincoln Road"  
- Herzog De Meuron -  
Miami, USA  
2008



(In)Performance Reduction



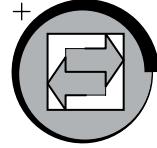
(In)Deconstruction



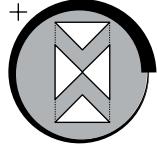
(In)Performance Reduction



"Cap Ferret House"  
- Lacaton & Vassal -  
Lège-Cap-Ferret, France  
1996-1998



(In)Performance Reduction



(In)Deconstruction



(In)Performance Reduction



"Seattle Public Library"

- OMA -

Seattle, Washington

2009

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The *n*th Typology

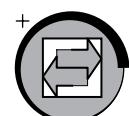
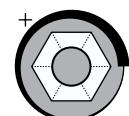
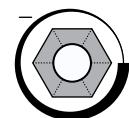
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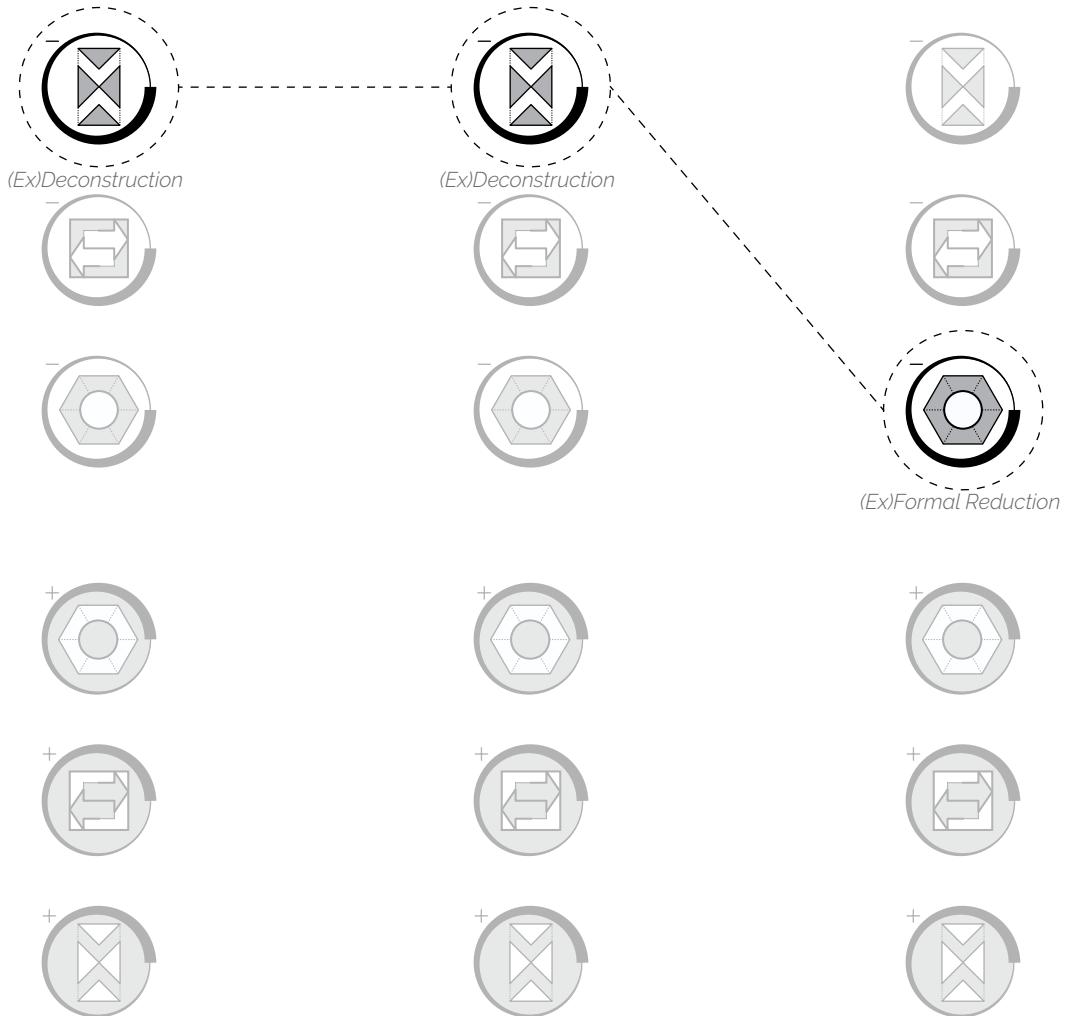


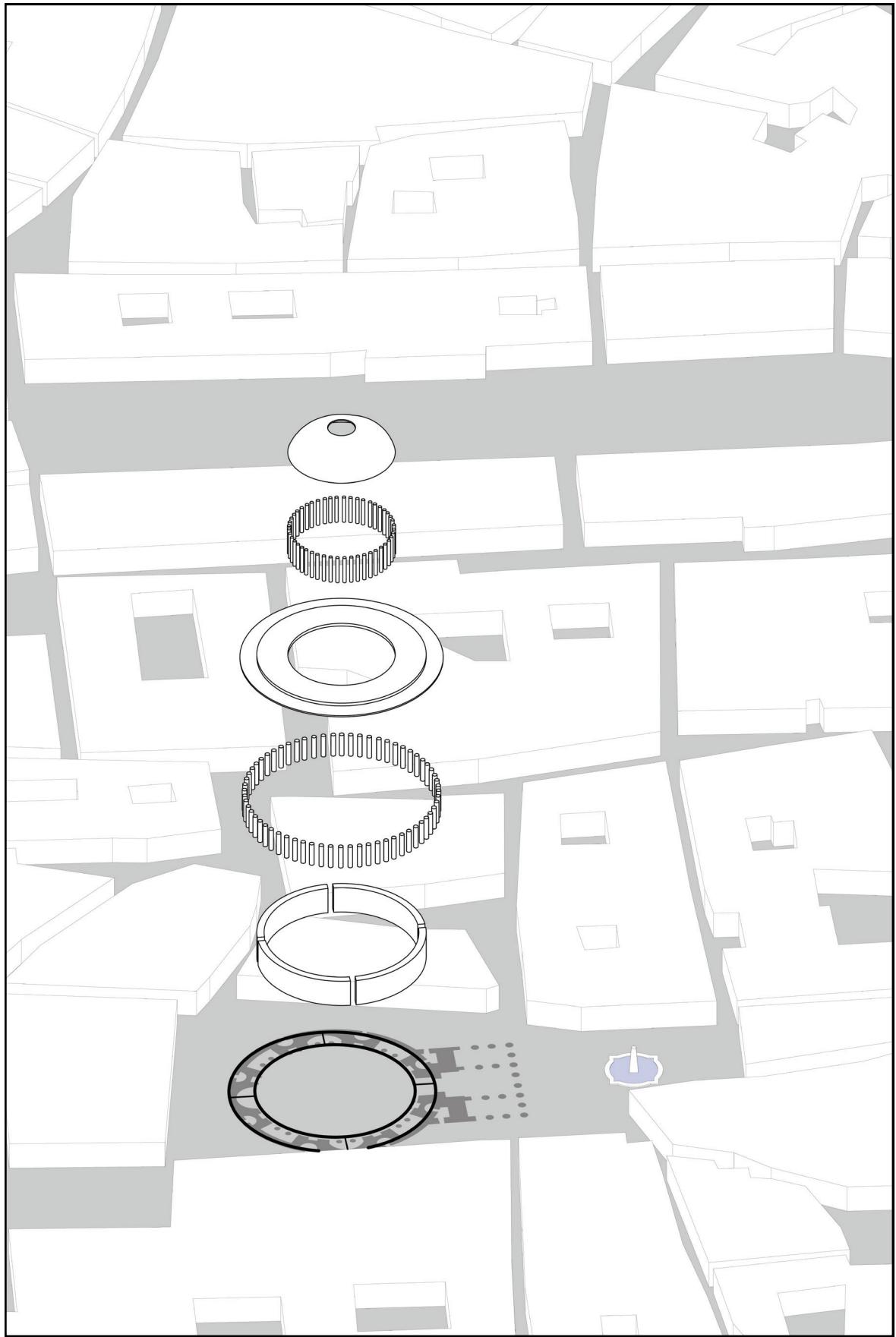
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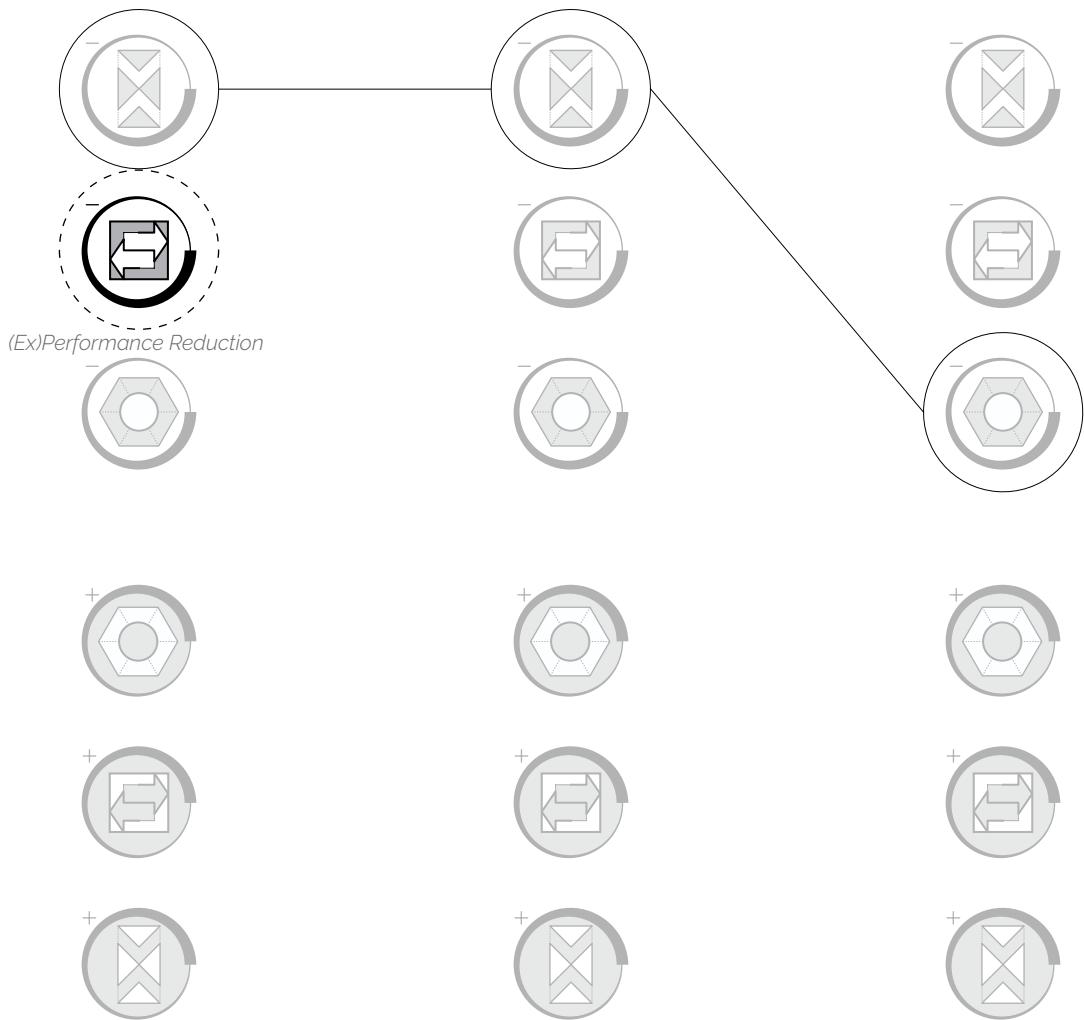
These operational sets allow us to draw similarity and difference between things, but what does it tell us about the Nth Typology? Now, when we consider the Nth Typology as we did in the past, we are now no longer concerned with a given author. Our ability to understand what the Nth Typology might look like comes from our ability to understand the logical operations that would construct the Nth typology. Our construction of operational lenses sets begin with mapping existing configurations and speculating the results.

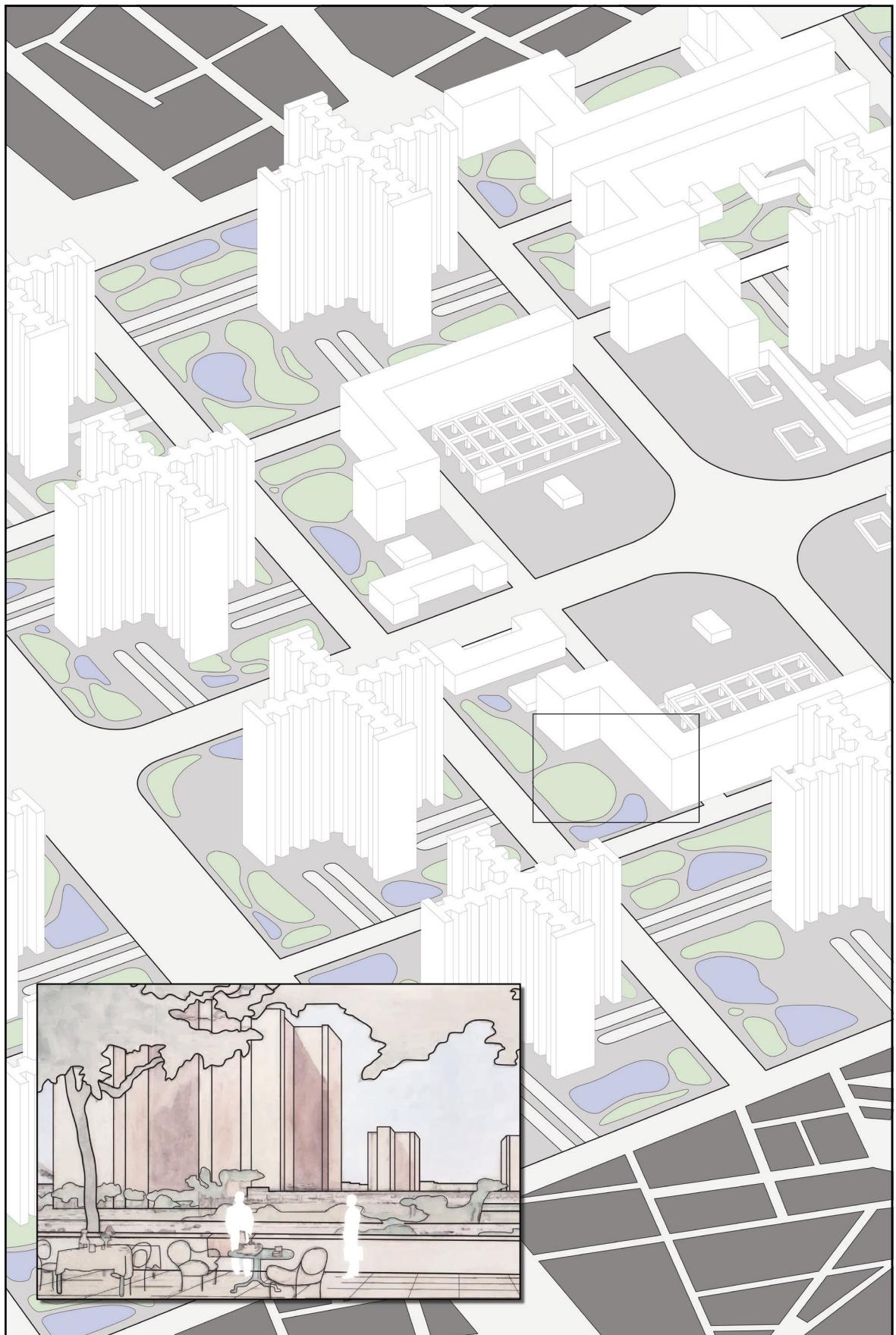
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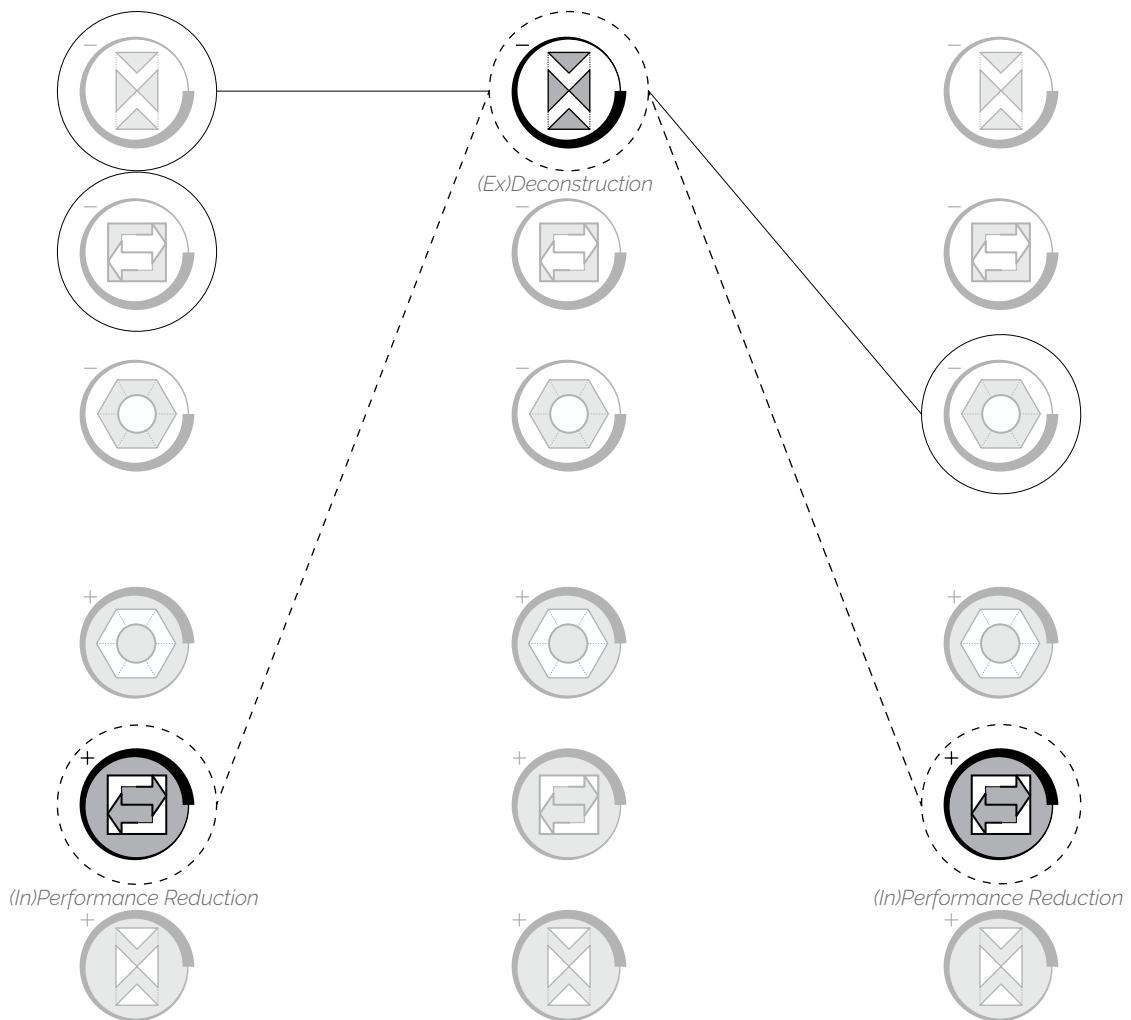




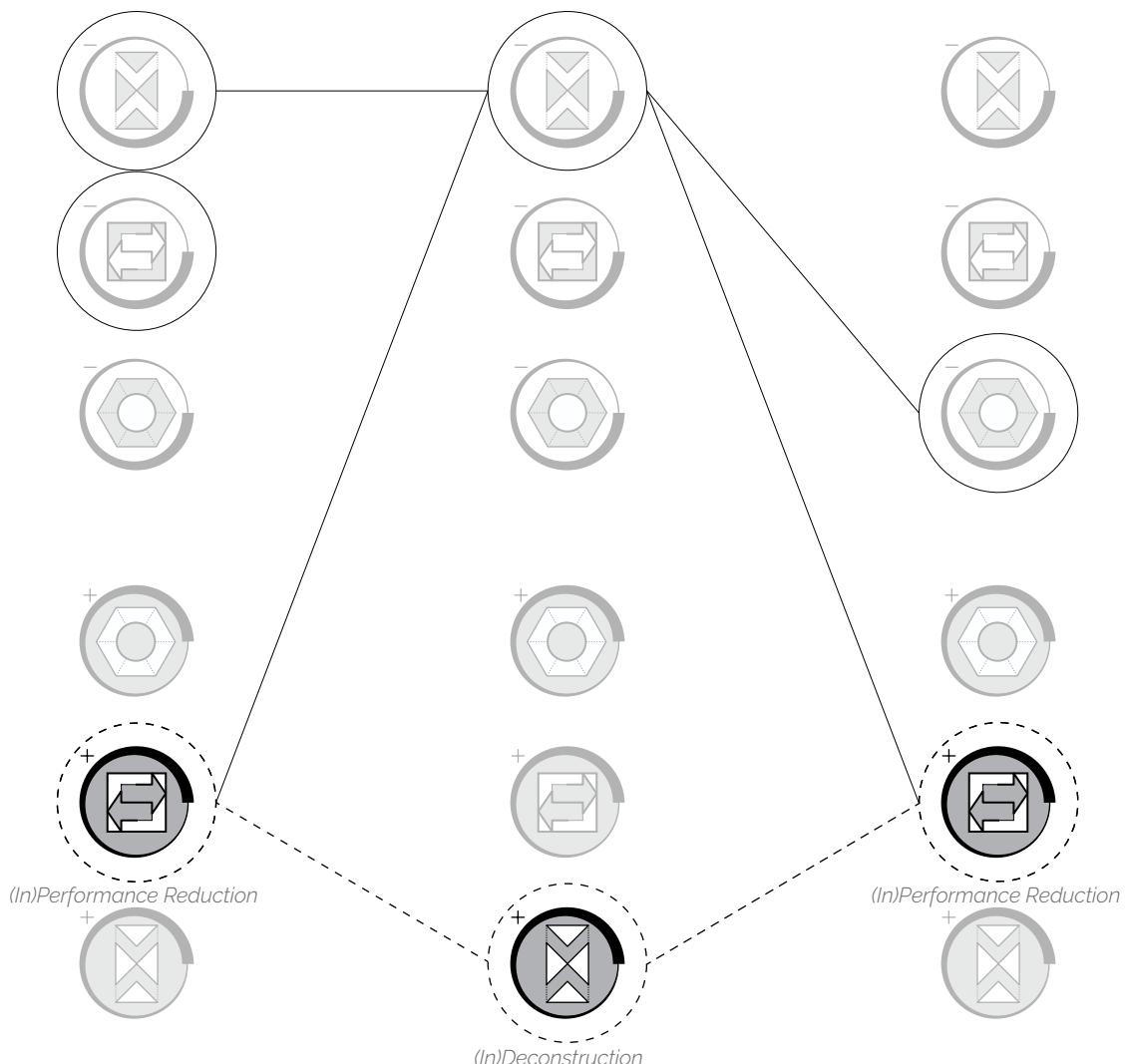


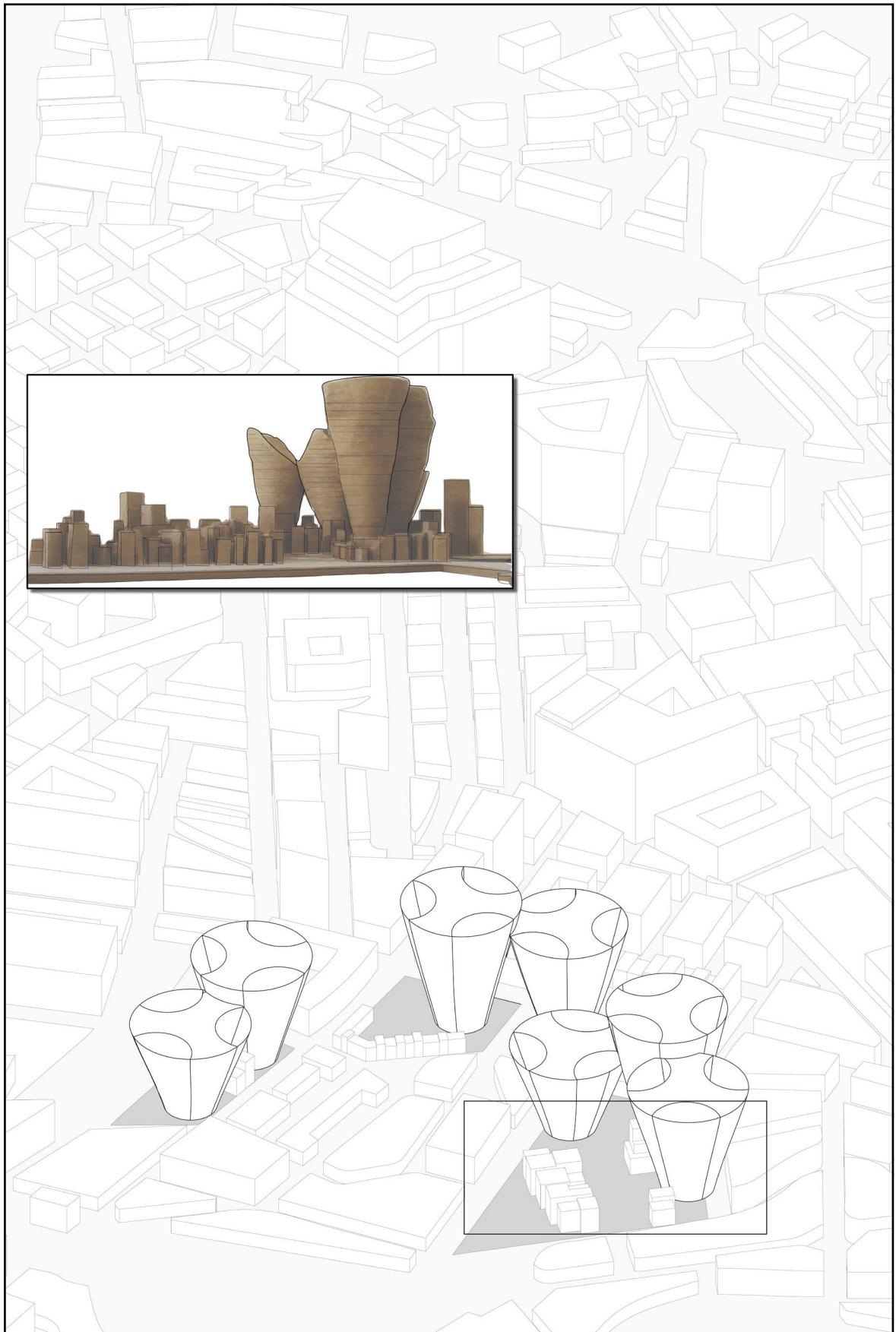










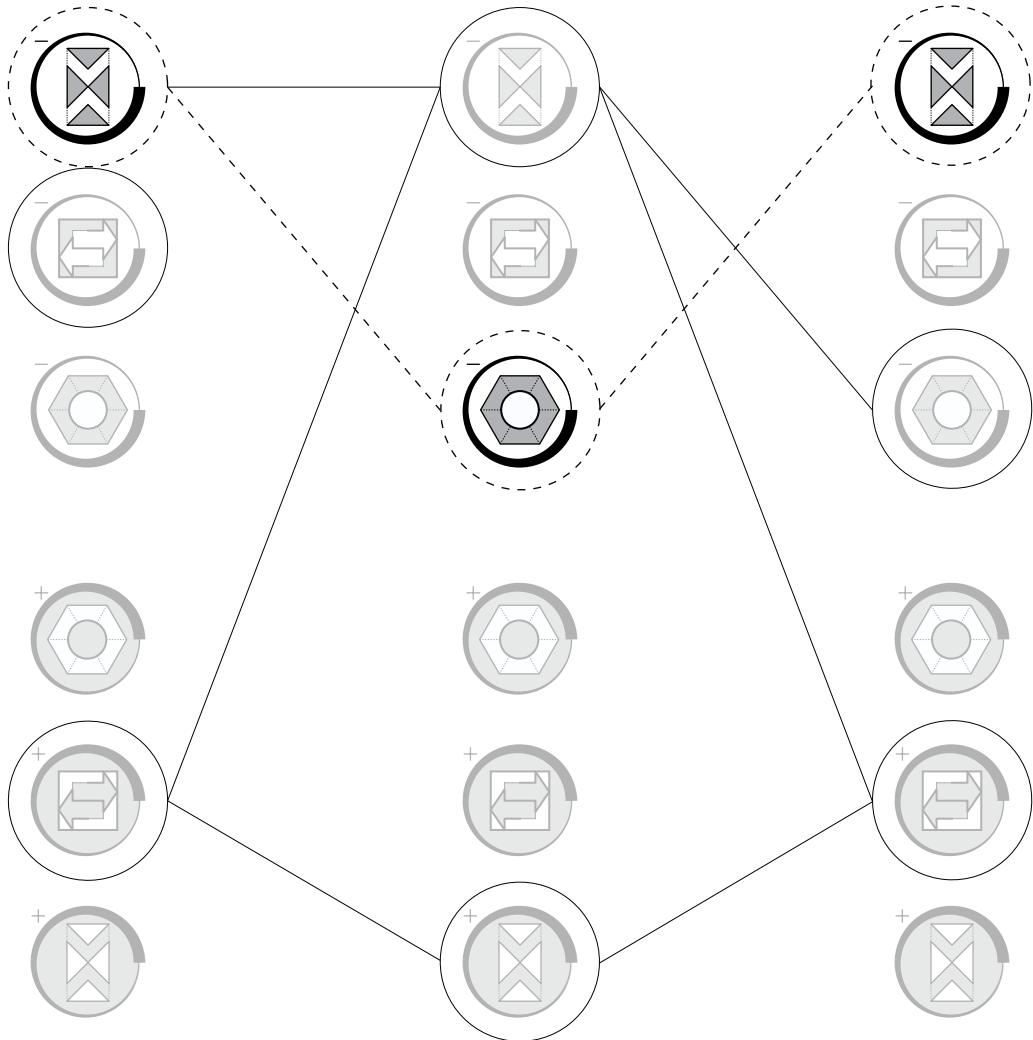


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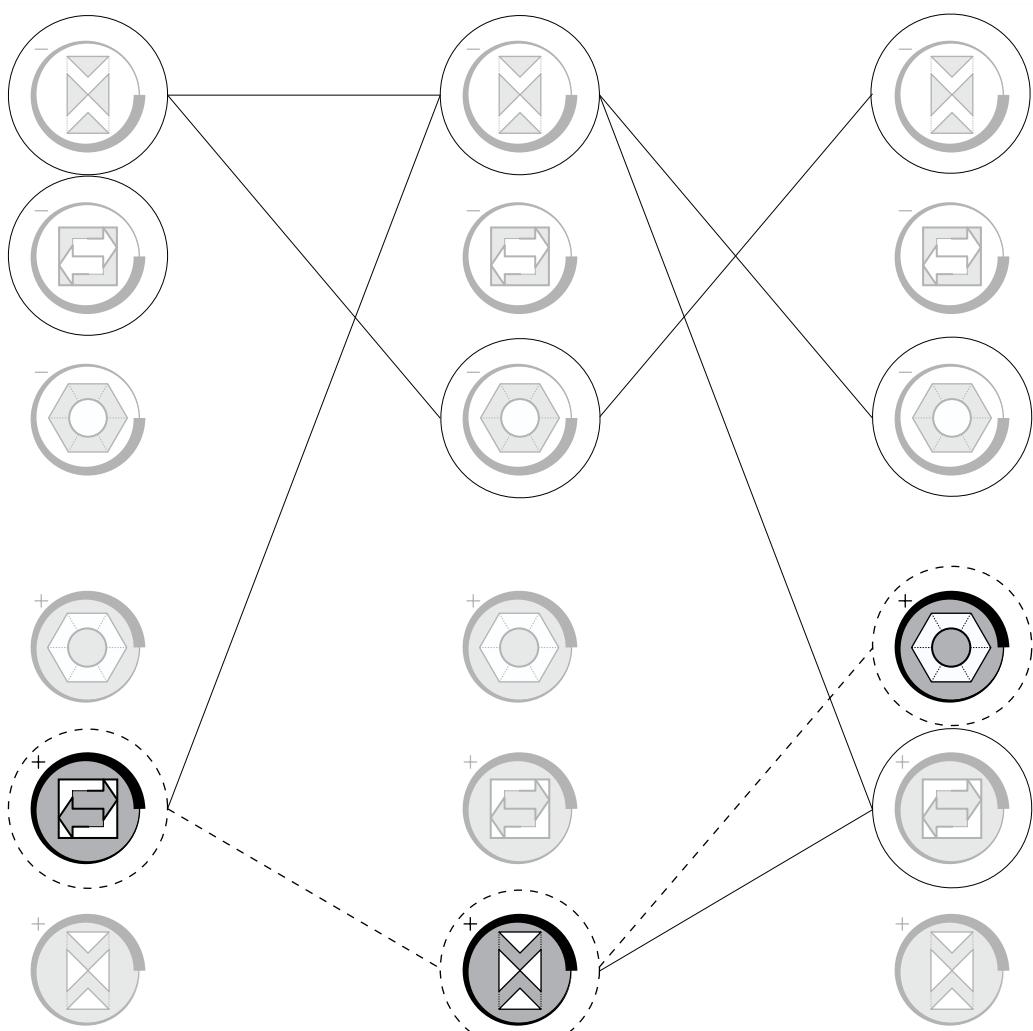
Apart from looking at existing logical configurations, can we begin to understand configurations that do not yet exist? By analyzing a collection of existing artifacts we should, in turn, be able to produce new artifacts that are both alike but different.

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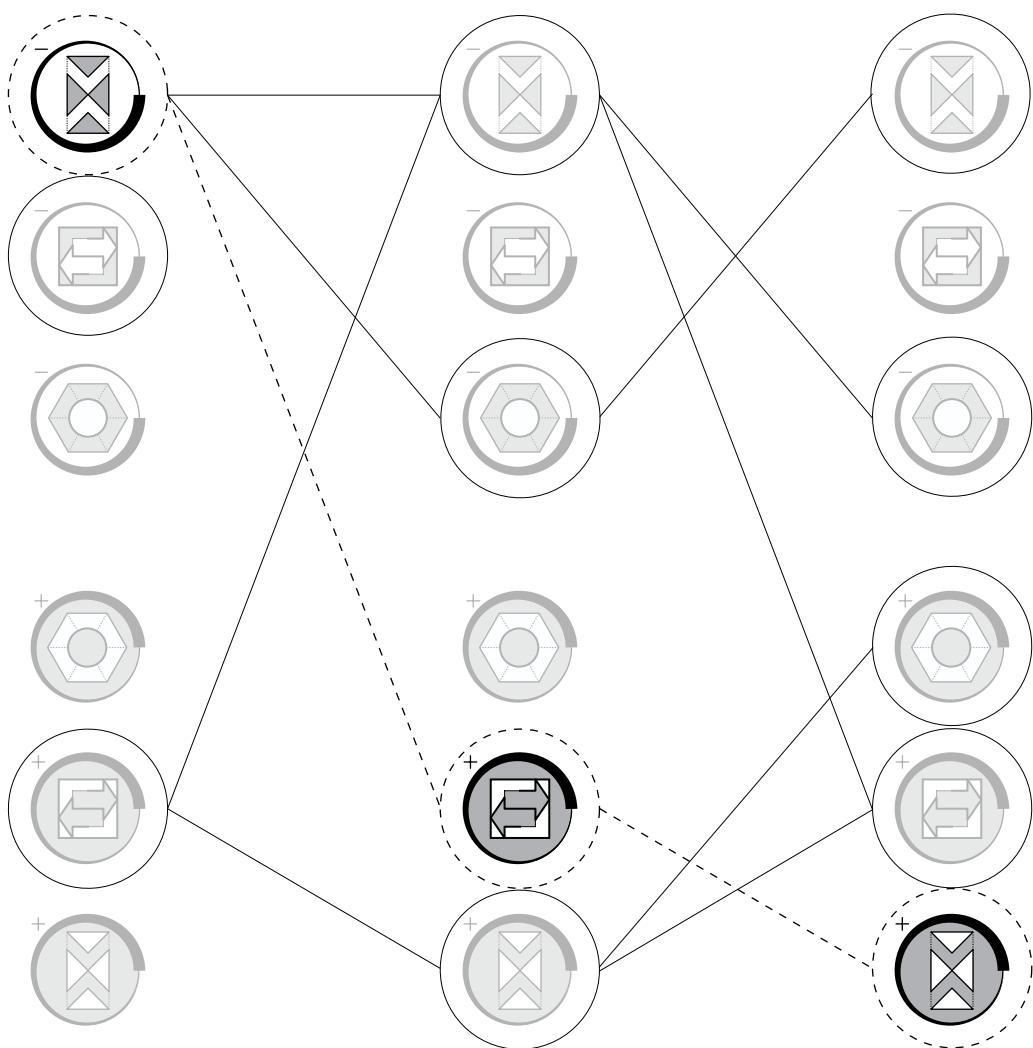




Architecture is Deconstructed into parts and then reduced to simple forms. Those forms are then broken down further into smaller elements



Architecture is Reduced into performance character within a larger context and then broken down into individual characteristics. Those characteristics are finally reduced to configural geometries.



Architecture is Deconstructed into elements analyzed within its own context. Those elements are then reduced to performances members. Finally Members are Deconstructed into individual performance criteria.

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Conclusions

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## Conclusions | Projections

The Nth typology isn't so mysterious anymore. Our ability to understand what has come before us allows up to see what there is to come. However this method doesn't help us understand THE nth typology – it helps us see what AN nth typology may look like, because in reality as we flip through these lenses and filter our perceptions we are swapping between many different typological views. There is no one path before us but many branching ones.

The ebb and flow of type theory lends itself to "knowing enough". It is extremely difficult to make conclusions about the way something functions while not knowing enough. But, how does one know when they have gathered enough information? My methodology was directly impacted by trying to walk that thin line of "knowing just enough" to make decisions and move the project forward. I chose four distinct authors to talk about and really dig deep down. This only begins to scratch the surface of the totality of Type Theory.

There are tons upon tons of author accounts of type and typology, and it seems rather selfish of me to then go about and say some of them don't count towards my research. On the other side of the argument it is narrow minded of me to think I can read them all and take them all into considerations. Because of this I don't know when I have "learned enough".

My thoughts in regard to my work in general is that it is but the first musing of a few. - Type Theory: Book 1 – The next book of mine looks at generating type structures that do not exist. Ideally, pulling them past simple speculation and into the real of design strategies for cityscapes. After that I want to dig deeper into the operations and see if this list I generated is truly the most fundamental there is. It could be the case that these lenses break down even further and into many different primitive operations. Both of these musings build off of the work I have done here and my goal is to refine what I have done. Is it the clearest what I have done here? – regardless what the answer to that question is, it could always be clearer.

One last thing I fail to do is have a stance of my own. My entire project has been me looking at images and reading what others have wrote. Everything is in a secondary degree of separation. If it is truly my goal to understand the ins and outs of type and typology as they occur within the discourse then I better get out there in the discourse and see things for myself; This situation reminds me of a famous thought experiment about mental content:

*"Mary is a brilliant scientist who is, for whatever reason, forced to investigate the world from a black and white room via a black and white television monitor. She specializes in the neurophysiology of vision and acquires, let us suppose, all the physical information there is to obtain about what goes on when we see ripe tomatoes, or the sky, and use terms like "red", "blue", and so on. She discovers, for example, just which wavelength combinations from the sky stimulate the retina, and exactly how this produces via the central nervous system the contraction of the vocal cords and expulsion of air from the lungs that results in the uttering of the sentence "The sky is blue". ... What will happen when Mary is released from her black and white room or is given a color television monitor? Will she learn anything or not?"* - Jackson (1982)

Will I learn anything when I leave my room and venture into the world filled with infinite type distinctions from infinite points of view?  
- I certainly hope so.

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