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Maxwell Rosner

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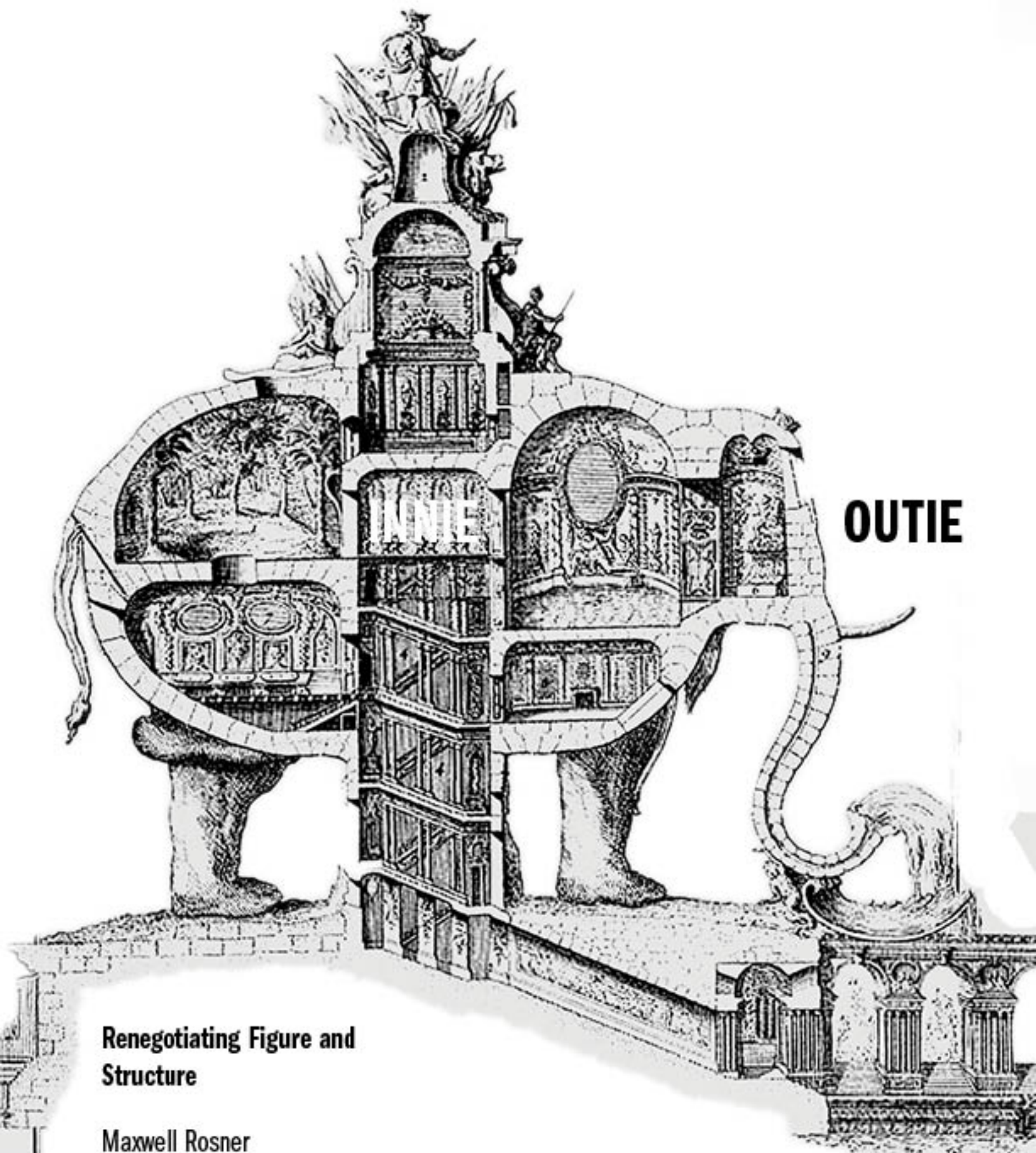


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**Renegotiating Figure and
Structure**

Maxwell Rosner

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**IN ORDER TO SUSTAIN AS A SOCIALLY
ACCESSIBLE ENTERPRISE, THE DISCIPLINE
OF ARCHTECTURE MUST RESIST THE URGE TO
DIVORCE THE PROJECTS OF FIGURE AND
STRUCTURE.**



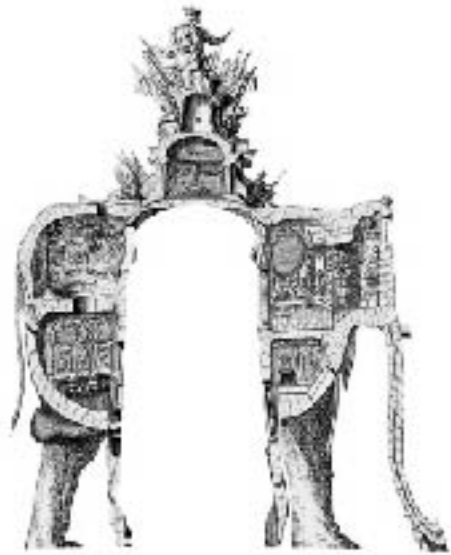
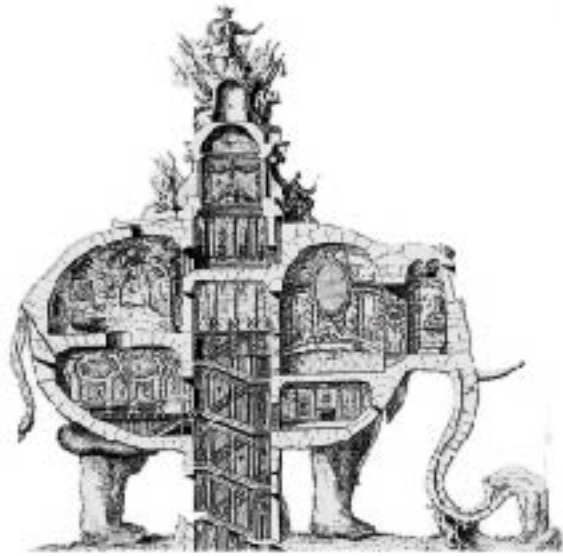
*Mon dessin ne représentait pas un chapeau. Il représentait
un serpent boa qui digérait un éléphant*



*J'ai alors dessiné
l'intérieur du serpent boa, afin que les grandes personnes puissent
comprendre. Elles ont toujours besoin d'explications*

Claim

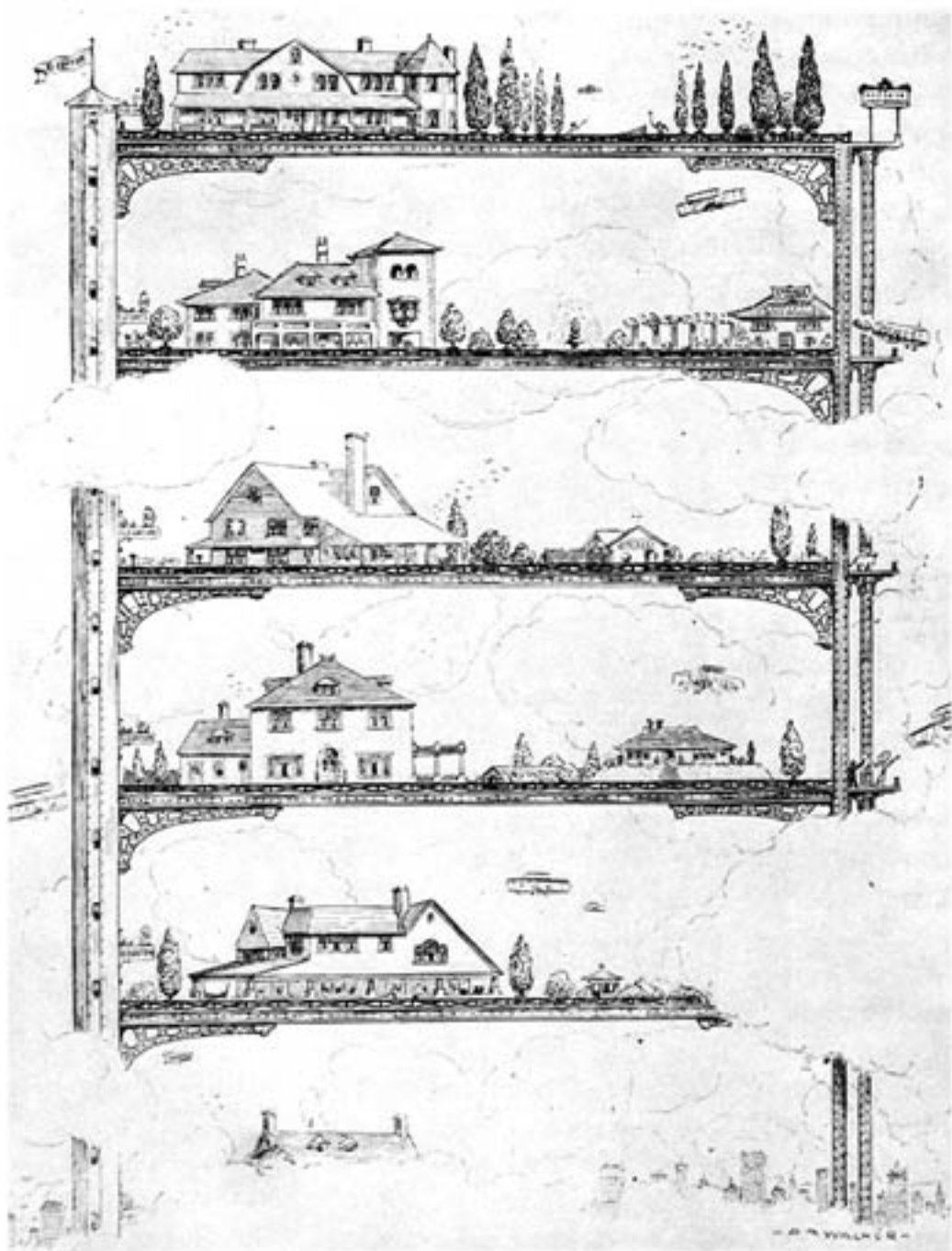
Innie/Outie considers Architecture as a simultaneously typological and teleological proposition. Architects exploit typology as a means of classifying, diagramming, and ultimately flattening and iconicizing ideas about Architecture so as to place them within a broader cultural context, thereby making them intellectually accessible to their audiences. By contrast, architects from the advent of Modernism onwards have displayed a critical preoccupation with the discipline's teleological potential, the creation of form that follows function – a renunciation of authorship, a denial of intuition that pursues an Architecture of transcendence that adheres only to the principles which govern that which is, rather than that which appears to be. These may both qualify as legitimate projects of architecture, but this thesis posits that neither one may supplant the other, lest we contribute to the process of reducing architecture to its own symbol.



Bad Habits

In order to identify the principles of that which is, one must first identify that which appears to be, and must paradoxically assign a necessarily reductive typological label to any work of architecture in order to proceed to understand it teleologically. We may begin to access that which is by distinguishing it as different from (albeit inextricably related to) that which it appears to be, which in the case of Architecture we may identify respectively as the three-dimensional organization of space, and the spatial figure, which the observer uses as a tool for beginning to unpack the principles that organize the construction of space. In spatial terms, then, the figure is the flattened image that the observer identifies as that which is organized by structure - Architecture. If we neglect to maintain this perceptive link between figure and structure, we run the risk of fragmenting the discipline of Architecture beyond its own recognition.

In order to develop effective strategies for maintaining a simultaneity of figural and structural perception, there are two of tendencies which we as architects have observed in the past and that this thesis contends we must resist in the future.



Figural Flatness

The first of these tendencies is the reluctance of architects to acknowledge the inherent three-dimensionality of architectural space - a tendency that proliferated with the advent of the free plan and the subsequent divorce of façade from structure. The relegation of architecture to the surface articulation lies in direct contradiction to the inherent three-dimensionality of architecture, which relies on its construction in three-dimensional space in order to carry out its communicative and equipmental functions.

This type of contradiction between surface and volume has preoccupied Postmodern architects such as Venturi and Graves whose decorated sheds accept typical organizational strategies a priori and apply symbolic veneers to their exteriors, but the complexity of contradiction cannot stand in for the conscious authorship of architectural space in three dimensions. The argument for the decorated shed is that it creates a both/and condition wherein an idealized structural system (the shed) can coexist with its own ideal symbolic representation (the decoration), but in practice the idealization of the architectural symbol supplants the idealization of structure by taking it a priori. While the decorated shed is not necessarily invalid as an approach to the construction of a relationship between surface and mass or interior and exterior, it cannot be mistaken that the architecture of surface may supplant the architecture of space.

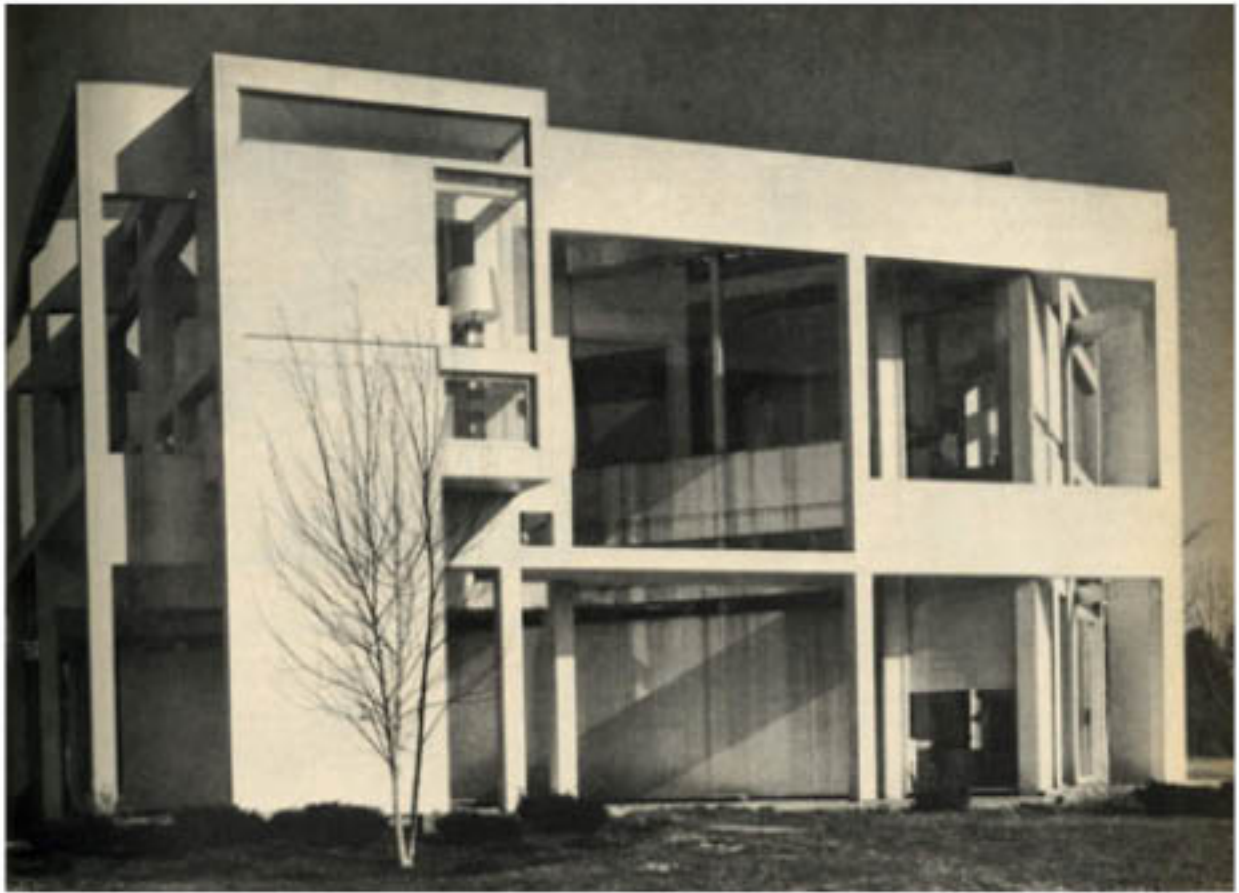


Venturi, like the typical modernist that he wishes to supplant, is adopting the tactic of exclusive inversion. He is cutting out a whole area of architectural communication, duck buildings, (technically speaking iconic signs), in order to make his preferred mode, decorated sheds (symbolic signs), that much more potent. Thus we are being asked, once more by a modernist, in the name of rationality, to follow an exclusive, simplistic path. Clearly we need all the modes of communication at our disposal, not one or two; and it's the modernist commitment to architectural street-fighting that leads to such oversimplification, not a balanced theory of signification.

Charles Jencks, *The Language of Postmodern Architecture*

Structural Illegibility

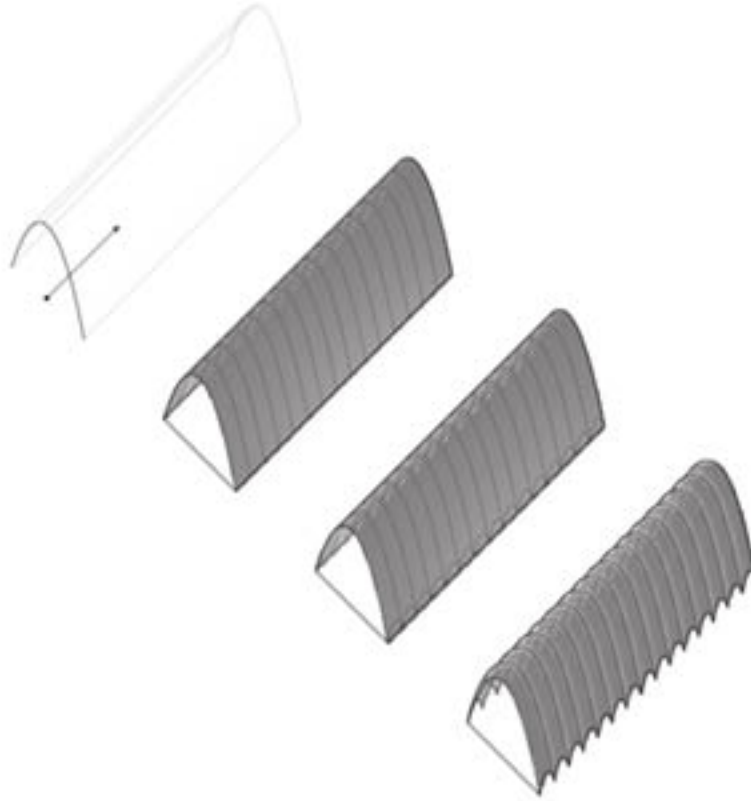
The second bad habit we must confront as architects is the postmodern willingness to obfuscate the associative meaning of architecture beyond its own recognition, rendering the discipline as socially inaccessible. If the works of Venturi represent an architecture whose parlance is comprised of a set of slogans and one-liners, then we might understand the works of Eisenman or Liebeskind as scrambling the language of architecture into a garbled, fragmentary version of architectural rhetoric. This is an architecture of methodology, shunning final form under the auspice of truth to process over content. The expression of process is not inherently problematic, as its subjection to real-world contingencies offers it the potential to bear social relevance, the urge to supplant the expression of figure with a wholly process-driven architecture fails to capitalize on the rhetorical immediacy that the legible figure provides.



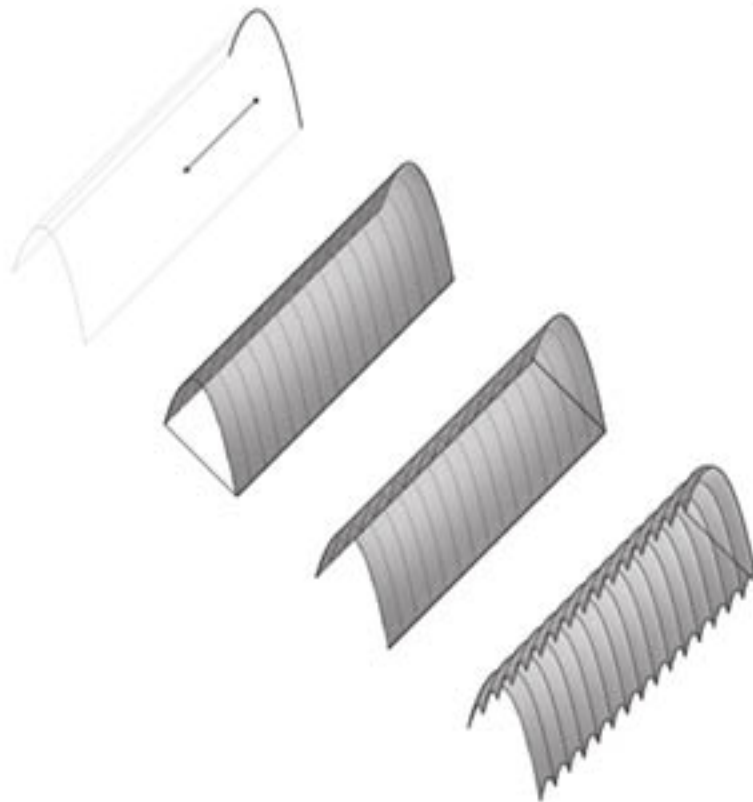
I have always been on the side opposed to phenomenology. I'm not interested in Peter Zumthor's work or people who spend their time worrying about the details or the the grain of wood on one side or the color of the material on the surface, etc. I couldn't care less. That having been said, it is still necessary to build.

Peter Eisenman, *Eisenman's Evolution: Architecture, Syntax, and New Subjectivity*

Birds Eye



Worms Eye



Articulation of barrel vault structure by diminution and repetition of catenary profile - extracting the figure from structure.

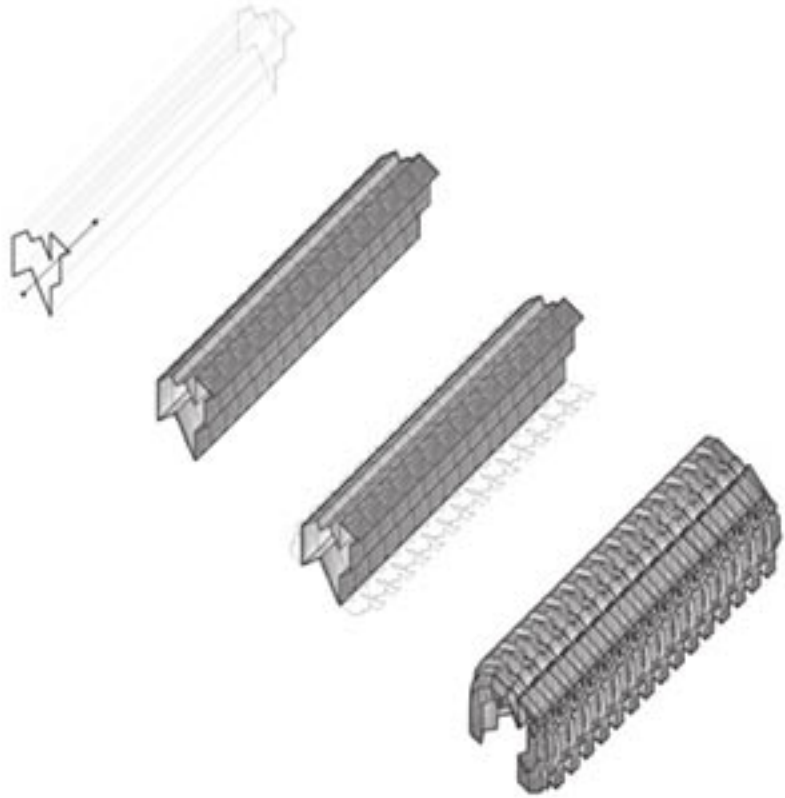
The purpose of the aesthetic organization of our environment is to capitalize on this subjective schematization, and make it socially available. The resulting organization does not correspond in a one-to-one relationship with the objective facts, but is an artificial construct which represents these facts in a socially recognizable way.

It follows that the representational systems which are developed are, in a real sense, independent of the quantifiable facts of the environment.

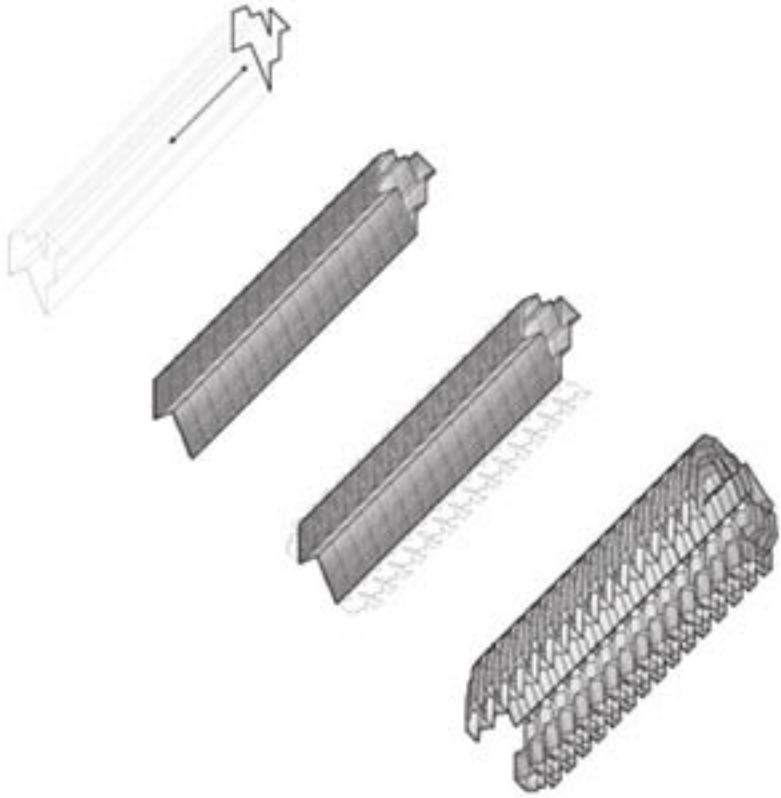
No system of representation, no meta-language, however, is totally independent of the facts which constitute the objective world. The modern movement in architecture was an attempt to modify the representational systems which had been inherited from the pre-industrial past, and which no longer seemed operable within the context of a rapidly changing technology.

Alan Colquhoun, *Typology and Design Methodology*

Birds Eye



Worms Eye



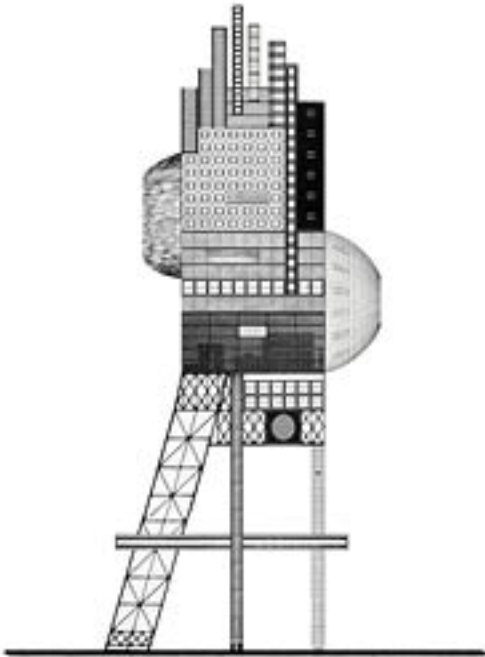
Extension of a profile into a three-dimensional spatial ordering system - constructing the latent structure of the Figure.

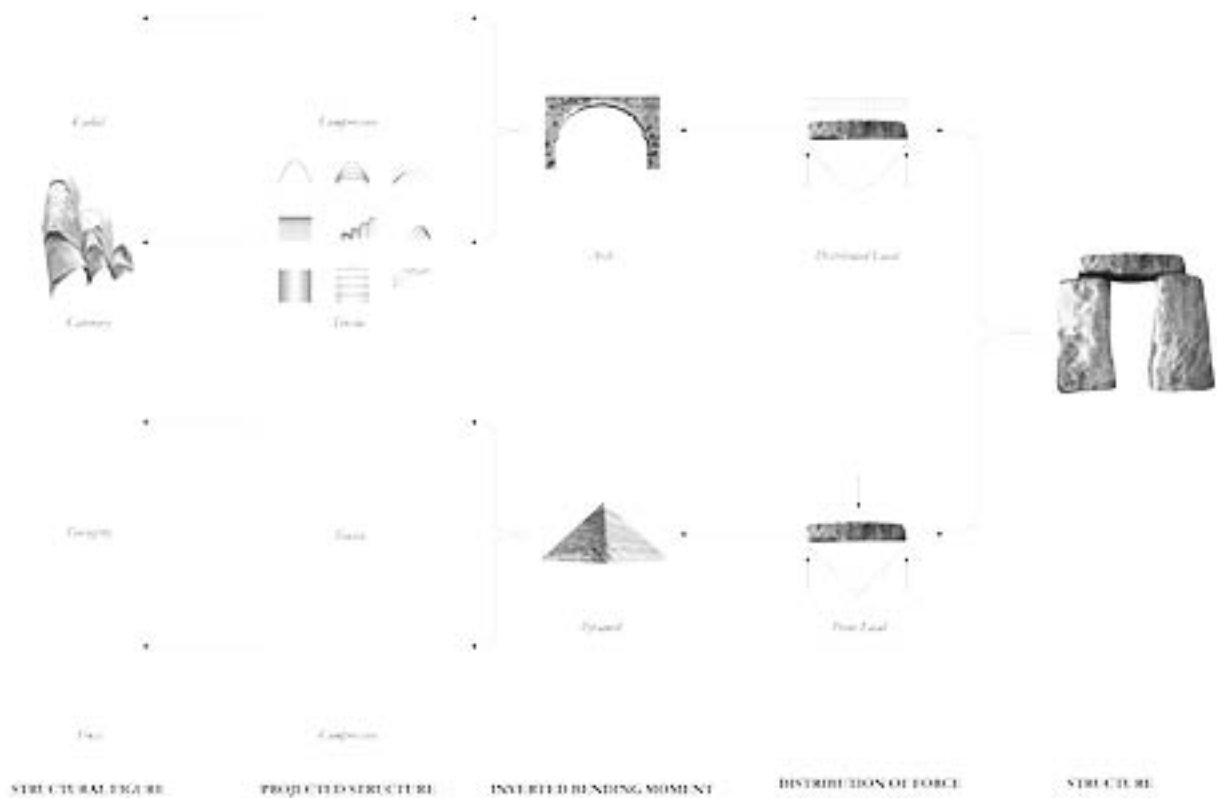
If we start to examine the general laws of perception, we see that as perception becomes habitual, it becomes automatic. Thus, for example, all of our habits retreat into the area of the unconsciously automatic; if one remembers the sensations of holding a pen or of speaking in a foreign language for the first time and compares that with his feeling at performing the action for the ten thousandth time, he will agree with us. Such habituation explains principles by which, in ordinary speech, we leave phrases unfinished and words half expressed...

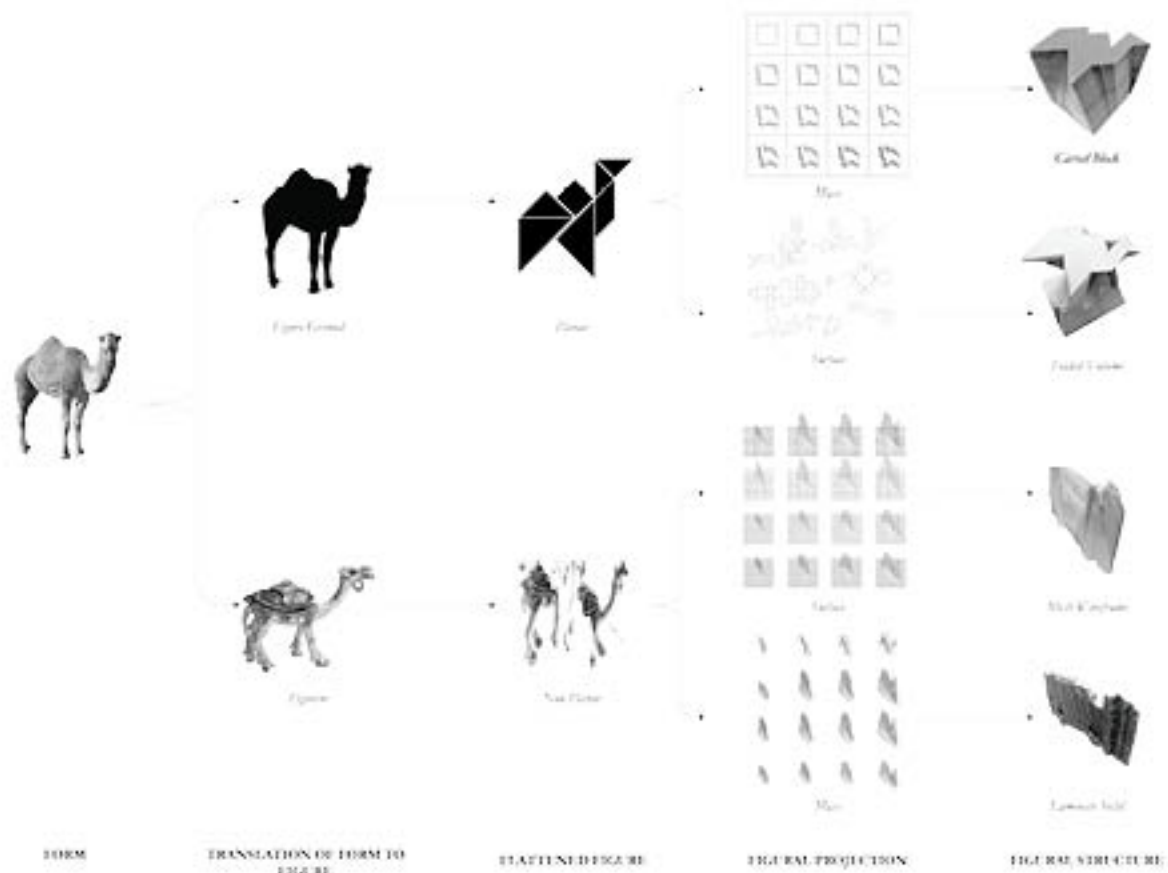
This characteristic of thought not only suggests the method of algebra, but even prompts the choice of symbols (letters, especially initial letters). By this "algebraic" method of thought we apprehend objects only as shapes with imprecise extensions; we do not see them in their entirety but rather recognize them by their main characteristics. We see the object as though it were enveloped in a sack. We know what it is by its configuration, but we see only its silhouette. The object, perceived thus in the manner of prose perception, fades and does not leave even a first impression; ultimately even the essence of what it was is forgotten.

Victor Shklovsky, *Art as Technique*

To construct a binary in which notions of figure and structure are mutually exclusive belies their latent interdependence in Architecture, and thus limits both their simultaneous phenomenological potential and social accessibility.







FORM

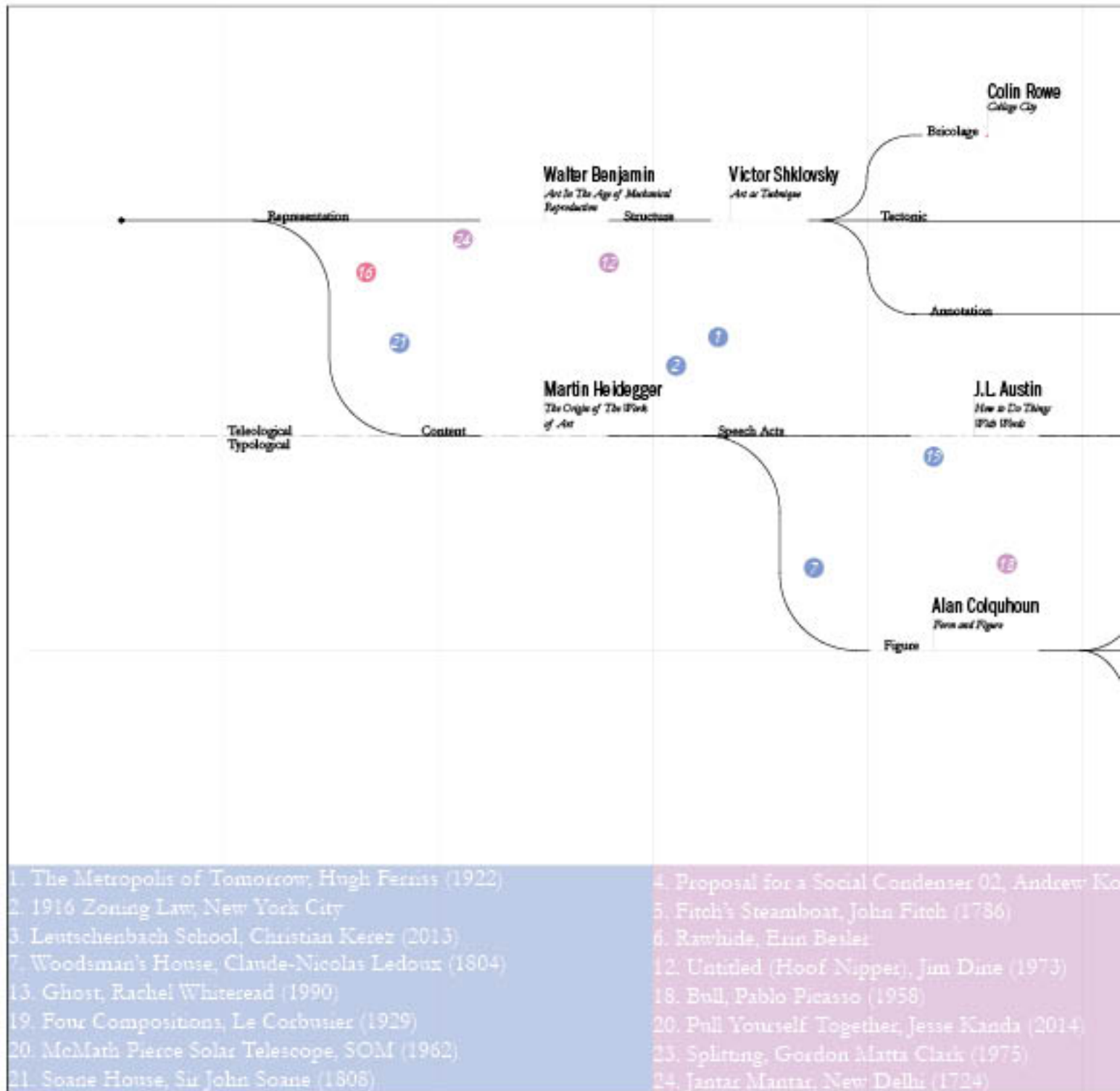
TRANSLATION OF FORM TO
FIGURE

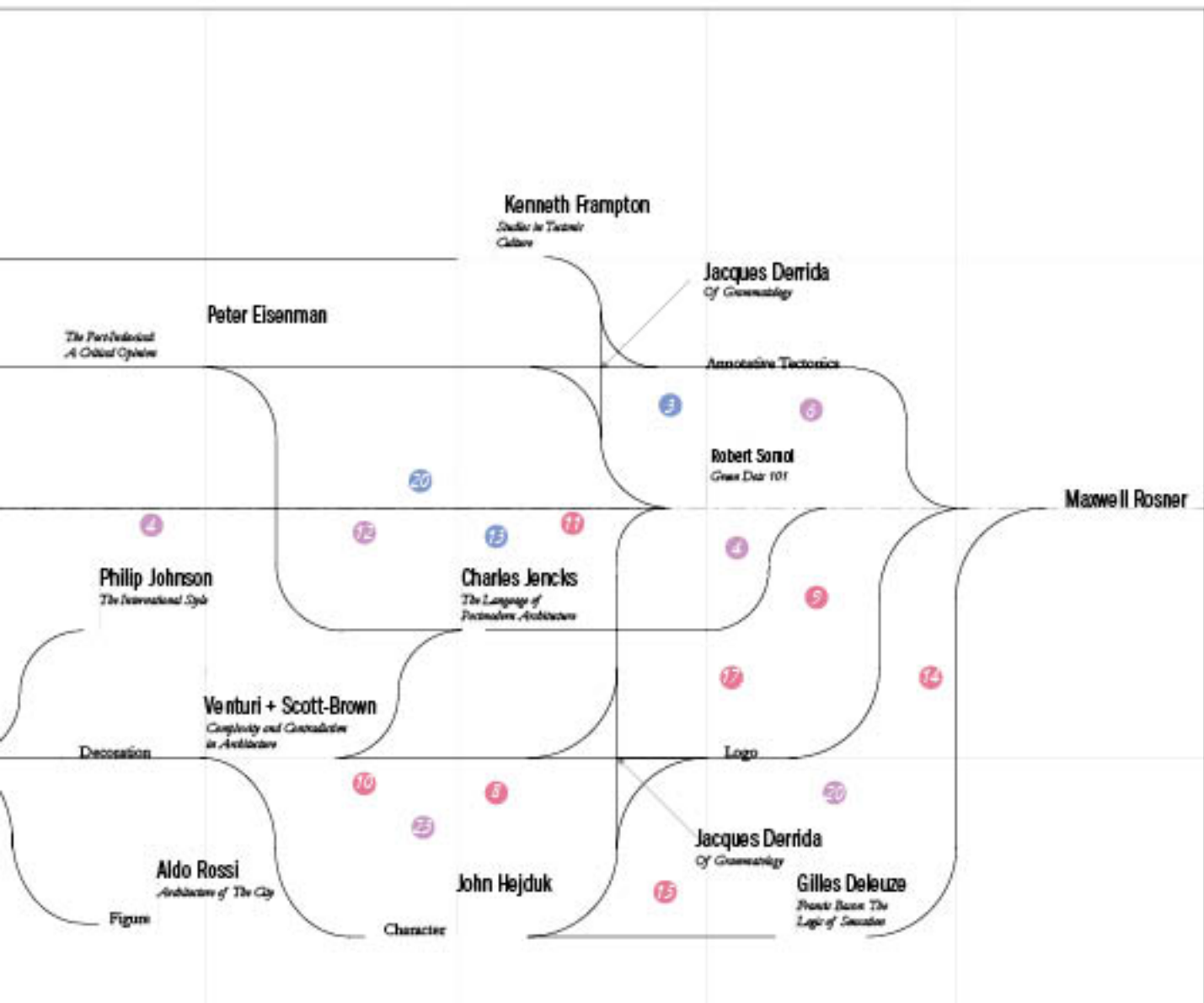
FLATTENED FIGURE

FIGURAL PROJECTION

FIGURAL STRUCTURE

2_CABINET OF CURIOSITIES





vacis (2014)

8. Outside, Adam Nathaniel Furman (2013)

9. Rawhide, Jason Payne/Hirvuta (2011)

10. Vanna Venturi House, Robert Venturi (1964)

11. Myriahedral projection, Jarke J. van Wijk (2008)

14. Four Domes, Clark Thenhaus (2015)

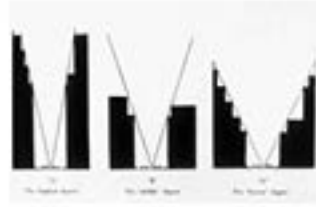
15. Merode Altarpiece, Robert Campin (1435)

16. Project for The Chapel of The Dead, Étienne-Louis Boullée (1788)

17. Afterparty, MOS (2008)



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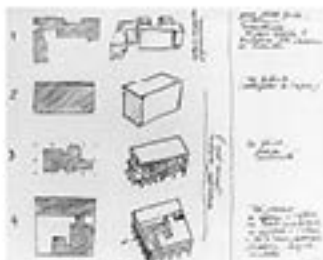
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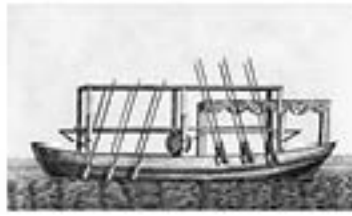
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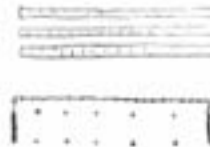
24

Surface and Mass

"Contemporary methods of construction provide a cage or skeleton of supports. This skeleton is as it appears before the building is enclosed is familiar to everyone. Whether the supports are of metal or of reinforced concrete, the effect from a distance is a grille of horizontals and verticals. For protection against the weather it is necessary that this skeleton should be in some way enclosed by walls. In traditional masonry construction the walls were themselves the supports. Now the walls are merely subordinate elements fitted like screens between the supports or carried like a shell outside of them. Thus the building is like a boat or an umbrella with strong internal support and a continuous outside covering."

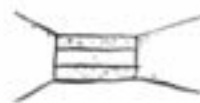
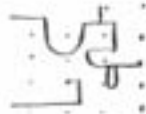
Henry-Russell Hitchcock and Philip Johnson, *The International Style*

LES TECHNIQUES SONT L'ASSIETTE MÊME DU LYRIQUE. ELLES OUVERT UN NOUVEAU CYCLE DE L'ARCHITECTURE.

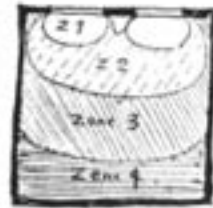
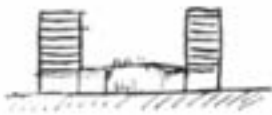
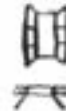


Jusqu'au béton armé et au fer, pour bâtir une maison de pierre, on creusait de larges rigoles dans la terre et l'on allait chercher le bon sol pour établir la fondation.

On constituait ainsi les caves, locaux médiocres, humides généralement.



Puis on montait les murs de pierre. On établissait un premier plancher posé sur les murs, puis un second, un troisième; on ouvrait des fenêtres.

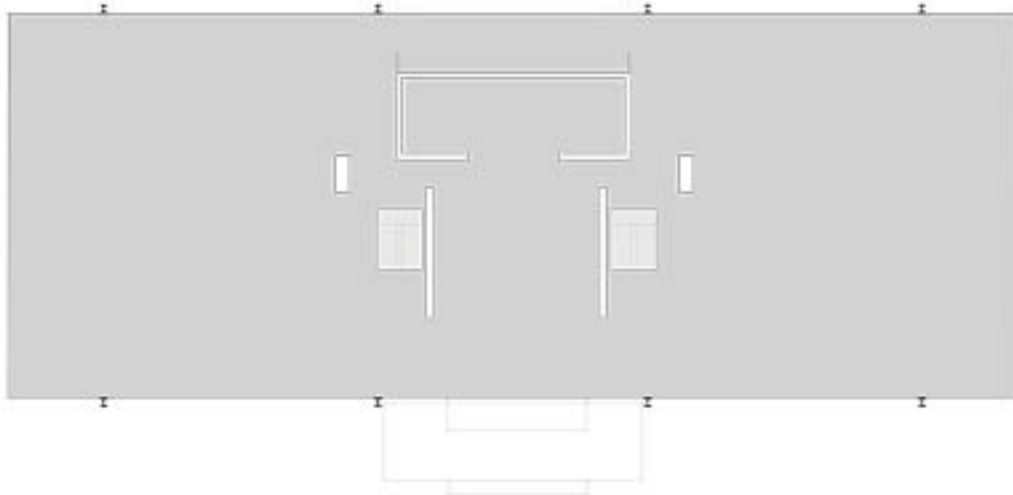


Avec le béton armé on supprime entièrement les murs. On porte les planchers sur de minces poteaux disposés à de grandes distances les uns des autres.

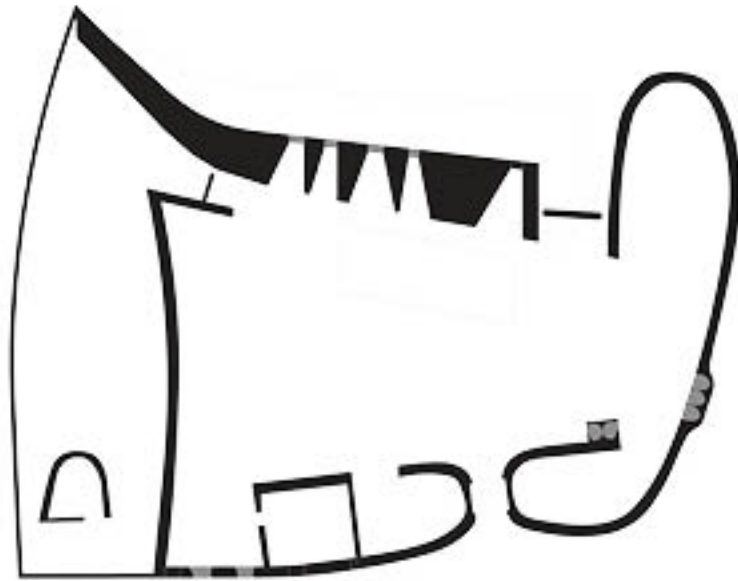
Le sol est libre sous la maison, le toit est recouvert, la façade est entièrement libre. On n'est plus paralysé.

La table dit ceci: à surface de verre égale, une pièce éclairée par une fenêtre en longueur qui touche aux deux murs contigus comporte deux zones d'éclairage: une zone, très éclairée, une zone 2, bien éclairée.

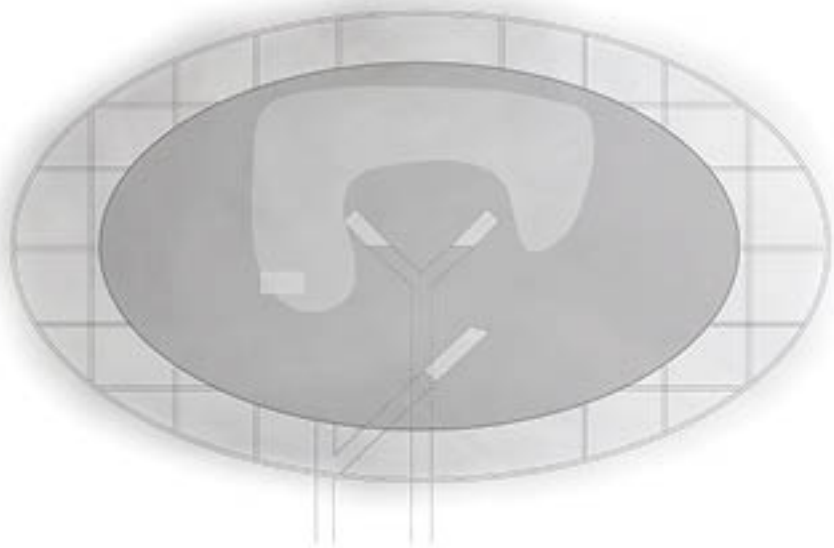
D'autre part, une pièce éclairée par deux fenêtres verticales déterminant des trumeaux, comporte quatre zones d'éclairage: la zone 1, très éclairée, la zone 2, bien éclairée, la zone 3, mal éclairée, la zone 4, obscurcie.



Mies Van der Rohe, Crowne Hall (1958)



Le Corbusier, Notre Dame du Haut (1954)



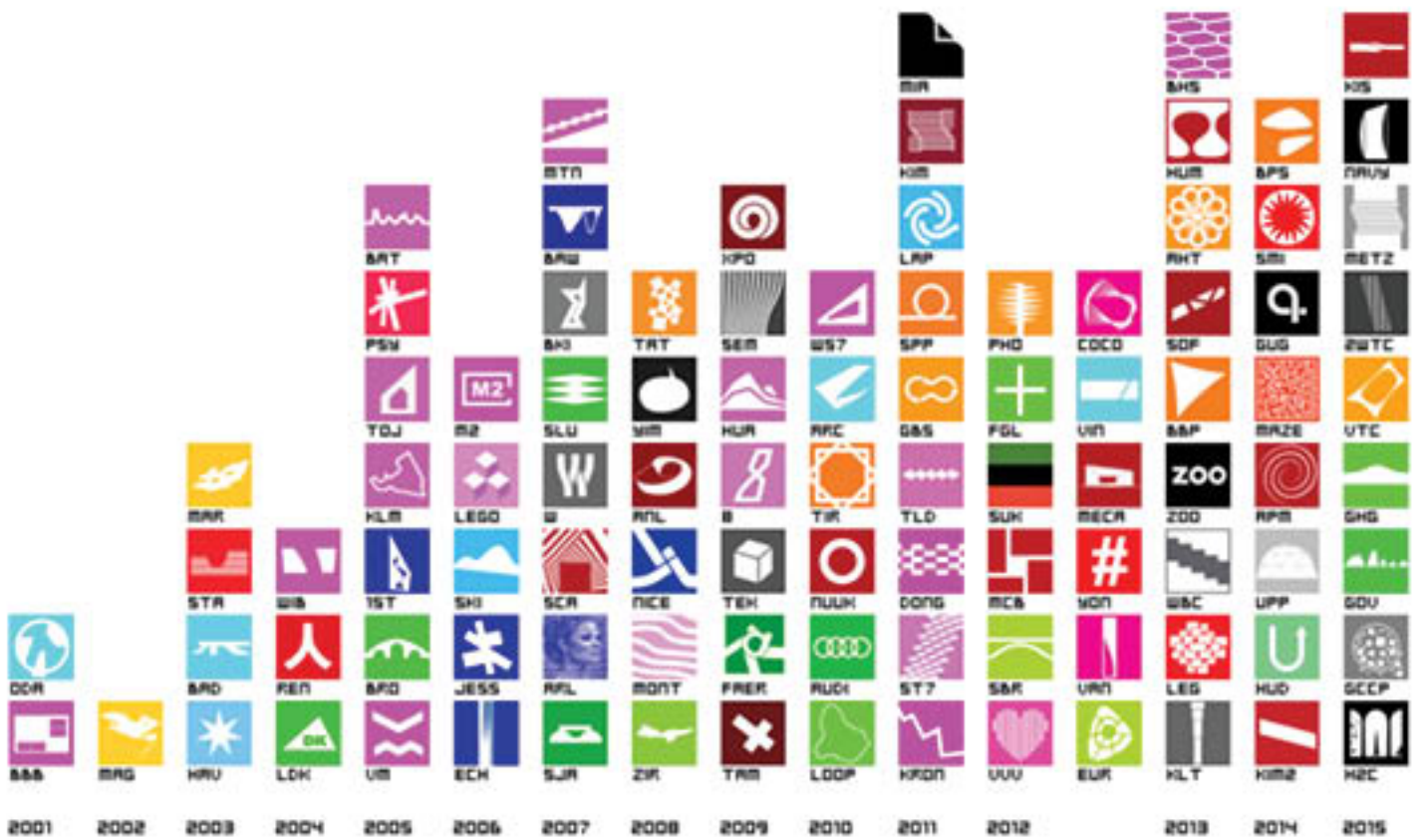
Diller Scofidio Renfro, Blur Building (2001)



Peter Zumthor, Brother Klaus Chapel (2011)

Legibility and Obscurity

We must as architects grapple with the discrepancy between the rhetorical value of a semiotic architecture and the subsequent danger of reducing architecture to a set of symbols that forego autonomy of meaning. If one considers the works of BIG as a set of icons, as his website would suggest to his audience, there is little opportunity to unpack the work for its objective, teleological, functional qualities. To reduce the complexities and contingencies that generate a work of architecture to a graphic symbol may not only flatten the richness of the work itself, but may even replace the work itself by fetishizing the work's graphic quality.



2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015



Bertel R.A., *Profilo Continuo (Testa di Mussolini)* (1933)



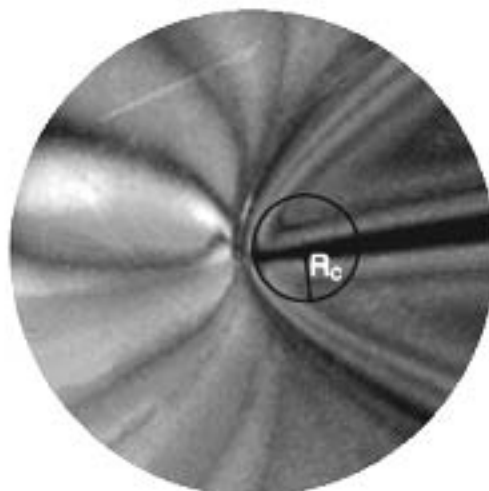
Francis Bacon, Studies for Self Portrait (1973)



Newcastle Journal



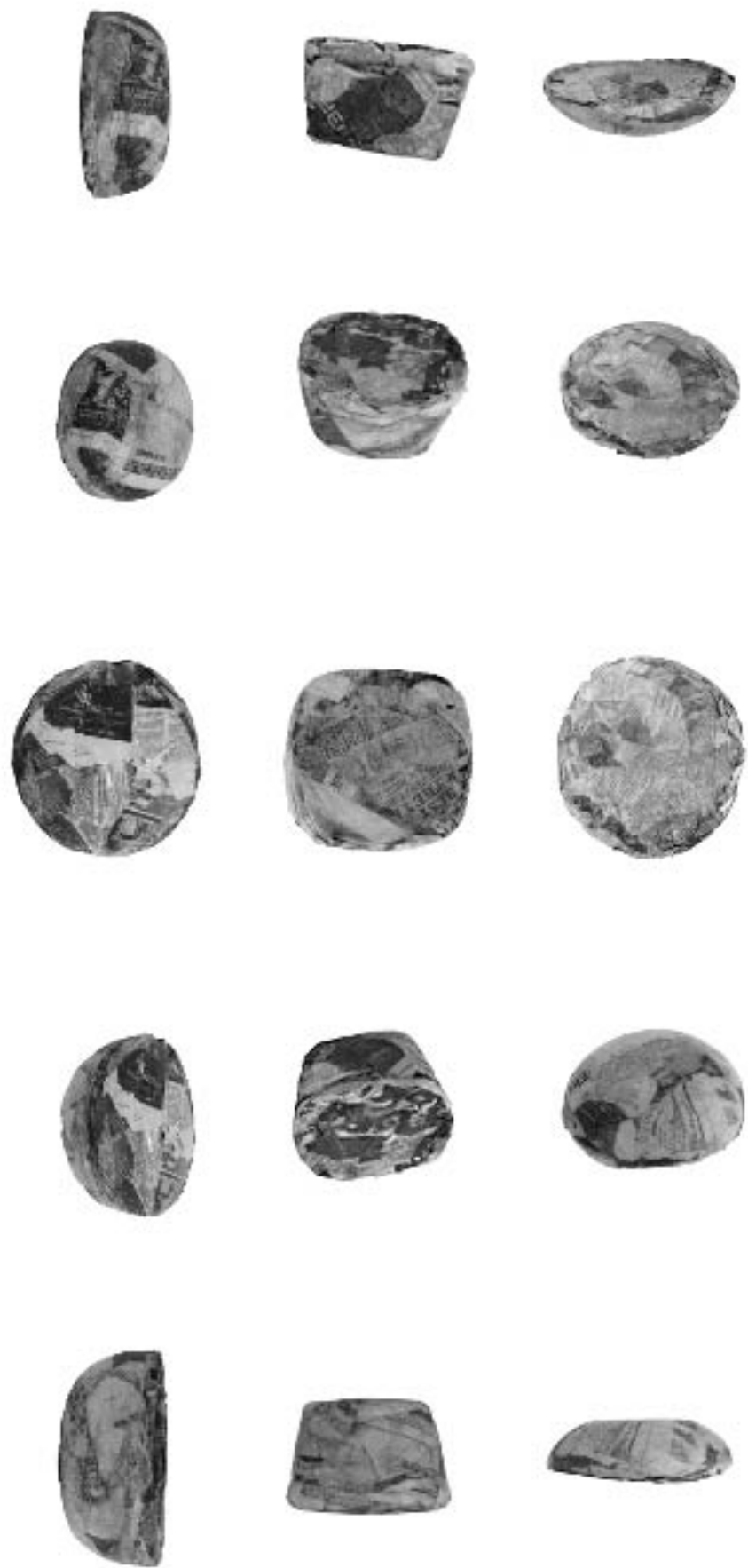
Crumpled paper



Distortion of a conically displaced sheet of paper

But what concerns us here is the absolute proximity, this co-precision, of the field that functions as a ground, and the Figure that functions as a form, on a single plane that is viewed at close range. It is this system, this coexistence of two immediately adjacent sectors, which encloses space, much more so than if one had proceeded with the somber, the dark, or the indistinct. This is why there is indeed a certain blurriness in Bacon; there are even two kinds of blurriness, but they both belong to this highly precise system. In the first case, the blur is obtained not by indistinctness, but on the contrary by the operation that 'consists in destroying clarity by clarity,' as in the man with the pig's head in the *Self-Portrait* of 1973, or the treatment of crumpled newspapers: as Leiris says, their typographic characters are clearly drawn, and it is their very mechanical precision that stands opposed to their legibility.

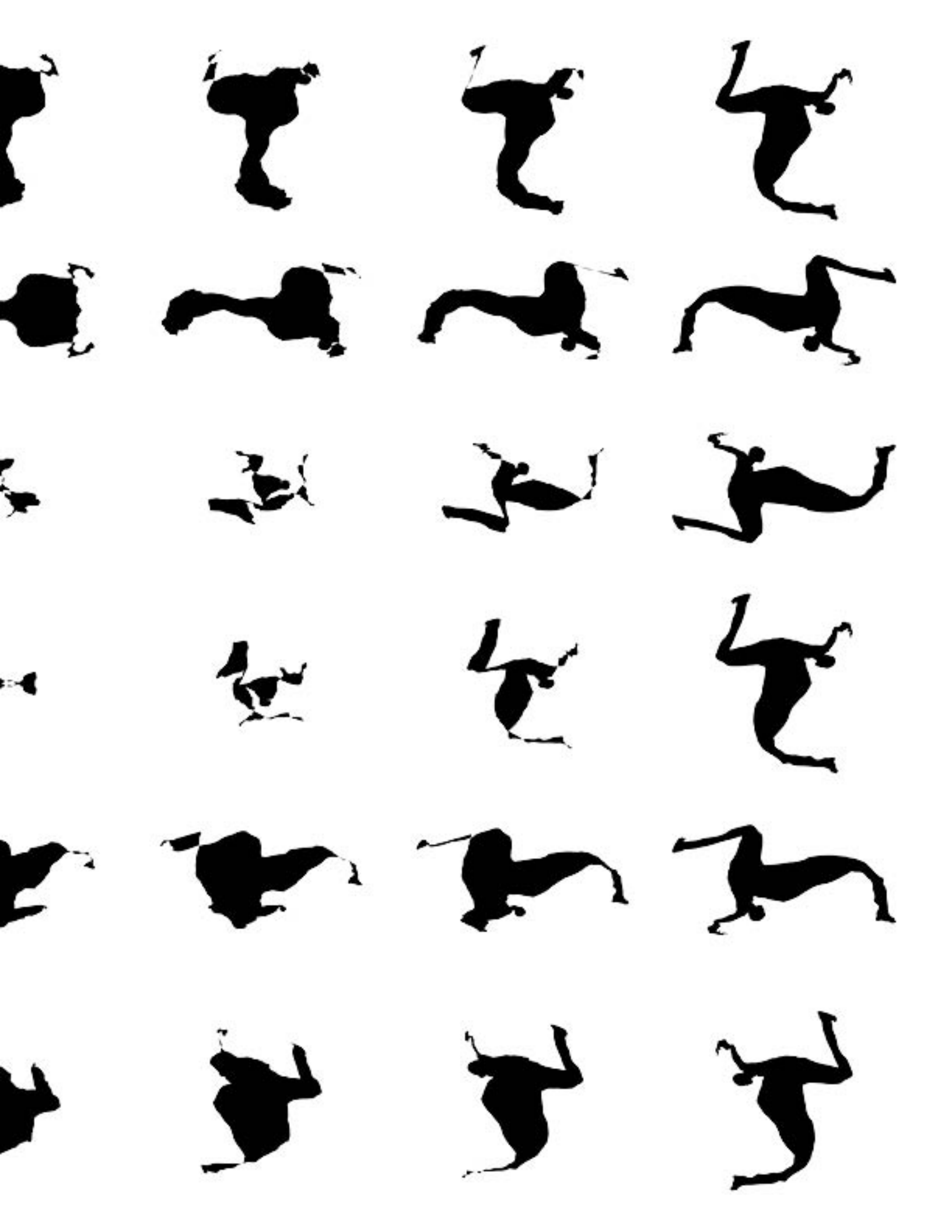
Gilles Deleuze, *Francis Bacon: The Logic of Sensation*

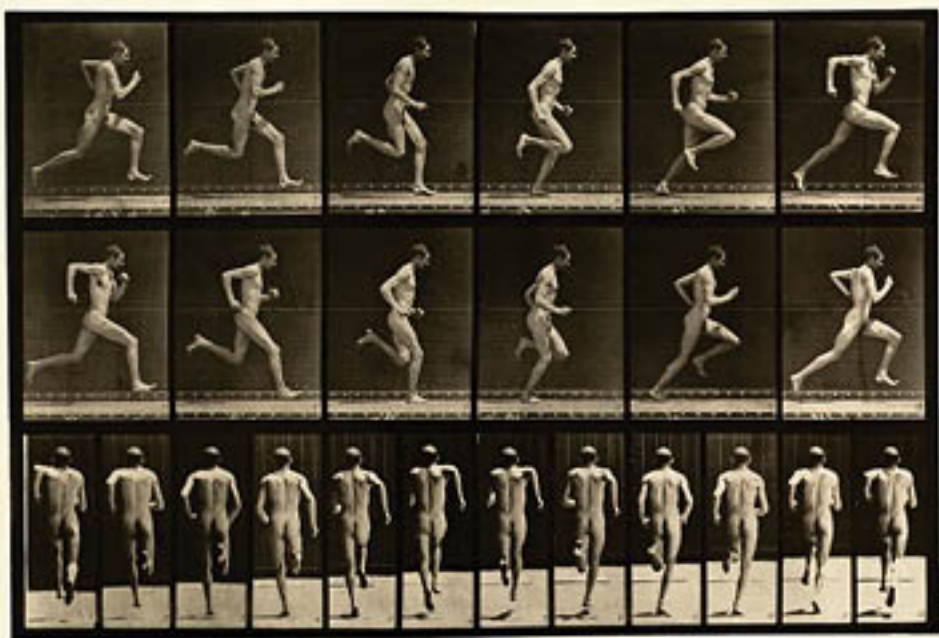


The following image extrapolates upon notions of rematerialization and figural legibility that are latent in Jesse Kanda's "Pull Yourself Together." Kanda in his warped latex renderings of the human figure reduces form to a glossy surface whose three-dimensionality is read through texture and light effects rather than through a legible profile. When the flatness of the figure is magnified as in the following drawing, new readings are made available through the interpolation of figure between recognizable orientations and through the transformation of the profile line.









ANIMAL LOCOMOTION. PART II.

Copyright, 1887, by EUGENE MUYBRIDGE. All rights reserved.

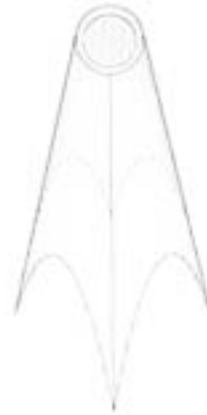




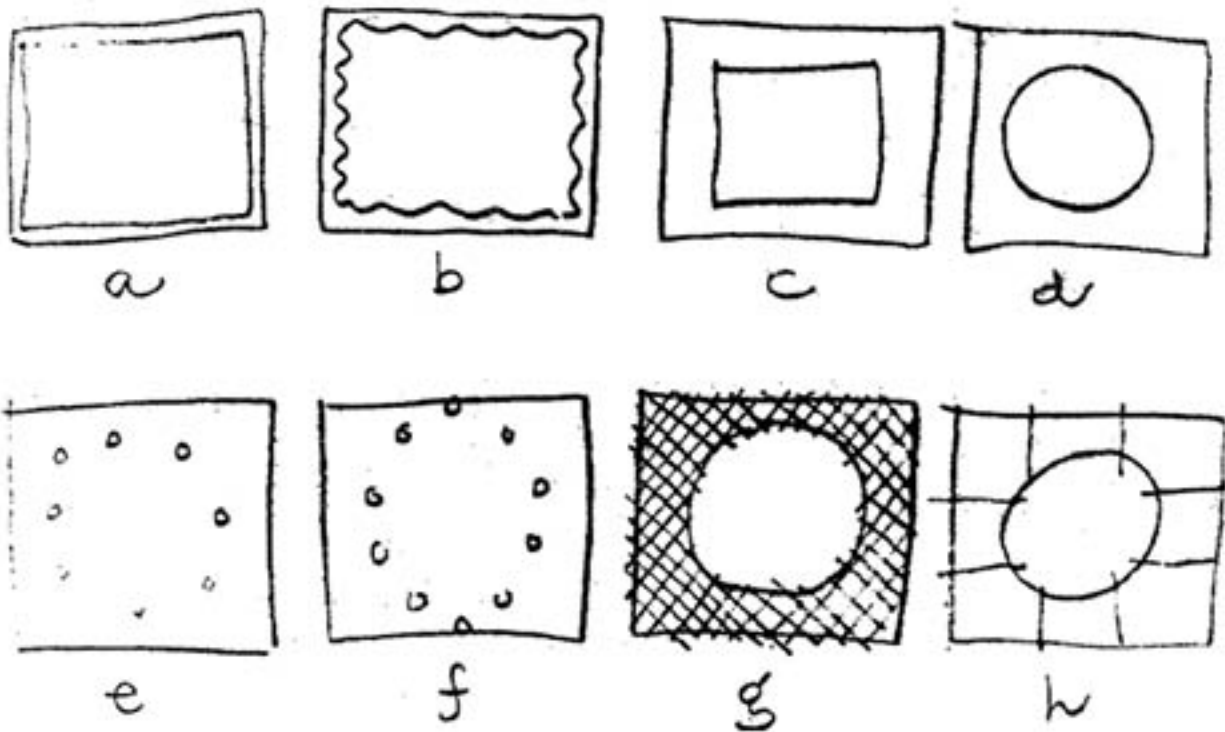


Interior/Exterior

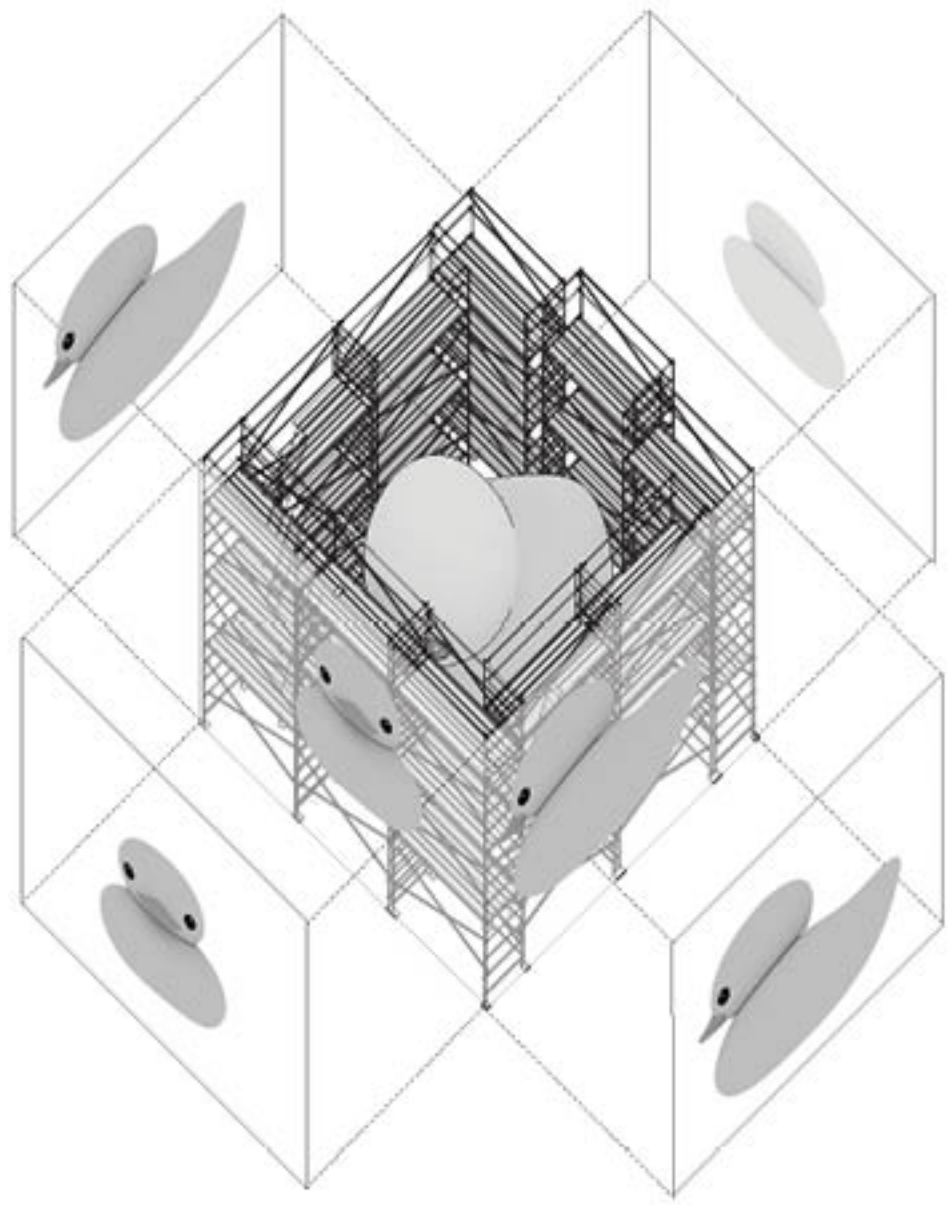
The construction of a methodology which exploits the latent interdependence of structure and figure runs in parallel to a treatment of space in terms of interior and exterior, whereupon the moment of interface between inside and outside doubles as the site of architectural confrontation between notions of figural and structural expression. At the moment of transition from interior to exterior, embedded ideas about tectonic, enclosure, and figure-ground come to the fore.

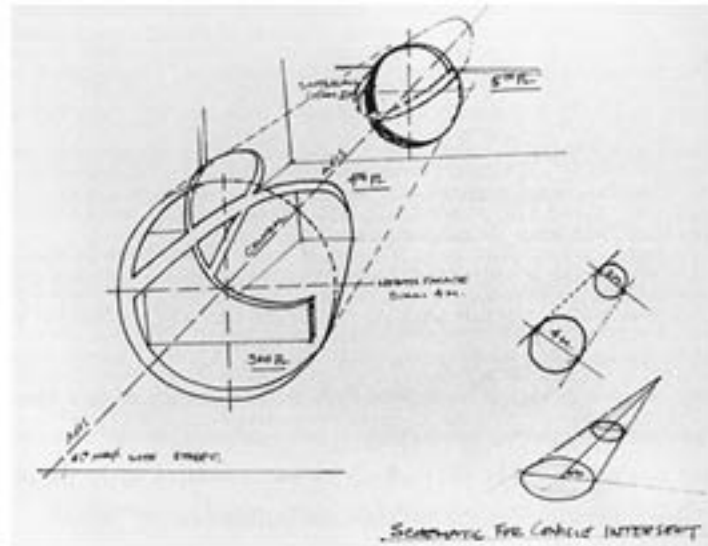


"There is another important area of contradictions. Contradiction between the inside and the outside may manifest itself in a "lining" - that is, a space within a space analogous to a frame. Plan diagrams illustrate the layers between the inside and the outside can be more or less contrasting in shape and position, pattern and scale.



Robert Venturi, Complexity and Contradiction in Architecture



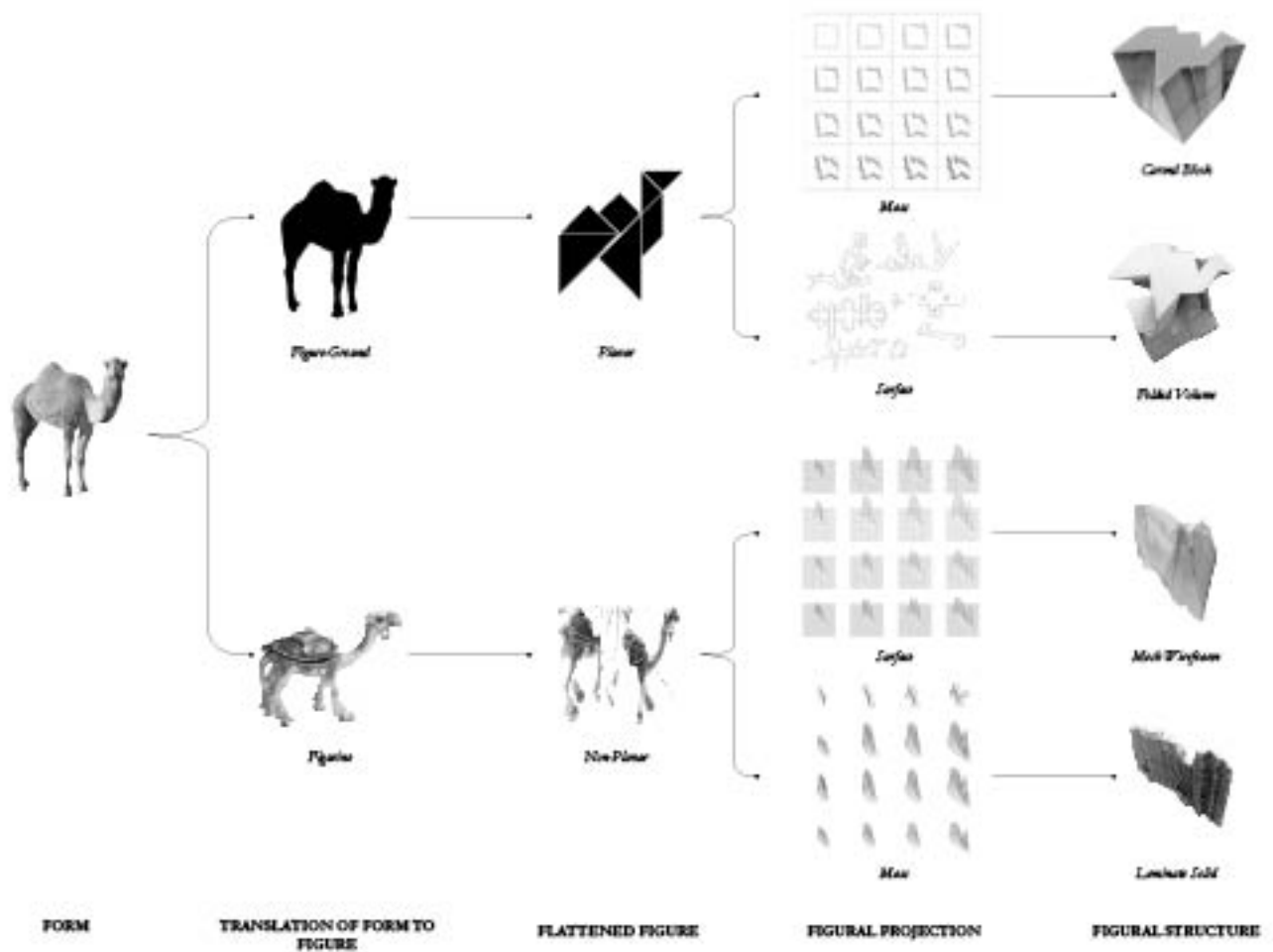


Excavation, revelation, and reconsideration of the dissonance between architectural assembly and spatial organization.

The first thing one notices is that violence has been done. Then the violence turns into visual order and, hopefully, then to a sense of heightened awareness.... You see that light enters places it otherwise couldn't. Angles and depths can be perceived where they should have been hidden. Spaces are available to move through that were previously inaccessible.... My hope is that the dynamism of the action can be seen as an alternative vocabulary with which to question the static, inert building environment.

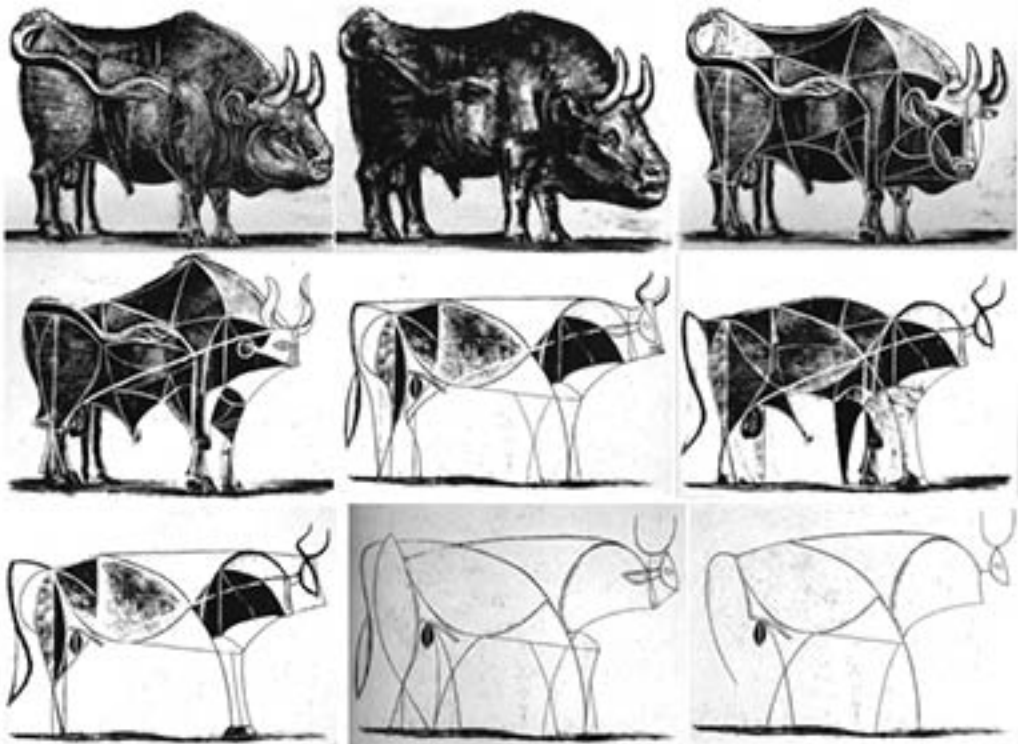
- Gordon Matta Clark, on Conical Intersection (1977)

STRUCTURAL FIGURES



“Curiously, while radical avant-garde films such as Warhol’s [Sleep] are analogous to the plans of typical tall buildings, these more “radical” forms of architecture, as represented by their plans, imply successive movement that is comparable to conventional narrative film.”

- Preston Scott Cohen, “Successive Architecture”

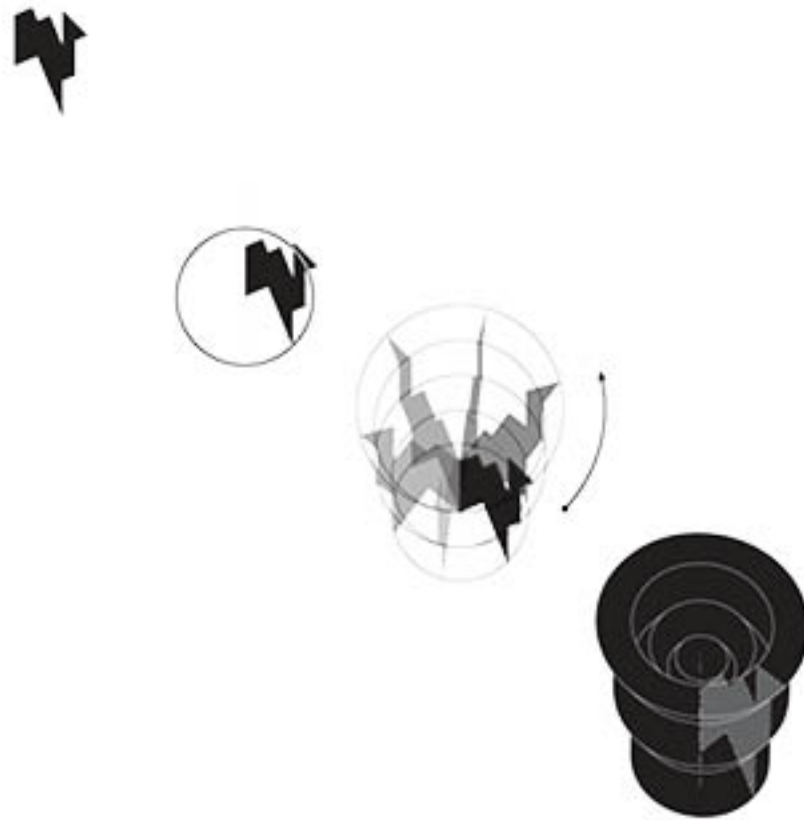


Projective Massing

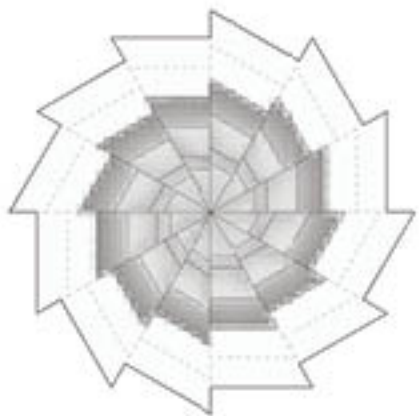
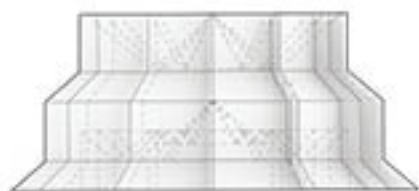
Rotational Projection

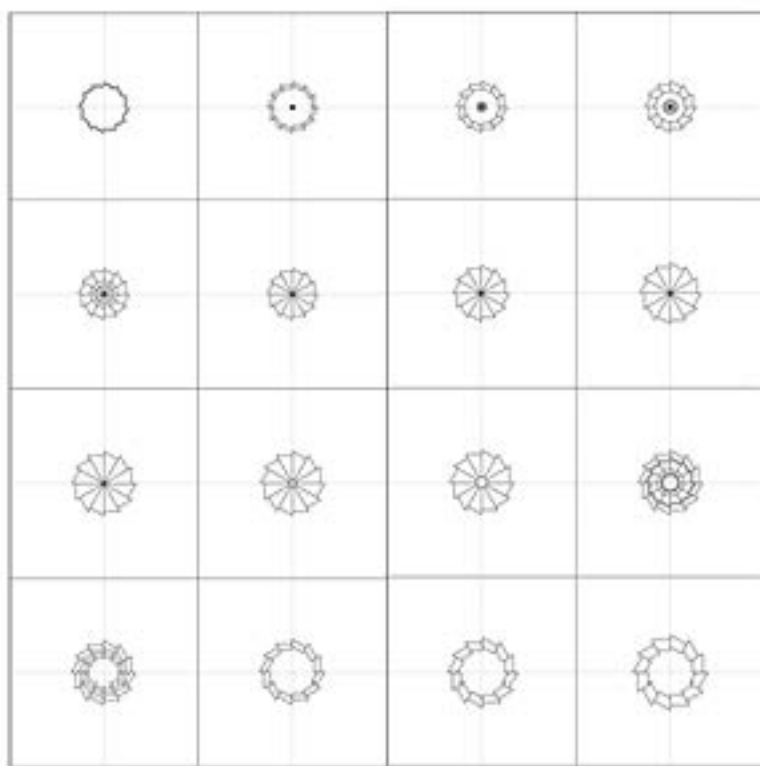
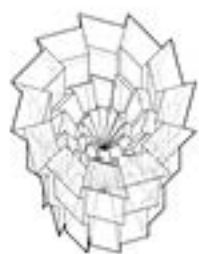
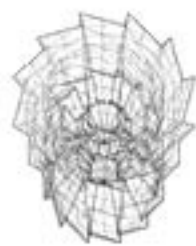


R.A. Bertelli, Profilo Continuo (Testa di Mussolini) (1933)

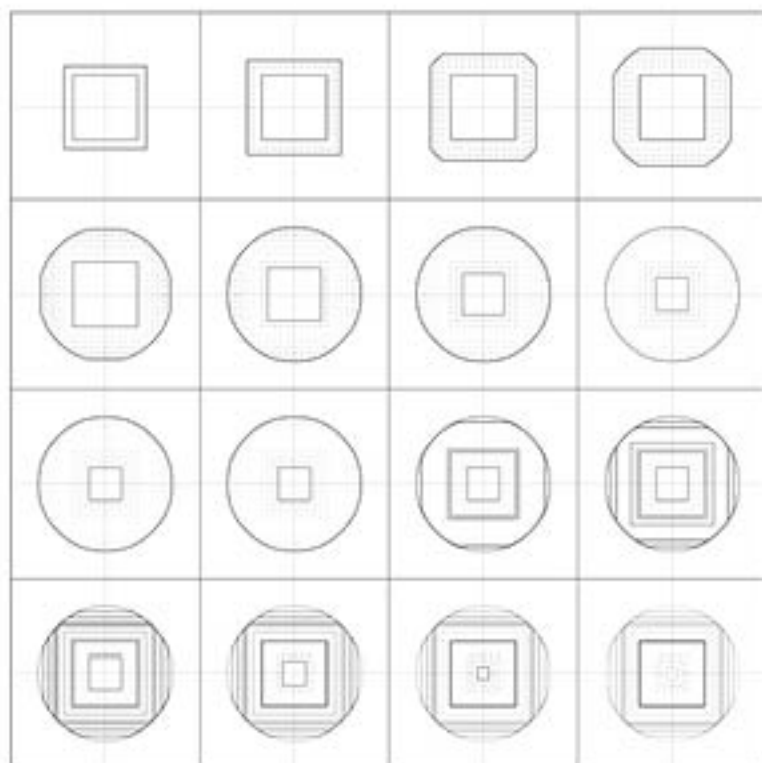
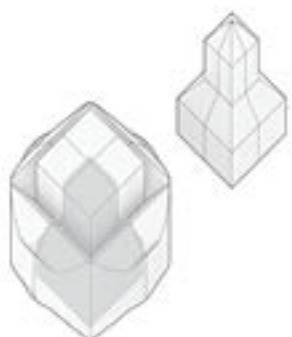
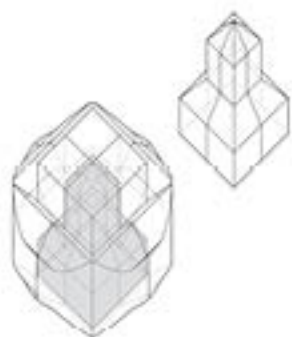


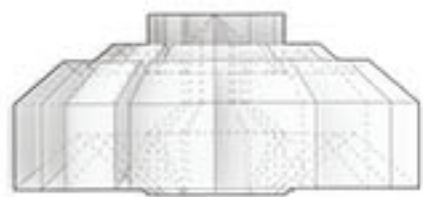
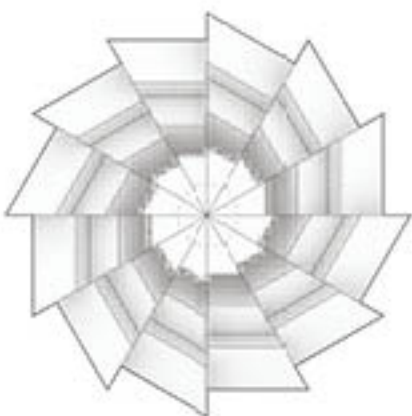
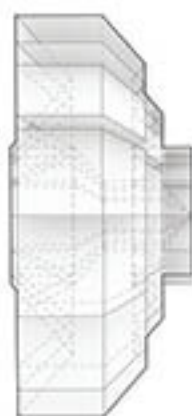
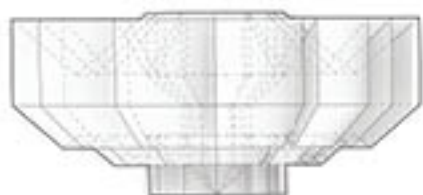
Translation of figure to mass through a process of revolved projection.

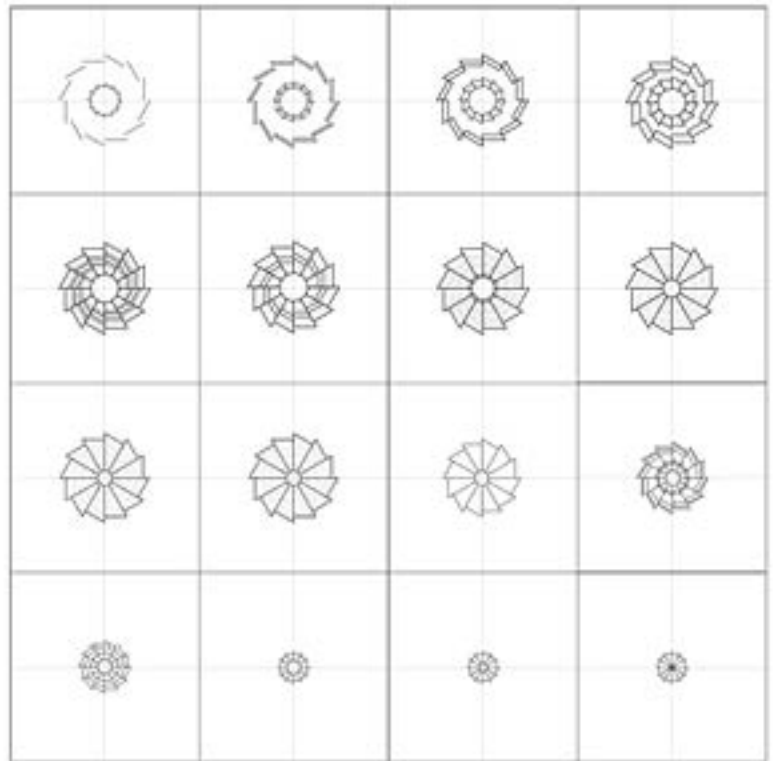
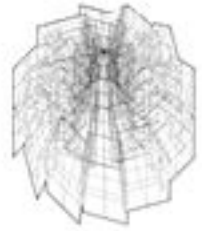








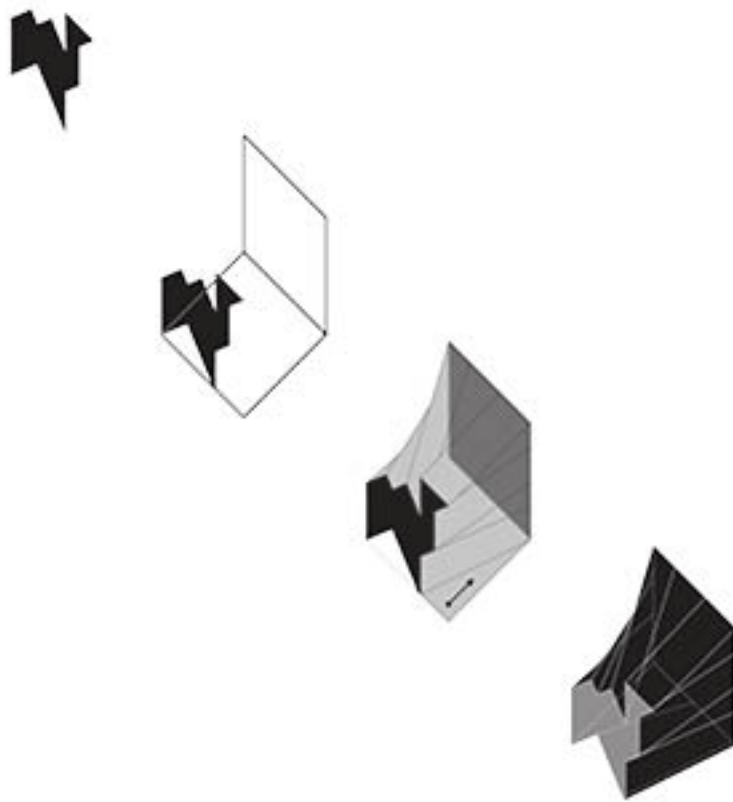




Single Extrusion



Bjarke Ingels Group, 57 West (2016)

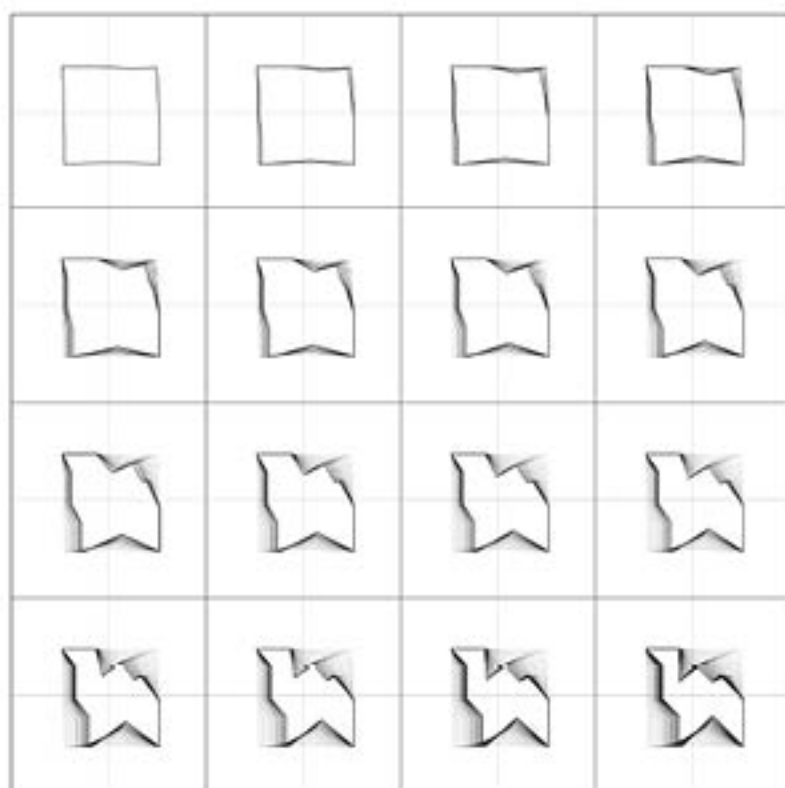


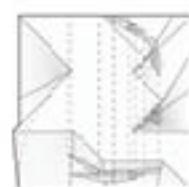
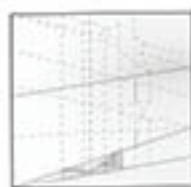
Translation of figure to mass through a process of lofted projection in one dimension.

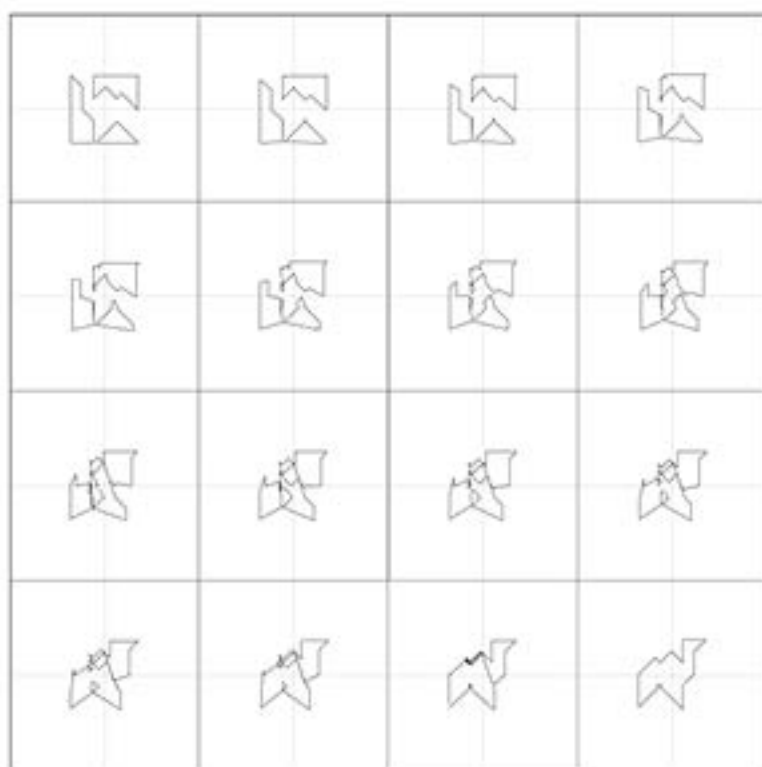








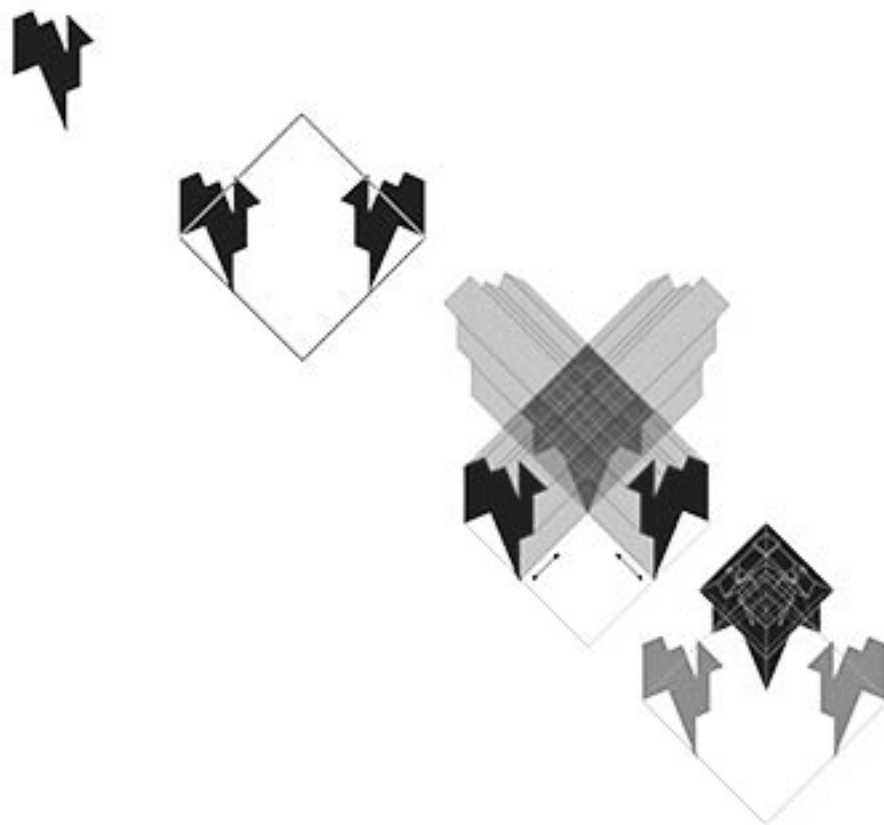




Double Extrusion



Angela Co, Critters (2013)



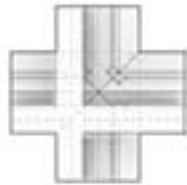
Translation of figure to mass through a process of lofted projection in two dimensions.

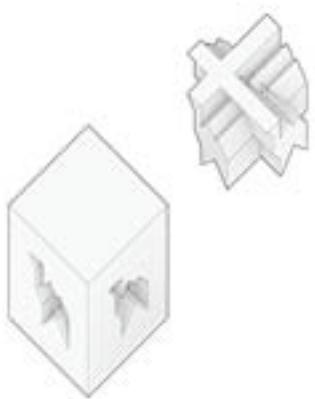
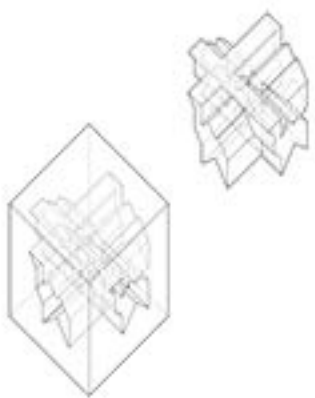
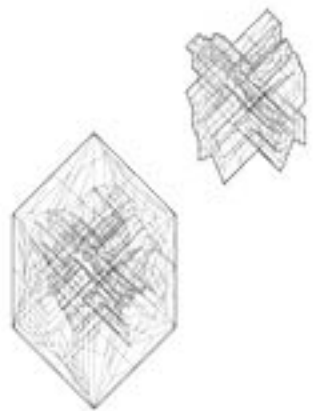
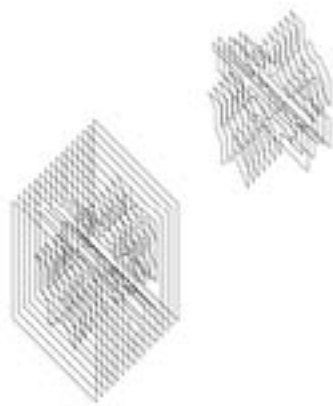














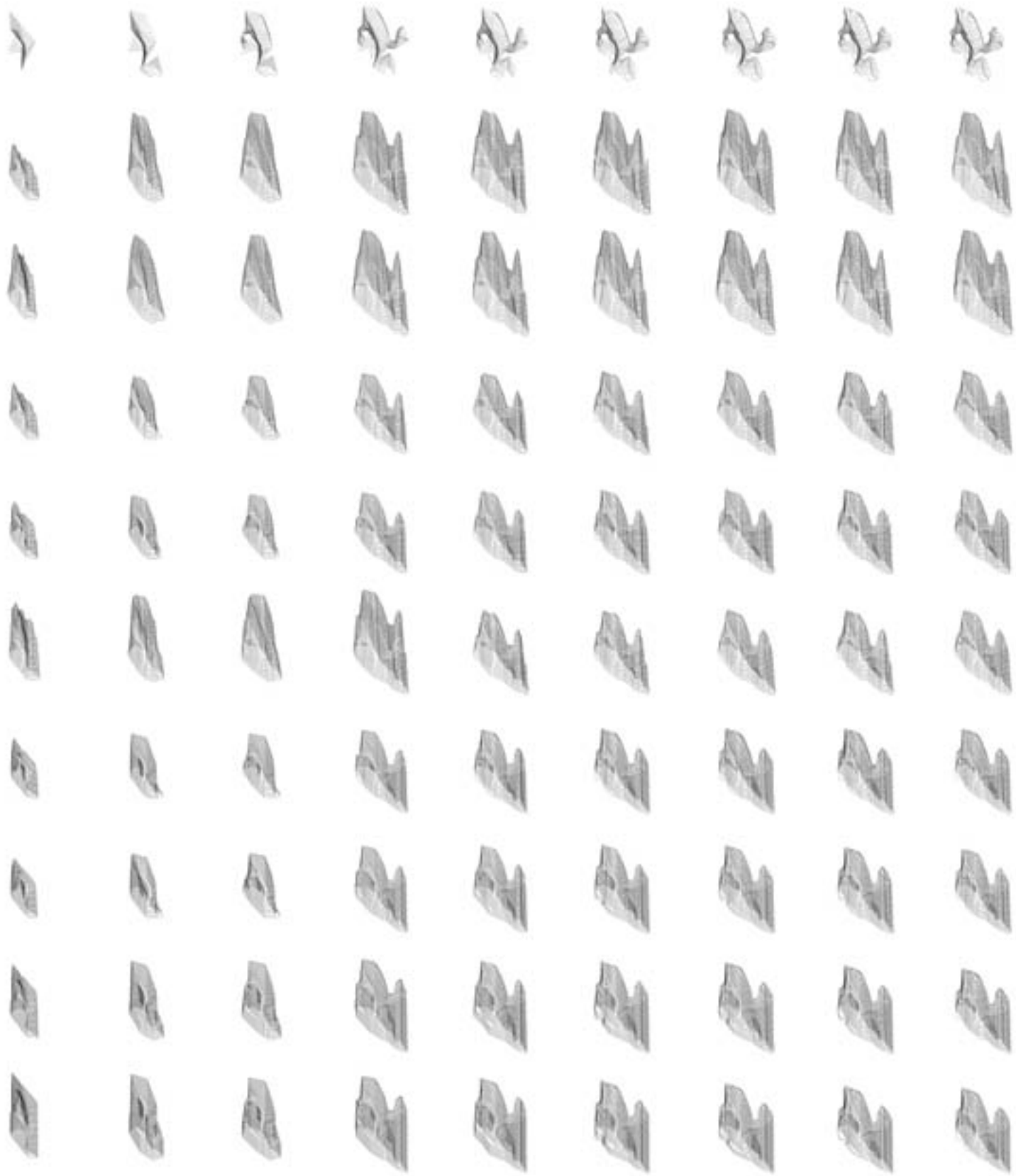
Jeanne Claude and Christo, Wrapped Reichstag (1975)

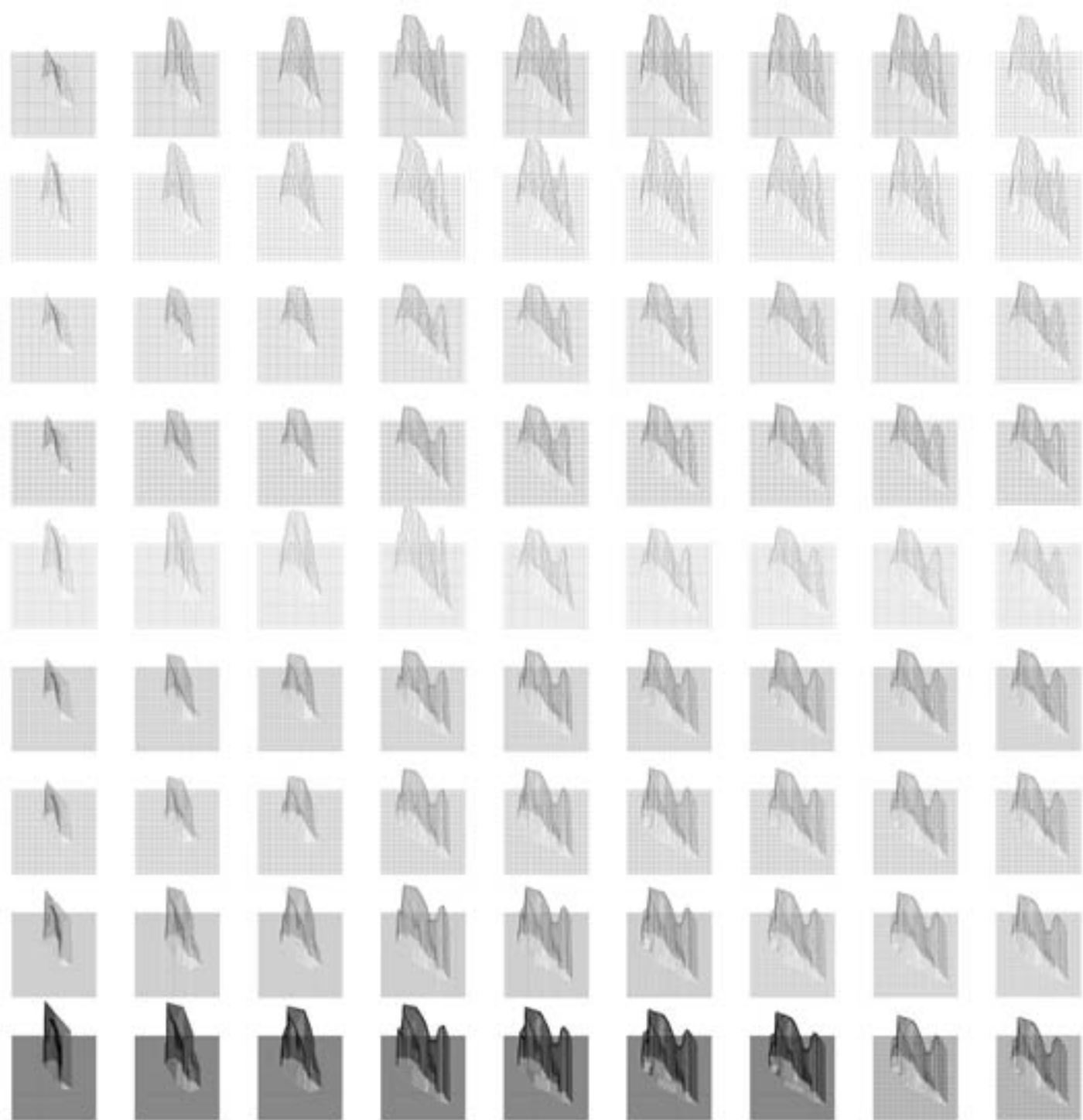


Translation of figure to mass through a process of contour lamination.

Laminate Massing

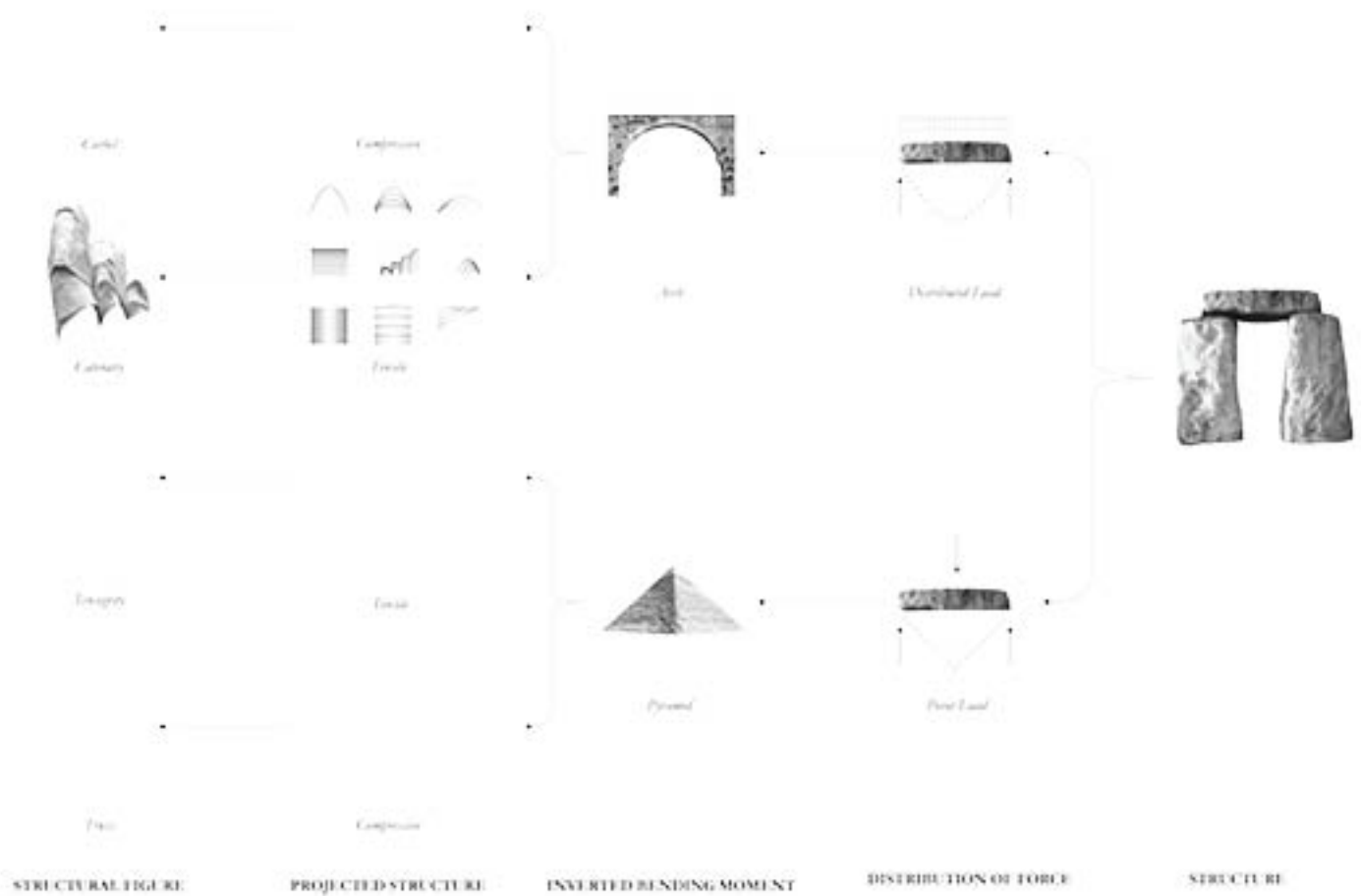






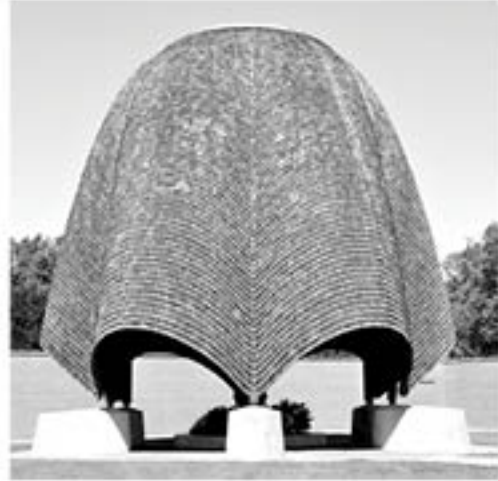


FIGURAL STRUCTURES





Hirsuta, Raspberry Fields



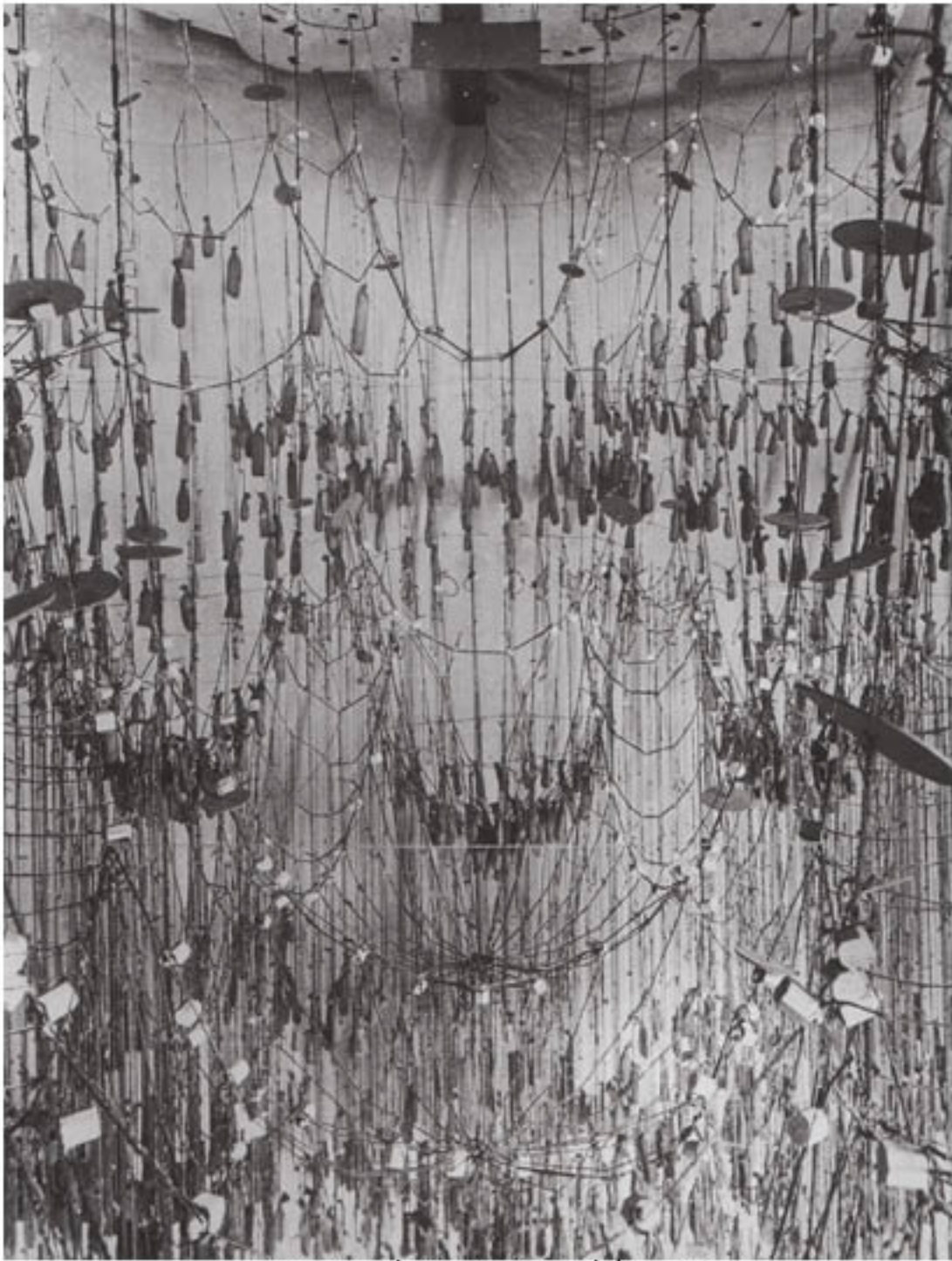
Philip Johnson, Roofless Church



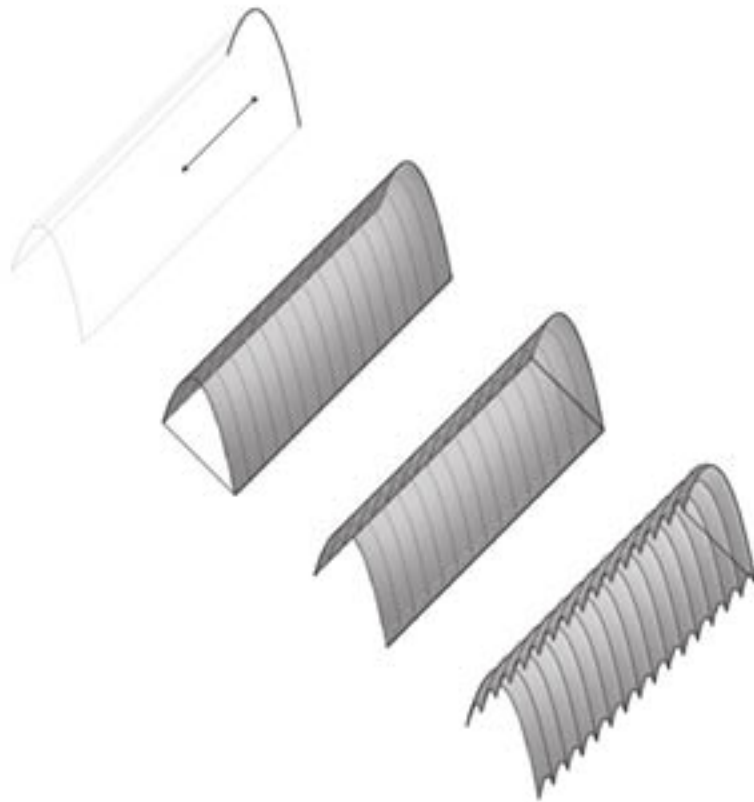
Christian Kerez, Leutschenbach School



Kenneth Snelson, Rainbow Arch

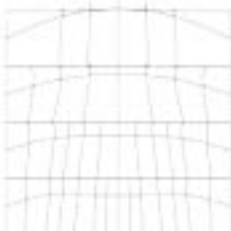
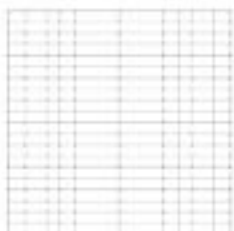
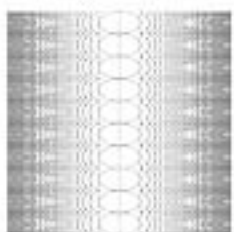
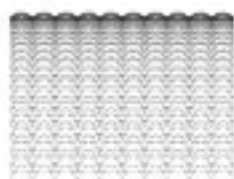


Antoni Gaudi, Catenary Model (1906)



Translation of structure to figure through a process of catenary suspension and inversion



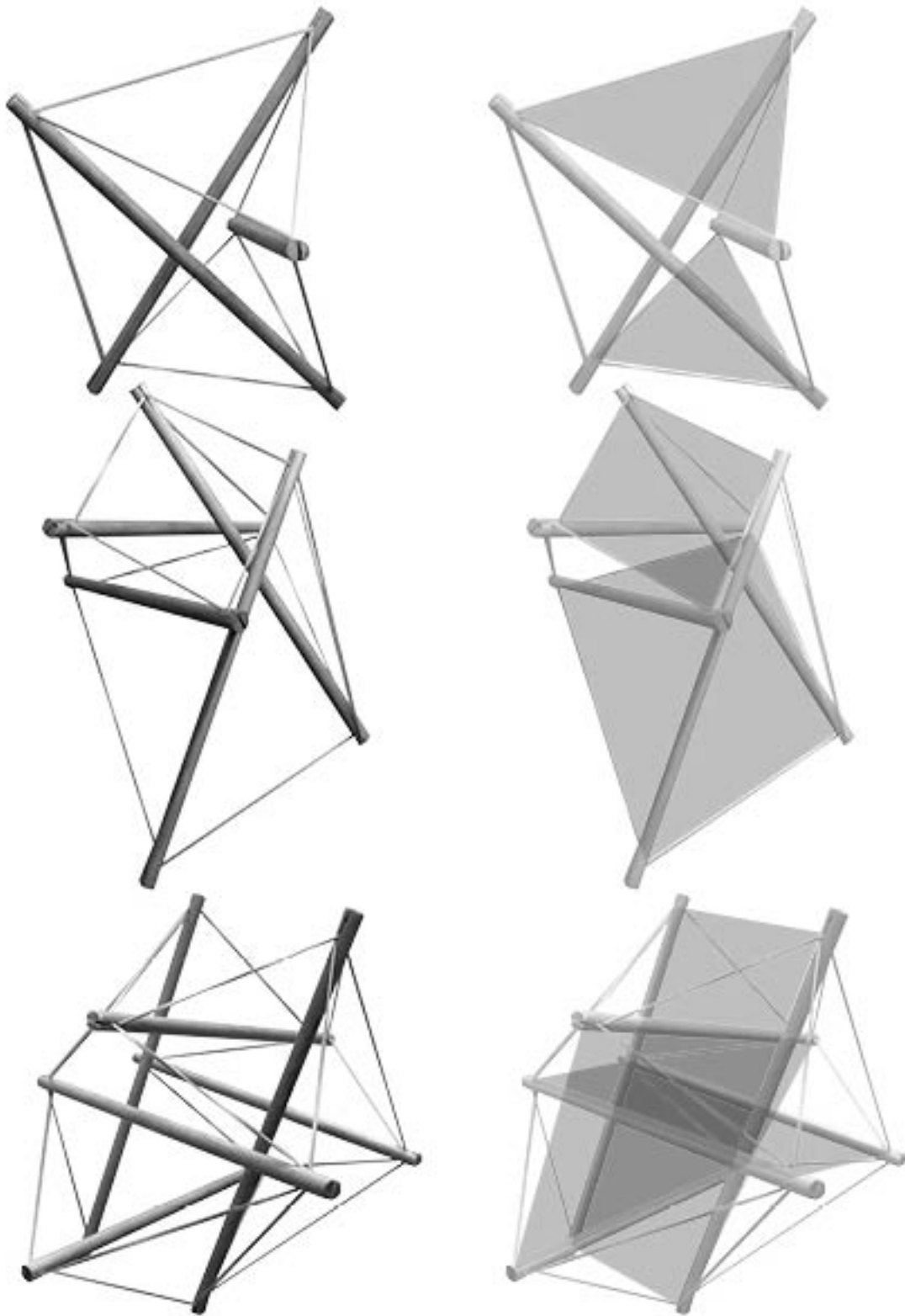








Kenneth Snelson, Needle Tower (1968)

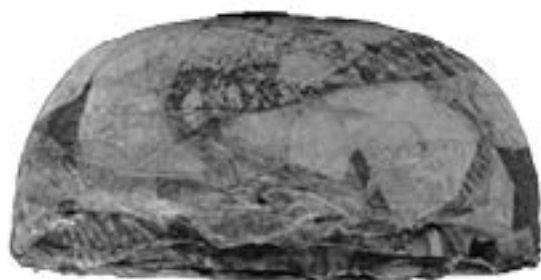


Translation of structure to figure through a process of tensegrity construction.



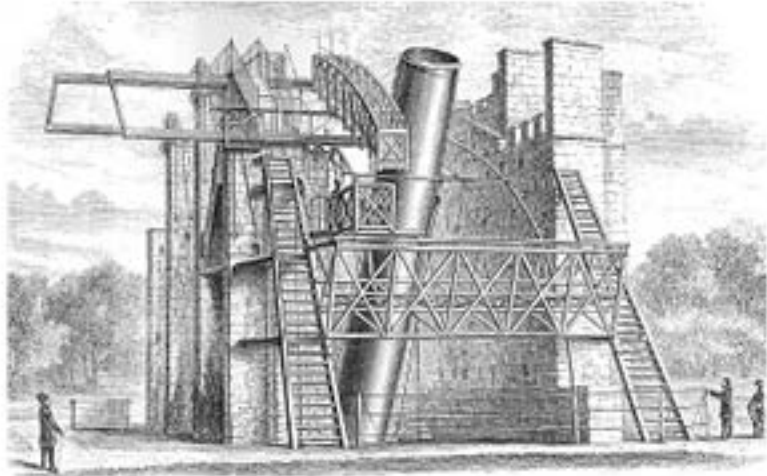
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Kenneth Snelson, Needle Tower (1968)

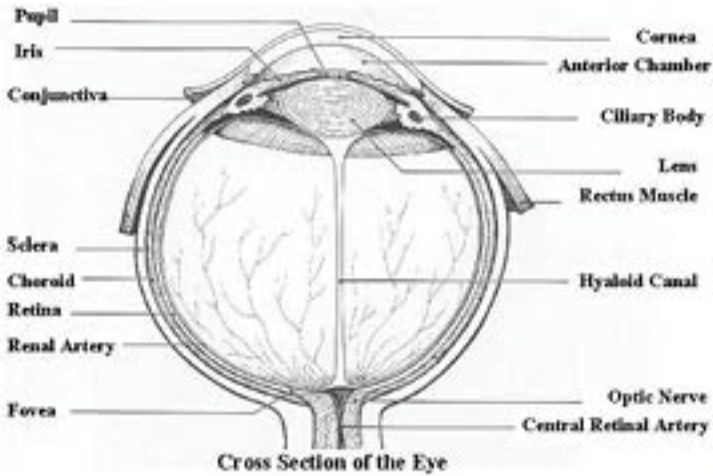
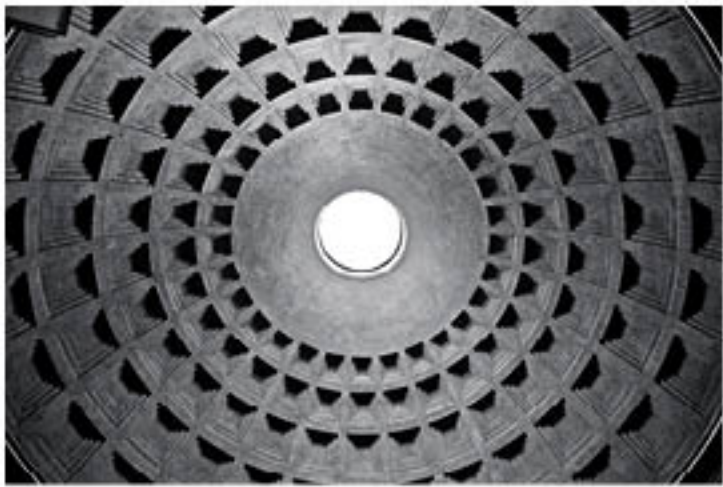
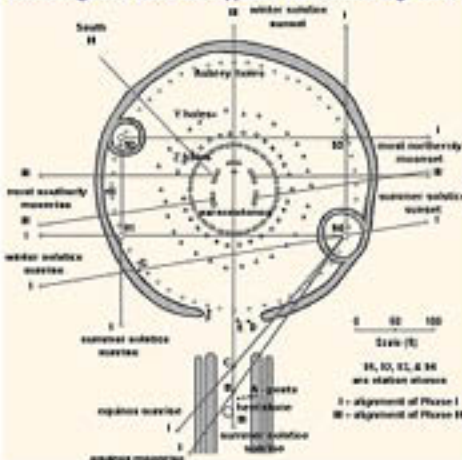


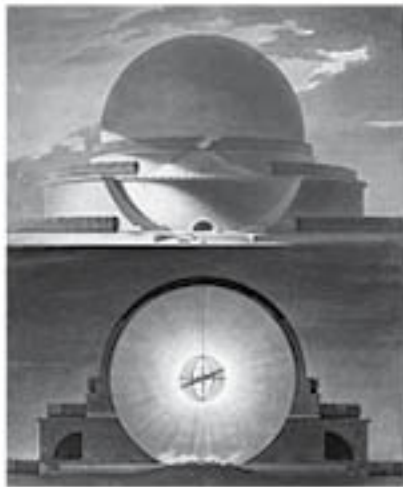
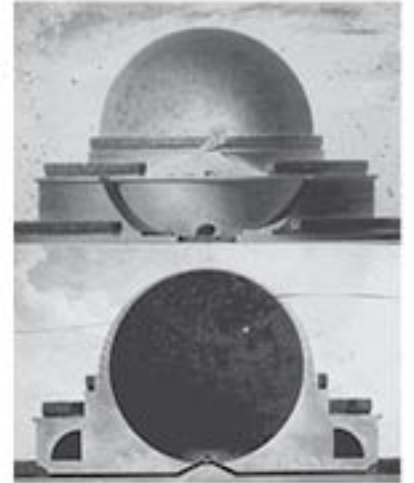
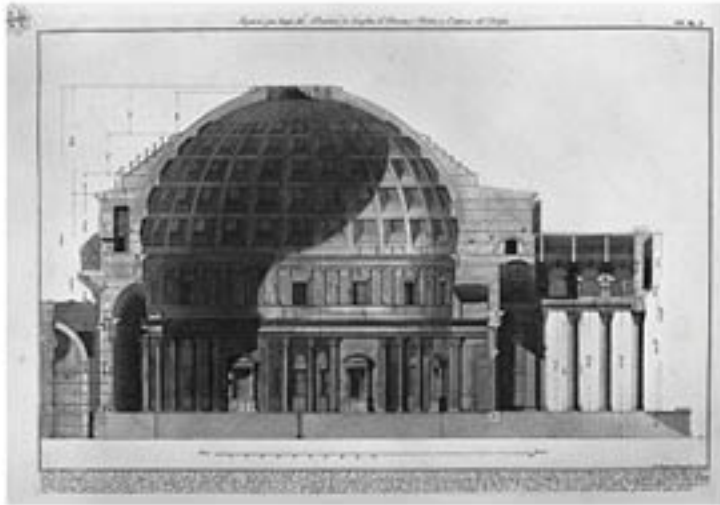
IN, OUT, FORWARD





Stonehenge from above with apparent astronomical alignments.



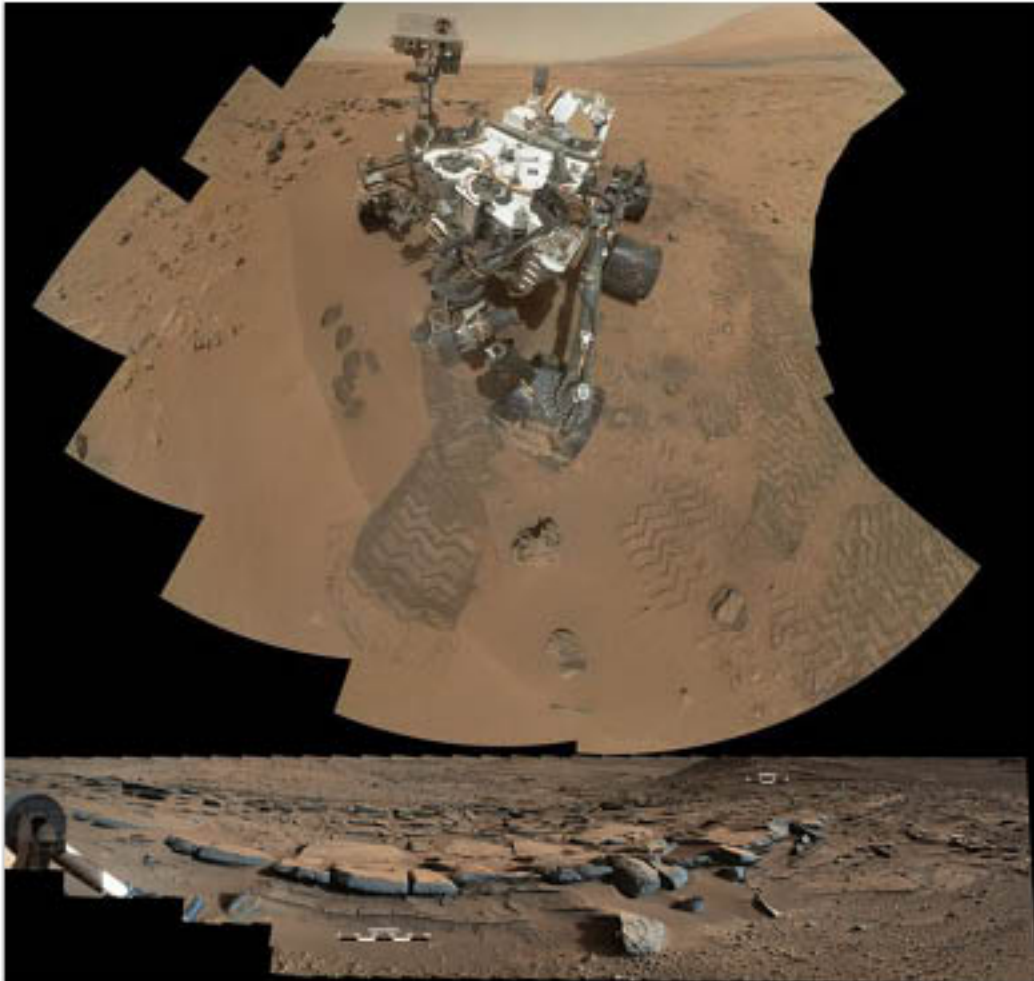


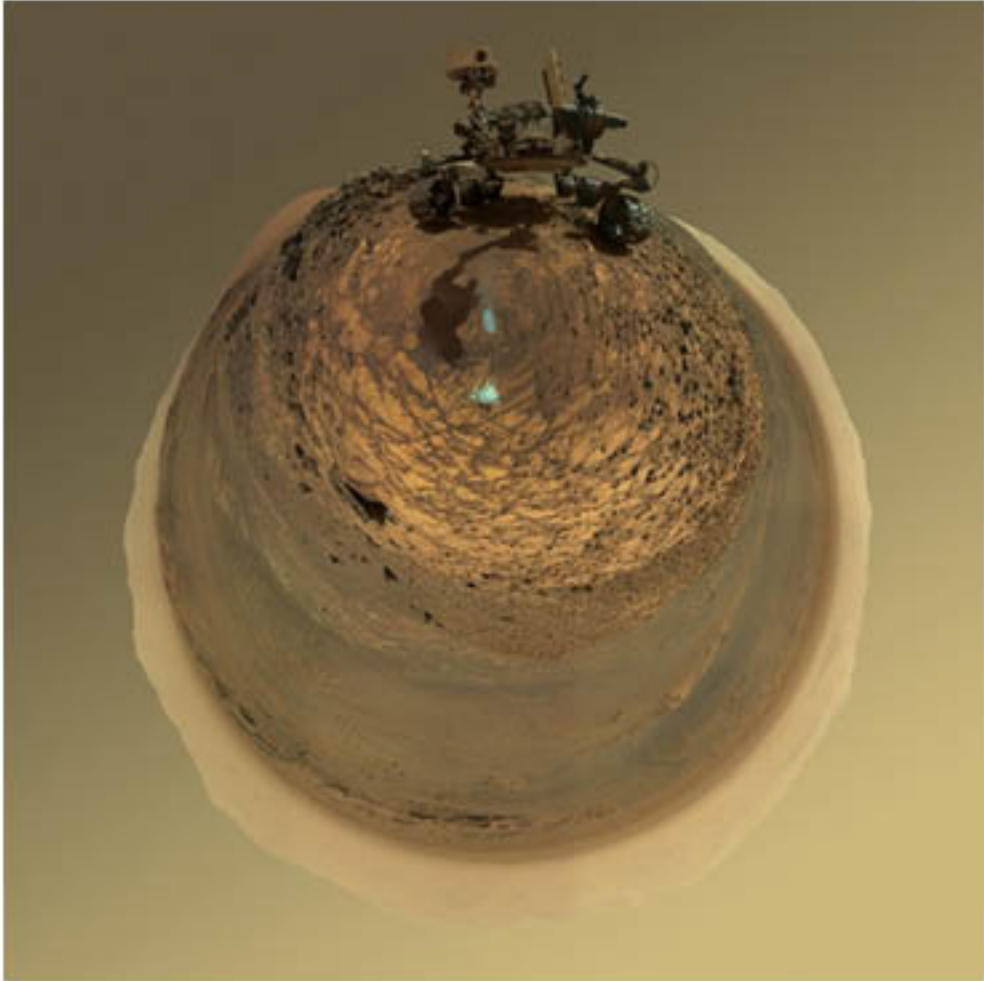
SITE





INNIE/OUTIE





TO BE CONTINUED

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Thank you