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Mechanization as Architectural Allegory

by

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ABSTRACT

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The 18th century French architectural debate led by architects such as Ledoux, Boullee and Lequeu laid the foundation for many of the Modernist doctrines. Yet it remains very much in the realm of the metaphysical. By re-examine the architecture of this period, Modernism can retrieve much of its lost rhetoric such as meaning, metaphor and symbolism. Through a design approach based on the idea of allegorical interpretations which incorporates geometry and mechanization as man's means of understanding the world, modern architecture could begin to reconcile the dilemma between its conceptual dimension, logos, and its perceptual dimension, mythos.
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Among the many stages of the modernist movement, French architecture in the middle to late 18th century stands out as the foundation to much of Modernism's theorems. It was a period in history when technique lagged behind theories. The new Newtonian science in many respects remained in the traditional realm of metaphysics, thus preserving an architectural agenda of romantic, all-encompassing nature. By re-examine and drawing upon the architectural debate of this period Modernism can retrieve much of its lost rhetoric such as allegory, origin and language. The act of re-examination reiterates the spirit with which architects Ledoux, Boullee and their contemporaries such as Lequeu looked beyond antiquity in search for a more convincing architectural a priori. The architectural duality generated by their work defined a period in history when the two fundamental yet often opposing axes in modern architecture, logos and mythos, coincided and thrived.

The idea of allegory was first made relevant to architecture by studies in the area of the origin of language by French philosopher Condilac. The recognition of figurative language as the original language was important to architects at the time because it justified the use of symbols and necessitates the process of interpretation. The new theory points out the significance of hieroglyph, or pictographic characters, along with grammatical and syntactical orders as the necessary elements in the origin of language. Hieroglyph represented a dimension in written language which
communicans not only to the mind but also to the eye through "visual gestures", a mode of communication predicated on the process of interpretation. Grammatical logic serves as an intangible facilitator. This new understanding of language finds its parallel in the allegorical approach to architecture of Ledoux and Boullee which sought to evoke meaning by creating a figurative discourse much like a form of hieroglyphic writing.

Predicated on the uninterrupted reference to a universal origin, the architecture of allegory, headed by the works of Ledoux and Boullee, necessarily disapproved the adequacy of the five Greek orders of antiquity. In so doing it also rejected the linear conception of progress and history so instrumental to the modern architectural rationale. The origin of architectural order, Ledoux contested, lies in man's ability to retrieve it from nature through perception as well as intellect. He positioned man in the position of a re-interpreter, an active participant of meaning rather than a static receiver. This believe in a cyclical path of progress relative to the origin echoes what Fredric Jameson would argue for in his book "Postmodernism". Furthermore, Ledoux believed that man's ability to perceive truth, or his genius, is a perceptual quality foremost captured by his "sensations". Thus Ledoux defined nature as composed of forms "whose integrity assured the production of decisive results and whose that were only the product of an unbridled imagination", paving the way for the symbolic yet manipulative architecture in his "Architecture Parlante". Geometric solids and their free formal recombination were Ledoux's vehicle to reconcile the conceptual nature
with the perceptual one. This view is underscored by his comprehension of arts, in regard to nature, as means of emulation through symbolization. It should be noted however that Ledoux's object of emulation was not perceptual resemblance, but rather the delineation of nature's functioning principles. This infusion of scientific logic into allegorical symbolism fore shadowed Modernism's biased pursue toward rational and technological end.

The closed-ended-ness of Classicism and Modernism among other historic movements can be attributed to the confusion of means and ends. Too often means of facilitation, as in the case of Cartesian geometry after in the Post-Renaissance era, are encoded with moral values. They become objects or signs whose symbolism lies in the social interest of the status quo. The Renaissance's Man by Leonardo fails to acknowledge his discoveries about the human body. Therefore it is more of a sign of political nature. The machine, occupies a peculiar position in that on one hand it is man’s primary means to other ends and on the other hand it is an end which technological, rational thinking keeps producing. Outside the domain of symbolization, machines are incapable of creating meaning. However they do have the unique ability of documenting simultaneously the concrete, unemotional, conceptual and the polemic, transcendental, and perceptual sides of the act of building by translating between knowledge and imagination, continuously fulfilling and exposing that perpetual gap between them. Production of machines by machines is man’s interactive power at its fullest manifestation.
Architecture differs from machines in that it can not isolate itself from human sensations embedded in its very origin. Here lies the foundation of the allegorical architecture. For the concept of allegory allows architecture to synthesize ideas according to knowledge. It rewards knowledge with new ideas. Substantiating the origin and the allegory as essential constituent in an architecture of meaning, language, the space between material and knowledge, the realm of the technique, makes possible the act of expression.

Bishop Warburton's study on the history of language distinguished three distinct stages in the development of hieroglyphic writing based on varying degrees of symbolization. The first of which is a quite depictive one termed "curiological" when the correlation of object and representation is crude and direct. Characterized by the Egyptian hieroglyphes the second stage, the "tropical", saw increasingly inventive use of symbols based on notion of analogy. Direct representation was substituted by symbols more metaphoric in nature. The final stage, relied on a purely analogous and increasingly arbitrary relationship between objects and representation, infused with philosophical and artistic influence such as in Chinese characters and calligraphy. However, such perceptual association disappeared, according to Mr. Warburton, when hieroglyphic characters evolved into alphabetical words. Letters standing for sounds which in turn conduct meaning eliminated any visual resonance between representation and its original imagery. As the conceptual logos replaces the perceptual mythos, a different kind of cognition takes place. Although it is questionable that alphabetical
writing was a further development of figurative language, Warburton's theory was embraced and extended to cover all "arts of action" by Condillac. The idea of allegory and its agents of operation such as symbols, metaphors and analogies were thus re-affirmed as underlying pre-requisite for true meaning in architecture.

If Warburton's history of language can be taken as an oblique model for architecture then Modernism must be the arrival of its alphabetical era, based on a systematic and industrialized production of letters. Both alphabetical writing and modernist architecture are systems that depend on mediation, either through speech or program, to achieve any justification. The void spaces between things rather than the things themselves, the spaces grammatical and syntactical logic occupy become the new hierarchy. In architecture, the negative, marginal spaces which suggest the spatial relationship of the parts to the whole become the agents of a new figurative discourse.

In his book "Postmodernism - Or the Cultural Logic of Late Capitalism" Fredric Jameson spoke of the problem of allegorical interpretations:

"Allegorical interpretation is then first and foremost an interpretive operation which begins by acknowledging the impossibility of interpretation in the older sense, and by including that impossibility in its own provisional or even aleatory movements".

Jameson juxtaposed a post-modern "horizontal" allegory with the traditional "vertical" allegory as invocation for a new aesthetic equation. One which relies on the
idea of allegory as a pivot in a dialectic relationship between the fixed origin and the ever progressing humanity. Here Jameson’s concept of horizontal allegory goes back to Ledoux and the idea that meaning can only be founded on man’s constant re-referencing to the origin instead of the immediate historic precedents.

The underlying theme of the three projects is the inhabitation of a irreducible geometric site. It is my belief that man’s first encounter with architecture is through adaptation to existing topography, may it be the cave or the forest. The recognition of organizational hierarchy precipitated man’s tradition of associating function with form. Each of the three projects contains a geometric "cave" against which the act of inhabitation is interpreted. The resulting forms seek to repudiate the superficial systems of proportions and rational functionalism as being the essential categories in architecture. Functions are subjective.

The box project (p 12 - 16) is based on the imposition of mythos, a perceptual mechanism over logos, a conceptual oriented structural frame. The assignment was given as such that a 14" by 14" by 14" wooden box was to be constructed housing a drawer. A "significant" object was to be held by the drawer. For my project, I chose a dozen stainless steel bearing rollers. Upon dissecting the free-rolling character of the ball into linear rolling motions along X, Y, and Z axis, I devised a system which transfers a vertical circular motion to a horizontal turning motion around a pivot point. Simultaneously, a cradle would slide out of the cubical enclosure, delivering the
bearing rollers in it. Attempting to close the rhetoric circle of means and ends, the enclosure and the mechanism maintain a inter-dependent relationship.

First, fine grain particle board is used for the enclosure. Because processed wood fiber bits lose their natural directionality, taking on a structural uniformity which underscores its industrialized nature. The cubical geometry is kept seamless. Expression of materiality is oppressed. The resulting cube is a generic, de-materialized and meaningless mass. Then, a mechanical assembly consists of a crank, three driving shafts, a set of three interlocking gears, a cradle, a pivot and a tension adjustable track is built on to its side walls. Necessary openings are cut into the cube to accommodate the mechanism. Finally a person must crank a lever to impart a clockwise turning motion of the assembly while the cradle slides out by virtue of the same force, metaphorically completing the allegorical cycle.

The second project (p 17 - 24), a house, experiments with the dialectic of representation and reinterpretation in an architectural allegory. A cubical geometry is again used as a symbolic reference to the square prescribing the Vitruvian man. Superficial axes denoted by eyes and ears are projected literally onto the cube. Tunnel-shaped spaces are inserted into the cubical volume as a symbolic response to the axial fashion in which sight and hearing is perceived. The Cube is divided into two halves to suggest the layout of the brain. The hearing tunnels physically are designated as entrances, correlating sound with motion. The sight tunnels represent
static spaces. The negative space between these tunnels and the cubical enclosure is where mechanical functions of the house take place. Water, first introduced as a dynamic then a static element, underscores the shift in the perceptual experience of the house.

The third project (p 25 - 26), a prototype Wallgreen’s drug store for Houston, is about conceiving architecture as hieroglyphes or visual gestures. It intends to render the prevailing landscape feature of the city, the parking lot, into a threshold of differentiation between building as architecture and as infrastructure. It is conceived as a working mechanism (a verb) and not a object (a noun) so that it becomes non-symbolic and meaningless in itself. Symbolism is only evoked by the parking lot itself when read in relation to the building.


