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Architecture, or Human versus Animal

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Mostly attributed to Renaissance and Antiquity, humanism is believed to be the ideal that gives priority to human being and considers it as the center of the universe and measure of all things, including architecture. In the architectural scope often appearing really as "the measure", remembering the famous Leonardo da Vinci's Vitruvian Man, a human body-based proportion system, or Le Corbusier's Modulor which pursues it after centuries. Yet, one of the main suggestions of this paper will be that the human body is not a measure of architecture, but rather architecture is the measure for Man.

Vitruvian Man is not any random body, pursuing the definition given by Vitruvius, Leonardo has depicted an ideal human being. The human body, which Vitruvius advises that one should follow the proportions of while building, is not any ordinary man but rather, the Idea of man. Only this fixed ideal model could be the measure for architecture. Thus, Renaissance intellectuals and architects believed in micro and macro cosmos theory that human body (micro cosmos) is the analogy for the universe (macro cosmos). So any malfunction of the body is the malfunction of the universe. Therefore, the deformation of the body is the break of the Order. That's why Avant-garde art movements like Dada has attacked the human body and proportion, the divine aesthetics during the years of World War I, because by this they attacked the humanly order, the Order that they blamed for causing the war.

Bataille argues in his book "The Cradle of Humanity" [1] that humanity is born with arts. Man gains his humanity through arts and gets rids of his animal side through architecture. Yet, according to Bataille, man can only fulfill himself by emancipating his animality instead of trying to defeat it, because it is only with his animal side that he can resist to any kind of authority [2] [3], and this is what Arts (excluding Architecture of course) achieved in the early 20th Cent. This paper will try to discuss this animality and architecture relationship through the ideal of the human body and Order.

Keywords-component; humanism, human proportion, humanly order, architectural order, animality, Bataille, Padovan

I. HUMAN PROPORTION

Throughout architectural history from Renaissance to the Modern era architectural elements are considered to be linked to human form and proportion mostly based on the concepts of Antiquity. In the 15th Cent, the architectural theory took the

Vitruvian image of man as the measure of proportion. Vitruvius, in his "De Architectura - Ten Books on Architecture" [4] writes that symmetry is the basic element for the design of a temple. Symmetry results from proportion, which is described as the individual part, selected as a standard of the entire building, should correspond to the other individual parts and the whole. A temple cannot be designed without symmetry, proportion and proper relation between its parts, just like in the case of a well-shaped man [4]. Then he continues to define the proportions of the body [4], the famous human body that has given inspiration to the Renaissance architects and intellectuals. Based on the description given by Vitruvius, Leonardo da Vinci and Francesco di Giorgio at the end of 15th Cent; Fra Giocondo and Cesare Cesariano at the early 16th Cent had depicted the Vitruvian Man. The most famous of these drawings belong to Leonardo da Vinci because it's the closest one to the description of Vitruvius. And finally, the same proportion obsession is encountered in the Modern era, in the Modulor (1946) of Le Corbusier.

For the Renaissance architects, every measure, including architectural proportions are derived from a well-proportioned human body. The proportions of the human body are not only a measure but also a focal point for architecture. Furthermore, they believe that the man and the building are analogous to each other, and that just as every man is unique, every building is also unique. It is interpreted from the drawings of John Shute, a 16th Cent English architect, that he believes variations of the human physiognomy correspond to different building characters [5].

II. IDEA AND BODY

But why have they based the proportional system on the human body? First of all, Renaissance intellectuals believed that the laws of the Nature were prevalent in the human body. Francesco di Giorgio writes in Book II of "Trattato di architettura – Treatises on Architecture", "man, called a little world, contains in himself all the general perfections of the whole world" [6]. For Renaissance architects, human body is an analogy for the nature. The body is the micro cosmos reflecting the universe which is the macro cosmos.

The "harmony of the parts and the whole" theory can also be considered in this micro and macro cosmos notion. For Palladio, there should be correspondence of parts to each other and to the whole. That idea is highly influenced from Alberti. He thinks building is a self-contained, well-defined body. The building should be analogous to nature, almost like a second nature, and that what is against reason is against nature [7].

For Alberti, the house is a small state and the state is a big house; which is another reflection of the micro and macro cosmos theory. They are held together as the members of the body correspond to each other [8]. For Alberti, beauty is harmony and it consists of number, proportion and distribution, nothing can be added or taken away from the whole. Harmony (*concinnitas*) is the principal law of nature and beauty, and without mathematics, harmony is impossible.

The human body, shaped by the laws of the Nature, stands both for the beautiful and the good. Throughout Antiquity, beauty and goodness were identified with each other. The Greek word beauty (kalon) does not depict only a physical beauty but also an ethical concept defining the right and the good [9]. So it is not a surprise that for Alberti, beauty has also moral quality, or for Filarete that the orders, derived from the human body reflects a hierarchy corresponding to the social structures [6]. It is easily conceived that in fact the Vitruvian man is not a human but a kalos kagathos. This antique Greek phrase, combining two words beautiful (kalos) and virtuous (kagathos), stands for a complete ideal human depiction which bears harmony of excellent mind and body. In the Renaissance notion, there is correspondence to the Platonic comprehension that there is the unity of the good, the true and the beautiful.

In Plato's philosophy, there is a world of pure Forms or Ideas (in ancient Greek, the words *idea* and *form* are the same). The perceived world is the representation of the real one where the Forms are. While the Forms bear the universal reality, the world we live in is just the changing shadow of it. Therefore, the Truth does not change, but the representation of it changes.

Plato identifies the creator as the *Demiurge* (~crafstman). In Greek philosophy, the world is made out of raw material. The *Demiurge* shapes the raw material like a craftsman giving form to the raw material, as clay used by a potter [10]. So creation is simply giving *form* to this *formless* material. Padovan describes the *Demiurge* as [10];

"Unlike the God of Genesis, the Demiurge is not an object of worship, and does not create the world out of nothing, but like a human designer or architect he merely rearranges it so as to bring it 'from disorder into order'. Neither the formless matter ('Necessity') nor the rational Forms he imposes on it ('Reason') originate with him; he merely brings them together."

So the human body described by Vitruvius and depicted by the Renaissance architects is a Form (or an Idea). Everything, and of course architecture tries to imitate that Form. The point is not only the beauty of it, but the divinity. It is also noteworthy that the Renaissance era is also considered as the decline of Scholastic thought in favor of the secular world view. So divinity must be replaced by transcendence. And that transcendence is believed to be embodied in the human body. Francesco di Giorgio clearly declares that buildings should demonstrate the divine order that is inherent in the human body [5].

So it is maybe time to get back to the idea "humanism", which, contrary to the common belief, does not mean "for the

human". What matters is not that whether it is beautiful or not for the human eye, but whether it is divine. Wittkower [11], indicating that the proportions depicted in the plans and sections cannot be perceived by someone who walks in the building, writes:

"It is obvious that such mathematical relations between plan and section cannot be correctly perceived when one walks about in a building. Alberti knew that, of course, quite as well as we do. We must therefore conclude that the harmonic perfection of the geometrical scheme represents an absolute value, independent of our subjective and transitory perception. And it will be seen later that for Alberti –as for other Renaissance artists- this man-created harmony was a visible echo of a celestial and universally valid harmony."

Whether the proportions are perceived by the human walking in the building becomes a question of no importance, because they are not for the eye of the human, but for the eye of the God [10].

III. ORDERED BODIES, DOMINATED BODIES

The divine proportion enshrined in the human body is fixed, although the mortal human body is in a continuous transformation, s/he grows, ages, and continuously changes. However the Ideal body has to be fixed because it symbolizes the Divine and the stable Order, which transcends the mortal human. So any distortion, any transformation of the body is just a moving away from the Ideal. Transformation of the body is deformation, therefore dissolution of the Order. That's why, at the beginning of the 21st Cent, during the years of 1st World War, the humanly proportion and the divine aesthetics were attacked by a group of avant-garde artists, because by this they believed they attacked the Order which has caused the war. Bataille [2] defines the classical academic painting as an architectural construction, and therefore the collapse of the academic system is the dissolution of the Form and therefore can induce a process that can lead to the collapse of the social stability. So it is not a surprise that all the totalitarian regimes regarded Avant-garde art as degenerated. The modern painting had a mortal impact on the Form, and as Hollier [12] mentions, there is nothing architectural left in the painting, it has transgressed the architectural Order. The modern art had deformated by decomposing the human body. That's why Bataille observes "bestiality" in the works of modernist painters who had transgressed the form of academic painting [2]:

"For that matter, whenever we find architectural construction elsewhere than in monuments, whether it be in physiognomy, dress, music or painting, we can infer a prevailing taste for human or divine authority. The large-scale compositions of certain painters express the will to constrain the spirit within an official ideal. The disappearance of academic pictorial composition, on the other hand, opens the path to the expression (and thereby exaltation) of psychological processes distinctly at odds with social stability. This, in large part, explains the strong reaction elicited, for over half a century, by the progressive transformation of painting, hitherto characterized by a sort of concealed architectural skeleton."

The man is shapeless if he does not kill his animality. At the Manifesto of the one of the most prevailing avant-garde movements, Dada, Tzara asks [13];

"How can one expect to put order into the chaos that constitutes that infinite and shapeless variation: man?..."

Then he goes on to express his detest for authority and Order, "I detest greasy objectivity, and harmony, the science that finds everything in order. Carry on, my children, humanity . . .", and that the solution lies in the anti-human; ".....and the divine thing in us is to call to anti-human action" [13].

Attacking the established aesthetic rules could only be achieved in one way, by displaying that they are not transcendental, but only man-made. Renaissance architects claimed that they revealed the law that is inherent in Nature and imitated it. However they didn't reveal any principles, they simply invented them, because universal truths are not inherent in Nature, but rather are invented and imposed on the Nature in order to explain the world in rational terms [10]. If one wants to perceive something, then he has to discover regularities in it, so the regularities that are on the mind of the beholder, he tries to impose them on Nature. The owner of this thesis, Padovan [10] explains the reason in these words;

"Both science and art are ways of making the world intelligible; that is to say, of making an intelligible world. And in art as in science the key to intelligibility is mathematical order."

Bataille [14] also argues that man imposes order on Nature, or form on the formless, but in addition to what Padovan [10] claims, he evaluates it as a way to control. Every kind of authority needs form to control. For Bataille, words have both meanings and jobs and the job of architecture is to stabilize the environment by giving form to what exists [14]. As he suggests in the article "Informe (Formless)" [14], architecture desires to provide what exists with a "formal coat, a mathematical overcoat". By "mathematical" he refers to all that is organized and ordered, or scientific. Matters do not arrive in formed, but rather formless. What is formless is unstable, irregular, without rules, chaotic, susceptive to the manipulation of imagination, hard to define, hard to understand, uncanny and uncontrollable. The universe is formless as the way it is, so in order to control it, one must provide it with form, just like the Demiurge of Plato. Once stabilized, it is no longer uncanny and can be defined and controlled. Therefore all authorities (academics, science, religion..) desire to provide the world with their form, which is a stable and ideal one. Submitting to the authority means to be with its form, or con-form. That's why Bataille examines architectural order in many other places than buildings, in all authorities and in all homogenizing tasks [2]. As every order is in fact architecture, another meaning of architecture in the dictionary is "the complex or carefully designed structure of something" [15]. So every new construction is a reproduction of the prevalent architectural system. And Nature, it is just a starting point in that process, or like Şentürk [16] calls it the zoê (bare life), that one does not have to get back to once abstracted; because the Order now would reign even over the Nature.

Padovan [10] claims that as we try to impose regularity on Nature, and therefore everything that we make, whether a building is beautiful with the help of the orders becomes a matter of secondary importance, because the goal is not beauty, but mathematics. He then mentions of Van der Laan, for whom architecture is an abstraction imposed upon nature: "a frame projected onto the natural continuum in order to make it measurable and intelligible" [10]. For Van der Laan, architecture does not aim to please the eye, but to help people

survive through the world. The world is a "measureless continuity" which is hard to comprehend. By building, we get to know the world and "give it a measure". We do it to comprehend –note that aesthetics derive from the word (aesthetikos) perception, not from (kallos) beauty-. It is not like measuring to tell the length but to transform an unidentified space in to a "measured whole". Just like music, because music gives measure to time in a very different way than done by a clock [10]. Padovan bases his thesis on the words of Karl Popper¹;

"Instead of explaining our propensity to expect regularities as the result of repetition, I proposed to explain repetition-for- us as the result of our propensity to expect regularities and to search for them... Without waiting, passively, for repetitions to impress or impose regularities upon us, we actively try to impose regularities on the world".

As the Renaissance attitude considered the world as an intelligible, mathematically ordered whole, the Renaissance architects tried to discover the rules of Nature and reapply them to everything that they have created during the 15th and 16th Centuries. At the 20th Cent, Le Corbusier once more tries to discover these mathematical laws of Nature with the Modulor, or rather invents them again. The Modulor is a man of 183 centimeters height -the height of the average English policeman-, combining the metric and inch systems and using the Fibonacci series and the Golden Section. And not surprisingly, it also corresponds to the proportions of the Vitruvius Man. Le Corbusier dreamed the Modulor as an anthropometric unit not only for architectural but also all standard industrial production. Standardization and mass production are the ways of achieving and sustaining the Order. The word "order" here is better to be conceived of its equivalent in Italian, ordinamento, which also stands for political and legal domination and arrangement [16]. The architectural program defines the activities that the body will take place in. So, the Moduloric program controls the body and tries to homogenize the environment [16].

Maybe it is time to re-read to mis-read the famous phrase of Le Corbusier, "Architecture or Revolution" [17]. He believes that architecture prevents revolution by achieving its goal, which is to provide better standards for all social classes, in a more coherent and smoother way. Architecture prevents revolution but not by achieving its goals as the modernists had also discovered through time. Rather, it prevents revolution in sake of social stability by sustaining that stability in a *more coherent and smoother* way. That is Modulor's job.

IV. ANIMALITY VERSUS HUMANITY

Once again back to the same question: Why the human body? Is it so simple that man identifies the proportions of the human body with himself so that associate himself with the bodies that are depicted apparently or latently? Or so simple that according to the Christian belief, Man is the image of God, therefore carries the harmonies of the universe within? That the proportions of the human body are produced by the Divine will, so the proportions of architecture have to express that Divine cosmic order [11]? Maybe. But then a fact as Frascari

¹ K. Popper, Conjectures and Refutations, 1965, p. 46; cited in [10].

has stated, "Just as we think architecture with our bodies, we think our bodies through architecture," [18] would be dismissed.

The dominance of Order is achieved by the dominance of the body. The body is a Norm. The continuation of the Norm can be achieved by the closure of the abnormal bodies to some place —detention center, asylum, prison..-[16], because as otherness introduces disorder, it has to be kept away for the sake of the Order. Foucault [19] mentions that in the Classical era the mad were identified as animal more than human, due to that they had lost their ability to think. So separating them was obligatory to keep away animality from humanity. In one of his articles, Hollier [20] likens architecture to a prison guard in terms of its relation to the authority. It protects Order from chaos. What Order does actually is to decide on the humanity of the living individual [16]. Pretending like talking about buildings, what human proportional systems do in fact is biopolitics [16] ².

In mythology, Man gains his humanity by killing the animal/monster. Theseus, mythical founder of Athens - where lies the roots of humanism not for a surprise- kills the Minotaur while Oedipus kills the Sphinx, then achieves the throne. These myths represent the mankind killing its animal side, as animality stands for chaos and disorder [12]; so once gone, remains the pure human, now more close to matching the Vitruvian Man.

Monument and monster comes from the same Latin root "monere", which means "to warn, advise, remind, show". Mankind kills the monster to become Man, then fulfills himself through the monument. Monument (or architecture) supersedes the animal which has been killed. It becomes an analogy for the ideal human being which has defeated its animal side. Man gains his humanity through architecture. Bataille explains it as [2];

"It is clear, in any case, that mathematical order imposed upon stone is really the culmination of the evolution of earthly forms, whose direction is indicated within the biological order by the passage from the simian to the human form, the latter already displaying all the elements of architecture. Man would seem to represent merely an intermediary stage within the morphological development between monkey and building."

Man tries to establish his rules, in fact what he tries to do is to make a Man, or decide what he is.

Humanism is not only that the human is the center of the universe, but rather that man is alone responsible of his own fate, and he chooses what to make of himself [10]. "Man is also the maker of himself," [10] because the world around him, he does not understand. He tries to cope with the unknown by building his own known. So As Vico [21] writes, "man becomes all things by not understanding them (homo non intelligendo fit omnia)" because "...for then when man understands, he extends his mind and takes in the things, but when he does not understand, he makes the things out of himself and becomes them by transforming himself into them." [21].

Frascari [18] claims that monsters are always on the edge, on the edge of maps, texts as well as buildings, they are on "the edges of walls, the capitals, the keystones" and on the joints. He proceeds to give some concrete examples where the monstrous architectural pieces are placed at the edges of the buildings as in the Romanesque architecture, like the Sphinx at the Cathedral of Cività Castellana... They are on the edge because "they are the joint between physical reality and artistic expressions" [18]. In the aesthetic theory, there are other words for the monster, one is grotesque and the other is fantasia [18]. The grotesque image is a body that is not fixed but in a continuous transformation. There emerges a new body from it when it dies, so there is an endless metamorphosis. However, "architecture situates and solidifies these metamorphoses of space within events or places," [18] that's why the monsters, the unstable ones, are always on the edges [18];

"Monstrous architecture and architectural monsters stand at the margin of consciousness between the known and the unknown, the perceived and the unperceived, calling into question the adequacy of our ways of organizing rationally the world into determinable parts and details."

Man tries to fulfill himself by escaping monsters – unknown- through architecture –known-. However, according to Bataille, man can only fulfill himself by liberating his animality [2] [3], because that is the only way of escaping the Order and resisting the authority. As the architectural practice and discourse is a socio-political construction, to escape the Order, one has to transgress the architectural order. Avantgarde is only possible outside the architectural structure as was the case with the modern painting at the 20th Cent. If man has to escape the architectural order, pointing out the analogy between architectural and human order, Bataille sees this escape in bestiality [2],

"Hence, however strange this may seem when a creature as elegant as the human being is involved, a path traced by painters – opens up toward bestial monstrosity, as if there were no other way of escaping the architectural straitjacket."

So the only way out is not through humanity, but animality.

REFERENCES

- G. Bataille, The Cradle of Humanity: Prehistoric Art and Culture. London: MIT Press, 2009.
- [2] G., Bataille, "Architecture," in Encylopaedia Acephalica, G. Bataille, I. White, I. Waldberg and R. Lebel, Eds., London: Atlas Press, 1996.
- [3] G. Bataille, "Beyond Seriousness," in The Unfinished System of Nonknowledge, S. Kendall, Eds. London: University of Minnesota Press, 2001, pp. 212-218.
- [4] P. Vitruvius, The Ten Books on Architecture. New York: Dover Publications, 1960.
- [5] A. T. Anderson, "On the human figure in architectural representation," Jornal of Architectural Education, vol. 55/4, pp. 238-246, May 2002.
- [6] H.-W. Kruft, A History of Architectural Theory from Vitruvius to the Present. New York: Princeton Architectural Press, 1994.
- [7] A. Palladio, The Four Books on Architecture. Cambridge: MIT Press,
- [8] L. B. Alberti, Ten Books on Architecture, London: A. Tiranti, 1955.
- [9] N. Pappas, "Plato's Aesthetics," in The Stanford Encyclopedia of Philosophy (Fall 2008 Edition), N. Z. Edward, Eds., found at: http://plato.stanford.edu/archives/fall2008/entries/plato-aesthetics/
- [10] R. Padovan, Proportion: Science, Philosophy, Architecture. London and New York: Spon Press, 2003.

² What he claims is that Modular does biopolitics, but it can be broadened to include all human body based proportion systems.

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- [11] R. Wittkower, Architectural Principles in the Age of Humanism. London: Alec Tiranti, 1952.
- [12] D. Hollier, Against Architecture: The Writings of Georges Bataille. Cambridge and London: The MIT Press, 1992.
- [13] T. Tzara, Dada Manifesto, 1918.
- [14] G. Bataille, "Formless," in Visions of Excess: Selected Writings 1927-1939, A. Stoekl, Eds. Minneapolis: University of Minnesota Press, 2008, p. 31.
- [15] Oxford Online Dictionary, found at: http://oxforddictionaries.com/definition/architecture?q=architecture
- [16] L. Şentürk, Modulor'un Bedeni, Modern Mimarlıkta Hegemonik Erilliğin Eleştirisi. Istanbul: 6:45 Basın Yayın, 2011.
- [17] Le Corbusier, Toward an Architecture. LA: Getty Publications, 2008.
- [18] M. Frascari, Monsters of Architecture: Antropomorphism in Architectural Theory. Maryland: Rowman and Littlefield Publishers, 1901
- [19] M. Foucault, History of Madness. London: Routledge, 2006.
- [20] D. Hollier, "Bloody Sundays," Representations, vol. 28, pp. 77-89, Autumun 1989.
- [21] G. Vico, The New Science of Giambattista Vico. New York: Cornell University Press, 1984.