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ARCHITECTURAL SUBLIME: DOME ABOVE DOME

Abstract | The European concept of the architecture of sky oscillates between the differences of the two worlds. In the period of classical antiquity, that was a leap forward from the perfect towards the unique, on a course set by the philosophy which began with the thought of nature (physics) and progressed towards the reflection of the essence of matter (metaphysics). The *poiesis* of the whole, as an architectural potential for the range of a higher scale, was born from the projection of cosmopolitan tendencies, but only after this perception of the world had included universality. For antique thought, whose boundaries and geometry were linked to the sphere, universality referred to the shape of the Universe, thus the geometric sky expressed the ideal One. Parthenon and Pantheon, unified through the thematisation of the geometric dome, uncovered possibilities for sublime architectural worlds. One world offers pure geometry, while the other one is ruled by the visual presentation. One projects the depth of the sky, while the other sees the sky only as its illusion. The sky is an absolute category for the architecture of both worlds, it is placed out of reach, and its symbolic sublimity is achieved through spatial opening, outwards. Sublimity is a constant metaphysical challenge in European architecture. It connects aesthetics with the spatial secret: the idea that it takes more than perfect technique to bring matter to life. In that sense, the connection between the antique ability to reduce the Universe to an object using weight, and the modernist antigravity which leaves the orbit of the Earth, may be interpreted today only if the limits of the visibility of architecture were expanded to reach the esthetic dimension of digital infinity, the same infinity which is stamped by pictures of Voyager on its journey of no return. That proves that only those who abandon their own position may come close to that which has remained sublime.

Index terms | *Parthenon, Pantheon, dome, geometry of the sky, antigravity, digital infinity.*

There exists an esthetical experience of architectural unity, equivalent to a sentiment of sublimity, which only appears unrelated to current professional challenges. The form which could define such an experience is not expressed through the entirety of contemporary architecture, what's more, it may seem that such formal character is indeterminable at present. We have to admit that, as architects, we belong to an epoch characterized by utmost historical instability, where dysfunctionality is an established common condition of practice. There remains very little aside from the awareness of the loss of the pivotal moment within the theoretical capacities, where everything has already been said, used and produced. It is the very recognition of that deficiency that

is quietly neglected by the contemporary architectural discourse. Besides, let us not forget the obscuring of the substantial emptiness, as well as disguising and ignoring the deficiencies which are all manifested in the quantities of the everyday architectural production. Therefore, it seems that by piling up architecture, an attempt is being made to substitute the insufficiencies of the key characteristics of architecture, or the very thought of it. This situation could be deemed legitimate if architecture could demonstrate the qualitative differences between the power and the condition. But the intensive preoccupation with the everyday leaves little or no room for discursive settings. Therefore, the legitimacy of the practice is not analogous with its theoretical conditions. Even if the discursive inertia and the efforts wasted on liquid politics would become entitlements awarded to the practice, the theoretical rigidity of the historical experience still poses questions of the architecture's agility. The contemporaneity of this disbalance is understandable, but the confusion is caused by the absence of a reaction to the awareness of its existence. The image which accompanies theoretical discourse lost the glory which architects customary took for granted. The variability of the conditions against the condition of variability remains a levitating rhetorical question blurred by interdisciplinary conditions, which are casually referred to as cultural, political or social circumstances, but never considered to be esthetical. The esthetical character of this situation remains unchallenged, owing this to the abstract values of its intellectual establishment. In other words, even if there is an objective weakness of an architectural place, it remains outside the esthetical judgement. The unity of the creator and the work, just as that of the time and language, exists in the form of the corpus of memories which remains inactive, due to the inertia of the historical consciousness. This does not invalidate recurring questions of architectural language, natural order or the shaping of the spirit of the time. They may resonate differently, but they refer to the same world. The world of architecture of refined style, or of the style in general. The broken unity of theory and practice is proven time and again by the ideas about their unity, in spite of the awareness that such unity is exhausted as a temporal category.

I SKY AND ILLUSION

The European concept of the sublime, ever since the Pantheon, concerned the design capacity of an elevated concave-convex structure which incorporates an entire symbolic space of a unique common sphere. Its immediate content was transformed on the metastructural level of its imminence. In such sublimation, the primary esthetical function of an architectural order is exceeded, and the unity with universal spatial order is pursued in the centrally positioned geometrical associations. If Pantheon was *it* – “the symbolic strengthening of the grand political space of the empire” (Sloterdijk, 2014) – then we must consider what it epitomized, and what Sloterdijk describes as “the Roman solution to a Greek problem”. The architecture of the higher extent in the case of both Parthenon and Pantheon* literally referred to the “building of the sky”, albeit only the latter materialized the spherical concept. Both structures establish an obligation for future European development, in construction and in culture, which fundamentally influenced the status and the significance of the vault as well as of its constitutive elements. The bias to elevate roofs and ceilings to the metaphysical level is what gave the sky a valid rival in the architecture of a symbolically unifying region – a region above which it rose and left its heavenly mark.

Centuries later, in an entirely new technological system, Bruno Taut wrote about the dreams of the generation of the earliest modernists. Elevating culture to the level where it became able to respond to the infinite development of new forms, he highlighted the obligation for architecture to be fundamentally reformed. He claimed that this is only possible if we forget the enclosed character of rooms and introduce glass architecture which “would allow the sunlight, moonlight and starlight, not merely through windows but through every possible wall materialized in (coloured) glass. Only a radical transformation of the environment conducted this way could deliver new culture” (Taut, 1919). In “Die Stadtkrone” Taut refined this need for new architecture in the concept for his Chrystal Palace (Kristallhaus) “where architecture can renew its beautiful relationship with the sculpture and arts”. That new architecture of sublime spaces will enable cities to reimburse culture for all the constraints and the evil caused by mere utilitarian forms and other embodiments of the industrial era. Expressionism, the artistic direction which gained prominence by rebelling against all previous dogmatic forms, be they formal or functional, offers an understanding of a collective industrial work as a new alchemy. This is due mainly to the fact that the matter reached unprecedented levels of perfection – as shown at the Cologne fair by Taut, crystal became purer and clearer than ever before. Crystal is simultaneously a material, a structure and the form. The “ideal” understanding of the functionality was born out of the desire for the synthesis, but unlike in the functionalism of Loos, it is not an answer to a real need but an expression of spirituality which will soon confront the practicalism – the utilitarianism of that age, and especially of the age of the industrialization.

Taut’s “Alpine architecture” saturated with parabolic domes appears as a molded mass rather than as an architectural plan. This is why it can be understood as a succession of figures or shapes in an unconditional reality of an image, rather than recognized by the characteristics of its construction, typology or statics. We can refer to Argan’s notions about expressionism, and see an architectural image stretch into infinity, discarding every link between matter and nature, and incorporating all existing realities into its ideal world. It becomes an ideal of a progressive society which generates space through its new organizing structures, emphasizing spirituality, rather than utilitarianism, in architecture (Argan, 2006). It is precisely at this historical point that we can see the link between the expressionism of the “Alpine architecture” and the planetary rationalism of the Bauhaus, including the work of roughly the same artists who appeared at the famous exhibition of Novembergruppe, accompanied by the words of Gropius that “nothing is by itself any more”.

But let us return to the “City Crown” where we find Taut’s views on the unifying and transforming roles of architecture. Here, we also see his understanding of the sensibility with which the citizens of medieval Florence observed the erection of Brunelleschi’s architecture, the work to which Alberti, in his “De Rae Aedificatoria”, refers to as “a structure” (Alberti, 1485).

II HOW DEEP IS YOUR LOVE

Florence renewed the metaphorical potential of perspective geometry, which found itself at the formal threshold of the European Modern and its love for pure forms and the Sun, as a result of a sublimation of the roles of Parthenon and Pantheon. Reaching above the hills which framed the horizon of Florence, the city which aimed to symbolically abandon the boundary walls of its medieval fortresses¹, the dome became

both the morphological and the technological proof of the possibility to “reach beyond the skies”. This phrase, chosen by Alberti (On Painting) was not a mere figurative speech, considering that the “structure” comprising of ribs which all gathered at a single point defined the visible boundary of the infinity. It was a gigantic instrument of perspective—a machine, like the spherical roof of the Pantheon, which employed all contemporary knowledge in support of the (materialization) of a philosophical understanding of the “whole”. The opening on Pantheons dome, on an esoteric level, shines the light on both worlds (Sloterdijk, 2014). Its projection sublimates Aristotle’s physics (On the Heavens) and Plato’s ontology (Theories of Soul) by illuminating the perfect interior, allowing the Sun to dissolve and gather—reminiscent of the Supreme Deity. The modern equivalent of such an opening (bearing in mind that the Parthenon becomes the paradigm of high style only as an open structure liberated from the primary spatial order) can be found only in the parabola of the entrance roof, which referred to all previous arts by the materialization of its glass pyramid. The modern Louvre, as a global cultural heritage, expresses renewed love for the daylight which, by means of transparency, enlivens the link to Egyptian forms, figures and obelisks. The Louvre pyramid uncovers its deep historical character as the landmark of the “capital of modernity”, brought over from Egypt at the beginning of the XIX century. Pharaoh, who named himself Akhenaten (Amenhotep IV) was not only “the first individualist” in global history, but also the first modernist (revolutionary and reformist) who went against the rigidity of the archaic style, turning naturalism into an artistic programme in line with his personal fight against all, including religious, traditions. His new found love for truth is visible to this day, in the portrait of his queen Nefertiti. Her representation, almost as a suggestion of a new anthropology, stamped a moment in which a subjective experience of reality becomes more real than the apocryphal truth about eternity. That uncompromising sensitivity and the intellectual tension of the portrait is on a par with Mona Lisa’s smile, but the spatial feeling of the reliefs of Akhenaten’s era is closer to the visual impressionist experience. Here, the language which can defeat the unstable state of reality, turns the figure into an intellectual operation of artistic outlines which is weakening under the superior order of matters. The glass pyramid, while mapping the heavenly depth, symbolizes the disintegration of the visible horizon— the temporal and spatial liberation of the structure is attacked by the loss of its ontological core, and a consciousness that it can only confront its own finality by further liberating itself. Akhenaten’s migration to the modern era, which ended with the arrival of monotheism, is unmatched in the history of marked love for the world, even if we can only see it from the position of the (pharaoh’s) eternal beauty.

III ANTI-GRAVITY

Structure is the word which, in the modern era, changed the house of Gods into an open sky above the city. It used to be, and remains, the purest mark of the essence of architecture. Brunelleschi’s Dome was a structure (of volume with no supporting sub-structural elements), but so was the Parthenon with its inner sky dispersed in an explosion, at the time when the science dismissed the concept of the sky in a form of a dome (discovery of the telescope and the dismissal of celestial spheres). Ever since, modern architecture is developing its “appreciation of deficiency” related to this deep void which corresponds to the architectural understanding of the cosmos. European architecture, in its romantic fervor, finds ruins to be the last splendor, whereas all buildings strive to, through their comprising forms, uncover what lies in the depths of their history. This new capacity to uncover the past is developed in parallel with the unconscious tendency to do away with unnecessary weight. The opening of the

“modern sky” and the tendencies towards a universe with no spatial or temporal limits, along with the modern perception of reduced distances on Earth (Arendt, 1958), brings, for the first time, an architecture which is characterized by the transparency of an esthetic quality similar to that of ruins. It could be said that the character of such architecture sublimates the trajectories of the gothic tradition of directional space, except that it is not towards the empyrean (heavens above) but in all directions of the meta-ecumene of the modern era.

Since the XIX century people have to face their own finality in an infinite space and time, similarly to the new image of the world which was left without artistic presentations of its *heavenly twin*. Foucault also claimed that the XIX century scrapped the essence of myths in favour of the Second Law of Thermodynamics. The entropy of the system, metaphorically speaking, is nothing more than the loss of an atmosphere which was firstly scientifically proven, and then became evident in the empirical space. The Contemporary understanding of *the greenhouse effects* belongs to the inverted spectrum of the same terms, representing, in the domain of Rationality, the outcomes of the architectural green houses of the past. In the XIX century an idea was developed which claimed to be able to utilize new technologies to reconstruct the global protective envelope. This should have warranted the preservation of the ether which was, even in those days, destined for an infinite decay.

Architecture finds its new cosmic paradigm in the design of the “world’s interior” – Joseph Paxton’s 1851 Crystal Palace. This marks the commencement of the march of the new esthetics through modernity, when the critical threshold of immanency was crossed. Whitman’s poetics, in a similar way, accept the format of the World as an exhibition, thus becoming the container of all heterogenous exhibitions which his era allowed for.

The engineering architecture of glass and steel becomes the new expression of a form of an exponential relationship between shape and mass, but liberated from the solidity of matter this time. The style which displayed the organic essence derived from the geometrical skills is sublimated in the western world. In the wider architectural programmatic field, which was formed at the time of world exhibitions and the intensification of traffic, the Earth became available and explorable, we could say, as an object held in a hand². The esthetics and the spirituality of the society achieved a new, appropriate, expression, except that this time it was additionally marked by the speed of movement *. We could say that an observer moved through Gothic architecture as if on a journey, as the image of reality transformed into a panoramic overview. The Crystal Palace (Paxton, 1851) and the Eiffel Tower (Eiffel, 1889) symbolically represent the view over the exciting industrial landscape which was made of (Mars’s) fields, bridges and arches, train stations and funfairs, balloons, zeppelins and all that preceded steam boats and airplanes (which Le Corbusier will later consider to be the symbol, esthetic and programme). What reflects the sublime here is the feeling of a true liberation from the thought of the Earth’s heavenly shell, the idea which was thrown out by scientists at about the same time when the roof of the Parthenon was destroyed (the Morean War, 1687). The view became the factor which merged the Points of the World into a unique Time. If the Pantheon symbolically linked the territories of the empire, then structures like the Brooklyn Bridge or the Eiffel Tower, the Chrystal Palace or the Statue of Liberty prepared the world for the state of excessively interconnected reality in which we are still living today, endlessly. In this regard, the name of Nouvel’s infinite tower (Tour sans Fines, 1992) contains the reality of ‘Eiffel Towers life’, which is that all

of its steel elements were replaced over time while retaining its original geometry. Jean Nouvel's tower, besides its narrative about infinity, evaporates in front of eyes which have never seen it before.

IV DEPARTURE OF BELOVED OBJECTS

The middle of the XX century has been marked by a Galilean event. Amongst numerous discoveries, the density of which was hard to follow by mankind, one which is particularly relevant for this topic, appears incredible. For the first time the Earth has been seen by human eyes in its spherical wholeness. The following journey to the Moon only confirmed the extraterritorial character of this image. Undoubtedly, the Earth was finally discovered. But somehow, it went rather unnoticed. The human remained interested in earthly horizons (Arendt, 1958) despite the fact that his links to Earth are diminishing. The discovery of America suggested that all the trajectories on the planet are defined, while the modern era began by the clearing of continental paths and by unifying all the seas into one. On the other hand, the astronomical landscapes on the Moon were named after the imaginary seas, and prepared for new Great discoveries. This shows us that, even after five hundred years, the real and symbolical capacity of trajectories on Earth is not exhausted, and the old dreams about space journeys were replaced by an interest in the creation of a new image about ourselves. This is how the discovery of the telescope changed the way we see ourselves and the Earth more than it influenced our vision of the Cosmos, and subsequently left us awaiting new findings about our own lives. This time the images are dispersed polycentrally, aiming towards the depths of darkness, and not towards the hues of blue atmosphere of the yesteryear. The nonexistent dome of the Ultimate Home only proves the eternal character of the myths, despite our reliance on scientific knowledge.

The history of departures is the history of new worlds. After forty years of their journey, Voyagers 1 and 2 finally left the Solar System and inhabited interstellar space. The doubts of the 1970's was replaced by the 90-minute delay of the image which Voyager 1 still emits on its journey of no return. All the evidence of the exclusivity of life on Earth, engraved in gold, have never been further apart from its creators. The idea that man finally created something and placed it in the space inhabited by stars can easily be considered an inconceivable dream of cosmical scale, and the images which are still reaching us can be deemed the replicas of thoughts belonging to any observer of any of the domes ever created to support the idea of sublime. That history is equally the history of the revolution of a single architectural form. Dispersion of the dome's geometry and the linear character of its trajectory define the universal character of all matters, including the directions of all forces which cause our love for the sublime architectural objects to grow as our distance from them increases.

Figures:



Case 1: Pantheon, Rome, 2018, Case 2 Parthenon, Athens, 2014 (polar distortion of the view)



Case 3: Neoarhitekti, National Museum, Belgrade, Competition, 2011

Case 4: J.M., Spherical Mirror, Installation, Gallery Kolektiv, Beograd, 2015



Case 5: Voyager 1, “Nonexistent Dome”, Last position, Right Ascension: 17h 13m 17,6 s; Declination: 12o 25’ 27,7” Magnitude: N.A., Constellation: Ophiucus, Sun Distance: 21,810,060,483 km [17.0 km/s], Earth Distance: 21,686,463,303 km [31.6 km/s]

Endnotes:

- 1 “it reached so high that it was indistinguishable from the hills surrounding Florence” (Vasari)
- 2 What we learn from the modern globe which found its place in the middle class homes of the XIX century, and what is wittily described in Jules Verne’s “Around the World in Eighty Days”, is not the possibility to see the world using public transport, conditioned by the cost of the ticket, but that the speed of movement became more exciting than exotic and sometimes unimaginable, undiscovered and mysterious contents of that world – matters which explorers used to obsess about before the last unknown territory on Earth was discovered.

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