

Monolithic comeback:

A contemporary examination of Monolithic architecture and relation with uncanny

20.04.2023 ILIAS VOURAS 5859026

AR2A011: Architectural History Thesis

Delft University of Technology supervisor: P.I. Panigyrakis

A BRUTAL RETURN AND THE CASE OF THE MONOLITH THE NARRATIVE OF THE UNCANNY IN ARCHITECTURE ARCHETYPES PRISM FRAGMENT CTHTONIC LABYRINTH	CONTENTS ABSTRACT	3
ARCHITECTURE ARCHETYPES PRISM FRAGMENT CTHTONIC LABYRINTH		5
ARCHETYPES PRISM FRAGMENT CTHTONIC LABYRINTH	THE NARRATIVE OF THE UNCANNY IN	
PRISM. FRAGMENT CTHTONIC LABYRINTH.	ARCHITECTURE	12
FRAGMENT CTHTONIC LABYRINTH	ARCHETYPES	16
	PRISM	19
LABYRINTH	FRAGMENT	26
	CTHTONIC	33
SEMIOTIC DIAGRAMM OF THE MONOLITH	LABYRINTH	39
	SEMIOTIC DIAGRAMM OF THE MONOLITH.	47

With a starting point of the brutalism return to the foreground of the architecture practice and its positive shift and acknowledgement by users and critics, the essay tries to construct a narrative around the formation of prismatic forms. There is a chance of analysis of a broader group of buildings - works that converge similar traits. This analysis revisits and adds to former essays of this thematic area, which were written in the decade of 1990. The renew aims to indicate fragments that have not presented or have not studied in an adequate degree and also to encapsulate the secrets behind those type of creations.

For the holistic study of the topic the narrative searches manifestations of monolithic structures from history, myths and tales, adding a symbolic background to sociopolitical values. Myths assist unravelling the clew of continuity, urges behind the consistent use of prismatic forms through different time periods. There is a tendency of humans to return to more primitive forms, as they encapsulate meaning, so some architectural forms work more as statements, symbols rather than function and space. Symbolism and Monumentality, aligned with the essence of monolithic architecture, indicate an examination of the feeling of uncanny.

As a dominant factor of Monolithic architecture, uncanny and its effects on human mind and senses are getting into consideration, through the lance of terms as gothic, terror, sublime. Aspects of uncanny will be the core of discovery and definition of monolithic architecture's characteristics. Traits as darkness, lack of orientation, continuity of form, insecurity are embedded in the design process or created unconsciously. They provide except for morphology, atmospheres that end up in a design identity, a typology of monolithic architecture.

Afterwards а categorization of contemporary examples is discussed, based on their affiliation with exterior and interior form and design. Examples include works of the past two decades, which encapsulate the characteristics of monolithic terminology and differentiation from the previous traits found in bibliography. There is a redefinition of monolithic architecture in contemporary design of past two decades, revealing forms more close to nature and landscape. Alejandro Aravena Center of Innovation of Chile, Ensample's studios Musical studies center, Olafur Eliasson's ilusisat Icefjord Park and Peter Zumthor's Serpentine Pavilion describe new possibilities in design and readjust the atmospheric values brought with the term uncanny. Presentation of examples aims to discover new design tools for architects and designers, accompanied with the understanding and rational behind those creations.

A BRUTAL RETURN AND THE CASE OF THE MONOLITH

Concrete and its characteristics in the architectural discourse has been a topic of debate for the past sixty years. "It exudes optimism and generosity to some, violence and misery to others." (Guardian, Wainwright Oliver. 2019). Structures that agve prominence to concrete and gave birth to the movement of brutalism from the modernism era associated with symbols of a future dystopia. "It is the material that most embodies the era of the welfare state, a time when the public sector-built housing, schools, hospitals and theatres on a majestic scale. It is the liquid rock of socialism" (Guardian, Wainwriaht Oliver, 2019). Architectural editors saw them as symbols most closely associated with the social problems that accompanied the decline in industry, lack of maintenance and inner city decay. Thus buildings abandoned or treated with demolition. Of course origin of this neglect can be the association with World War II, as "people associate it with the postwar city, with cities that were badly bombed" (Henley, P14). The catastrophic image of the war kept vibrant with brutalist structures.

Despite neglect and the displacement from public and critics, traits of concrete maintained in public memory, bringing a brutalism revival. Social media, movies, magazines placed their role in that revival. Several articles in *The New York Times*, the guardian and multiple new awarded building examples are proof of this new trend¹. Moreover In 2014, the British critic

¹ In 2016, after nearly 30 years of their being at risk of demolition, the renovation of the Hayward Gallery, Queen Elizabeth Hall and Purcell Room on London's South Bank began; in the same year, Dublin-based Grafton Architects won the first RIBA International Prize for their concrete megastructure, UTEC Lima, in Peru. The Brazilian architect

Jonathan Meades produced a combative reconsideration of Brutalism in a two-part television documentary for the BBC, putting the style back into the mainstream of welfare-cutting Britain (Nikil Saval, 2016, The New York Times). Furthermore, Simon Hensley recommend that Brutalism is a more complex subject than a postwar historical artifact. The essence of Brutalism comes from a combination of multiple characteristics referring geography, to history, materiality, culture. Thus Brutalism is "not a corpse but a living thing" (Henley, p14). Critics started to reconsider their thoughts for this style and capabilities.

Architects accolade concretes' capability to create sculptural forms and acknowledged it as a material that affected the senses. "It is not bland, it is poetry and it is not hard to see" (Henley, p8.) As Wainwright Oliver describes architects pursued a kind of spiritual cleansing through a back-to-basics approach to architecture. The architectural critic Reyner Banham implies that "Brutalism was an attempt to create an architectural ethic, rather than an aesthetic. It had less to do with materials and more to do with honesty: an uncompromising desire to tell it like it is, architecturally speaking" (Nikil Saval, 2016, The New York Times). Material purism was celebrated and treatises on phenomenology defended the use of concrete, establishing its comeback.

In the research for this comeback this essay recurs to a terminology that originates in endogenous characteristics of human existence. Traits that remain unspoiled, archetypical forms of the human mind. Archetype comes from the combination of Greek words "*archi*", beginning or first point of an action, and "*typos*" meaning type. It is something that its origin comes from the beginning of an action, a prototype.

Paulo Mendes da Rocha received the 2017 Royal Gold Medal from the Royal Institute of British Architects. (Henley, P9,10)

The second meaning comes from the science field psychology, meaning an unconscious or generally accepted image for humans like birth, death and god. The term was first mention in Psychology by Carl Jung.

The word archetype translates to something primal that every person recognize, despite searching or refraining from it. "An archetype in architecture is a form that we keep reproducing, more or less deliberately, acknowledging therein an irrefutable wisdom and an appeal that may never perish" (Lefas, 2013, p8). They are basic spatial structures, prototypes that are products of impulse. They are preserved eternally and they "adapt to specific contemporary requirements over changing times, while maintaining all its primary qualities" (Lefas, 2013, p8). For this reason this essay tends to describe an evolution of the prismatic forms under the scope of monolithic architecture.

A monolith is a very large, upright piece of stone, especially one that was put in place in ancient times. Its origin came from ancient Greek *monolithos* "made of one stone". It is a combination of two words, from "*monos*" meaning single, alone or isolated plus "*lithos*", meaning "stone". It is a description for both natural formations and monuments. The figurative meaning is indivisible unity in the form of rigid, inflexible describing the character of an individual and is usually a negative description adjective.

If the term monolithic is taken literally to suggest material solidity, a unique piece cut in a curtain geometry like the obelisk, monolithic architecture would be impossible by definition. There would not be place for inhabitation that architecture requires, nor place for openings. Rodolfo Machado Rodolfo el-Khoury first attempted to give a definition to the term in 1995, in order to categorize a group of prismatic buildings. "We understand monolithic to signify monolith-like, and hence to confer a sense of solidity and homogeneity on objects that are not and could not be integrally solid and homogeneous" (Machado, 1995, p15). In this essay the analysis revisits and adds to this former thematic area. The renew aims to indicate fragments that have not presented or have not studied in an adequate degree.

The term monolithic underlies an experiential subjectivity. For an observer what is monolithic could appear non-monolithic to another with a different view. Even aeologists tend to avoid the term, based on its nebulous boundaries. This fact underlines numerous factors, except from morphology, which should be taken into consideration. "This inconsistency in perspective makes the integrity of the monolith's abstract form even murkier because it highlights the fact that geometric rationalization is only one aspect of an object's corruption." (Atwood, 2011, p206). So a monolithic cannot be described only by its shape, as a prism is not always a monolith and there is a necessity of identification.

The incorporation of factors from other study fields, which unravel sociological and experiential traits of the monolith, are requirements for a solid description. Thus, the term uncanny and myths around it work as a connective tissue behind the different categories of monolith. Mythology and folklore, despite its unrealistic nature, encapsulate secrets and beliefs of human thought. "Our most sober concepts and definitions are distant offshoots of myths and ancient stories". (Bruno Schulz) Old civilizations used mythology to describe what the science back then was not capable of. Even the original translation of the word "mythos", which originates in Greek, means truth. After many centuries the translation came to its todays meaning of legend. Mythos represent the existence of symbols, which are indelible in the human unconscious. "Man cannot gain a foothold only through scientific understanding alone. He needs symbols, which represent life-situations." (Schulz, 1979) The importance of myths in the research for meaning is underlined by Bruno Schulz as "There is not even one of our ideas that is not derived from mythology, a mythology that has been transformed, mutilated, remoulded".

Analysis isolates a group of constructions with specific traits and not the entirety of the monolithic spectrum. The traits are related within uncanny and mythology, design principles, final outcome. The process unravels a myth in first place, which gives a background for the existence of uncanny in psychological and experiential level. The latter creates a base for a presentation of examples. This focus helps the thorough depiction of contemporary buildings of the past twenty years, supplementing the gap of previous analysis in the field.

Goal is to portray a group of buildings that seem unique, unprecedented and find similarities between them. The nonspecificity of both uncanny and monolithic architecture create a gap in the division and number of groups, which are decided. The Greimus square, or semiotic square, is a schematic representation of relations in the form of oppositions that helps the analysis of concepts in literature and theory. Derived from Aristotle's logical square of opposition, was developed by Algirdas J. Greimas, a Lithuanian linguist in his book Structural Semantics: An Attempt at a Method in 1983.

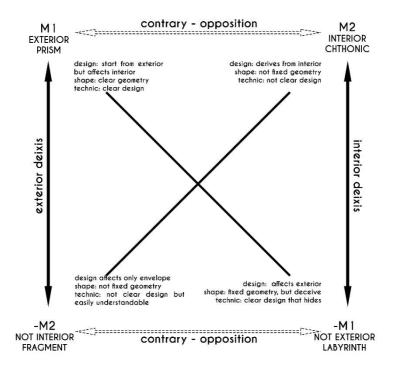


Diagram 01. The four categories of analysis based on the semiiotic square. The diagram is based on the opposition of interior and exterior space. Based on this analytical tool monolithic architecture is divided based on the opposition of exterior and interior space. This admission is based on one the basic traits of monolithic architecture, the contradiction of rigid exterior atmosphere and more fluid welcoming interior. The Greimus square is used to enrich the analysis and make clearer the division between every monolithic concept. In monolithic architecture there are more levels between interior and exterior, so instead of two categories there will be an analysis of four, two closer to exterior and two closer to interior. This process also unfolds layers of uncanny, which are close related to every monolithic concept. Aim of the creation of this diagram is also to result in fertile conclusions in the final chapter of this essay.

THE NARRATIVE OF THE UNCANNY IN ARCHITECTURE

The subject of the uncanny is related with the subject of aesthetics, a theoretical term associating with experience and the aualities of feeling. It is similar with what is frightening and it is connected with emotional impulses. However there is no clear definition of the uncanny. Fear, uncertainty, unfamiliarity are common adjectives that accompany uncanny, but not a clear description. This implication comes from the fact that uncanny differs from the sense of absolute fear or its derivatives, it is something in between. Anthony Vidler in his book Uncanny spoke about the non-specificity of uncanny and underlined that "the uncanny seemed easier to describe in terms of what it was not than in any essential sense of its own" (Vidler, 1993, p22). Also its meaning differs between languages and seems closer to the English translation. Greek word for it is "Ekvoc" or foreign and latin «locus suspectus" or suspect space, but in English uncanny means beyond knowledge or skill. "It is better characterized as dread than terror, deriving its force from its very inexplicability" (Vidler. 1993, p23)

Freud in his endeavor to describe uncanny proposed two ways of analysis in his essay Uncanny published in 1919. First he proposed a gathering of words, phrases that associated with the uncanny historically and secondly what sensorial source results to uncanny. The comparison of the two comes to a conclusion that "**the uncanny is that class of the frightening which leads back to what is known of old and long familiar.**" (P01). However this sequence of what is novel, unfamiliar results to frightening is not a relation that always exists, so further factors should be included to the equation. Freud continued his investigation based on what we experience and what myths and tales reveal for our internal world.



Pic1. Francisco de Goya y Lucientes. Witches_Sabbath. ca 1797. The wilderness as a form of uncanny. The implementation of myths help to unravel previous, primordial beliefs of human imagination. Of course these beliefs are surpassed as civilizations evolved, but they come back in the human mind in the form of superstitions, reservation for the existence of something or simply the belief in luck. "an uncanny experience occurs when primitive beliefs which have been surmounted seem once more to be confirmed" (Freud. p14). Freud adds to this segment that a second, equally significant, source of uncanny is when "infantile complexes which have been repressed are once more revived by some impression" (Freud, p14). In any case, Freud conclusion is that uncanny derives from the parallelism of fiction and reality, a confusion in the human unconscious. This dipole would be the main criteria for the analysis of monolith, as these two factors are characteristics of the monolith. "The monolith impersonates itself on our architectural unconscious so that we dream of it as floating, walking and even reproducing". (Singley, p24, floating solids)

However the uncanny connects with the monolith in one of its homological words, the sublime. The vertigo that comes from the height, depth, extension of an enormous stone. But uncanny is more than that. Space of uncanny, according to philosopher Burke, is **"a space of silence, solitude, internal confinement, that mental space where temporality and spatiality collapse"** (p39). In that sense we can assume that the monolith exists into a biggest realm of uncanny. Its existence sometimes gives birth or originates from uncanny, but definitely monolithic architecture is correlative of the experiential power of uncanny. Monolithic forms can always associate with myths, eternal thoughts that justifies its existence, giving monolith a meaning and forming its traits.

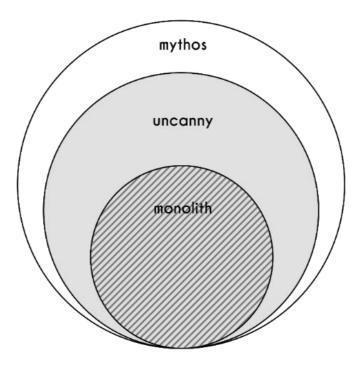


Diagram 02. Relation of mythos -uncanny - monolith. Monolith is into the realm of uncanny.

ARCHETYPES

In the research for the identification of archetypical forms for the monolith, depictions of monolithic structures were found in prehistorical times. The Dolmen, megalithic structures or a series of large stones piled up in a singular way, were found in Neolithic period. But for the purpose of understanding the notion of the monolith the focus should be made on Mediterranean examples, as its architecture is distinguished by the use of large stones. Christian Norberg Schulz in his book Genius loci characterizes the architecture of east Mediterranean Sea as Mediterranean Mode "It is a megalithic architecture where the material symbolizes the solidity and permanence found in mountains and rocks." (Schulz, 51) The use of stone and the symbolism around its formology and materiality were of primary importance for ancient civilizations, because of their "imperishableness." (Schulz, 25).

Obelisks were singular stone block cut and extracted for mountains. There use was sign and entrances to temples. Of course ancient civilizations used singular pieces of massive stones to construct religious structures, like Stonehenge or the statues from Easter islands. However with the Obelisk the symbolism of those creations stood to a different level. Obelisk meant a superior civilization, which kept the tools and the know how to extract massive blocks without breaking. Furthermore Obelisks affiliated with the phallic symbol, a symbol of, at the time, strength in mind and hands. "An inflatable signifier for architecture's phallic economy" (Singley, 1995, p24 Moving Solids). It seems alien from its surroundings, something fallen from sky, despite it is extracted from nature. But the term monolithic is taken literally to suggest material solidity, a unique piece cut in a curtain geometry like the obelisk, monolithic architecture would be impossible by definition. So another archetypical and ancient structure is more useful, that of the pyramid. A vast building with a clear geometric shape stands without showing clear entrances to the interior, a structure that stayed homogeneous to human mind. "easily recognizable, regular, shapes have been employed to indicate that the form before us is the result of deliberate choices aimed at conveying complex meanings and sophisticated symbolisms and not the outcome of inconsistent, random actions carried out by a large set of active agents" (Lefas. p. 27). Christian Norbera Schulz referred to the symbolism of Pyramids as artificial mountains that connect earth and sky. "Thus the pyramid unifies the primordial mountain of Egyptian mythology with the radiant sun-god Ra." (Schulz, P51). The last resort for pharaohs, gods on earth figures, had to be equal to the god nature and also pointing the sky.

Indeed symbolism was a high priority for the Egyptians. They deal with objects as physical entities materializing abstract concepts, as such of death and after life. There architecture stands in a duality: "the ethereal, completely detached from anything that belongs to the material world, conception of an edifice, and its earthly materialization fully dependent on physical things". (Lefas. p. 33) This duality applies also for the relation between interior and exterior. The highly proportional, golden ratio, and sublime to exterior mass hides small interior spaces, narrow corridors and difficult access entrances. Of course those spaces was meant only for priests and their shape was meant to protect the corpse of pharaohs from intruders. The examination of a Pyramid section shows an imbalance between mass and interior space that occupies, creating a monolith form, at least in the drawing.

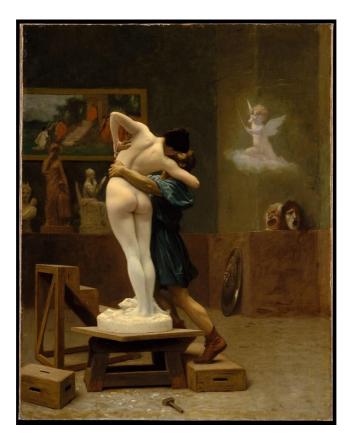
Geometrical shapes were subject of knowledge for other civilizations. The Greek Plato, father of idealism and philosophy in general, associated geometry with the mind state, a place different from natural world where no perfect circles or lines exist. Plato saw geometry as a vehicle to comprehend the material world. He also associated analogical geometrical shapes with the elements of world, as structures unchangeable and eternal. Cube, or prism in the case of monolith, was equivocal to Earth.

Some centuries later, a new geometrical form came to express different ideas. The Roman Pantheon indicates in its interior a vast spherical roof. The sphere represents an artificial cave, a womb, creating "a reciprocal relationship between natural and man-made world. (Schulz, 1979, p52)." Later, in 1784, the iconography of sphere is presented by Louis Boulle in his creation "the Temple of Death", a spherical cenotaph proportionally similar with its great predecessor. The vast sphere stands up to a flat underground plate preserving the dead body, having only one hole in the top for light entrance. This type of light from above is a derivative of a feeling of sublime in relation with the emptiness of the void. Boulle created an analogy of dichotomy between light and darkness, "a monument to death that represented an ambiauous moment, somewhere between life and death, or, rather, a shadow of the living dead" (Vidler, p171, Dark Space). Those ideas would be dominant ideas for a phenomenology of monoliths, which is associated with the term uncanny.

PRISM

Monolith is associated with a form of art. classic sculpture. From a singular block of stone, sculptors began to create forms by removing, carving the stone. This process of creation differs from other art forms because sculptors should imagine and organize the final result from the beginning of the process. Sculpture had a different position among other art forms in ancient times, as its difficulties positioned it as a major art form. Its fame contributed to its evolution, as the final products were from ancient time of an excellent quality. Usually depicting human form, either historical, mythological important figures or situations from religion, forms were highly detailed way before other art forms, like theater or painting, were evolved. The level of detail in coordination with the time period, in which, gave birth to a series of myths surrounding this art form.

One of the most famous is the story of Pygmalion and Galateia from ancient Greece. In this myth, the sculptor Pygmalion was so impressed by the detail and beauty of his creation, the female sculpture Galateia that fell in love with it. His love and affection to the sculpture intrigued Aphrodite, goddess of love, who turned it into a woman. Galateia eventually married Pygmalion and gave birth to a daughter, Pafos, which name gave to one city in Cyprus. The story of the breath of life in a statue is encountered several times in Greek mythology, every time with a different meaning.



In the story of Pygmalion art becomes a double of nature, as not only resembles human traits but actually become one. The transformation of art into reality tricks the eye, which cannot recognize what is real or not, creating an unpleasant feeling. "Art is uncanny because it veils reality, and also because it tricks" (Vidler. P35). There is also an implementation more crucial to this hypothesis. Galateia, by becoming alive replaces the form of a woman that Pygmalion could marry. The existence of a double can also refer to a replacement of the human body. The greek Colossoi were human like sculptures that replaced the corpse of a man when it could not be found in order to prevent the psyche, or spiritual double, from wandering among the living and causing trouble (Mascado, p26).

The mimesis of human anatomy and movements, creating an uncanny entity, can describe monolithic forms. Prismatic forms relate with sculpture in form and construction approximation. Their design seem like extracted holes are curved into a massive block of stone. So sculpture myths can attached to the monolithic representation. "the architectural monolith surfaces as a brute stone planted firmly in the ground. A body-double independent of direct mimesis, or a fallen object that aspires toward its spatial origins. Its fixity and proximity to the earth gesture toward the mobility". (Machado, p27, moving solids)

Prism is the definite solid to begin the architectural analysis of the monolith. The clear geometry of a platonic shape is an archetype of monoliths, such as the pyramid and sphere. The cube stands architecturally as the symbol of monolith architecture, something that is easily understandable, recognizable and something that human mind relates to. In this factor comprises the connection with sculpture, as segments of the buildings seem as being cut out, curved into a big mass.

There is a change of a presentation and conversation for monolithic architecture characteristics with the prism as a core of relation. On a great massive solid, few big in proportions curve the exterior, creating a robust outer form. The analogy between mass and void is evident, as monoliths tend to hide their openings to public. Indeed monolith tends to deceive the viewer by hiding its entrances. However the robust exterior changes in the interior where large spaces allow sun light entrance. Usually another archetypical form, which of the atrium, stands as a dominant figure where light enters from above and every living space circulates around. The dipole of exterior and interior create a relation in which the design initiates from exterior and affects the interior space.



Pic03. Alejandro Aravena for the Center of Innovation of Chile

Furthermore, in order to achieve homogeneity, the design uses the same material eradicating the base plinth and roof of the building "rootlessness is emphasized in the omission of a differentiated base and top or in the continuity of cladding patterns across horizontal and vertical surfaces. - with total disregard for architectural conventions and laws of statics" (Machado, p19). Monolith stand almost texture less, with usually concrete as the dominant exterior material to accentuate robustness and austere or an "autonomous abjectness" (Machado, p19), seemina as they lack foundations, grounded merely by gravity, a type of stone. Brutalism through the use of concrete connected with monolithic architecture, but replaced in contemporary architecture with prismatic form with similar characteristics and sculptural identities. Such projects can be the tower like Cien House by Pezo von Ellrichshausen or the non-canonical openings of Hunters Point Library by Stevel Holl. But the contemporary prism can be prescribed better in the work of Aleiandro Aravena for the Center of Innovation of Chile.

Regarding Center of innovation comprises of a cube with big opening that seem to be extracted from the façade. Openings are disproportionate with human scale. The robust structure makes the viewer to abhor creating the feeling of sublime. Monoliths in general demand the attention of the eye, they are designed to resemble to monuments. **"They are characters, they have a persona**". (Machado p20, Domesticated Monoliths). Of course contemporary buildings cannot consider as monuments, as the characterization of a monument is given in a building in a course of time and in a specific category of functions. Architects or people cannot simply equalize the center of innovation with pyramids, as it demand time, the great concern of the monument.

One of the biggest threats of the monolith is being outdated "We thought that the biggest threat to an innovation center is obsolescence; functional and stylistic obsolescence," (Aravena, 05.10.2014). So monolithic architecture comes from a very articulate method of design, care is given to always stay relevant without staying in fashion trends. "From a stylistic point of view, we thought of using a rather strict geometry and strong monolithic materiality as a way to replace trendiness by timelessness," (Aravena, 05.10.2014) Moreover their arrogant posture in regards with the landscape and its surrounding buildings and their uncompromised structure make them stand out "the monolith invariably becomes an icon of the place" (Machado.p18, floating Monoliths), Contemporary monoliths present a mimesis of a monument, similar to that of the sculptures and the human body. This mimesis create the sublime feeling and make them stuck in human unconscious.

Prism gave the chance to present characteristics of monolithic architecture. Examples of last two decades, though, present an evolution in prismatic forms. Structures develop traits that are opposite from the fundamental principles of monolithic architecture, which were primarily given in 1995. Despite this factor, they can still considered as monoliths. So the case of contemporary monolith is still under consideration.

FRAGMENT

Monolithic architecture is texture less. Absence of touch or, to position it better, absence of multiple textures serves the homogeneity. Aim if the design is the sense of sight, which focus on the form purity. As W. Adrew Antwood puts it **"The monolith, rather than allowing an expression or indexing of its part-to-whole relationship as an alibi for technical ineptitude, or a desire to express its complexity, must suppress it." (Antwood, 206)** Despite this factor, a series of buildings presents a different view, one that a fragment of exterior diverges from the homogeneity. Materiality and touch comes in front.

The connection of monolith with sculpture raises also the issue of ruination, broken sculptures. The biggest number of sculptures from the archaic period today stands into museum incomplete, as parts of them are missing or destroyed for various reasons. This lack of completion conserves and enriches the narrative of those fragments. "The gothic revival in architecture tends towards ruin and ruination: in literature, the gothic favors the fragment." (Luckhurst, 2021 p37) The torso of Belvedere, a fragment that presents Nestors' son Apollonios, rediscovered in Italy in 1430 and became a symbol for art itself as it was much admired by Michelangelo. "There was a whole programme for the aesthetic study and initation of classical fragments" (Luckhurst, 2021, p37).

Questions are emerging in favor of the overall form, under which circumstances the original was destroyed. The usual case of vandalism and destruction tend to magnify. Beliefs of moving statues led in dishonorable acts, as there were cases that people put statues under chains, even the feathers of Athena Nicky were removed in order to prevent the statue from flying. "Despite incapable of walking in its sleep, definitely it is capable of moving in human mind" (Singley Paulette, 1995) underlines Paulette Singley, which inclines a misconception of truth and reality in the case of fragments.

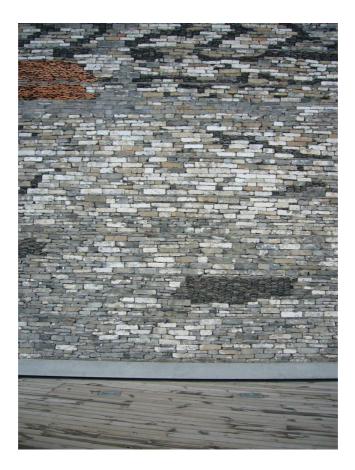
However a more dominant source of uncanny is assumptions of the creations of the whole. As people see only a part of the sculpture, they want unconsciously to fill in the form. "Like the ruin, the fragment compels the imagination to complete it" (Luckhurst, 2021, p38) Legend has it that Pope Julius Il requested that Michelangelo complete the statue fragment with arms, legs and a face. Concerning the notion of uncanny and gothic culture Roger Luckhurst even implements that permeating parts are more terrifying to human mind than the actual fragment, as mind tend to seclude the traits of the original that cause terror and exaggerate them. "Our compulsion to complete the story is such that small fragments can produce whole Gothic subcultures." (Luckhurst, 2021, p38)



There is a small group of constructions that implement the idea of fragment into a monolithic design. Fragment comes with the form of texture, only in the exterior façade. Despite the dichotomy relation between interior and exterior of the monolithic design is not disturbed, it diverges from the clear prismatic forms where the exterior insertions affect the interior. There is an epidermal intervention, so dominant that affects the structures' identity. Such projects are the musical studies center by Ensamble Studio, Galleria Department store in Gwanggyo by OMA and Ningbo Historic museum by Amateur architecture studio.

The brutalist morphology of Ningbo Museum is interrupted by a non-canonical facade, were different shape stones and ceramic tiles are piled up in the wall. The façade was developed in collaboration with craftsmen via the traditional Wapan technique, a textured cladding of brick and tile. Through this epidermis technic design enrich the identity of the monolith, living apart the previous textureless traits. The building, through the revival of old construction techics and local materials cooperates with the local urban fabric and tradition. The monolith by embracing the surrounding landscape tries to be a part of the whole minimizing its arrogant form, which were shown in the previous chapter.

Moreover the unconventional appearance of texture sustains mythological thoughts about its creation. in the Musical studies center by Ensamble Studio The masonry granite work of the façade it's made of stones opened "on the contrary side", searching for the spontaneous natural surface of "stereomity" which allows the granite to be ripped more easy. Despite its natural technic of stones' extraction, the use of every vast piece requires extra levels of comprehension. From distance the building seems as it fallen from the sky, without



Pic05. Detail of the façade of Nigbo historic museum

relevance to the surrounding landscape. Looking closer the rough edge of the cutting stone reveals the technic, the origin of construction and the idea related to the already use of stone in the area.

In that sense the facade can evoke memory. In conversation with Dezeen Magazine, Wang Shu reveals for the Nigbo historic museum, "Many of the recycled bricks and tiles date back over a thousand years. These materials have been used to preserve memories of people living here". Even the intentions of the Musical center is the emphasis in the memory of space and the deep based on stone culture of the city. "It seems that the building was always there." (2009). the building resembles a stone that is omnipresent, creating stories about its creation and chronology. "Even the process of their construction imbues those structures with ambiauity." Antwood. Their rough, almost unfinished form make mind blur and guess if their current form is the final alteration or a part of a series of alterations that left unfinished, fragmented. Similar to the belvedere torso or Aphrodite of Milo, and borrowing words of Anthony Vidler "fragments that at once signaled an irretrievable past and evoked an unbearable desire for future plentitude".

This category of buildings, despite altering some characteristic of the monolith, the texture and relation with the landscape, keep intact the dichotomy of interior and exterior. Debora Messa inclined the contradiction in the Musical Center "As the exterior presents the roughness of nature, the interior is a domesticated stone, polished, smooth, different kind of space." (Messa, 03.04.2018). Still the monolith focus on exterior







The investigation of monolithic architecture continues with design concepts that originate from the interior space, and formulate the exterior based the characteristics of interior.

The word chthonic in Greek means something that relates or comes from the earth. It is associated with the mythological god Gaia or Earth, from which every living thing in Greek mythology came from. However chthonic can also describe a series of gods and demons which are related with what happens under the surface, underground. Underground was considered in Greece the kingdom of the dead, the final destination of souls and was depicted as a place of terror and mysticism similar to hell. Even the biblical devil is considered the god of earth. The two meanings create a paradox, chthonic describes the life and creation in the form mother earth "Gaia" and also death and evil in what relates to the subterranean.

This dipole unravels in the mythical story of Persephone. Daughter of the goddess of nature and harvest Dimitra, Persephone was kidnapped by the king of the underworld Hades and forced to follow him into the kingdom of death and marry him. Dimitra desolate after the loss of her child resulted in the lost harvest and decline of nature. Dimitra requested her daughter back from Zeus, but Hades agreed to return Persephone for half a year. This myth is the description of seasons and the agriculture circle, as when Persephone returns from the dead, Dimitra is happy and creates summer similar to the rebirth of Persephone, and when Persephone went to her husband there is the start of fall and winter.



Pic 07. Frederic Leighton. The Return of Persephone ca 1891

The interpretation of this myth complements the statement that "The boundaries which divide life from death, are at best shadowy and vague" (Royle, p 146). Persephone, Dimitra and Hades are considered chthonic gods, creating a view that life and death are not exact opposites. In his treatise about uncanny Freud associated one of the most frightening factor in human perception, the fact of buried alive, with the intra – uterine existence. However this word translation in other languages is not so frightening, as Germans translation is "life within the mothers' body" (Royle, p143, Buried alive). So there is an indication together with a return from the dead of a return to the womb, or in the case of monolith, return to nature.

Concerning nature, contemporary monolith seems in first negation to be out of context, as the performance is into the urban fabric. "With its assumed aravity, it is meant to sober the strident aesticulations of neighboring buildings in congested city centers and to generate with its stubborn presence a sense of urbanity in more depleted surroundings." (Machado, p15). However the performance of Pyramids in a desert environment proofs that the monolith can be enhanced by environment and nature. The context of return to nature, can be stated in the realm of uncanny with the form of wilderness. Opposite of civilized, wilderness personifies unknown. the unruly, uncultivated. It offends the eye by being so unproductive, so vast and ungovernable......It is a place of terror, where you lose your way, get turned around, become lost and bewildered. (Luckhurst, p177 wilderness). Monolith comes to tame the wild, but absorbs its characteristics to conform with landscape.



Pic08. Plan icefjord illussitat. Ice create a non canonical interior. Non canonical shapes are imported into a cubic form.

Uncanny emerged just as "wilderness was being rethought by discourses of sublime". Here there is a auestion if Monolith has to tame, to civilize the wilderness. Mircea Iliade speaking about Dolmens, monolithic structures of ancient Nordic culture, spoke for the importance of the non- canonical form of those structures that made them "artificial caves. simultaneously interior spaces and feminine symbols, were understood as representations of the world as a whole". (Schulz p51). By this sense, monolith should diverge from the original canonical, strictly shaped aeometry, at least for the interior space, and allow nature to shape it. The contribution of nature becomes a necessity as "These places are never chosen by man, they are discovered by him." (Schulz, p51).

Translating all those ideas to material form, a small group of building comprises all of the characteristics. Between the realm of art and architecture, small constructions can prescribe the idea of womb and in parallel collaborate with nature. Such buildings are Bruder Klaus Chapel by Peter Zumthor and Illusitat Icefjord by Olafur Eliasson or the exhibition Batara by Anne Holtrop and Bas Prinsen.

The design principles starts from the interior. In the case of Icefjord, concrete in poured onto large iceberg rocks creating an outside cubic form. The final outcome comes from a natural process, the ice melt. Similar in the Bruder Klaus chapel concrete is poured onto a wooden tent, creating a monolith exterior without any openings. The natural process of burning the wooden blocks leave an interior space full of texture, the engraving of the wood into the concrete. The final result in both cases is non canonical, almost unpredictable, with a construction failure. hiah of However this unpredictability is the core of attractiveness. Both projects keep the difference between interior and exterior, but now they are more focused on the interior, which make them easily identifiable.

The wild form of nature, in our case wooden blocks and ice, despite absent in the final result return to human memory in a form of engraving. Engraving creates a texture dominant to the eye, a process that awakes the senses and memory. There is also another take in the symbolism of the engravings. "Carving the name on a stone is a rather unsophisticated way of perpetuating the founder's name." (Lefas, p47) In the case of these two examples the creation of those engravings is not an unrefined way to preserve the founders' name, but a noble focused way for natures' preservation. The eye, still connected to the archetypical forms of natural materials, ice and wood, need a secondary source of sensorial stimuli to identify their nature. The combination of eve and touch evoke past memories of the lost material, preserving its absent form to human mind. The exterior form is still dominant to the landscape, however the interior create a conversation with nature. "Icebergs are harvested directly from the nearby ice fiord to create an exhibition building, called the Ice Void," explains Eliasson's architecture practice to PHAIDON magazine. "Which harbours in its walls the memory of the ice that was used to shape it." The monolith in chthonic architecture is not only participates with landscape but is formed, molding by it.

Chthonic architecture embraces wilderness and tries to present it without taming its spontaneous forms and senses. The products resemble to cave with vibrant materiality, texture and non-canonical spaces that diverge from the common architectural areas. Forms showing a return to nature, to the mother earth.

LABYRINTH

There is a group of structures are similarly with chthonic architecture parts of the landscape, complimenting each other. Mediating between works of art installations and buildings keep intact characteristics of the monolith, such as homogeneity of exterior form and sublime presence, but reconstruct the narrative of the interior space of the monolith. There is a group of buildings that originate from interior and does not affect the exterior, which is left in a secondary role. Examples of this category is the serpentine pavilion by Peter Zumthor and Writ in water by studio Octopi, which represent another mythological term, that of labyrinth.

The origination of the word labyrinth came from the Greek legend of Theseus. Theseus, prince of Athens, went through a series of labors with the most crucial, famous and symbolic that of the labyrinth. King of Greek island Crete, Minos, made Athens to contribute seven young men and women to Crete every nine years, as an act of retaliation for a lost war between the two kingdoms. Those tributes were meant to be the pray of the Minotaur, a humanoid monster with a bulls head, which was held captive in a labyrinth created to exclusively host the monster. Theseus volunteered to because a tribute and kill the monster, but still the quest was impossible, as nobody who entered the labyrinth could find a way out. Theseus went to Crete, and fortunately met and fell in love with king's daughter, Ariadne, who gave him a thread as a gift. Theseus unraveled the thread in labyrinths entrance and raveled it again after his successful quest, killing the Minotaur and liberating the other tributes. Theseus returned in Athens and became a king, making Minotaur his final and most important labor, symbol of his hierarchy.

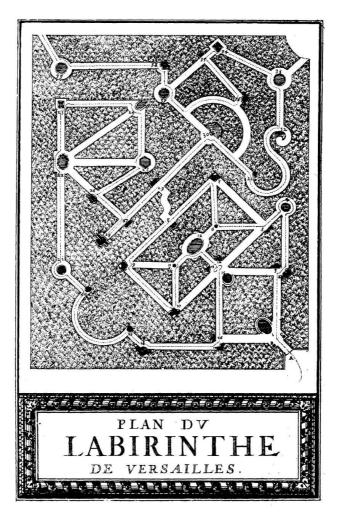


Pic.09 Theseus and the Minotaur, aka The Labyrinth (detail from The Cretan Legend in Four Compositions), Maestro di Tavarnelle, ca. 1500-1525.

This myth were one of the most symbolical and important myths in ancient Greece. It meant the transition from the dominant Minoan civilization, Crete, to Mycenaean civilization, as Theseus killed, or eliminated the symbols of Crete. Minotaur means bull of Minos king where bull being the sacred animal for both Cretans god of the seas Poseidon. Secondly the word Labyrinth means double axe " $\lambda \dot{a}\beta \rho u\varsigma$ ", the symbol of the Minoan civilization. Even archaeologist Arthur Evans in his excavations to find kings Minos Palace, claimed that the mythical labyrinth was the actual palace, Knossos, which orientation of the rooms and lack of navigation was similar to a labyrinth structure.

However the focus should be made for the symbolical iourney of Theseus, as this myth is a come of age story. The Labyrinth is the multiple immature paths that a voung person makes to find his destination, adulthood. Theseus overcome this path to become a mature king and finds his first love in the process. Foucault's labyrinth is the place of modern perversity. "An emblem of male sexual virility trapped in the maze of its own desire" (Luckhurst. 48). In that sense the corridors of the labyrinth is the woman body, and its center the womb that both chthonic monoliths have in common. The labyrinth represents also a passage from life and death, as killing the Minotaur² means an act of resurrection. come back to life. "The labyrinth leads to a Minotaur which is a mirror, a mirror of birth and of death, the deep and inaccessible point of all metamorphoses."

². The monster Minotaur by its own is translated as a trapped man with a bull's heads, and the labyrinth as a mirror, depiction of his inner problematic relation of his body, nor an animal or human. The labyrinth is at the same time the truth and the nature of the Minotaur, that which encloses him externally and explains him from within p89. Another translation that Roger Luckhurst, in his book Gothic, underlines based on art projects and previous essays on the theme is that the Minotaur is the animalistic sexual behavior of a young teenager Theseus that needs to surpass and suppress.)



Pic 10. Plan from "Labyrinte de Versailles", printed at the Royal Press, Paris and illustrated by Sebastien le Clerc. The labyrinth had thirty-nine groups of hydraulic statuary representing the fables of Aesop. Each of the speaking characters represented in the fable groups emitted a jet of water, representing speech, and each group was accompanied by an engraved plate displaying verses by the poet de Benserade.

(Foucault, p96, death and the labyrinth). So the center of the labyrinth can also be liberating for the visitor, as in the center the visitor has already surpassed the uncanny feeling of death

Starting the architectural analysis of the myth the difference between maze and labyrinth identifies spatial traits. Maze is a multi-cursal place of multiple routes, tricks and dead ends that is designed to bewilder or entertain. On the contrary Labyrinth is unicursal, with only one route to the center, its course folded and confounding yet easy if patient, writes Roger Luckhurst about their distinction. Its basic characteristic is the lack of orientation despite its definite one way path.

Concerning orientation, Christian Norberg Schulz claimed that the experiential foothold or symbolism is a combination of orientation and identification. "Man has to know where he is. But he also has to identify himself with the environment that is, he has to know how he is a certain place" (Schulz, p19). As the system of orientation depends on roads, paths, direction, images and focal points, identification is a sense of security, to "become friends with a particular environment" (Schulz, p20). Freud nurtured the importance of those factors as "The better orientated in his environment a person is, the less readily will he get the impression of something uncanny in regard to the objects and events in it." (Freud. The inference of getting lost is insecurity, which leads to terror.

This paradox is done by a series of factors, which come from a combination of architectural characteristics and uncanny traits. Labyrinth form can be divided in three categories, exterior form, middle part corridors and central atrium. As far as exterior form is concern it has to give no claim for what happens into the interior. Similar to the monolithic characteristics, no visitor has to understand the existence of the labyrinth until he enters the corridor. The latter is the most crucial trait of the labyrinth.

Corridor area has to compile all the uncanny characteristics in order for labyrinth to work. Corridor usually is steep, so much that the continuation of the direction path and doors are not visible. This trickery can be also performed by the absence of light and texture. Labyrinths corridors try to minimize or extinguish human senses. Despite darkness seems the primary source of uncanny. Freud indicates that more terrifying is the absence of other senses that darkness underlines. In his experiments, children stopped to be frighten in the dark when they heard a familiar voice, "if anyone speaks it gets light", and continued to navigate again based on the voice. Darkness attribute to distract the eye and eliminate other senses is the primary source of uncanny. "It is specifically 'fear of the dark', rather than fear of silence or of solitude to which we are alerted" (Royle. 108. Darkness).

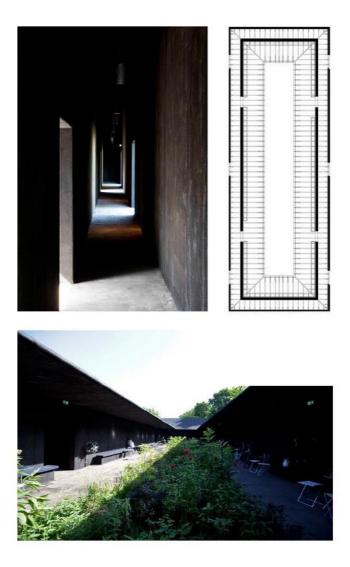
After a labyrinths visitor crosses the labyrinth, there is the mysterious surprise of the center, the Minotaur. The loss of orientation, created by absence of senses and eyesight foreshadows an unpleasant end, a monster that lives in the interior. "The uncanny seems to involve a special emphasis on the visual, on what comes to light, on what is revealed to the eye. Uncanny is what comes out of darkness" (Royle, 108, Darkness). Ernst Jentsch even described the feeling brought by the insecurity as "a sense of something new, foreign, and hostile invading an old, familiar, customary world" (Royle, Sel23). So its important what is in the center of the structures, and the intermediate corridor mechanism that hides the central configuration from the user.

Usually the architectural monolith endeavours to reconstruct this myth. The center of monolithic

labyrinths is not the house of a monster, but the contrary, it is the core of design. The central space, usually working as an atrium compels the visitor to stand, abhor and isolate from exterior environment, "a place abstracted from the world of noise and traffic and the smells- an interior space within which to sit, to walk, to observe the flowers. This experience will be intense" (Zumthor, 2011). The labyrinth starts from light, becomes dark in the middle, just to return to light it the center.

Serpentine Pavilion by Peter Zumthor is a black wooden box standing into the garden landscape. Narrow simplified labyrinth corridor acts as a transition to a central atrium with a garden. Here the interior is core of the design but it does not affect the exterior. The use of the corridor lives no relevance between interior and exterior, except from the use of the wall material. Furthermore this project is simply a building cooperating with landscape, it is by its own landscape. "a contemplative room, a garden within a garden. The building acts as a stage, a backdrop for the interior garden of flowers and light". (Zumthor, 2011) Despite of its fixed organized geometry, architect endeavors to hide it, leaving uncertainty to the observer who needs to search and unravel by his own the spatial relations and characteristics.

The concept of the labyrinth is presented in contemporary monolith as small structures of landscape, pavilions. Similar with Serpentine Pavillion, Writ in water by studio Octopi is deeply attached with landscape but its functions limit in its relationship with environment. The monolithic began from megalithic prismatic structures with multiple functionalities to more simple, small in scale constructions.



Pic11 Serpentine pavilion by Peter Zumthor. Corridor of the labyrinth, central garden and plan of the structure.

SEMIOTIC DIAGRAMM OF THE MONOLITH

Mirroring the four categories of the monolith architecture the semiotic diagram, Greimus Square, assist to extract useful conclusions and relations between the four groups. This essay unravels the notion of monolithic architecture by presenting gradually evolving buildings, starting from the biggest in size prismatic forms to the smallest, being that of the labyrinth. Prismatic forms being the most common representation of monolithic architecture is the base to understand the basic characteristics that already have presented in previous treatises on the subject of monolithic architecture. The other three categories reconstruct those characteristics, finding differences inside the scope of the monolith.

There is also a gradual transition from more pragmatic structures to more conceptual. Prismatic forms are typical forms of structures with the use for public, large scale buildings. Following the fragment has the same use and even or smaller in scale, as chthonic architecture become smaller, ready to serve the use of the concept. For chthonic architecture form becomes less strict, non – canonical, very close to the traits of the landscape. Projects are using earthy materials from the region and the final product is deeply attached to the region. Those projects are not common because they are site specific. Similar to that, labyrinth forms are less in number, follow a smaller function scale and are encountered only as pavilions. Similar to chthonic, they are less in number because they need to be unique, part of a completion, sometimes without the necessity for actualization.

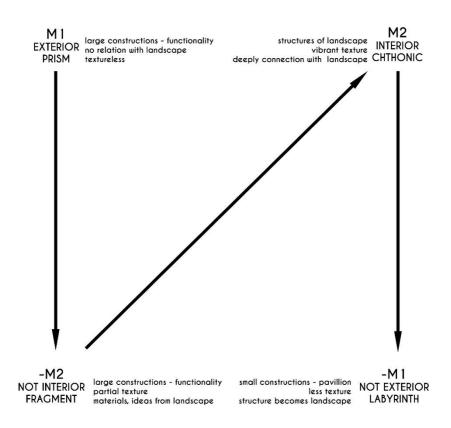


Diagram03: conclusions from the seimiotic diagram (diagram 01,p10), relation of scale from large to small, relation with landscape, texture, rarity from common to less common.

Thus there is also a transition in relation with landscape. Prismatic forms are arrogant, strict form that defy landscape but fragmented facades can give an essence of the region. Chthonic are structures of landscape, deeply detached with the environment and labyrinth are not simply part of the landscape, but landscape by their own. That process is similar with materiality, as the fragment use materials for the region and create texture, defying the texture less presence of prismatic forms. Texture is transcended in chthonic architecture where actual raw materials such as iceberg ice and wooden chunks are used. However there is an error in the diagram as labyrinth are losing texture. In that sense labyrinths are closer in relation with prisms creating a type of circular relation, or square in this case, between the four categories rather than a linear one

There is also a consequential relation of the uncanny existence. As the four groups are divided in the beginning of this essay in two parts, based on the opposition of exterior and interior space, another opposition is created, that of male and female entities. As the exterior categories of prism and fragment are related to male forms, based on their strict exterior appearance, chthonic and labyrinth monoliths are more close to female entities. Non canonical forms and curvatures are related to this result, but the existence of uncanny and more precise the translation of the chthonic to mother's womb and labyrinth to woman body. Moreover the female categories are closer to the fear of death, darkness, return of the dead in contrast with male categories that focus on the sublime feeling and trickery.

Furthermore, looking into the semiotic square we find a range of leveled oppositions. In that prismatic and chthonic forms have contrary relationship. The same happens between their close derivatives (deixies relation), fragment and labyrinth category. The relation contrary means a strong opposition, things that do not match. However this essay finds a strong relationship between labyrinth and fragment in the form of ambiguity. Ambiguity larks into the impulse to complete the form and in the lack of orientation respectively. Thus a relation occurs between the contrary categories, finding similarities between the levels of ambiguity of their deixies relation. Semiotic square can subdivided in a more focused diagram, in which relation between contraries can be found diagonally. In order to resemble from prismatic forms to chthonic architecture, for example, a middle transition step is required, that of fragment. Indeed Prismatic texture less architecture with no relation with landscape can become a part of the region and texture of chthonic architecture through fragmentation, through sporadically add texture, memory of place (diagram).

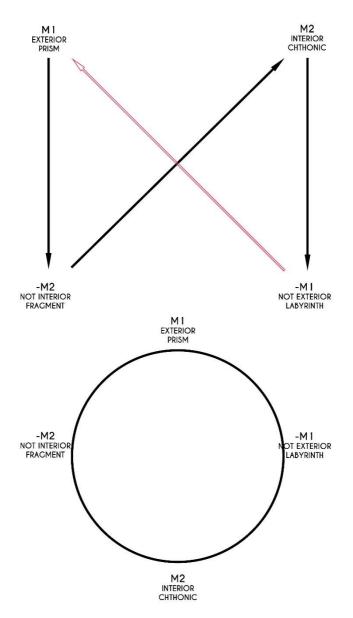


Diagram04 in semiotic diagram similarities are found between prismatic forms and labyrinth. Thus the diagram is read as a circle. (M1, -M1)

To conclude, monolithic architecture is a useful tool for designer, not only to produce forms and shapes, but also to encapsulate meaning and atmosphere in their designs. There is a tendency to return to more archetypical forms of architecture, which almost got lost the past two centuries. However this return is not a step back rather than a part of experimentation and analytical composition that produces more conceptual contemporary structures that also encapsulate meaning.

Of course the subject of the monolithic architecture is vast and needs further analysis. However this kind of analysis resulted in a series of conclusions, assisting in understanding monolithic architecture, its characteristics and functions. This comprehensive tool can be used by architects and designers to produce architectural forms and relate to the subject of monolith. By unraveling the characteristics, both sensorial and architectural, designer coopt monolithic architecture and approach a holistic comprehension of the subject. Now it is their hands to transcend this notion by new designs.

PRISM



pygmalion - galateia statue becomes alive sculture

SUBLIME

Elemental - Angelini C.enter

P. Ellrichshausen - C. Barozzi, Veiga - B Kunstmuseum Chur P. Ellrichshausen – Cien House

Holl S.- New York city library

Bundner

UNC

TRAITS

EXAMPLES

textureless geometry monuments large openings



CHTHONIC

persephone return from the dead return to nature technics materials

DEATH - DARKNESS

mimic rock formations experimental construction texture from earthy materials radicality



mystery

only in the facde inconcistency-first glance odd forms-fixed geometry old technics

torso of belvedere

behind

creation

the

FRAGMENT



P. Zumthor - Bruder Claus chapel O. Eliasson - Icefjord

Wang S. - Ningbo his. museum

OMA - Galleria in Gwanggyo M. Wallinger + Studio Octopi Ensamble studio - musical studies center



LABYRINTH

minotour - theseus monsters in the center get lost

LOST OF ORIENTATION

only interior fixed geometry-not visible textureless surprise in the center



P. Zumthor - Serpentine pavilion writ in water

diaram05: overview of the four categories. Summary of uncanny, architectural characteristics and examples.

Literature:

- Machado, R., el-Khoury, R., Mertens, Detlef, (1995). Monolithic Architecture. 1st edition Munich; New York: Prestel
- 2. Vidler. A., (1992). The Architectural Uncanny: Essays in the Modern Unhomely, 1st edition. The MIT press: London
- Royle. R., (2003). The Uncanny, 1st edition: Routledge: New York
- 4. Zumthor, P., (2006). Thinking Architecture. Basel, Boston, Berlin: Birkhäuser Architecture
- 5. Henley, S., (2017). Redefining Brutalism. Newcastle: RIBA Publishing
- 6. Borden G. P., Meredith M, (2011). Matter: Material Processes in Architectural Production. Abingdon, Oxon: Routledge
- Luckhurst R., (2022). GOTHIC: An illustrated History. 2nd edition. London, England: Thames & Hudson
- 8. Lefas, P., (2014). Architecture: a historical perspective. Berlin: Jovis Verlag
- 9. Schulz C. N (1979). Genius Loci: Towards a Phenomenology of Architecture. Rizzoli
- Foucault, M., (1993). Death and the Labyrinth_ THE WORLD OF RAYMOND ROUSSEL. London, New York: Continuum
- Babiniotis, G., D., (2002). Dictionary of new Greek language. 2nd edition, Athens: Dictionary Center Ltd.

Articles - Essays

 Saval. N., (06.08.2016), Brutalism is Back, [Supplemental material]. SIGN OF THE TIMES, The New York Times Style Magazine, URL:https://www.nytimes.com/2016/10/06/tmagazine/design/brutalist-architecturerevival.html

- Salmon, F., (28.09.2016). Concrete Jungle: Why Brutalist architecture is back in style [Supplemental material]. Culture - Art and Design – Architecture, The Guardian Magazine, https://www.theguardian.com/artanddesign/ 2016/sep/28/grey-pride-brutalist-architectureback-in-style
- Wainwright. O., (26.02.2019). Brutal beauty: how concrete became the ultimate lifestyle concept [Supplemental material]. News – Guardian concrete week, The Guardian Magazine,

https://www.theguardian.com/cities/2019/feb /26/how-concrete-became-the-ultimatelifestyle-concept-brutalism-architecture

- Musical Studies Centre / ENSAMBLE STUDIO" 08 May 2009. ArchDaily.. https://www.archdaily.com/21496/musicalstudies-centre-ensamble-studio
- 5. https://www.phaidon.com/agenda/architect ure/articles/2016/june/22/how-icebergsshape-this-olafur-eliasson-building/
- 6. https://espacodearquitetura.com/noticias/ser pentine-gallery-pavilion-2011-peter-zumthor/
- Schulz, B., (2016). THE MYTHOLOGY OF REALITY. Translated by John M. Bates http://www.brunoschulz.org/mythologization.h tm#_ftn1

<u>Lectures</u>

 Messa D., (April 3, 2018), Ensamble Studio: On/Site - Off/Site. Architecture Spring 2018 Lecture Series <u>https://www.youtube.com/watch?v=9OBpaU</u> oxmsw&ab_channel=SyracuseArchitecture%2 8SyracuseUniversitySchoolofArchitecture%29

Pictures

- <u>https://commons.wikimedia.org/wiki/File:Franc</u> <u>isco de Goya y Lucientes -</u> <u>Witches Sabbath - Google Art Project.jpg</u>
- Jean Leon Gerome: Pygmalion and Galateia met ca.1890 https://nl.wikipedia.org/wiki/Bestand:Pygmalio n and Galatea MET DT1969.jpg
- 3. <u>https://www.archute.com/chile-innovation-</u> centre-alejandro-aravena/
- 4. <u>https://www.museoomero.it/en/opere/the-belvedere-torso/</u>
- 5. <u>https://www.archdaily.com/14623/ningbo-historic-museum-wang-shu-architect</u>
- pic06. A series of pictures showing construction and final result of the quarry in Musical studies center <u>https://arquitecturaviva.com/works/centrode-altos-estudios-musicales-0</u>
- 7. <u>https://commons.wikimedia.org/wiki/File:Frede</u> ric_Leighton_-
 - The Return of Persephone (1891).jpg
- 8. https://studiootherspaces.net/project/ilulissaticefjord-park
- 9. <u>https://lionofchaeronea.tumblr.com/post/175</u> <u>815578903/theseus-and-the-minotaur-aka-the-labyrinth345</u>
- 10. https://commons.wikimedia.org/wiki/File:Plan_ du_Labyrinthe_de_Versailles.JPG
- 11. <u>https://divisare.com/projects/170887-peter-</u> zumthor-helene-binet-oscar-ferrari-serpentinepavilion-2011

