

The fictive and non-fictive origins of Architecture

- Building versus Architecture
- The Problem of this dichotomous understanding

-How can we overcome this dichotomy?

-ritual: with this, the emergence of architecture as a temporal and spatial event

-Archaeological Periods

- Paleolithic Era (35,000 BC to 8,000 BC)

- Mesolithic Era (8,000 BC to 4,500 BC)

- Neolithic Era (4,500 BC to 1,500 BC)

- Pre-Historic Age (no writing)

- Historic Age (BC 4000-3000)

 - In Mesopotamia and Egypt, Hieroglyphs

 - Mesopotamia: clay plate. Egypt: on the surface of the papyrus.

 - Later, hieroglyphic characters develop into signs and a syntactic system

- Archaeological Origin of Architecture

 - New Stone Age (BC 8000-BC 4000)

 - Before the Neolithic Era

 - Life of the people of the Paleolithic Era and the Mesolithic Era was based on hunting and wild edible plants

 - cave as shelter

 - religious rituals in a cave

 - for hunting purposes, temporary shelters were constructed in hunting sites

-Archaeological Origin of Architecture

- During the Neolithic Era, the Glacier Period ended and climate became mild
- People came out of the cave
- Agriculture instead of migrating to hunt animals and acquire other food sources

- Before the Neolithic Era
 - Terra Amata (BC 400,000)
 - Lascaux Cave (BC 17,000)
- During the Neolithic Era
 - Township of Jericho

Prehistoric hut, Terra Amata, France

-at a cliff road to Monte Carlo in Southern France

-Example of the nomadic life of the period before the New Stone Age

-example of the pre-Historic Age , too

-This could have been a hunting hut

-main materials and structure: branches or saplings put together as a palisade.

Braced along the rim and fixed by a ring of stones on the ground.

-The long axis of the hut has two large posts to help support the roof

-plan of the hut: oval, size: about 8 to 15 meters in length and 4 to 6 meters in width

-the hut was left for natural decomposition, and was built anew when a new hunting season comes

-shelter not for a single individual, but for a community, or a band of hunters. About 15 people for a limited period of hunting forays

The hearth at one side of the hut

-Archeological evidence of the hearth goes back more than 500,000 years

-Origin of fire

-natural science: discovered accidentally when a lightning set fire on the forest

-mythology: fire was stolen from Zeus by Prometheus for human race

-Greek thinking: according to Plato's Timaeus, the sensible world of becoming, or the sensible things, are created out of the combination of four basic elements (fire, earth, air, water)

-Fire: source of transformation

Emission of energy.

Intensity of heat.

Dissolution of matter into smoke and ashes.

The metaphor of birth and death.

The metaphor of transitoriness

Lascaux cave, hall of bulls

Prehistoric cave, Lascaux, France

-the most famous cave art of the Paleolithic Era

-Discovered in 1940

-believed that this cave was not for habitation, but people visited it briefly for artistic or ritualistic activity

-Murals depicted various animals including reindeer, deer, bison, bull, and horse

-Murals were drawn with charcoal compressed into bone tubes with a mixture of ground minerals

-In terms of representational technique, anamorphosis has been employed in the cave.

-Anamorphosis: a sophisticated technique that deliberately distorts “a figure so that it looks normal (next slide)

-By the way, why would the men draw the animals on the ceiling of the cave?

Lascaux cave, axial gallery of bulls
(technique of anamorphosis)

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-the most fundamental dynamic of life for the hunting people

-fight of life and death. Matter of survival and death

-killing the animals, yet the availability of animals is also fundamental for the sustaining of life, leading them to offer a ritual

-From this perspective, the section of the cave called “The Shaft of the Dead Man” is the most interesting part.

Lascaux cave, Shaft of dead man, detail

“The beast is a big rounded bison. The spear is lodged in its strong body; its entrails are coming out. The hunter responsible is himself fatally hurt. He has fallen backwards, gored by the dread horns.” (Kostof, p. 25)

- A bird-headed man (This man is the only human figure depicted in the cave mural)
- the man has an erect phallus and is falling back in front of a bison.
- a stick with a bird on its top
- the erect phallus and the stick with the bird could be the symbols of regeneration

- depicting confrontation between man and beast, tragic fate between the two.
- Terrifying power of bestiality, its untamed spirit of wilderness, to be courageous enough to confront, acknowledgment of the insufficiency of the human power and the invitation of the trans-human power to survive, longing for abundance
- according to kostof, “paradoxical reality” - “the more animals he managed to kill, the fewer of them there were left to kill.”
- “the paradox of life and death, of fertility and extinction”
- “the painted image is hope and expiation in one”
- ”the hope of drawing the animal to the kill, and expiation for having to kill it.”

Significance of Ritual

- Ritual is fundamentally associated with the weakness of the human being before nature, his being caught between mortality and immortality, finitude and infinity, ephemerality and permanence.
- Seeking the significance of life by situating life in reference to the outside world
- Cosmogonic situation of himself or herself, situation of oneself into the ever-returning cyclical operation of the universe.
- This cyclic returning of seasons and moments were blessings—anticipation of the same in the future particularly in the context of agricultural society that emerged during the New Stone Age.

Significance of Ritual

-Reconciliation with the external world and propitiation of the external world in the expectation of its orderly manifestation.

“it is difficult for us too conceive a personified, willful, and therefore totally unpredictable external reality, identical and continuous with the self, needing constant propitiation through human actions to secure the survival of the world from one instant to the next. Nevertheless, this is precisely the context of ritual.”

“ritual enables primitive man to propitiate the external world and dwell in a totality”
(both passages by Alberto Perez-Gomez)

Significance of Ritual

-Ritual occurs at the level of the collective.

-People hunted for animals together, cultivated the field together.

--When they build the stage for a ritual or the stage where they could be united with the movement of the cosmos, they built it together, (they erected megalithic stones together.)

-The individual may perform a ritual as a way of situating himself in the cosmos.

--But, “a group may only come to possess a space through more complex startegems. . . group action requires repetition, and repetition must be rhythmic.”

Significance of Ritual

- “the rhythmic repetition of communal action inevitably appears to be ritual” (Joseph Rykwert, *Necessity of Artifice*).
- It gives rise rhythmic, well-ordered, choreographic and acoustical organization of the movements to be made by the participating individuals. (dancing, chanting, singing)

-Giant Stone Structures (in general, Neolithic Era)

-Dolmen

-Passage Grave (or gallery Grave)

-Menhir

Dolmen, Locmariaquer, France, 3rd mill. BC

Gallery grave, Esse, France, 3rd mill. BC

Gallery Grave, New Orange Ireland, 3rd mill.BC

Menhir and Stone Alignment, Carnac, France, 3rd mill.BC

Richard Long, A Line in Japan, Mt. Fuji, 1979

Richard Long, a Line in Scotland, Cul Mor, 1981

- This piece of one of more than 3000 megaliths of local granite in Carnac, France.
- The megalithic stones are lined up for several miles in ten to thirteen rows.
- a giant stone pillar, verticality, standing up against gravity, in contrast with the horizontal topography, and towards the sky (primary structure of the world: verticality brings the sky, in horizontality).
- The human being on the earth and under the sky)
- Stone endures, almost forever.
- That is the reason why it was picked up by human beings of mortality.

-Kostof explains this in conjunction with the biblical story of Jacobs: a pillar as God's house.

-The pillar has no space in it, but is still considered as the dwelling place of God's inhabitation (the differentiation between the empty space and material container is the 19th century notion. In the twentieth century – Japanese influence)

Menhir, Carnac, France

Southern England, with inset of Stonehenge vicinity

Salisbury, United Kingdom, Stonehenge, ca. 2750-1500 BC

Stonehenge, midsummer sunrise over Heel Stone

- Material: Sarsen stone (a kind of sand stone) and Bluestone
- stone pieces were brought from a quarry 25 miles away from the site
- each stone piece weighs 45 to 50 tons
- stone were sculpted in such a way that it becomes thinner
- sometimes the middle part of the stone bulges out (entasis in Greek architecture)
- lintels are also slightly curved
- outer ring: 30 gigantic sandstones. Sarsen stone laid out in a circular format. Stones support lintels
- Inside: five pairs of U-shaped structure (horseshoe) of Sarsen stone opening to the East

-Heel stone: distanced from the outer ring.
Placed in such a way that, looking towards
the East from the inside of the U-Shped
ring, the sun arises above the heel stone on
the day of the summer solstice

-Our lack of astronomical knowledge makes it difficult for us to understand clearly how the Stonehenge responded to the movement of the Sun, the Earth and the moon.

-However, we can still say that Stonehenge was a kind of device through which the choreographic movement of the cosmos could be perceived.

-It was choreographic because to read the cyclic movement of the moon and the sun through the device would let you know to where you can put out your next step, when to sow seeds, when to plant the seedlings, to give fertilizers, when to wait, when to harvest.

-Through this reading, there emerges an order, not a static one, but in the form of ever-changing in the cyclical fashion.

-Order emerges from chaos, or meaningless concatenation of changes through the device.

-We become part of the cosmic movement. -
The distance between man and cosmos is mediated through this device

-We need device because with bare eye, we cannot notice larger and more secretive cycles of cosmos. We cannot see everything. We need a microscope to see the realm of microcosm, we need a telescope to see the planet in the distance of many light years. We can notice the day and night cycle, maybe a month, maybe a year, but the complexity of the movements of the sun, the earth, and the moon is always hidden in a larger secretive pattern of the cycle. 100 yrs, 1000 yrs, 10000 yrs, (eschatological) Stonehenge is a geometrical and mathematical device through which one can understand the movement of the cosmos and its order.

Fictive Origins of Architecture

Fictive Origins of Architecture

-fiction not in the sense of fake, but in the sense of possibility, plausibility

-the role of fiction: to redescribe reality, to augment reality, to uncover the possibilities of reality

-a fictive construction is experimental, subversive against the conventional

-”*epoche* of the real,” so that “new ideas, new values, new ways of being-in-the-world” may be ventured (Paul Ricoeur, “The Function of Fiction in Shaping Reality,” in *Ricoeur Readers*)

-return to a fictive origin

-We return to the primitive whenever there is some dissatisfaction in the contemporary situation.

-It is, according to Joseph Rykwert, *On Adam’s House in Paradise*, a human constant which recurs over and over again when a period feels that it is lost.

Vitruvius (born c. 80–70 BC, died after c. 15 BC)

The origins of architecture according to Vitruvius

1. “The men of old were born like the wild beasts, in woods, caves, and groves, and lived on savage fare. As time went on, the thickly crowded trees in a certain place, tossed by storms and winds, and rubbing their branches against one another, caught fire, and so the inhabitants of the place were put to flight, being terrified by the furious flame. After it subsided, they drew near, and observing that they were very comfortable standing before the warm fire, they put on logs and, while thus keeping it alive, brought up other people to it, showing them by signs how much comfort they got from it. In that gathering of men, at a time when utterance of sound was purely individual, from daily habits they fixed upon articulate words just as these had happened to come; then, from indicating by name things in common use, the result was that in this chance way they began to talk, and thus originated conversation with one another.” (Book 2, Ch. 1)

2. “Therefore it was the discovery of fire that originally gave rise to the coming together of men, to the deliberative assembly, and to social intercourse. And so, as they kept coming together in greater numbers into one place, finding themselves naturally gifted beyond the other animals in not being obliged to walk with faces to the ground, but upright and gazing upon the splendor of the starry firmament, and also in being able to do with ease whatever they chose with their hands and fingers, they began in that first assembly to construct shelters. Some made them of green boughs, others dug caves on mountain sides, and some, in imitation of the nests of swallows and the way they built, made places of refuge out of mud and twigs. Next, by observing the shelters of others and adding new details to their own inceptions, they constructed better and better kinds of huts as time went on.” (Book 2, Ch. 2)

3. “And since they were of an imitative and teachable nature, they would daily point out to each other the results of their building, boasting of the novelties in it; and thus, with their natural gifts sharpened by emulation, their standards improved daily. At first they set up forked stakes connected by twigs and covered these walls with mud. Others made walls of lumps of dried mud, covering them with reeds and leaves to keep out the rain and the heat. Finding that such roofs could not stand the rain during the storms of winter, they built them with peaks daubed with mud, the roofs sloping and projecting so as to carry off the rain water.”

(Book2, Ch. 3)

Vitruvius' story talks about a couple of interesting things about the beginning of architecture

- It relates the origin of architecture to the discovery of fire

- It talks about the beginning of communication, the formation of language

- so fire, first, then to language, then to architecture

- It talks about primary structure of the primitive hut

- the collective origin of architecture

Marc Antoine Laugier (1713-1769)

Marc Antoine Laugier (1713-1769), the primitive Hut, from
Essai sur l'architecture, 1753

The Oval Salon
Hotel de Soubise
(1737-1740)

Germain Boffrand
Paris, France

-Unadorned rational construction

-Functional and ethical

Purification of architecture by rediscovering the essential parts of the composition: the free-standing columns, the horizontal lintel and the rude pediment

-Laugier's system, despite its innovative nature, reduces the architectural origin to the matter of formal simplicity and functional clarity.

-Disregards the fire that led to the formation of language, convention and other cultural collective acts including architecture.

Gottfried Semper (1803 -1879)

-*Der Stil*, Caribbean hut

Gottfried Semper, Der Stil, Caribbean hut

- A Caribbean bamboo hut Semper saw this at the great exhibition of 1851
- He reproduced a diagrammatic sketch.
- In a way, it is not an imaginary construction, but a highly realistic instance of building in timber
- The hut is made up of four radical, irreducible elements: the hearth, which is the moral foundation of settlement; the walls; the mound or terrace; and the roof.
- The walls were composed the basic tectonic structure and covering.
- This covering was achieved usually first by using wickerwork and later carpets.
- This moment of covering was the most essential human act of delimiting an enclosed space.
- The cover, not the hidden structure, was more essential.

Gottfried Semper(1803-1879), Der Stil, examples of knots

Gottfried Semper, *Der Stil*, 1-6 Egyptian ornaments
on walls and ceilings of graves, 7 Scandinavian
broider patterns

Symbolism of weaving

- Fiber leads to thread and twine, thread and twine suggest knots.
- The knot is 'perhaps the oldest technical symbol and the expression of the first cosmogonic ideas which arose among the peoples.'
- Joinery through weaving is the origin of work of art, including architecture
 - Pattern-making comes later when weaving (and dyeing) is realized
 - The justification for these ideas came from the primitive hut.
- To Semper, the primitive was not in the stone age, but his contemporary, yet those people who still maintain purity uncontaminated by civilization

Le Corbusier (1887-1965), Towards a new Architecture (1923)

Le Corbusier, from *Towards a New Architecture*, p. 70, p.71

- Geometrical clarity in layout
- Volumetric clarity in the body of the hut
- repetition of elements
- Axiality
- His primitive man was a rational man (Le Corbusier of the 1920s)
- Justification of the direction of his own architecture of the 1920s