Origin of Architecture

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Abstract - One of the most basic needs of Homo sapiens was to protect itself from the physical dangers of the natural environment. In order to achieve that, Humans used the natural shelters such as caves and rock formations as their first form of architecture. However, it was not only the physical need that was satisfied with this architecture, another essential need was also satiated, which was the need to own a territory, the process of **territorialization**, a need seen in various animal species. Since humans were social animals, caves were not inhabited by single human but group of humans and even various families coinhabited the caves and marked those as their territories. Marking the territory also involves the process of **personalization** and individualization. The territories were marked not only physically by creating boundaries using rocks and fire but also through **self-expression** such as paintings and drawings done on the surfaces of the caves.

I. INTRODUCTION

One of the most basic needs of Homo sapiens was to protect itself from the physical dangers of the natural environment. In order to achieve that, Humans used the natural shelters such as caves and rock formations as their first form of architecture. However, it was not only the physical need that was satisfied with this architecture, another essential need was also satiated, which was the need to own a territory, the process of **territorialization**, a need seen in various animal species. Since humans were social animals, caves were not inhabited by single human but group of humans and even various families coinhabited the caves and marked those as their territories. Marking the territory also involves the process of **personalization** and individualization. The territories were marked not only physically by creating boundaries using rocks and fire but also through **self-expression** such as paintings and drawings done on the surfaces of the caves.

II. ARCHITECTURE AND THE POWER

As the man started to shift from hunting to agriculture because of the possible physical harm during the hunting, the shift in form of architecture was also visible. Rocky landscapes and land formations which housed the *Homo sapiens* for long, was now being changed to the fertile flat lands which could support agriculture. This shift also meant the transformation of architecture; Humans started using stones for constructing their own shelters. Various tools helped them to use wood and clay bricks also eventually to create their own dwelling units near the fertile flat lands suitable for agriculture. It must be noted at this point that various geographical areas did not allow the same which led to developments of variety of architecture around the world. However, one transformation which was common during the Neolithic era was that that the dependency on nature to give a shelter was lesser and the need to create one's own architecture was higher, one can also call that need, an attempt to mark out one's own territory from mother nature. Man started to modify the natural environment much more than before during this era, whether to produce the food or for the shelter.

Another important thing the humans began doing during the Neolithic era was to start finding the *Order in the Chaos*. Here, one must understand that it became important for man to differentiate between what was completely natural and what was man-made. Whatever was man-made was more ordered or organized as per the suitability of the need for which it was made for, as compared to the natural elements. Development and town planning became more and more about bringing the organization and order in the existing chaos of nature.

As stated earlier, various geographical locations gave mankind the different materials for construction and the materiality itself led to the different development of different civilizations such as the stark difference between coastal civilizations from a desert originated civilization. Climate and geographical landforms became the following dominating factors in the development of architecture after the advent of civilizations. As the society became more and more consolidated during the times of civilizations, the need for the structure in the built environment and in the society, itself became more prominent. Here, it must be understood that this structure in the society, whether hierarchical or democratic, also started reflecting in the ways the town were planned and the architecture was built. One of the examples could be the Colosseum in *Rome*, the amphitheatre shows the classification of seating according the class system existing in the society of Rome in those times. A major problematic idea which must be understood here is the word civilization itself as it had major implications in the world later on. The word "civilization" is defined as *a state of human society that is very developed and organized* as per the Oxford dictionary. One can see various ambiguities here in the definition itself as the definition of developed is problematic as it is subjective. The tribal areas which were not part of any civilizations were labelled as "uncivilized". Despite the tribal areas having indigenous knowledge, their knowledge was not considered as modern or was called as undeveloped, it led them to ultimately either coercing them to accept the civilization's culture or destroying them if they resisted. Colonialization is a great example of the above-mentioned process rendering many small tribes completely destroyed or modified.

As the territories of the civilizations started expanding, another issue in the architecture came into the play, the Sense of Ownership and *the Power*. While sense of ownership was always there since the territorialization was in place, it became more prominent during the times of civilizations, when the expansion of territory also became important and the sense of ownership of land also added to the sense of power in the owners. The sense of power also reflects in the architecture and the built environment, such as, in the height or the width of expanse of land. Such displays of power in architecture became more and more common with advent of different cultures and religion.

III. IDENTITY CRISIS

After the times of civilizations as religions became more and more strong, various groups started forming throughout the world which used architecture as symbols to represent their power and their *identity*. Architecture and built environment became the representations of the people who were building them, their ideologies, their thought processes and most importantly it became the reflection of their identities. Some of the buildings became explicitly symbolizing an idea such the triumphal arches to commemorate the victory of one group over the other while some reflected the idea more implicitly such as the tall gothic churches belittling the human with their high vertical dimension stating the power that church men had in those times.

The issue of identity in architecture has been studied by various authors and architects and can be explained through various examples. One must understand that the identity of a person is deeply intertwined with his built environment. Whether it is personal identity or social identity, a man considers the external built environment a source of reaffirming his own identity. As the book *Identity by Design* explains this process though the example of the old bridge of *Mostar*, wherein people said, on the account of it being broken during a war, that they felt a part of their own body was broken when it broke. This also suggests that that the permanence that the architecture has; it also helps people to hold on to some tangible feature in that place that they can identify with. However, the identity in architecture can also lead to a problematic issue, which is the rigidity in identity. When one becomes too rigid with a particular identity, then one starts defining the "us" and then the rest become the "others". This can lead to problematic ideologies such as Fascism where one's identity becomes superior than the others. Architecture also gives one the rootedness that one requires to associate oneself with the built environment. One not only associates oneself with the building but also develops relationship with the events happened around and inside it which is another way of reaffirming one's own identity.

Since one's identity is reinforced by his/her built environment, one can also argue that changing that person's built environment would also transform his identity, this has also been seen in various examples throughout the world, whether for good or worse. Carrying forward the same example which was mentioned earlier, the old bridge of Mostar, when it was broken; people initially became nostalgic and felt that a part of their selves was uprooted. This shows two important points, first that the people who attacked, also chose to attack a piece of built environment which was a symbol of that culture in order to uproot their roots and second that people, in absence of that bridge felt unbearable void that after the war retreated, they wanted a bridge to be constructed to which they can connect to again.

This same analogy was very clearly seen and documented by various researchers in the event of plane crash in *World Trade Centre*, wherein the building itself became the symbol of American Power and Dominance, and to undo that and break the existing hegemony of the US, the terrorists chose that building to literally break the backbone of power of the US in the world. Unfortunately, it did succeed in doing so. But left the built environment designers with the question how the identity of a building can also make it an insecure or a vulnerable built form. Another very unfortunate example is that of *Pruit-Igoe Complex*, where the authorities built a high-rise housing complex for the *St. Louis*'s neighbourhood residents, where the people were earlier living in slums. As the sudden shift in built environment was introduced to them, a new identity was not immediately assimilated. It started become more like slums eventually, people were segregated more from the rest of neighbourhoods leading to more vandalization and crime. It ultimately led the government to break the *Pruitt-Igoe* complex. Many people questioned that an imposition of new identity without considering the existing identity of the people was a right move or a careless move. The question rose after this event was that whether the job of an architect is only to design a building or creating the environment which reflects the culture of the users.

IV. ANTHROPOMORPHISM

One can see here that the need of architecture is not only limited to shelter, protection and comfort; it goes much beyond than that, which consists even building one's own identity through the built environment. The need for establish rootedness is an important need too and is established by the authors of The Unbearable lightness of the being where Milan Kundera exemplifies that the freedom from roots can also be detrimental as one has nothing to hold on to and that too can be unbearable. Carl Jung, a famous psychoanalyst also explained this phenomenon, through his famous quote, a house was a symbol of building a self, can explain a variety of points about the origin of architecture. The first most important point was that that the self translates in the built environment where one resides. To explain this, one of the best examples is the *House of Tamberma* tribe. House forms do help clarify human beliefs and psychology by defining human beings. *Susanne Preston Blier* carried out a study on Africa's Tamberma and its striking architecture. She found that anthropomorphism is one of the most central and important feature of the Tamberma house. Though anthropomorphism in architecture is almost universal, but in Tamberma, *"Houses are Human".* Therefore, anthropomorphism is the main concern of the builders. In a variety of ways, the Tamberma suggest that their houses are human. The fabric of the house, for example, is compared to that of the human body: the earthen core is its flesh, the numerous pebbles are its bones, and the smooth clay plaster surface is its skin. Not only the structure but all the components of the house are human parts which perform the same function as they do in our body. The tiny facade windows, for example, represent the house's eyes. They are called in Tamberma language, "the eyes of the wall". The front doorway is compared to the human mouth, the means by which everything enters the interior. Just inside the front entrance are found stones used for grinding grain. Tooth-like in shape and white in colour, these function as incisors to "chew" the millet to fine white flour. Some other striking features are the penis and the anus. The penis is the drain pipe from where it "urinates". Another pottery drainage pipe at the centre back is given the name "the anus". Even the daily rituals and activities reaffirm the human identity. For example, when a man joins his wife in her bedroom each night, he figuratively enters into the vagina and womb of the house to provide the house with future children. This "womb" also plays an important role in initiation rites when *Lifoni* novices are made to emerge from these chamber as newly born members of the association. The house penis and anus accordingly are used to direct potentially damaging water outside the house both during rain storms and during the daily terrace bath. They even dress and decorate their houses as humans. The delicate markings ornamenting the house facades, for example, are designed and incised by Tamberma women to recall their own body scarification patterns. They not only concentrated at the physical aspects, they also related their psychological balance and soul related matters to the human houses.

Tamberma architecture also plays a central role in various forms of traditional therapy which are undertaken as a means of restoring the patient's loss of identity and inner balance. In this way, she proves that house forms help clarify human beliefs and psychology by defining human beings. Another easier to understand examples are: an organized personality would organize their built environment and a chaotic or more creatively free person would bring that same idea to their environment, one can say that the self is expressed in one's built environment.

This same idea is shown at society level too, at country level too and at variety of scales. Carrying the same idea forward, even the built environment is the extension of the ideology of the society. This can be seen in various examples around the world. One such example is Las Vegas, when the Las Vegas was planned in amidst of Nevada desert, they did not have much to take from the context culturally. They planned for a Sin city, which was not planned before in the world, where the laws were slightly flexible than other states of the US and it reflected in the built environment too. With multiple casinos, bars and such buildings, sin city started taking its shape. Hotels that were planned there took inspiration from the wonders of the world, a place where everything was allowed and was open to the world to experience city of sins.

V. MARGINALIZATION

Built environment also reflects the ideology of the people of that place. The built environment of a place is shaped and enforced by the political and social structure of that place. Built environment is, sometimes, planned according to the social ideology existing in the culture of that place such as planning of more social gathering places in a village or town which believes in sociability while sometimes it develops almost organically there in form of a node or a marketplace. Political factors, too, reflect in the built environment of a place, either in form of a hierarchical planning of a place or a democratic distribution of land. This can be illustrated through variety of examples throughout the world such as the *Bordeaux Law Courts, France* which indicates their idea of democracy or the *Enabling Village* in Singapore, which exemplifies the inclusive architecture by providing access to all kinds of users such as the senior citizens and the disabled people and all the genders.

Another example of this is the **Bundestag, the German Parliament** which has the glass dome which is accessible by the public from where the people can view the assembly happening beneath them literally stating that the government lies beneath the people showing the spirit of democracy. This reflection of social and political factors in the built environment can also be seen in India. One such example is non-inclusivity of various groups while planning for built environment such as the transgender groups or the disabled people. Built environment not only reflects the socio-political ideology of a place but also how it marginalizes a certain section of the society. Various such examples of marginalization exist in the world and one section of the society, which faces it, in many countries including India, are the Persons with Disabilities (PWDs). While, is has been considered a global issue by the UN, various developing countries like India are still to reflect the much required inclusivity of PWDs socially, politically and even legally and such ideology translates blatantly into the built environment of many cities in India. Various cities in India are not accessible for persons with Disabilities and the underlying force behind it is the socio-political background around the issue and perception of disabilities.

It, then, becomes of paramount importance to study the social, political and even legal aspects around this issue before one can attempt to improve the situation of built environment. It must be understood that the built environment can actually reinforce a certain identity to an individual which may also get embedded in that individual which can have a positive or negative impact on that person's psyche.

This can be well illustrated with an example of *Prisons*. When one talks about a place like a prison, the underlying ideology becomes really important as it gets reflected in the layout of the prison such as the punitive ideology results in something like Linear and rigid layout while reformative prisons become more like housing clusters. While the legal punishment may decide the term of punishment, the goal of incarceration should be rehabilitation and if one has to be rehabilitated, then the punitive environment might not work for long term, hence the ideology has to be worked upon, so that one can design according to that.

One must understand that if the idea behind design is not worked out beforehand then design will never reflect what it needs to in the built environment. Since architecture and built environment can present so many complex ideas such territorialization, identity, sense of power, ownership and much more. It becomes so much important for all architects to understand the implications that architecture can have on the life of the people. Hence, every aspect must be taken into consideration before designing the buildings and built environment.

VI. CONCLUSIONS

Architecture, not only affects the life of the people but the natural environment too, which houses it, so the relation that architecture should have with its natural habitat or environment must be considered before designing the buildings and the cities. Another very important thing that must be considered before planning for a building or city is the culture of the place and also if the place can be flexible enough to incorporate the multiplicity of culture.

Transcultural inclusivity has been a principle advocated by many authors including *Ian Bentley* of *Identity By Design* who states that the place should allow for multiple cultures to part of it as it decreases the chances of conflict and also gives people the scope to create multiple identities rather than having one rigid identity. It also adds to the richness of the place. Overall, one must understand that origin of architecture is as complex as the human brain as it is the by-product of the human brain and as the human race discovers more complexities, a more informed layer keeps getting added to the discipline of architecture.

VII. REFERENCES

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