

R-evolution of Architecture

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1. Introduction

As we embark on a journey for new homes in the new worlds to lay solid foundations, we should consider not only the survival of frontiers but also well-being of those to live in zero gravity.

As a versatile science, architecture encompasses abstract human needs as well.

On our new different direction in the course of the Homo sapiens evolution, we can do this with designs addressing both our needs and senses. Well-being of humans can be achieved by creating environments supporting the cognitive and social stages in the evolution process.

Space stations are going through their own evolution process. Any step taken can serve as a reference for further attempts.

When studying the history of architecture, window designing is discussed in a later phase, which is the case for building a spaceship as well.

We lean on the places we live both physically and metaphorically.

The feeling of belonging is essential here, entailing trans-humanism, which is significant since the environment therein is like a dress comfortable enough to fit in, meeting needs without any burden.

Utilizing the advent of technology, we can create moods and atmospheres to regulate night and day cycles, thus we can turn claustrophobic places into cosy or dream-like places.

Senses provoke a psychological sensation going beyond cultural codes as they are rooted within consciousness, which allows designers to create a mood within a space that tells a story and evokes an emotional impact.

Colour, amount of light, sound and odour are not superficial. As much as intangible, they are real and powerful tools with a physical presence.

Tapping into induction, we can solve a whole system based on a part thereof. Therefore, fractal designs may not yield good results unless used correctly in terms of design although they are functional, which makes geometric arrangement critical.

If we start to examine space stations – we need to understand how we get there.

When we took vertical section of history we see architecture, because architecture is what remains from humans.

After the industrial era, the use of metal and technical advantages of it reflected to architecture.

Joseph Paxton who is a gardener and an entrepreneur, built Lily's house (green house) in Queen Victoria' era, he developed the space cage inspiring from the pattern of a Lily. The pattern of a leaf is fractal design. And it can solve modularity problem because by understanding the design principle of the system you can solve the entire system.

Flexible and changeable means; thinking about the recycling process of mechanical parts from the very beginning of design. Development of production processes is such arrangement that the product will turn into another product after use.

The open plan is also an option where reshaping can be necessary.

The combination detail of these metals adds structural flexibility to the structure that enables modularity.

By contemporary means, the nodes and connection detail are the ornament in architecture.

If we think more thoroughly about the change of space, the module land on the surface of planet can win another function after landing.

You most probably start to compare,

One is stone other is white painted, the other is metal
Let's start from the first one –Göbeklitepe
How it meets the ground.
It almost seems to be emerging from the earth or the metaphor of mountain.

When we came, Mies Van der Rohe's Farnsworth House,
It is lifted off the earth. It is kind of perches on the earth and still conscious of the landscape.

When we came to space stations architecture, they free from the earth surface, elevated from the ground and conceptualized.

SPACE STATIONS

Due to the technical importance of the subject, Architectural part is still very primitive. But it is going to arise from its restrictions.

The important thing is to understand what you can do and what you can't do and be creative in this restricted zone.

When we compare Skylab, Mir, and ISS

They are going through their own evolution process.

Anything that is done is a reference for the subsequent ones.

Short Summary

When we took vertical section of history we see architecture. Architecture appears in history as a representation of culture that moves and changes through time from temple to spacecraft