T3 01.1 Architecture: Assignment 01

Spatial Implications of Structure - A Visual Essay

Mary Beth Robbins, January 16, 2018

Expressive Space-Making [Hansjoerg Goeritz lecture]

Paradise Room, Danteum

Creating space, Architecture - same thing, right? The essence of Architecture is "the applied art of placemaking and spacemaking." And creating space has no scale, it can be as small as a room to as large as a city. Depending on the structure of a city, space is needed more than others depending on how dense the city is. But creating space is not just clearing a room, but space can be expressive. For example, the Danteum by Guiseppe Terragni has levels that represent the 3 realms, Paradise, Puragtory, and Inferno. The Paradise Room expresses space with a forest of columns, while the Inferno has columns breaking down smaller (Golden Ratio) with columns holding concrete slabs. Both these rooms are expressive and representive of Paradise and Inferno. When it comes to designing space, context is important. "How does this space relate to the area around it? How does the space respond to its environment?" This is crucial to even the simplest problem of "where is the front door?" The Art Center College by Craig Ellwood responds to its environment quite well, the bracing and framing of the building creates and overpass and cantilevers over a dip in the terrain. This allows the space of the building to be continuous, and the building to be responsive to it's surroundings.

Categorical Concept-Making [Stereotomics - Tectonics, Fundamental - Advanced]

Pompidou Centre

The essence of Architecture is simply "the applied art of placemaking and spacemaking with matter to pupose." Meaning, we as designers are creating space. "Nothing has to be invented but rather to be rediscovered." As designers, we are manipulative to other's work. Some say we are "stealing" ideas, when we are transforming them to fit our own. When it comes to comparing stereotomics and tectonics, it seems that one is far more preferred than the other. It has become this comparison of style, preference, or even personality. There could be arguments of which one is more practical or more advanced in this world. Personally, I admire the frame or the skeleton of the building. I like architecture to feel light and spacious. A stereonomic style feels too heavy. I know I am not the only one who enjoys the "art of joining". Semper's 4 basic elements of architecture include: 1. Earthwork 2. Hearth 3. Framework/roof 4. lightweight enclosing membrane. With this list, we know that a building cannot stand without elements of both stereonomic and tectonic. As the essay further explains, the tectonic is the framework "the sky", and the stereonomic is the foundation, the masses, the "Earthwork". While as designers we may lean to one preference to another when it comes to tectonic and stereonomic building, but we simply cannot build without essence of each one.

Iconic De-Materialization [Mie's Grinding at the Wall]

Farnsworth House

"Consider the momentous event, when the walls parted and the column became". This Louis Kahn quote relates deeply to Ludwig Mies van der Rohe's accomplishments on removing the wall. I admire Mies van der Rohe's study and hardwork on this discovery. As said my paragraph above about the first essay, designers are spacemakers, and with Mie's discovery, he became a master designer. The study took years, looking a 4 manifestos that were over a decade apart. Mie's looks at skin and skeleton, cubes on planes, composition of planes, and glass exposure with brick enclosure. The German pavilion gives the illusion of walls, when it is steel columns wrapped in stone cladding. Mie's believed strongly that "God is in the detail"., and was longing to expand space beyond the wall. In the Courtyard houses, Mies finally removes the walls. This created a beautiful grand openness, but caused severe structural issues. It took complex welding strategies to create a framework that had the essence of no walls. This framework holding planes of slabs (like the Farnsworth House), creates the purest expression of tectonics and stereonomics working together. After over a decade, Mies dematerialized the wall, creating a space that has "elegant nothingness".

Sources/Notes

[1] Paradise Room, Danteum, Photo: www.danteumfoundation.org
[2] Pompidu Centre, Photo: www.raredelights.com
[3] Farnsworth House, Photo: Mary Beth Robbins