

William Turner and Sou Fujimoto: Solidlessness!

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Abstract.

The architects of the revolution have set light and colour to be defined by accurate rules of geometry. Solid and void coexisting in the world of sharp shapes and volumes arrived at the centre of architectural imagination. The night stars of Newton's Cenotaph would not twinkle but instead they would display the sharpness of the laws of geometry and arithmetic and yet the internal light fires of Boullée's Metropole (1781-1782) and Museum (1783) seemed week to challenge the accuracy of the lines that placed them in space and time. Solid shapes and colours appeared to be the distinct mark of the new scientific era that was to rise firmly. Yet the universe of a rational mind was soon challenged by the eyes that see, by the body that feels the world beyond geometric-mathematical frameworks: frames of reference that were nothing more but confined ways of abstract representation.

William Turner shook the solidity of solid and void such as Mount Tambora shook the solidity of Earth in 1815. The fresh world of shapes such as we experience them could not be hidden behind geometric-mathematical formulas and world representation to be accepted as such should then be invented afresh. Yet such challenge seemed hard at the core of architecture because even Modern Architecture seemed to prefer accurately defined volumes and shapes. Post-modern architecture proceeded likewise and only developments on structural glass or Plexiglas like materials would make architects imagine other shapes that would question appearance of solidity afresh.

Sou Fujimoto's constructive 3D matrix cloud that gave life to 2013 Serpentine Gallery Pavilion seemed to display the important characteristics that Turner's world brought into the art world. Embodying the world we live in and fashion as well as presenting the world as representation of *being-in-the-world*. Turner-Fujimoto's *massness-colourness-solidlessness* may thus rise at the core of contemporary art production and theory of art.

TERRA FIRMA demands solidity. Buildings are solid and stand on solid places. We regard matter as potential building material, but that matter is tangible by its solidity. Solid-void seemed to oppose, to define mutually, and both can be understood as construction materials. Space and space boundaries seem to give architectural understanding a straight forward clarity. We may say that solid and void became self evident and effective in describing architectural composition and the experience of architecture. Even a ship opposes its solidity to the liquid water in which it navigates. And if we take Turner's 'Wreck of a Transport Ship' (c.1810), we see the solidity of the ship loosening and breaking into the immensity of the sea.

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But solidity would be challenged by gravity, space and time. Isaac Newton (1643-1727) and Gottfried Wilhelm Leibniz (1646-1716) brought space and time to the centre of a philosophic discussion that would have the acme on the relativity formulated by Albert Einstein (1879-1955). Gravity made space dense. That void, somewhere there into the core of outer space lives because gravity lives there, the same gravity that enables my walk on streets, fields and mountains. The unseen, the colour free emptiness builds the universe, builds life. And to this basic building block of the universe, architecture proceeds by overlapping solid bricks to confine «empty» spaces.

Being gravity so basically important, we may not feel weird that we need a simply three dimensional reasoning, an Euclidean mind, to build accurately long lasting buildings.

Nonetheless, the challenge towards solidity was, somehow, of great importance in the era that brought forth mechanisation and the transparency of iron-steel structures that opened the originality of 19th and 20th century architecture. Such structures despite the transparency they would convey would not abandon the solidity of the materials they were made of to oppose to glass that could provide solidity or transparency depending on light and reflective conditions. However, simplicity of stereometric solid-like volumes seemed to become the distinct mark of modern architecture despite the transparency that crystal glass could provide. Solid free structure seemed an impossible challenge to architecture.

In fact, three dimensions are strong enough to support the atomic forces of nature regarding tension and compression. And we step on surfaces and textures that belong to a world of solidity that makes the world we live in and fashion easily tangible.

Yet we could say that space and time read terra firma backwards and may break down solidness. Upwards our eyes see the blue sky that is only the beginning of an «empty» infinite, an immense void where a whole variety of solids, of atoms combined in extraordinary ways, live. And zero degrees Kelvin give solidity to everything but not the void itself.

Along with this new awareness of space and time, chemistry and, especially, physics and mathematics have given architects and engineers new ways of dealing with ancient materials afresh and thus creating new ways of building.

Yet a deeper revolution takes place that rises from the world experience of nature such as we fashion it through our *body-mind-world*. The ever framing of *God-Man-Nature* takes individuals to regard nature and natural processes as overwhelming phenomena that Man himself partakes by his material condition that might no longer be confused with a mortal mundane condition that intrinsically opposes the sacred. Thus, nature does not appear on a lower level regarding man as a divine creation, but man might understand himself better by knowing his natural environment. In some sense, nature takes place beyond the artificial *man-made-world*.

Kenneth Clark in *Civilization* explains how important nature was in the 19th century, how it was fashionable to take long walks in

the country side, to cross woods and forests, hills and valleys, and last but not least how important become to observe the sky. Clouds and winds, light and shadow, day and night, colours, all create an incredible territory of events as objective as terra firma and yet those materials that construct that sky are not solid and yet they are and represent active forces of natures such as the ground that I step on and holds me at the upper surface of the world under the sky. Those materials are not solid, but they are real and they may affect my body and mind more profoundly than the solidity of the world. And we certainly have a strong challenge to representation.

Thus, the materiality of pigments and canvas represented an amazing challenge at the core of mimesis. And no painter seemed to answer better to that challenge than William Turner.

Sky as an actual territory of events involves earth itself and clouds that move and change their shape and colour. *Solidness* gives way to *solidlessness* and challenges architecture and human scapes. Paintings such as Turner's *Dido building Carthage or the Rise of the Carthaginian Empire* (1815) and the later *Norham Castle Sunrise* (c. 1835-40) not only display the triumph of the romantic revolution but put forward a challenge to *architecture-by-being-environment-within-environment* that places colour as a final challenge. The sense of wholeness is of greater importance. Solids and voids mingle to some extent and share a common experience that takes me in. Into the realm of both painting and nature.

Thus Turner challenges the solidity of classical architecture, a solidity that Boullée, Ledoux and Lequé, have put forward as a milestone to the neoclassical revelation of architecture that would precisely accompany the accuracy of drawing and construction. In fact, the sources of modern architecture developed a clear definition of forms and constructive methods to which the free behavior of sky above building seemed alien. The light-shadow atmosphere that Boullée displays inside his «virtual» buildings gives solidity to light-colour rather immaterially. Light along the surface of a sphere and it displays an infinite variation but it is exactly that, a solid surface, and light-colour become meaningful by being solid, a privileged place for their divine revelation. According to this view the acme of light-colour experience has to be the solid, not the void.

Consequently and in some sense, we may say that Turner's representations of classical architecture are no longer classical. *Dido building Carthage* put forward a challenge to *architecture-by-being-environment-within-environment* that places colour as a final experience and even seems valid to contemporary architecture. Vibrating light and colour floods into the universe of architecture-nature like a storm.

Architecture under the role of mathematics and construction certainly is to be seen in a different way even if the magnificent *light-by-being-light-by-being-architecture* that filled in Paxton Crystal Palace was successful in bringing into architecture the architecture of the colourful sky. Such as Alberto Campo Baeza put it, the new nineteenth century architecture presents the new great possibility of having light into the building from all directions. The divine light, an ancient aspiration of the architects finds a new materiality that combines with any construction material that architecture makes use of.

In Turner's, the infusion of *man-architecture-environment* is both, an awareness of a new man's world conscientiousness and the characterization of an idea that would build future architecture far beyond the Modern Era.

It is far more interesting that modern sensible architecture is ascribed to Arts & Crafts and to local displacement from a functionalist hard core. Thus materials, materiality, colour and texture seem to be the critical standing points regarding sensibility in what it opposed to an objective rationalism. Sigfried Giedeon has put forward this lasting argument in *Space, Time and Architecture* and it looked a strong formula in an era that easily put Frank Lloyd Wright and Alvar Aalto on one side and Le Corbusier on the other. And the free plan, the «empty» plan only makes sense if one creates the suitable solids to make spaces suited to life.

The distinguished glass façade of the Modern Architecture was typically used to create a fascinating atmosphere of transparency, and also an atmosphere of volume. This nineteenth century heritage was going to be found in Bruno Taut's Glass Haus (1914), in the Mies Van der Rohe's project for a skyscraper in Berlin (1922), or Walter Gropius Bauhaus Building, in Dessau (1925-26), among many architectural experiences.

Perhaps the evolution from cubism to suprematism, and constructivism, already provided a strong field of research regarding new materials and technologies. As well as giving a sense of synthesis of form with regard to architecture, the everlasting art object, as loosening solidity was far too strange to the modern mind.

And from this background we may jump in space and time to Sou Fujimoto's 2013 Serpentine Pavilion. Certainly other previous pavilions used transparency versus opacity, solid versus void, as a working methodology. And yet, Fujimoto's project seems to go further. The «cloud» effect springing from the environment in which ground and sky seem linked. Furthermore, that seems to be the same natural-artificial phenomenon that invites me in, does not have a common solidity, but, somehow appeals to a natural-artificial experience not far from Turner's environments in which the natural and the artificial, the building, is embodied by a single atmosphere of light and colour. Certainly Turner works appropriately the colours of the tragedy of nature. Such as he works successfully the colours of the triumph of man over nature by building Carthage. While Sou Fujimoto works on a peaceful cloud in which I can live, sitting or stepping on transparent glass. Yet both glass and Plexiglas built-in with the structural matrix create a permanent change of appearance as I move around, move in, or move around inside-outside.

Somehow, both experience and appearance are hardy to describe especially because of that terra firma that only expects clouds to live somewhere there in the upper sky. But trees, branches and leaves that the wind moves, that reflect the moving sun, are also solid and void, and both movable in this sense. Thus, in the same way that Turner's nature changed nature because we would no longer see nature on the same way as before, we could say that Sou Fujimoto's Serpentine Pavillion has taken us to another dimension of creating architecture and nature, in fashioning both, and last but not least of understanding the experience of *solidlessness* as an heuristic issue in architecture. Last but not least, we have gone deeply into the poetics of architecture, into the aesthetic experience of the world we live in.



Figure 1. A cloud-like phenomenon.



Figure 4. A cloud that belongs to sky.

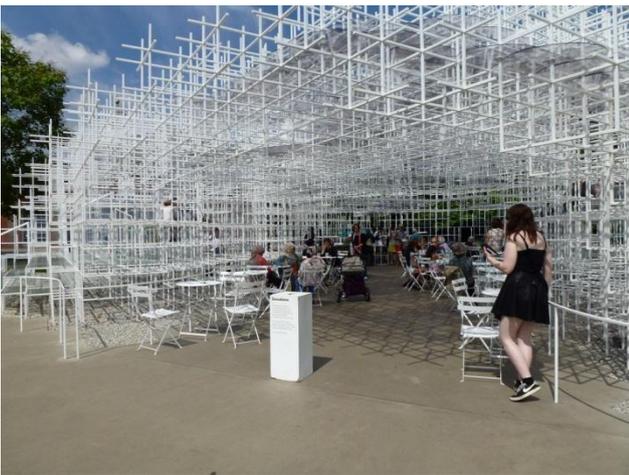


Figure 2. A natural-artificial phenomenon that invites me in.

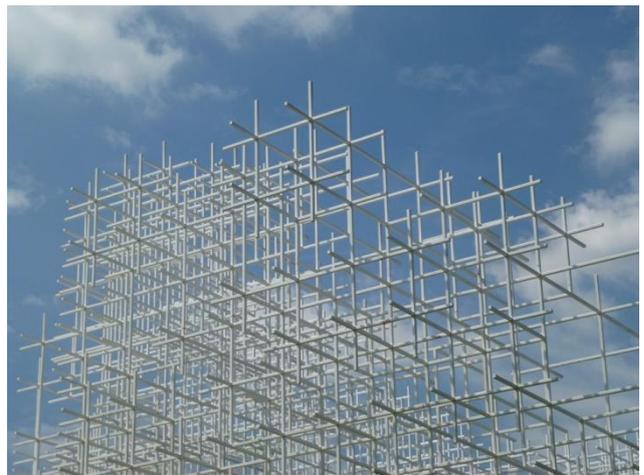


Figure 5. The sky that belongs to the cloud.



Figure 3. A peaceful cloud in which I can live.

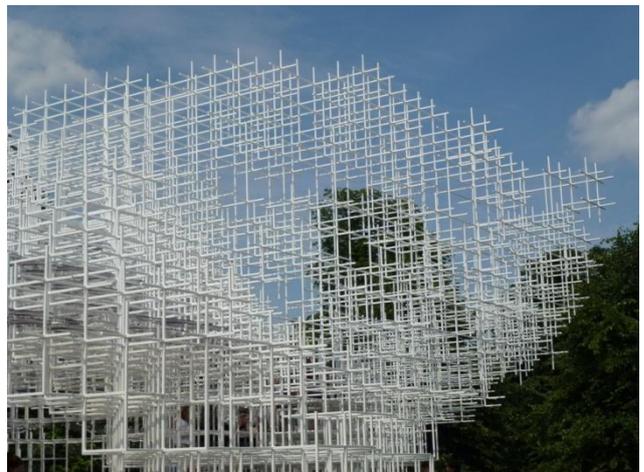


Figure 6. A cloud that belongs to both land and sky.



Figure 7. Natural-artificial moving transparency.



Figure 10. A phenomenon to observe closely and silently.

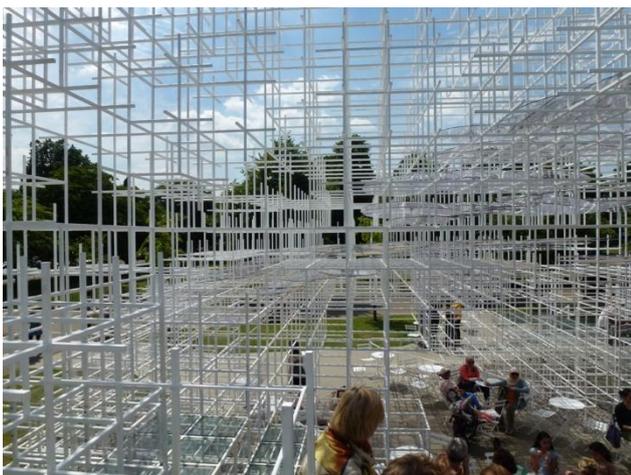


Figure 8. A cloud that looks towards the natural environment.



Figure 11. A natural human living painting.
A Turner-Fugimoto painting?



Figure 9. A world of sensitive kinetic experiences.

REFERENCES

- Giulio Carlo Argan. *Arte Moderna. Do Iluminismo aos movimentos contemporâneos*. Companhia das Letras, São Paulo (2004).
- Alberto Campo Baeza. *A Ideia Construída. Caleidoscópio*, Lisboa (2004).
- Kenneth Clark. *Civilisation*. British Broadcasting Corporation and John Murray, London (2005).
- Kenneth Frampton. *The Evolution of 20th Century Architecture*. Springer-Verlag, Wien, New York, and China Architecture & Building Press, Beijing (2007).
- Philip Jodidio. *Serpentine Gallery Pavilions*. Taschen, Köln (2011).
- Josep Maria Montaner. *Depois do Movimento Moderno. Arquitectura da segunda metade do século XX*. Editorial Gustavo Gili SA, Barcelona, 2001.
- Jean-Marie Pérouse de Montelos. *Étienne-Louis Boullée*. Flammarion, Paris (1994).
- Franz Schulze. *Mies Van der Rohe*. The University of Chicago Press, Chicago and London (1985).
- <http://www.serpentinegalleries.org/>