

Boullée's Drawing Praxis and the Contemporary Speculative Practice

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This paper examines the relationships between the drawing praxis of Boullée and the contemporary speculative practices. The modus operandi on drawing is discussed through the lens of 'speculation'. Drawings are used to probe, anticipate, and to project his imagination of utopia, where the 'thing' of drawing and the idea behind it forms the vessel to the uncharted frontier on science and reason. Another type of drawing is embraced by practices emerged out of the post-Bilbao exuberance, a period after the completion of Gehry's magnum opus in 1997 until the 2008 Recession. A tendency dominated by, and relied upon speedy image-making, and disseminated through social media for mass consumption. The appetite for *architecture as images* stemmed from two coinciding conditions. First, the explosion of emerging markets and its demand for building construction. Second, the widespread and ease of use of computational tools in creating architectural shapes and images. These practices are often associated with transnational architectural firms that are conjoined to the capitalistic preconditions. The production of the drawings in these practices are to elevate and enhance the potentiality of the property owners, investors or the State. The objective is not to advance a visionary agenda in the avant-garde sense of the tradition, but rather to visualize the speculative monetary return.

DRAWING AS A MEANS TO WHAT END?

"All architecture that was built before the Renaissance (or even after the Renaissance, but outside the ambit of the Albertian, 'authorial' paradigm) was built without architectural notations in the modern sense of the term – and often without any drawing at all.¹"

—Mario Carpo

Architectural drawing is a means to an end. But to what end does it arrive at? What is the arc of relationship, if any, between the drawing praxis of Boullée's and the contemporary speculative practice? This is the core question of the paper.

Is it a spatial hypothesis that ends with the building as referred to by Kahn: "The painter sketches to paint, the sculptor draws to carve, and the architect draws to build"? Or, could the

drawing be an autonomous artifact that exists for its own sake as in Libeskind's Chamber Works suggested by Robin Evans, where the architectural drawing is acting synonymously as architecture? Alternatively, could the end espouse a belief in scientific progress symbolized in monumental forms, or representation of necessary institutions and visions of an 'ideal city' as depicted in Boullée's ink wash drawings²? What about an end that aims to speculate and even embellish the development and monetary potentials of land acquisitions?

The premise under which the questions are being examined is the notion of the speculative. For Boullée, the drawing is used to imagine, anticipate, and affirm his proclamations as written in the *Essai sur l'art*, where the 'thing' of drawing and the message behind it forms the vehicle to an optimistic future. The Enlightenment thoughts of reason and order are expressed through his drawings. The consideration that the drawing is a legitimate form of autonomous architecture production not dependent on the building is something we have now taken for granted. It has not always been the case. In *Drawing the Unbuildable*, Nerma Prnjavorac Cridge noted Adolf Loos "believed that drawing and building were not only separate, but at opposite ends of the production of architecture. By famously burning all his designs before his death, Loos demonstrated that he wished to be remembered by the buildings he had realized and not by his drawings³."

DRAWING AS MANIFESTO: ETIENNE-LOUIS BOULLÉE

"In order to execute, it is first necessary to conceive... It is this product of the mind, this process of creation, that constitutes architecture."

—Etienne-Louis Boullée, *Architecture, Essai sur l'art*, 1790⁴.

Boullée's speculative drawing praxis, particularly the Cenotaphs series from 1782-1789, was deployed to advance a critical narrative for an ideal vision on architecture and the city. In the Newton cenotaph, Boullée's creative momentum carried him beyond the technical limitations of his time, as he advocated 'the art of building is only the scientific side of architecture⁵'. Designed in 1784, the Newton cenotaph is a double boolean sphere, with small apertures pierced through its solid creating the illusion of stars in the night sky during the day. The impression of immensity and immateriality in the

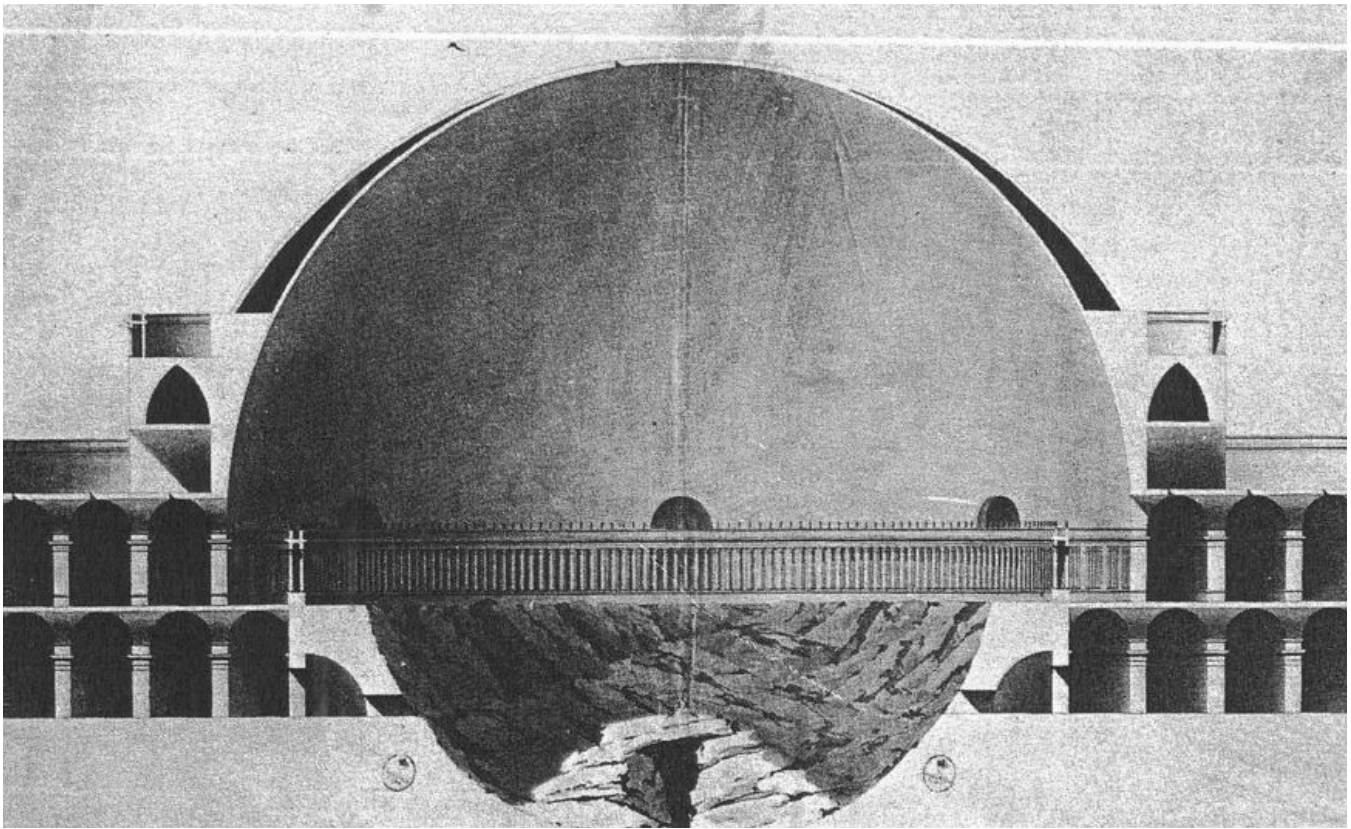


Figure 1. Temple of Nature, 1785. Drawing by Etienne-Louis Boullée.

internal space is all the more arresting because the spectator is ‘obliged’, as if by main force, to stand at the place assigned to him. In another project, Temple of Nature (1785), Boullée commemorates the progress of the Enlightenment through a monument of grandeur. Carving into earth as if it is an archeological process of discovery. It is among a series of cenotaph designs that articulates Boullée’s philosophical ideas on nature, beauty, and architecture. Articulated through three ink-washed monochrome drawings including a section; an elevation and one plan (Figure 1).

Born in 1728 Paris, Boullée, together with Claude-Nicholas Ledoux and Jean-Jacques Lequeu are commonly referred to as French ‘Visionary Architects’, and being considered as a tour de force of French Neoclassicism. Boullée, being the influential elder, his contribution to architecture lies in his prolific and powerful drawings, influential writing, and effective teaching. In *Architecture, Essai sur l’art* (Architecture, Essay on Art), Boullée advocated a *priori* nature of thinking and picturesque representation over materialization. His view of prioritizing the pictorial image and the ideal behind made a stark distinction from the Vitruvian triad (Venustas, Utilitas and Firmitas). Boullée considered the work of Piranesi (his contemporary) a dreamer composed of disconnected and scattered ideas with no particular order⁶. Contrary to Piranesi’s arbitrary and whimsical principles of design, Boullée on the other hand has discovered the way to put nature to work⁷.

Alberto Perez-Gomez defines the works of Boullée as projects that cannot be embodied in a physical building and as the first examples of the unbuildable: ‘Thus, for the first time in the history of European architecture – apart from the rather fragmentary precedent of Piranesi’s *Carceri* (Prison) – architectural intentions had to be expressed almost exclusively through theoretical projects that obviously did not fit into the new essentially prosaic world of industrial society.’⁸ The power of his ‘paper architecture’ lies in the perpetual state of unrealisation. Although the images remained confined by the frame, the frame enabled the representation of sublime by suggesting something further beyond.

Although drawing as a speculative praxis was not widely accepted in the mainstream, and may even have been objected upon, its lineage to the present is evident through architects or the modern period in the works of Gläserne Kette, Bruno Taut, Hans Poelzig and Theo van Doesburg and the color experiments of Gerrit Rietveld⁹. These faithful modernists persisted in using drawing as a means to experiment and develop new ways of thinking, understanding and designing with drawing. It subsequently paved the way for many generations to come.

Inspired by Boullée’s Cenotaph for Newton, Lebbeus Woods created *The Einstein Tomb* in 1980, an exemplary manifestation of his melding of the mythic or the ineffable with the tectonic (Figure 2). As Boullée has intended in his Cenotaph for Newton,

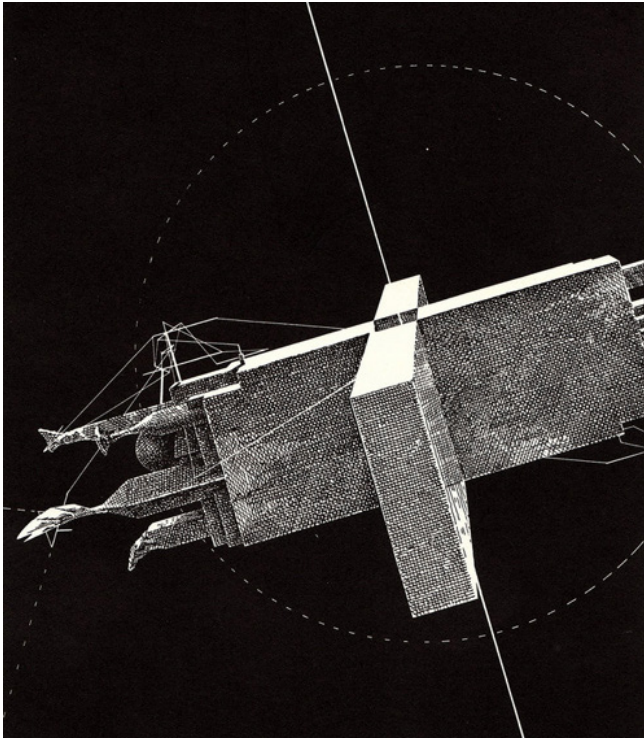


Figure 2. The Einstein's Tomb, 1980. Drawing by Lebbeus Woods.

the Einstein Tomb demonstrates Woods' interpretations of ideas about time and space. He attempted to devise a physical form that 'while being definite, played with the plasticity of time and space postulated by Einstein¹⁰.' The Einstein tomb is conventional in its orthogonal structure. The quadripartite form alludes to four quarters of the day (dawn, say, dusk, night) and the four seasons of the year, and Woods represented the tomb rotating through one cycle in its entirety. He equated the transit through these astronomical sequences with man's journey through life, identifying in both of them the pure or extreme states that must be consistently negotiated, 'until the cycle of a life woven/ wholly into immortal ones of the world.'¹¹

The acceptance of drawing as architecture proliferated in the late 60's and continued into the 70's during a turbulent climate of political and social transformations. When building opportunities declined in the US in the 1970s, architects turned to drawings. Architectural drawing has come back richer, stronger, and more provocative, which affects many post-modern architects to embark their architectural aspirations in reality. Coinciding with the flattening of economic activities and the stock market. Architects have turned to drawing which provided a fertile ground for the experimental 'architecture' albeit it is only on paper. Protagonists such as Paolo Soleri, Superstudio, Archigram, Lebbeus Wood, and Bernard Tschumi et al not only drew but theorized their works. Evidence of Boullée's thinking and ways of using drawing with agency can still be found. In the project of Arcosanti, Soleri envisioned a desert utopia with young disciples living and working together

in a vast spatial vessel recalling the vision once proposed by Boullée (Figure 3).

The combination of writing and drawing working in concert occurred in a manner similar to Boullée's. The protagonist of this praxis shared a commonality with Boullée in the sense of a forward-looking attitude, of using the drawing activity and the thing of drawing to push new ideas. So, in this respect, the drawing is a critical and creative domain. It is a simultaneous critique of the present as well as speculation on the appearance of tomorrow. Although its reliability in predicting the future is unreliable, articulating the desires and critiquing concerns contemporaneously is acute and powerful. The collective praxis legitimized the role of drawing as an architectural activity.

DRAWING AS ARCHITECTURE: THE AVANT GARDE TRADITION

It is tempting to attribute the enormous surge of interest in architectural drawings in the last couple of years to the depressed state of the architectural profession itself— if no one hires an architect to build, he can at least make pictures. It is not so simple as that.¹²

—Paul Goldberger, *New York Times*, 1977.

The exposure of drawing in the public discourse made a profound impact between the 1960s and 1980s. The prolonged economic recession in the United States created the opportunity of acceptance for architectural drawings as synonymous to architecture. Drawing became the platform for presenting a vision to probe, imagine, and speculate the unfamiliar. Architectural drawing has been rediscovered and become more than just a footnote to architecture¹³. This reconsideration of architectural drawings took place on the heels of a similar shift in conceptual art, where drawings were no longer seen only as a supporting medium. The "America Now: Drawing toward a More Modern Architecture" exhibition in Cooper-Hewitt Museum in 1977 is one of the seminal exhibitions that showed architectural drawings were integral to the shift¹⁴. The exhibition tends toward drawings for buildings that have either been built or were seriously intended to be built, and the Drawing Center leans more toward conceptual projects.

The influence drawings had on the architectural debate would culminate in numerous important exhibitions dedicated to the activity of drawing in the following decades. Some of the notable works include: The Museum of Modern Art displayed "Visionary Architecture" in 1960, "Frank Lloyd Wright Drawings" in 1962, and "Architectural Fantasies: Drawings from the Museum Collection" in 1967. The 1975 exhibition "Drawing Now, 1955-1975," shown at the Museum of Modern Art and curated by Bernice Rose, was the first major exhibition that celebrated drawings in their own right. The drawings

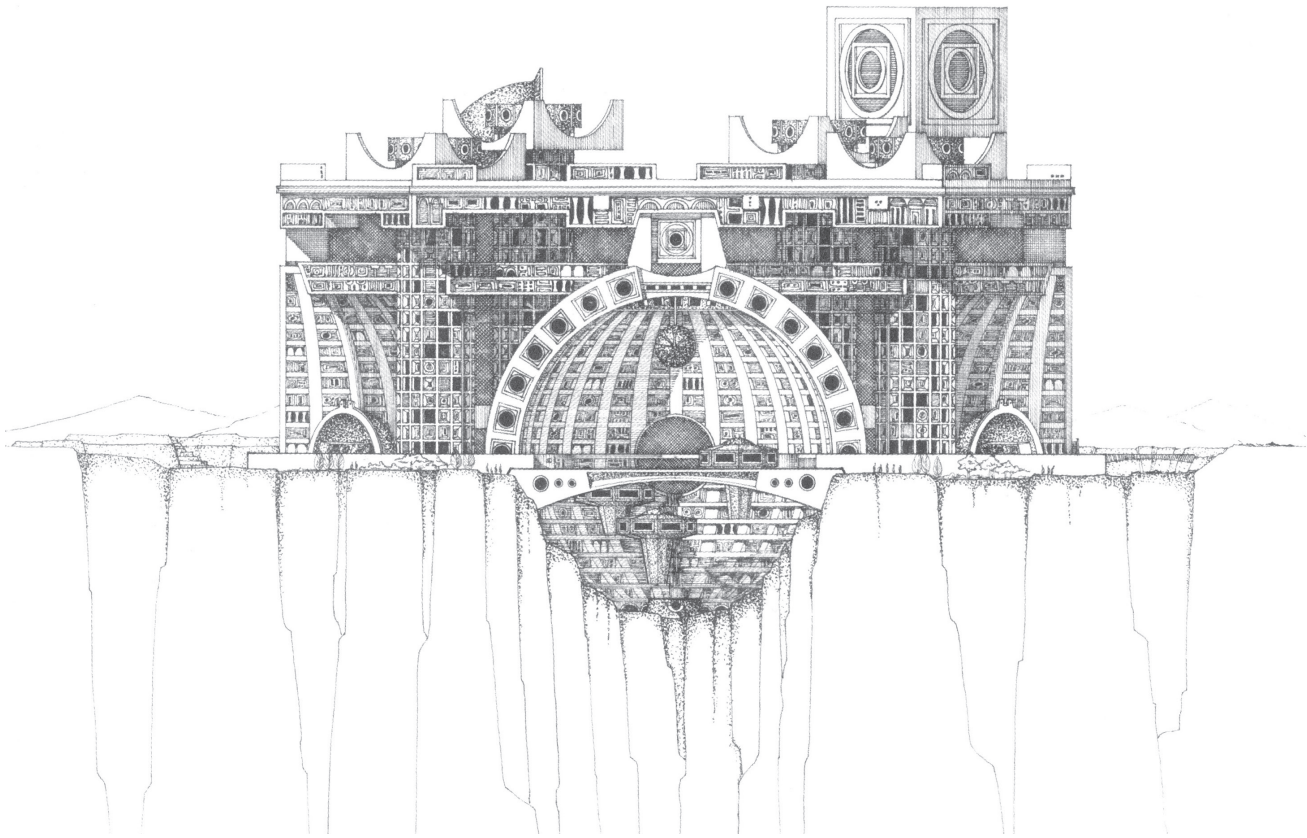


Figure 3. Arcosanti, Drawing by Paolo Soleri.

would receive as much attention, if not more than the buildings that the drawings were supposed to represent. A case in point is Daniel Libeskind's exhibition at the AA in October 1983. The twenty-eight drawings exhibit was accompanied by introductory essays by Aldo Rossi, John Hjdruk, Kurt Forster and Peter Eisenman¹⁵.

However, this way of critical practice through the drawing would change.

HOW MUCH DOES A PICTURE WORTH?

[For] Instagram....It's very different from the traditional architecture photography, which is just waiting, waiting, waiting for the perfect light. It is very intuitively working.

—Iwan Baan, *Architect Magazine*¹⁶.

Billions! A new form of speculative drawing emerged out of the “post-Bilbao exuberance”, a period after the completion of Gehry's magnum opus in 1997 until the Great Recession of 2008. The absent-minded practitioners in this case tend to project their architectural designs through photorealistic raytrace renderings with intense Photoshop post processing. The pictorial images almost always result in shiny and glowy perspectives. To describe this production by the noun or verb

of “drawing” would be imprecise and would not give drawing the justice it deserves. Instead, much of this work resembles the hybridization between the *photograph* and *image*¹⁷.

The demand for the architecture as images stemmed from two pretexts. First, the explosion of emerging markets and its demand for building consumption. Second, the widespread and ease of use of computational tools in architecture that simplifies the picture-making process. The latter is often associated with transnational architectural practices that are deeply conjoined and enslaved to the capitalistic preconditions. The production of the drawing in those practices is to elevate, enhance the potentiality of the property owner, investors or the State (Figure 4). Whether it is land speculation or investment on a property acquisition, the objective is not to advance a visionary agenda in the avant-garde sense of the tradition, but rather to visualize the potential monetary return of an investment. Furthermore, the pervasive use of social media since the launch of Friendster, Facebook or Instagram etc. has provided a platform that enables the public to have an immediate visual access to pronounced buildings. This challenged the authoritative (traditional, slow and limited) distribution of the architectural images by the architects themselves. Hence, the perception of architecture is also affected by this fluency of image distribution.



Figure 4. The Future City. Image by anonymous.

The proliferated use of digital renderings in architectural practice can be attributed to the extreme opulence of capitalism saturated after the fall of the Berlin wall. The Dow Jones Index doubled from below 5000 level in 1990 to a record peak of 13000 in 2008 (Figure 5). During this decade, architects made drawings not to design a different and better world, but instead to make a set of increasingly realistic and marketable renderings of their own¹⁸. As commercial rendering entered the architectural practices, issues of representation were disregarded as computer-aided renderings normalized drawing technique by demanding no direct mark of a hand. The second prevalent explanation for the phenomenon is the resurgence in the economy, which caused many architects, particularly those who had become famous for their architectural drawings, to build again and redeployed their energies on completing building commissions.

As rendering software becomes more powerful, the speed of churning out images increases so does the degree of realism that they are being portrayed. In the late 90's few companies were capable of generating photorealistic renderings, one of them is dBox from New York, a specialist startup office with a handful of trained architectural graduates from Cornell. By the mid-2000s, the exceptional had become the norm, the small startup have become a multi-hundred persons operation.

In *Architecture Enters the Age of Post-Digital Drawing*, Sam Jacob lamented that the past two decades' culture of digital rendering almost killed a core architectural act. He asserted that by presenting viewers a 'realistic' image, digital renderings are transformed as the body-double of photography. Architectural drawings should not be seen as a window onto the world, but as a way of constituting the world. It should be the primary site where an architectural idea is staged¹⁹.

Architecture critics became skeptical of the role of drawing in speculative architectural practice. Alberto Pérez-Gómez questioned the role of computer graphics as merely a tool of systematic representation²⁰. The digital revolution has degenerated into a banal mannerism, resulting in homogeneity with little concerns to cultural contexts in different parts of the world. He argued that the results of computer applications in architecture, be it only graphic, or recently motivated by a desire to extrapolate a 'complex natural orders' to practice, remain generally disappointing.

With the fall of the Berlin Wall followed by rapid globalization around the world, the opening up of China and other emerging markets in developing countries created a perfect opportunity for international conglomerates to extend their reach. Architectural practices were not precluded from this favorable juncture.

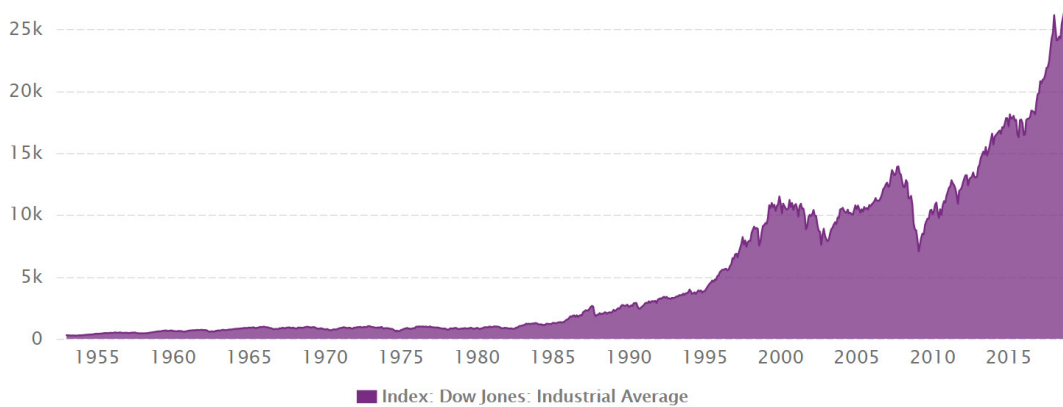


Figure 5. Dow Jones Index from 1955 to 2015. Image credit: WWW.CEICDATA.COM.

Xuefei Ren described the trend of the emergence of mega projects in developing countries brought by architectural firms as "Architecture as branding"²¹. She found out that the articulation of spatial design has become a major force of capital accumulation in mega project developments. Signature design from transnational architectural practices, such as SOM, KPF, HOK etc., functions as symbolic capital, which is transformed into economic and cultural capital by various actors in the process of development and marketing of urban mega projects. Cities like Beijing, Shanghai, Dubai and Abu Dhabi are powerful consumption sites for the realization of mega-scale projects produced by international architectural offices. Sérgio Miguel Figueiredo probed the role of drawing in contemporary architectural practices in his essay *Imaging buildings and building images*. From the black and white photographs that disseminated Die Kiefhoek's original construction and idealized its image, to the colorful renderings of Hagneiland by MVRDV that created before any construction, the dominance of image over building transformed the object-centered architecture into a consumable commodity even before it could exist as a material reality²². Hence, as the solid position of building is displaced by the fluidity of an infinite imagery, not only strenuous challenges emerge, but also incredible opportunities to create wealth.

Social media like Instagram, had changed how people perceive the world²³, as a larger socio-cultural development is now facilitated by a variety of social media platforms. Mitchell Schwarzer pointed out that the meaning of building has repeatedly been altered and expanded through the creation of technologically driven information realms²⁴. 'Visioning technology' of photographic images was catapulted into even more distant and disembodied information realms through digital technologies. Digital capture, like mobile phone shooting, has enabled everyone to create an immediate perception of a building, which challenges architects' customarily privileged role.

CONCLUSION

Drawing can make such a speculation: correct only to its own waywardness and imaginative limits.

—Peter Cook, *Drawing, The Motive Force of Architecture*.

Contrary to Boullée's visionary doctrine, the contemporary speculative practice of the post-Bilbao exuberance was not about attempting to reveal the avant-gardiste vision. Instead, it is premised upon realizing the now, the immediate and the familiar through the fast turned out, hyper-realistic and slippery-slick computer renderings. Ironically, as digital renderings increase exponentially in precision, the scope of drawings has been narrowed and subsumed by the limitations of the super-sophisticated rendering software. It becomes a tool to convince business decision-makers, whilst the role of drawing as an exploratory, inquiring design tool has diminished. Viewers are positioned within a predetermined idea of space, rather than an ambiguous possibility that can be constructed.

Pictures of architecture can now be instantly captured by everyone on smartphones and shared to a mobile network of viewers. Does this represent a re-collectivization mode of seeing a building? Or a re-socialization in a state of architectural reception? Social media like Instagram, Pinterest, Flickr are becoming ubiquitous interfaces of the image-saturated contemporary life. Its presence has been reshaping people's perception to the world of architecture. The immensity and sheer quantity of the images have provided a means for a total blasé attitude, that visionary and pastiche is often rendered indistinguishable. Images of good, bad and indifferent are shared in blogs, Facebook albums, Instagram feeds, Twitter and Flickr pools, where people can comment freely on others' accounts. While many architects attempt direct marketing by tweeting images of their own buildings, they no longer control the narrative of their design²⁵.

ENDNOTES

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