

## **VIRTUAL ARCHITECTURE: RECONSTRUCTING ARCHITECTURE THROUGH PHOTOGRAPHY**

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**Abstract.** The concept of construction in architectural design process is a temporary action that exists for a while and transforms itself into another product; i.e. the final building to be inhabited. Construction site can be taken as a podium where a play-to-remain-incomplete is being staged. The incompleteness causes us to dream, due to the fact that a complete building loses its narrative potential as it informs us about all the necessary pieces that constitute the whole: There is no puzzle to solve... Construction in this sense is like a historical ruin; Paul Zucker asserts that "ruins have held for a long time a unique position in the visual, emotional, and literary imagery of man. They have fascinated artists, poets, scholars, and sightseers alike. Devastated by time or willful destruction, incomplete as they are, they represent a combination of man-made forms and of organic nature."

Architectural photography has the potential of re-creating this puzzle back again in order to bring an alternative representation to architecture. The architectural photographer is sometimes offered the freedom of reinterpreting, reconstructing architecture in order to be able to present a novel virtual perception to the audience. The idea here is to get some spatial clues that can later be used in other architectural projects. I was personally invited to two different concept exhibits in which I was given the freedom of inventing a virtual architecture through photography. The concept text written for one of these exhibits goes as follows: "I went, saw, stopped, attempted to grasp and enter it, looked at construction process and workers with respect, tried to internalize, wanted to claim it for a while, dreamed of creating a microcosm out of the macrocosm I was in, shot and shot and shot and finally selected: The created world, though intended for all, was probably quite a personal illusion..."

Virtual architecture is a term used for architecture specifically created in the computer environment and never used in the realm of architectural photography. People like Piranesi, Lebbeus Woods,

M.C. Escher, Marcos Novak, etc. previously dreamed about architectures that could exist virtually on paper, screen, digital environments. This paper will try to prove that this practice of (re)designing architecture virtually can be transferred to one of the most important realms of visibility: Photography. Various digital processes like stitching multiple photos together and mirroring images in image editing software like Photoshop, allow this virtual architecture to take place in the computer environment. Following this, I propose to raise the term “snap architecture” to connect it to the frequently referred concept of “paper architecture.”

Keywords: virtual, (re)construction, snap architecture, paper architecture, illusion, puzzle, incompleteness, representation, perception, reinterpretation, microcosm vs. macrocosm, fictional architecture, metaspace, narrative space, generative architecture.

## 1. Architecture and Representation

Depending on facilities and technologies available at various periods of the world history, architects used various tools like drawings, paintings, miniatures, models, computers, fine arts platforms to represent their design before and after construction.



*Figures 1 & 2. Left: An “architectural” greeting card. Right: Lego architecture*

“Representation includes everything people construct to be known as a visual record or figurative manifestation of that reality. [...] Within this approach, architects usually reduce the definition of representation to the

creation of such visual forms as drawings or models that selectively double or imitate the physical reality of a building. I would like to move beyond this traditional view to define representation as a culture-specific and dynamic process of establishing the relationships between reality and the signs created to symbolize this reality. In this process, reality becomes thinkable, and its meanings are symbolically assigned.” (Piotrowski and Robinson 2001: 42)



*Figure 3.* Ottoman miniature depicting Bagdad by Matrakci Nasuh.



*Figure 4.* Ottoman miniature depicting Istanbul by Matrakci Nasuh.

“In general, buildings do not communicate but represent, a distinction essential to the study of architectural specificity of thought. [...] This

representational process is far more complex and dynamic than the process of sending, preserving, retrieving, and decoding well-formed messages. [...] Buildings and cities represent when they serve as repositories of materialized concepts that manifest how people have defined themselves in their lived reality. [...] In this way, a building becomes a repository of cultural memory and helps to expand the sense of reality beyond the here and now. Any piece of architecture functions in this manner when its value is found in the interconnections it establishes with other buildings, practices of everyday life, social structures, attributes of the natural environment, or metaphysical concepts, although many aspects of these relationships may be perceivable only to people identifying with the local culture(s). This process of establishing a symbolic network of relationships can be viewed as analogous to what Jean-François Lyotard calls the emergence of representational consciousness. He observes that the viewer's accumulation of experiences and the delay of the immediacy of reaction to what is being perceived at a particular moment show “how perception stops being 'pure', i.e., instantaneous, and how representational consciousness can be born of this reflection (in the optical sense), of this 'echo,' of the influx on the set of other possible — but currently ignored — paths which form memory”. Through this process, according to Lyotard, human thoughts establish networks of relationships within functioning concepts of reality. [...]



*Figure 5.* Panoramic photograph of the Covered Bazaar, a “cubist” documentation resulting from the viewer’s accumulation of the experiences in situ: A moment where perception stops being “pure.” motion. Photo by Murat Germen, Istanbul, Turkey.

As the space of representation, a building only foregrounds concepts of reality and implies modes of thought and perception. For example, it invites a tacit dialogue between old and new, or between a culturally shared and a personal sense of reality. Whatever exists or happens in a building, we interact with it symbolically. Any building admits various and even conflicting concepts of reality. [...] Such hybridity of meanings is possible

because concepts of reality and physical forms of buildings, although symbolically related, are never fully codependent; they are differently constructed. [...] Because buildings do not impose concepts of reality but make them thinkable, many concepts may coexist and be in symbolic dialogue with one another within a physical space. [...] Similarly, it does matter how a person interacting with a building finds personal relevance in this interaction. To reveal these kinds of meanings, the building must somehow engage, like Lacan's mirror, a personal sense of reality.” (Piotrowski and Robinson 2001: 43, 44, 45) This personal sense of reality makes us question the inherent nature of the concept of ‘representation’ and helps us to extend it into a more flexible (and maybe more correct) notion / formulation of ‘re-presentation.’



*Figure 6.* Panoramic photograph of Istiklal Avenue in Istanbul showing both ends of the large pedestrian artery: A personal sense of reality, in other words “re-presentation.” Photo by Murat Germen, Istanbul, Turkey.

Movie industry is another platform in which representation has a significant part, especially when it comes to adapting / altering / converting cities for particular needs such as creating futuristic sci-fi cities / architecture that never existed. A particular type of illustration called “matte painting” created by illustrators (and not architects) usually serve as departing points for such architecture. The fact that illustrators can create virtual architecture can also lead to the assumption that photographers who can read space properly can use photography as a tool to re-invent, re-interpret and re-form architecture.

The urban space created in Luc Besson’s renowned movie “The Fifth Element” is one of the best examples where an “almost impossible” artificial architecture is envisioned and implemented as a simulation. The complicated upwards and sideways stretch of the built environment takes the limited one-axis 3D volume structure to a richer multiple-axes structure which allow circulation in all directions and not only horizontal direction as usual.



*Figure 7.* A futuristic city that grows both horizontally and vertically with horizons in all axes. “Fifth Element” by Luc Besson.



*Figure 8.* Matte painting by Yanick Dusseault, depicting a non-existing piece of architecture.

It is obvious that fictional processes like movie making and novel writing can be used to expose unseen studies of architecture; by the same token, the most faithful representation tool of architecture, i.e. photography, can also be employed to exercise “fictional” architecture that can later be taken advantage of for “real” architecture to be built.

## 2. Architecture and Photography

Photography is the only medium that enables architectural works to be shared with people who do not have access to these works. It is, in this respect, the ultimate representation of architecture that is built. There are various techniques, lenses, rules of thumb that are used in architectural photography in order to make the process as “appropriate” as possible. But these special techniques usually provide us with unique visual recording possibilities that are practically and physically impossible to the naked eye. The so-called “perspective correction” process much used in architectural photography, carries the potential of producing some steeply converging lines, especially when the photographer is close to the building to be photographed. Consequently, the shifting motion in photography causes another shift in our perception: photography does not reflect the truth.



*Figure 9.* Converging lines due to excessive shifting motion. Photo by Murat Germen, Istanbul, Turkey.

Considering the fact that there are different lenses ranging from wide angle to tele, different films for different purposes yielding different contrast histograms, different speed values that lead to various levels of graininess, the fact that we do not see in black and white, etc.; it is possible to assert that cameras do not see in the manner we see and therefore photographs that cameras take have no possibility or reflecting the truth as we see with our eyes. Piotrowski and Robinson approach the problem from another angle: “Photography, on the other hand, filters reality in a different way. A photograph seems to be an ‘objective’ record of the field of vision that is trustworthy because the photochemical process provides a reliable method of recording an image. [...] All that makes photography appear believable or objective conceals how much a photograph is a constructed representation. Unlike a person's experience in architectural space, a photographer's picture singles out a particular view and freezes it in time. That which the image illustrates is composed to be seen in certain manner, making particular

relationships visible and hiding others. Photographers frequently manipulate light, either artificial or natural, to enhance selected attributes of architecture. (Piotrowski and Robinson: 51) Promotional photographs of architecture [...], rather than supporting a symbolic dialogue between the viewer and a depicted building, encourages the viewer's desire to own a similar kind of architectural commodity. This constructed desire for the represented object shapes the commercial subject-object relationship." (Piotrowski and Robinson 2001: 54)

The type of photography titled as documentary photography is usually presented as an instrument that communicates the "real" incidents that are not witnessed by most people and naturally is a very important tool of the news industry. Yet this does mean that the messages consciously or unconsciously present in these photos are genuine. "John Tagg's 'The Currency of the Photograph' (1978) effectively explores the ideological motives behind realistic representation." (Conner 2001: 16) A photographer can record a real event but s/he can present it in such a way that the interpreted conclusion can lead to a completely fake direction and result in a hoax (that will spread too quickly especially with the current technological facilities available these days).

"By itself, the image has a variety of possible interpretations whereby different aspects of it will spark off particular trains of thought in the viewer. The ways that the viewer proceeds to construct the narrative are determined by the context in which the image appears. [...] The context will imply a certain range of possible interpretations and the text will aim to anchor the wide range of potential connotations that can be triggered by the photograph. (Wright 1999: 83) [...] If we adhere to Charles Suchar's (1989, 52) interrogatory principle, our interrogation of the photograph might lead us to ask the following questions:

- What information do we find within the photograph?
- What additional external information do we need to supply to direct the meaning of the image?
- What is the range of potential meanings and interpretations that the viewer might construct from the photograph?" (Wright 1999: 114)

Following all this, it is quite easy to see that photography is about interpretation and therefore can be used to reinterpret a certain physical existence. In other words, photography can be utilized in the process of "constructing" a new space --that we can call "narrative space"-- from the existing spatial body. This narrative space is also a "manufactured metaspace" which a space between and / or beyond reality and representation: A constructed environment that exists solely in the digital realm, giving clues for the real world and exhibiting experiential aspects of the personal perception process.

### 3. Architecture and Construct

The concept of construction in architectural design process is a temporary process which finally transforms itself into an end "product": A building, a culture, a society, an idea, a freedom, a dogma, etc. Construction sites can be conceived as stages where this process is being "performed" over and over. The inherent incompleteness within the constructing act pushes us to dream; on the other hand, a completed product loses its narrative potential as it informs us on all the necessary pieces that constitute the whole: There is no puzzle to solve or no story to write. Construction sites, in this sense, are like historical ruins; Paul Zucker asserts that "devastated by time or willful destruction, incomplete as they are, ruins represent a combination of man-made forms and of organic nature." (Zucker 1961: 119) As a tribute to and resting on this statement, the more incomplete the "construct" is; the more organic life gets, the more surprises and the less boundaries we have.



*Figures 10 & 11.* Incomplete ruins that push us to solve the puzzle. Photos by Murat Germen, Assos, Turkey.



*Figure 12.* Construction site, ruin-like incompleteness prevails. Architect: Nevzat Sayin.  
Photo by Murat Germen, Istanbul, Turkey.



*Figure 13.* Construction sites can be conceived as stages where this never-finishing process is being "performed" over and over. Photo by Murat Germen, Istanbul, Turkey.



*Figure 14.* Clouds as perfect examples of organic natural forms. Photo by Murat Germen.

Architectural photography has the potential of re-creating the previously mentioned puzzle back again in order to bring an alternative representation to architecture. The architectural photographer is sometimes offered the freedom of reinterpreting, reconstructing architecture in order to be able to present a novel virtual perception to the audience. The idea here is to get some spatial clues that can later be used in other architectural projects. I was personally invited to two different concept exhibits in which I was given the freedom of inventing a virtual architecture through photography. The concept text written for one of these exhibits goes as follows: "I went, saw, stopped, attempted to grasp and enter it, looked at construction process and workers with respect, tried to internalize, wanted to claim it for a while, dreamed of creating a microcosm out of the macrocosm I was in, shot and shot and shot and finally selected: The created world, though intended for all, was probably quite a personal illusion..."



*Figure 15 & 16.* "Kanyon: Under Construction" exhibit. Photos by Murat Germen. Process: Vertical panoramic photography; took 8 photos for creating a very high resolution vertical panorama, stitched photos, mirrored the image in order to complete the aimed 'reconstruction' process. "Repetition: what does it produce, give (back), duplicate, yield, deliver, conceive, return, engender? -- Sylviane Agacinski" (Easterbrook 1995: 177)



*Figure 17.* Notre Dame de Sion concept exhibit. Photo by Murat Germen.

The following quote from William Mitchell will help me in clarifying the notion of “reconstruction of space” better: “The city --as understood by urban theorists from Plato to Aristotle to Lewis Mumford and Jane Jacobs-- can no longer hang together and function as it could in earlier times. It's due to bits; they've done it in. Traditional urban patterns cannot coexist with cyberspace. But long live the new, network-mediated metropolis of the digital electronic era. (Mitchell 2000: 3) The buildings, neighborhoods, towns, and cities that emerge from the unfolding digital revolution will retain much of what is familiar to us today. But superimposed on the residues and remnants of the past, like the newer neural structures over that old lizard brain of ours, will be a global constructions on high-speed telecommunications links, smart places, and increasingly indispensable software. This latest layer will shift the functions and values of existing urban elements, and radically remade their relationships. The resulting new urban tissues will be characterized by live / work dwellings, twenty-four-hour neighborhoods, loose-knit, far-flung configurations of electronically mediated meeting places, flexible, decentralized production, marketing and distribution systems, and electronically summoned and delivered services. This will redefine the intellectual and professional agenda of architects, urban designers, and others who care about the space and places in which we spend our daily lives.” (Mitchell 2000: 7)

The above mentioned redefinition process, which constitutes the main point of this paper can also be associated with the conception of simulacra as offered by Jean Baudrillard, one of most important contemporary thinkers.

“During the 1980's, Baudrillard became influenced by Marshall McLuhan and began developing ideas about what determines the nature of social relations, with special emphasis on modes and forms of communication. His most famous formulation about what he calls Simulacra and Simulation fits here. In ‘Symbolic Exchange and Death’, he argues that the Western societies have undergone a ‘procession of simulacra’, a chain of ‘orders of simulacra’:

1. The era of the original.
2. The counterfeit.
3. The mechanically produced copy.
4. The simulated “third order simulacra” where the copy has replaced the original.

Baudrillard further argues that in modern society the simulated copy has superseded the original object or the original experience and ‘the map has become the territory.’ Art theoreticians and philosophers have already discussed the extent to which reality is represented in photographs. The general acceptance today is the idea that photographic images only imply reality or truth and photographs in daily life do replace the reality copied or represented in them. Examples are people kissing loved ones' portraits or the huge industry built around pornography, or mouth watering food photographs.” (Cetin 2007) Following this argument, one can justify the motivation of practicing architectural design within the realm of digital photography since the image created within the photograph carries the potential of replacing the “truth.” This argument can additionally be supported by the following quote from Lynda H. Schneekloth: “Architecture, landscape architecture, planning, and other environmental design fields are practices whose primary aim is to make the world, to make something new. We give material form to some vision of human society and place. The shadow side of this creation, this making, is that these fields are also about "unmaking" the world. The world already exists, and every time we plan, design, and/or construct some aspect of worldness, we are replacing and therefore unmaking something else.” (Schneekloth 1998)

## 5. Conclusion

Space is usually defined / experienced as a physical entity; yet, we recently began to observe that the notion of ‘space’ can exist / be perceived / used as a non-physical organism by means of interactive media and virtual environment applications in the computer platform. Such creations bring new definitions of “space” and can be named as “informational space” or “cognitive space.” Virtual architecture is a term used for architecture specifically created in the computer environment and never used in the realm

of architectural photography. People like Piranesi, Lebbeus Woods, M.C. Escher, Marcos Novak, etc. previously dreamed about architectures that could exist virtually on paper, screen, digital environments.

“The up-view axonometric projections of the late James Stirling, the edited and super-imposed composite drawings of Thom Mayne’s Morphosis and Zaha Hadid’s dynamic acrylic paintings. Not only have these architects developed an instantly recognizable style of depiction, they each provide a memorable image of individual projects which simulates the essence of their architectural experience. Many of the key drawings describe a paper architecture, i.e. one that is not built but exists only as a drawing. Such architecture, however, can be as influential as one constructed. For example, one has only to think of the impact that the visual commentaries of ‘paper architects’ have had on mainstream architecture, from visionaries such as Piranesi to Franco Purini and Lebbeus Woods.” (Porter 2000: 48, 49)

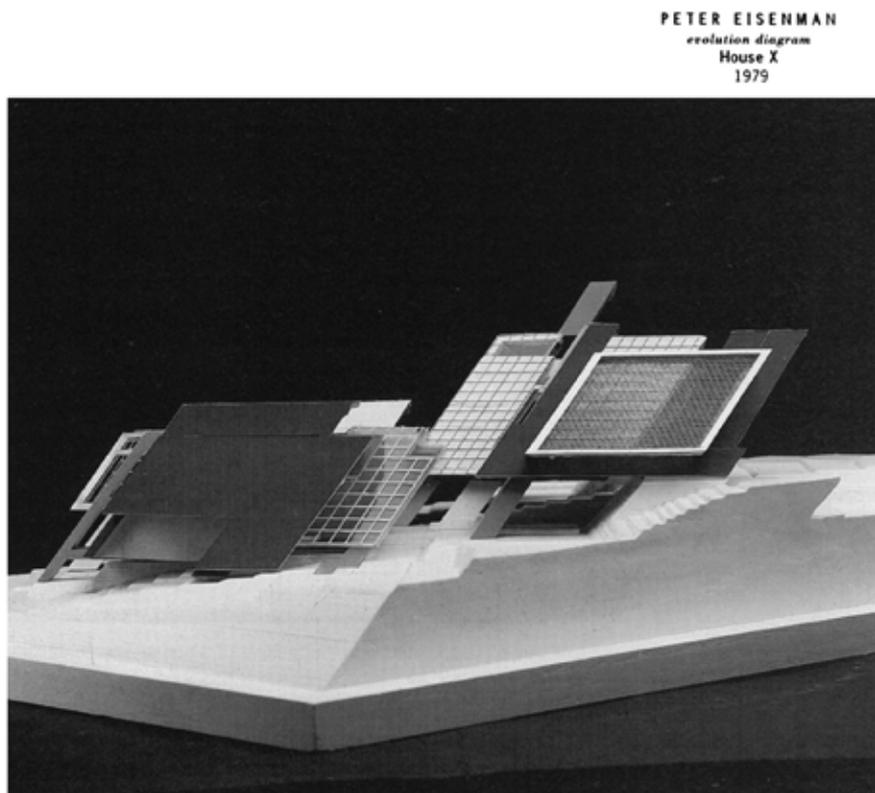
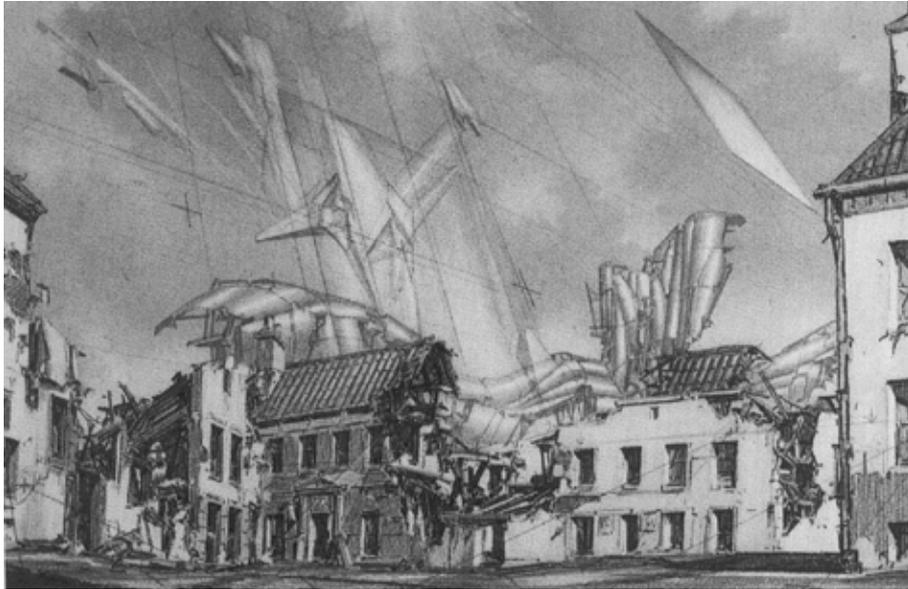
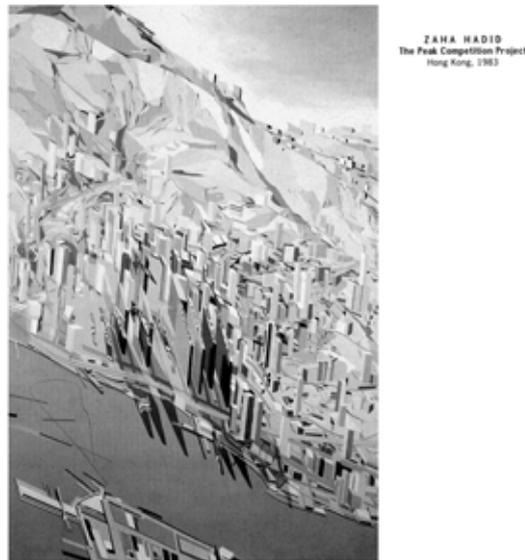


Figure 18. “Model” architecture, Peter Eisenman.



*Figure 19. "Paper" architecture, Lebbeus Woods.*



*Figure 20. "Paper" architecture, Zaha Hadid.*

This paper focuses on the possibility of (re)designing architecture virtually with the help of one of the most important visual realms: Photography. Various digital processes like stitching multiple photos

together and mirroring images in image editing software like Photoshop, allow this virtual architecture to take place in the computer environment. Following this, I propose to raise the term “snap architecture” to connect it to the frequently referred concept of “paper architecture.” I will close with a quote from Terence Wright: “In the art photograph, it may be the photographer’s intention to let aspects of the image be ambiguous, leaving it open to a wider spectrum of imaginative possibilities on the part of the viewer.” (Wright 1999: 83)

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