

Metaverse Creativity  
Volume 1 Number 1

© 2010 Intellect Ltd Article. English language. doi: 10.1386/mvcr.1.1.33\_1

**MURAT GERMEN**  
Sabanci University

# Using 2D photography as a 3D constructional tool within the metaverse

## ABSTRACT

1. *Photography is a powerful 2D representation tool to document 3D volumes like*  
2. *architecture. It is possible to manipulate photos with 2D tools like Photoshop in*  
3. *order to suggest new 3D reformations and re/interpret architecture. One can*  
4. *alternatively use 2D textures as mappings to create realistic 3D model renderings.*  
5. *This project is a combination of these two approaches: photographing architecture,*  
6. *turning the resulting photos into transparent image files, and then mapping these*  
7. *photos onto 3D volumes in order to create a 'new' architecture from an 'existing'*  
8. *architecture.*

9. *One of the advantages of using photographs to create architecture is that the*  
10. *photo pool can easily be composed of visuals from various cultures and you may*  
11. *end up using an amalgam of visuals from, say, so-called opposite cultures. This*  
12. *possibility reminds the peaceful collaboration of musicians from different cultures*  
13. *to create a unique music. In addition, this act can also be taken as a migration*  
14. *of media through appropriation of photography for 3D volume creation and re/*  
15. *presentation. At this point, we are talking about a double representation, since*  
16. *photography is a representation tool already and it gains another representa-*  
17. *tional dimension when it is remapped onto 3D volumes for the construction of an*  
18. *alternative reality.*

19. *This article concentrates on using a representation tool (photography) to con-*  
20. *struct a 3D space (architecture) within a virtual 3D environment (Second Life®).*

## KEYWORDS

photography  
construct  
perception  
virtual reality  
representation  
metaverse  
virtual architecture  
perspectivism

*During the process the concepts of perception, reality, cultural context, re/presentation and appropriation will be examined.*

**ARCHITECTURE, PHOTOGRAPHY AND TRUTH**

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 being photographed. Consequently, the shifting motion in photography causes another shift in our perception: photography does not reflect the truth.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.
- 41.
- 42.
- 43.
- 44.
- 45.
- 46.
- 47.
- 48.
- 49.
- 50.
- 51.
- 52.



*Figures 1 and 2: Professional architectural photography samples where two horizontal photos taken with a wide-angle, tilt-shift lens were combined in order to widen the angle even further and augment the perception. This coverage is not possible with a single shot and offers a unique aesthetic. Photos by Murat Germen, 9 August 2007.*

1. Considering the fact that there are different lenses ranging from wide to  
 2. tele-angle, different films for different purposes yielding different contrast his-  
 3. tograms, different speed values that lead to various levels of graininess, the  
 4. fact that we do not see in black and white, etc.; it is possible to assert that  
 5. cameras do not see in the manner we see and therefore the photographs that  
 6. cameras take have no possibility of reflecting the truth as we see with our  
 7. eyes. Piotrowski and Robinson approach the problem from another angle:

8.  
 9. Photography, on the other hand, filters reality in a different way. A  
 10. photograph seems to be an 'objective' record of the field of vision that  
 11. is trustworthy because the photochemical process provides a reliable  
 12. method of recording an image. [...] All that makes photography appear  
 13. believable or objective conceals how much a photograph is a constructed  
 14. representation.

(Piotrowski and Robinson 2001: 54)

15.  
 16.  
 17. Unlike a person's experience in architectural space, a photographer's picture  
 18. singles out a particular view and freezes it in time. The image is composed  
 19. so that it is seen in a certain manner, making particular relationships visible  
 20. and hiding others. Photographers frequently manipulate light, either artifi-  
 21. cial or natural, to enhance selected attributes of architecture. Promotional  
 22. photographs of architecture, rather than supporting a symbolic dialogue  
 23. between the viewer and a depicted building, encourage the viewer's desire  
 24. to own a similar kind of architectural commodity. 'This constructed desire  
 25. for the represented object shapes the commercial subject-object relationship'  
 26. (Piotrowski 2001: 54).

27. With reference to the notion of an ideal truth Mark Kingwell puts it clearly:

28.  
 29. The image is made, not found, and the making is inherently personal,  
 30. rooted in prejudice. The important truth is to recognize and acknowl-  
 31. edge bias openly, not least in the essential decisions around framing  
 32. the image. [...] Our investigation must entail a special kind of refusal:  
 33. a refusal to take the taken-for-granted for granted. It follows that  
 34. the responsible image is the one that makes that refusal necessary,  
 35. unavoidable, insistent. That is the truth in the image though perhaps  
 36. not the truth we thought to find.

(Kingwell 2006: 16)

37.  
 38.  
 39. The concepts of objectivity and the presence of a single dogmatic reality are  
 40. also criticized by Vilém Flusser, who states that 'the apparent non-symbolic,  
 41. 'objective' character of technical images has the observer looking at them as  
 42. if they were not really images, but a kind of window on the world'. He goes  
 43. on to say that the viewer trusts what he/she sees in the way in which they  
 44. trust their own eyes. If there is any criticism involved, it is not as a critique  
 45. of image, but as a critique of vision; the critique is not concerned with their  
 46. production, but with the world 'as seen through' them.

47.  
 48. Such a lack of critical attitude towards technical images is dangerous in  
 49. a situation where these images are about to displace texts. The uncritical  
 50. attitude is dangerous because the 'objectivity' of the technical image is a  
 51. delusion. They are, in truth, images, and as such, they are symbolical.

(Flusser 2000: 4)

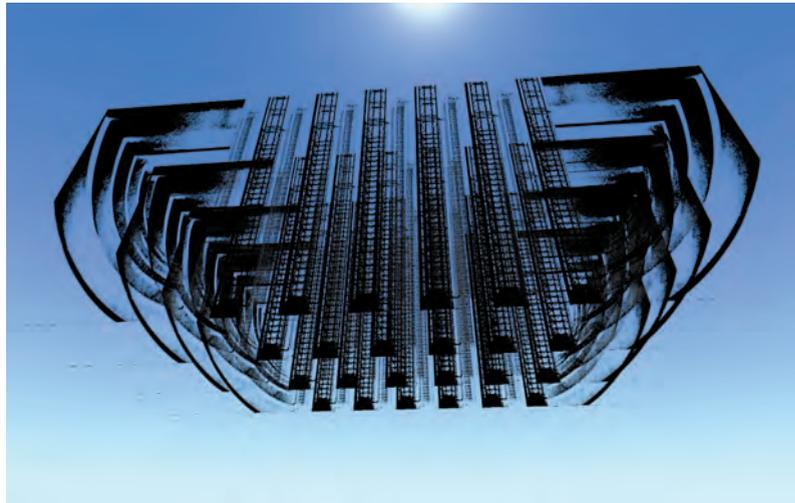
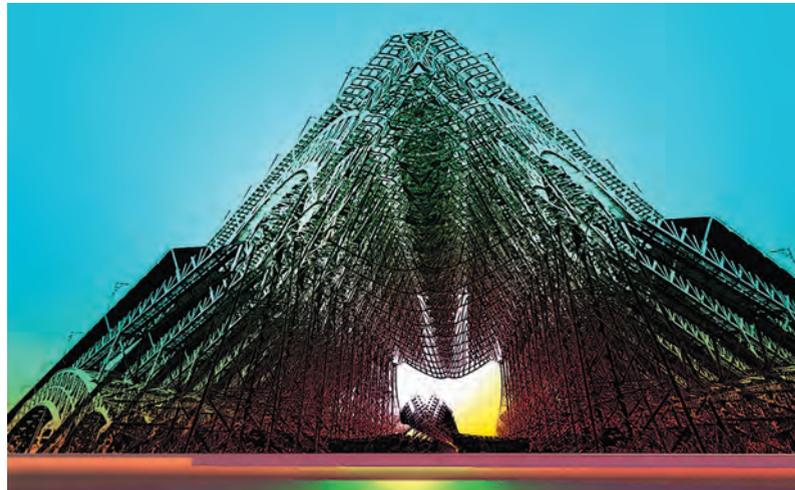


Figure 3 and 4: Staging a succession of planes devoid of the typical depth of field, with all its planes kept clearly and no shadows cast (due to online rendering limitations in Second Life®), leads to an idiosyncratic perception mode that further fosters the concept of constructed reality and creation of a personal world. This personal world exists in the virtual world and the particular experience of the constructed reality takes place with the help of a concept that we can call 'tele-presence', which focuses on the relationship between an individual and his/her personally mediated environment. Three-dimensional modelling artworks constructed in Second Life® by Murat Germen, 2008–2009.

Since we deal with symbols at this point, the notion of representation comes in. As Fritjof Capra states in his *Tao of Physics*, 'representation of reality is so much easier to grasp than reality itself, we tend to confuse the two and to take our concepts and symbols for reality' (Capra 1975: 28). This is also very much in parallel with Jean Baudrillard's statements in his philosophical treatise *Simulacres et Simulation*, where he asserts that simulated copy

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.
- 41.
- 42.
- 43.
- 44.
- 45.
- 46.
- 47.
- 48.
- 49.
- 50.
- 51.
- 52.

1. has superseded the original object, therefore representation has replaced the
2. reality it illustrated. Since representations are personal definitions of particular
3. personal experiences and perceptions, it becomes rather problematical to talk
4. about objectivity where reality is concerned.

- 5.
- 6.

## ARCHITECTURE AND CONSTRUCT

- 7.

8. The concept of construction in the architectural design process is a tempo-
9. rary process which finally transforms itself into an end 'product': a building,
10. a culture, a society, an idea, a freedom, a dogma, etc. Construction sites
11. can be conceived as stages where this process is being 'performed' over
12. and over again. The inherent incompleteness within the constructing act
13. pushes us to dream; on the other hand, a completed product loses its nar-
14. rative potential as it as it gives us all the necessary pieces that constitute
15. the whole: there is no puzzle to solve and no story to write. Construction
16. sites, in this sense, are like historical ruins; Paul Zucker asserts that 'devas-
17. tated by time or wilful destruction, incomplete as they are, ruins represent
18. a combination of man-made forms and of organic nature' (Zucker 1961:
19. 119). As a tribute to and resting on this statement, the more incomplete the
20. construct is the more organic life gets, and the more surprises and the less
21. boundaries we have.

- 22.

23. Architectural photography has the potential to recreate the previously
24. mentioned puzzle in order to bring an alternative representation to archi-
25. tecture. The architectural photographer is sometimes offered the freedom of
26. reinterpreting and reconstructing architecture in order to be able to present a
27. novel virtual perception to the audience. The idea here is to get a set of spatial
28. clues that may even be used later in other architectural projects. The artist/
29. author was personally invited to two different concept exhibits in which he

- 30.



- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.
- 41.
- 42.
- 43.
- 44.
- 45.
- 46.
- 47.
- 48.
- 49.
- 50.
- 51.
- 52.

Figure 5: 'Metagen' Series #12 by Murat Germen., 2008–2009.

was given the freedom to invent a virtual architecture through photography. The concept text written for one of these exhibits reads 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 ...

(Germen 2006)

The following two quotes from William Mitchell will help the author in clarifying the notion of 'reconstruction of space':

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, neighbourhoods, 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 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 remake their relationships. The resulting new urban tissues will be characterized by live/work dwellings, twenty-four-hour neighbourhoods, 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 can also be associated with the conception of simulacra as offered by Jean Baudrillard. During the 1980s, 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 on what he calls 'simulacra' and 'simulation' fits here. He argues that the western societies have undergone a 'procession of simulacra', a chain of four '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.

1. Baudrillard further argues that in modern society the simulated copy has  
 2. superseded the original object or the original experience and 'the map has  
 3. become the territory' (Baudrillard, 1998: 166). Art theoreticians and philoso-  
 4. phers have already discussed the extent to which reality is represented in pho-  
 5. tographs. The general acceptance today is the idea that photographic images  
 6. only imply reality or truth and photographs in daily life do replace the reality  
 7. copied or represented in them; examples of this are people kissing loved ones'  
 8. portraits or the huge industry built around pornography, or mouth-watering  
 9. food photographs (Cetin 2007). Following this argument, one can justify the  
 10. motivation of practicing architectural design within the realm of digital pho-  
 11. tography since the image created within the photograph carries the potential  
 12. to replace the 'truth'. This argument can additionally be supported by the fol-  
 13. lowing quote from Lynda H. Schneekloth:

15. Architecture, landscape architecture, planning, and other environmental  
 16. design fields are practices whose primary aim is to make the world, to  
 17. make something new. We give material form to some vision of human  
 18. society and place. The shadow side of this creation, this making, is that  
 19. these fields are also about 'unmaking' the world. The world already  
 20. exists, and every time we plan, design, and/or construct some aspect  
 21. of worldness, we are replacing and therefore unmaking something else.

22. (Schneekloth 1998: 1)

## 25. ARCHITECTURE WITHOUT ARCHITECTS

26. In *Architecture Without Architects*, originally published in 1964, Bernard  
 27. Rudofsky provides 'a demonstration of the artistic, functional, and cultural  
 28. richness of vernacular architecture'. Rudofsky discusses spaces and buildings  
 29. made without the involvement of architects. He is interested in buildings pro-  
 30. duced through 'communal enterprise' before architecture 'became an expert's  
 31. art'. Some of his examples are buildings made by builders without the direct  
 32. involvement of users; others are a collaborative effort between builders and  
 33. users (Hill 2003: 58). The participation of the dweller in the design and con-  
 34. struction processes requires leeway and the

36. flexibility by technical means suggests two further types of user creativ-  
 37. ity: constructional, a fabrication of a new space or a physical modifi-  
 38. cation of an existing form, space or object, such as removing the lock  
 39. from a door; conceptual, a use, form, space or object intended to be  
 40. constructed, such as a door.

41. (Hill 2003: 88)

43. Conceptual creativity encourages the user to be creative mentally and pro-  
 44. vide practical data to be used in more responsive architecture. Concerning this  
 45. Rudofsky says, 'vernacular architecture does not go through fashion cycles. It  
 46. is nearly immutable, indeed unimprovable [sic], since it serves its purpose to  
 47. perfection' (Rudofsky 1964: 2).

48. Bernard Rudofsky was neither an architect nor a theorist in the usual  
 49. sense. At the start of his career he completed a number of houses in Italy and  
 50. Brazil, where he employed the formal language of the modernists (although  
 51. his writings appear to indicate that Rudofsky was primarily engaged as a  
 52. critic and culture theorist from the 1940s onwards). He did not just write

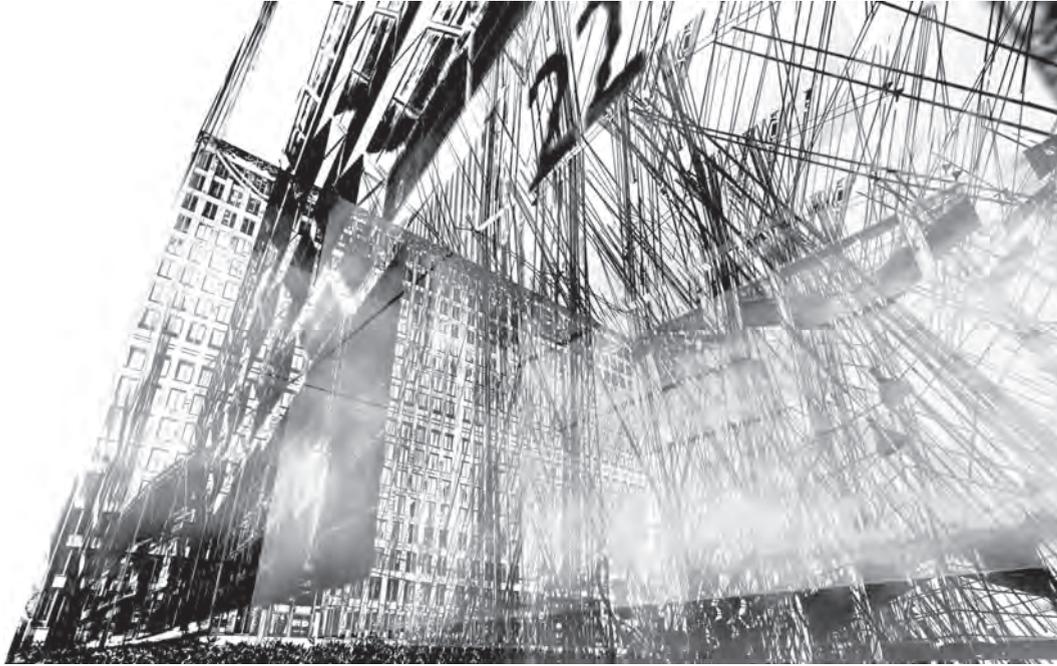


Figure 6: 'Metagen' Series #18 by Murat Germen., 2008–2009.

about architecture and design, but also on topics such as clothing, shoes, eating and bathing. The common element behind all of these activities, though, was the human body, and his lamentation of the loss of sensual awareness. No lifestyle should be preformed, preordained or preconceived. The interaction of the human being with the environment he has shaped has to be characterized by an individual attitude towards the life of a responsible citizen (Platzer and Wit 2007).

It is obvious that not everybody has the ability to build and design; not everybody can become an architect. Yet this fact should not lead to the conception that the architect should be in full control of the entire process. There is more potential for a truer localization of architectural design if users are involved in the design process. If the architect takes control of everything, local design trends to be introduced by him/her face the danger of becoming overly globalized, due to the inevitable presence of governing fashionable styles dictated by 'high architecture' or hegemonic macro trends that directly/indirectly force architects to follow them:

Historically, in professional practice, many architects retained their position by servicing powerful clients and accepting their values. When the powerful ignored, misunderstood, or repressed the needs of others in the society, the views of the less powerful did not play a role in the definition of architectural knowledge or practice. Insofar as the traditional perspective is followed, it excludes the powerless, or the 'other', ' and has proved unable to effectively encompass social justice, the politics of diversity, or the politics of empowerment. [...] Involving the user, the ordinary citizen, the public, not only would require more time and

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  
10.  
11.  
12.  
13.  
14.  
15.  
16.  
17.  
18.  
19.  
20.  
21.  
22.  
23.  
24.  
25.  
26.  
27.  
28.  
29.  
30.  
31.  
32.  
33.  
34.  
35.  
36.  
37.  
38.  
39.  
40.  
41.  
42.  
43.  
44.  
45.  
46.  
47.  
48.  
49.  
50.  
51.  
52.

1. energy but would demand substantial changes to existing practices. [...]  
 2. Clearly a culturally critical position is needed'.  
 3. (Piotrowski and Robinson 2001: 76)  
 4.

5. As a contrast, in vernacular architecture from the primitive age, or even in  
 6. several parts of the world nowadays, there is no segregation between the  
 7. architect and the community because normally the architect is indeed a mem-  
 8. ber of the community. Thus there is no differentiation between both cultures  
 9. and there are no conflicts of interests since they have the same way of life,  
 10. use the same symbols and codes, and apply the same strategies. The result is  
 11. usually that every part of vernacular architecture – be it its technology, con-  
 12. nections with nature or with the social system – is culturally related. Although  
 13. the typology of the building is merely simple and less dramatic, its immense  
 14. level of ingenuity is beyond belief (Paramita 2009: 3).  
 15.

### 16. **EXPERIMENTATION IN *SECOND LIFE*®**

17.  
 18. As digital photography became more accepted, influential and widespread, art-  
 19. ists/designers started to take advantage of photos to create novel 2D/3D enti-  
 20. ties. Panoramic photography, photo-mosaics, stop-motion studies are examples  
 21. of 2D creations using numerous photographs. Software packages whereby one  
 22. can employ photographs to create 3D scenes and environments have also infil-  
 23. trated the marketplace in recent years. In such cases photographs mostly act as  
 24. planar surface information to be used as mappings onto volumetric faces and  
 25. they provide valuable knowledge/detail on the identity of a particular entity.

26. Virtual architecture is a term used for architecture specifically created in the  
 27. computer environment and never used within the realm of architectural pho-  
 28. tography. This article concentrates on the prospect of constructing architecture  
 29. virtually through photography within the metaverse. Artists from widely dis-  
 30. parate periods, ranging from Piranesi to Lebbeus Woods, previously dreamed  
 31. about architectures that could exist virtually, on paper. Nowadays the compu-  
 32. ter screen and particularly 3D environments, which can be accessed via that  
 33. screen, appear to fulfil this dream of many millennia. While space is usually  
 34. defined/experienced as a physical entity, we have recently begun to observe  
 35. that the notion of 'space' can exist/be perceived/used as a non-physical organ-  
 36. ism by means of interactive media and virtual environment applications in the  
 37. computer platform. Such creations bring new definitions of 'space' and can be  
 38. named as 'informational space' or 'cognitive space'.

39. The artist/author has been pursuing his own line of enquiry into creat-  
 40. ing such novel identities through the usage of photography mapped onto  
 41. new media. Since past studies mostly revolved around setting up panorama  
 42. stitches, investigating 3D objects and environments was the next logical step.  
 43. There were various offline and online 3D environment alternatives in which  
 44. one could carry this experimentation out. *Second Life*® was selected because it  
 45. has a powerful 3D construction interface.

46. Of equal importance to the artist/author is the fact that *Second Life*® is a  
 47. global(ized) milieu where participants worldwide pursue interactive 3D crea-  
 48. tivity. This global platform upon which participants from many diverse back-  
 49. grounds can interact, and even build collaboratively, is of added interest to the  
 50. artist/author who believes that personal experience is closely associated with  
 51. local culture and consequently influences the particular representations that  
 52. an individual will create. No matter how hard one tries to keep away from

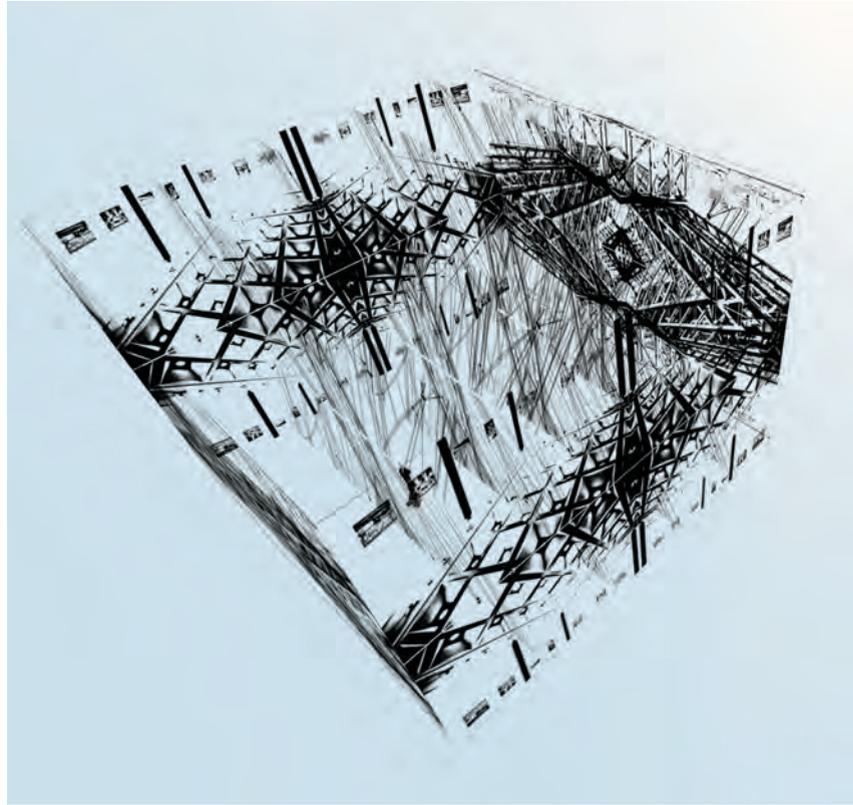


Figure 7: 'Metagen' Series #23 by Murat Germen., 2008–2009.

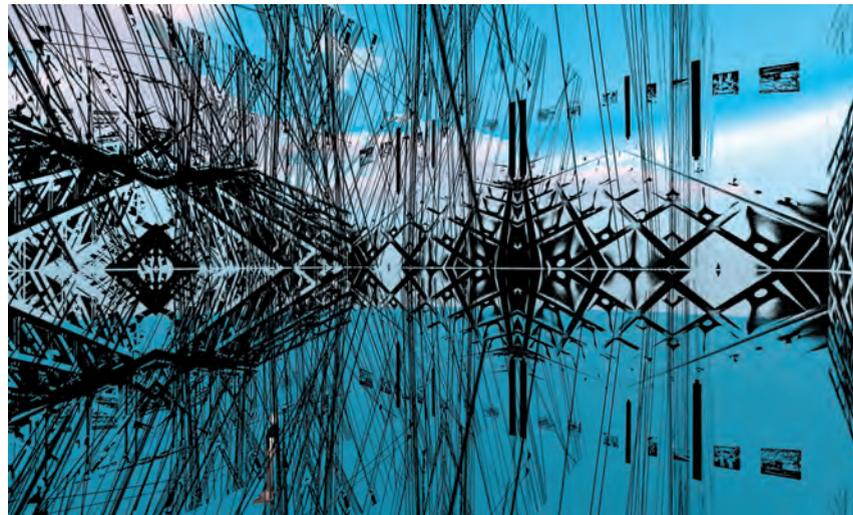


Figure 8: 'Metagen' Series #29 by Murat Germen., 2008–2009.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.
- 41.
- 42.
- 43.
- 44.
- 45.
- 46.
- 47.
- 48.
- 49.
- 50.
- 51.
- 52.

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  
10.  
11.  
12.  
13.  
14.  
15.  
16.  
17.  
18.  
19.  
20.  
21.  
22.



23. *Figure 9: 'Metagen' Series #37 by Murat Germen., 2008–2009.*

24.  
25.  
26.  
27. cultural constraints in order to stay free, there is a collective memory which  
28. is embedded in our genes and that intuitively/unconsciously guides individu-  
29. als when making decisions. Thus, instead of escaping from tradition, a more  
30. balanced conduct can emerge as reinterpreting local customs, rituals, prac-  
31. tices, institutions, beliefs, etc. in the presence of new ways of communication.  
32. Adaptation, reinterpretation, revision, variation, reconsideration, adjustment,  
33. improvement are not necessarily notions forcing one to give his/her principles  
34. up; on the contrary, they ensure that individuals stay alert, fresh, ready, crea-  
35. tive and open-minded. The more one culture's representations are updated  
36. the more progressive this culture gets and the more it has to share.

37. As Andréa Zhouri states, instantaneous global communication and mass  
38. transportation have made distances 'shorter', time and space have become  
39. compressed, and contact with different cultures now shapes personal experi-  
40. ence of the world in a global way. Of course, such 'global' experiences require  
41. some preconditions in the form of financial means, access to new technol-  
42. ogy and linguistic skills. Certainly environmental and human rights agents  
43. share this 'global' experience. Thus remote areas have become closer and  
44. interlinked just as 'the exotic' has become familiar. However, this is not to  
45. say that environmentalists and advocates for human rights all hold the same  
46. homogeneous image or understanding of the world. Neither is it to say that  
47. the intensification of contact implies a better understanding of and commu-  
48. nication with 'the other' (Hussey and Thompson 2000: 178). If a culture and/  
49. or individual has a comprehensive assessment of personal experience(s) and  
50. a resulting definition of priorities leading to conscious representations, it/she/  
51. he will have more chance to generate self-esteem, self-confidence and conse-  
52. quently understand 'the other' in order to coexist in peace.

One consideration throughout this process was that the constitution of space involving multiple incompatible perspectives to be present in photos should be used. This can be likened to Ottoman miniatures where various conflicting perspectives can coexist. This diversity of perspectives takes us to the idea of 'perspectivism', originally proposed by Friedrich Nietzsche, where all ideations take place from particular perspectives. This means that there are many possible conceptual schemes, or perspectives which determine any possible judgement of truth or value that we may make; this implies that no way of seeing the world can be taken as definitively 'true'. If we take this a little bit further, there is no strictly objective 'reality' to be re/presented, but instead a detailed depiction of our personal perception, which is closer to reality since it describes a particular experience (which is different for every individual). This experience is a symbolic association as representation includes everything people construct as a visual record or figurative manifestation of a reality.

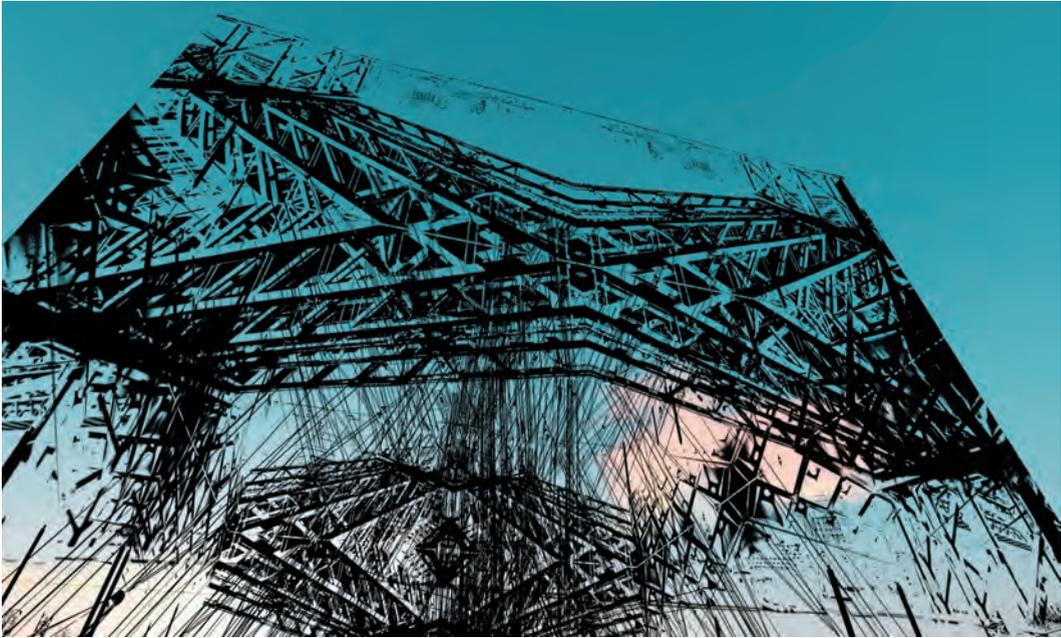
Within this approach, architects usually reduce the definition of representation to the creation of such visual forms as drawings or models that selectively double or imitate the physical reality of a building. I would like to move beyond this traditional view to define representation as a culture-specific 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)

Throughout the building activity undertaken in *Second Life*®, the artist/author was highly aware of the fact that, 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. According to Piotrowski, 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 to the immediacy of reaction of 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' (Lyotard 1991: 42). Through this process, according to Lyotard, human thoughts establish networks of relationships within functioning concepts of reality.

As a 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

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  
10.  
11.  
12.  
13.  
14.  
15.  
16.  
17.  
18.  
19.  
20.  
21.  
22.



23. *Figure 10: 'Metagen' Series #42 by Murat Germen., 2008–2009.*

24.  
25.  
26.  
27.  
28.  
29.  
30.  
31.  
32.  
33.  
34.  
35.  
36.  
37.  
38.  
39.  
40.  
41.  
42.  
43.  
44.  
45.  
46.  
47.  
48.  
49.  
50.  
51.  
52.

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 2001: 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'.

The movie industry would appear to be yet 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 or architecture which never existed. A particular type of illustration called 'matte painting' created by illustrators (and not architects) usually serves 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 reinvent, reinterpret and reform architecture. The urban space created in Luc Besson's renowned movie *The Fifth Element* (1997) 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 allows circulation in all directions (i.e., not just in the horizontal direction as was usual then).

It would seem to be apparent 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 representational tool of architecture, i.e., photography, can also be employed to exercise 'fictional' architecture; this can later be taken advantage of to enable 'real' architecture to be built.

The artist/author wanted to take advantage of the *Second Life*® environment in order to test his proposal of performing architectural design with the aid of photography. Thus the fundamental concern was to create architecture through the usage of architectural representation: a layering whereby 2D real-life photographs, taken by the author on previous occasions, were converted into highly contrasted black and white images with a transparent background. These images were mapped onto a complex 3D quasi-architectural construct built in the metaverse and which consisted of transparent object planes. Once the construct was textured with the real-life architectural photographs, a new generation of photographs (an 'architecture built upon architecture') was created using the *Second Life*® software's snapshot feature.

One further observation as the project was implemented was that virtual architecture seems to be a very potent platform when it comes to the proper planning of architecture through a multiplicity of sections. Even though the constructs assembled by the artist/author were highly complex through the imagery mapped onto their surfaces, as well as through their volumetric components, the care which was invested into proceeding with a sectional logic during the early phases paid off: when the plan of the construct was applied into the Z axis, the underlying strategy became evident. During the second phase of the building activity the prototype constructs were then extended into the X and Y-axis of the 3D realm through a process of equal interval repetitions. Through these repetitions sections/planes become volume, and the flow amongst volumes constitutes architecture.

What emerged was a layering of two realities, 'real' and 'virtual', visible simultaneously and which a user of the metaverse could also experience interactively in a 3D manner. Indeed the superimposed 'building' is one that a virtual resident of a metaverse could conceivably use as a dwelling or a meeting area. As such, a form of virtual architecture, which exists as a non-physically physical entity, enables the sense that the notion of 'space' can be perceived, indeed exist and be used, by means of interactive media and particularly 3D virtual environment applications.

## CONCLUSION

Architecture today need no longer be considered as a monument that smothers social life. The notion that architecture is a means of controlling and incarcerating people in solitary and inflexible permanent structures should be challenged in today's networked and fluid societies. Tendencies for oppression through architecture must be challenged, and, to be effective, resistance must remain alive and regenerative through collaboration (Cowan 2002: 20). Hill supports this proclamation by stating that the architectural profession has come to employ a restrictive visual and verbal language that empties architecture of its inhabitants. The text suggests that the traditional language of architectural production and discourse can be dismantled and recast to include, and respond to, the signs of inhabitation. Conversely, the 'illegal' architect,

1. who questions and subverts these conventions, codes and laws of architec-  
 2. ture, is most likely to value the user and transform architectural practice (Hill  
 3. 1998: 10). A very fresh example of this suggestion is the architecture designed  
 4. by non-architect individuals within the *Second Life*® environment.

5. This series of artworks and processes focus on the possibility of (re)design-  
 6. ing architecture virtually with the help of one of the most important repre-  
 7. sentation tools: photography. Photography can be utilized in the process of  
 8. 'constructing' a new space – that we can call 'narrative space' – from an exist-  
 9. ing spatial body. This narrative space can also be defined as a 'manufactured  
 10. metaspaces' which is a space beyond reality and representation: a constructed  
 11. reality that exists solely in digital realms like *Second Life*® where boundaries  
 12. are unnoticeable. Despite the fact that this constructed reality is not a physi-  
 13. cally built entity, it can reveal some spatial clues that can later be used in  
 14. tangible architectural projects of the real world. While the idea of juxtaposing  
 15. a series of disparate photos sounds questionable, the new aesthetic challenge  
 16. of formulating the visual continuity of photos in sequence offers new ways of  
 17. constructing space and conveying narrative information as a result of a new  
 18. spatial flow among contiguous planar spaces.

19. A final quote from Mark Kingwell reinforces this endeavour of making  
 20. personal worlds of architecture using photography:

22. Photographs are not multiple depictions of some single reality, waiting  
 23. out there to be cornered and cropped, and somehow regulating, even  
 24. in the cornering and cropping, how/what the image means. Rather,  
 25. photographs offer multiple meanings. The presented image is not a  
 26. reflection, or even an interpretation, of singular reality. It is, instead,  
 27. the creation of a world. [...] The truth of the image is the truth of time:  
 28. not its metaphysical essence, whatever that might be, but its presence;  
 29. its inescapability. A photograph, I want to say, is a machine for mak-  
 30. ing worlds.

(Kingwell 2006: 16)

## 34. REFERENCES

35. Baudrillard, J. (1998), *Simulacra and Simulations*, USA: Stanford University  
 36. Press, p. 166.  
 37. Capra, F. ([1975] 2000), *The Tao of Physics*, fourth edition, Boston, USA:  
 38. Shambhala Publications Inc. (original edition: Wildwood House), p. 28.  
 39. Cetin, O. C. (2007), 'Thomas Demand as a Baudrillard Practitioner: The pho-  
 40. tographic works of Thomas Demand as a Proof of or as Inspired by Jean  
 41. Baudrillard's Simulation Theory', VCD508 lecture notes, Istanbul, Turkey:  
 42. Bilgi University.  
 43. Cowan, G. (2002), 'Nomadology in Architecture Ephemerality, Movement and  
 44. Collaboration', dissertation, Australia: School of Architecture and Urban  
 45. Design, University of Adelaide, p. 20.  
 46. Flusser, Vilém (2000), *Towards A Philosophy of Photography*, London, UK:  
 47. Reaktion Books, p. 4.  
 48. Germen, M. (2006), *Under Construction, Exhibition Catalog*, Istanbul: Kanyon.  
 49. Hill, J. (ed.) (1998), *Occupying Architecture: Between the Architect and the User*,  
 50. London: Routledge, p. 10.  
 51. Hill, J. (2003), *Actions of Architecture: Architects and Creative Users*, New York:  
 52. Routledge, pp. 58, 88.

- Hussey, S. and Thompson, P. (eds) (2000), *The Roots of Environmental Consciousness: Popular Tradition and Personal Experience*, London: Routledge, p. 174. 1.
- Kingwell, Mark (2006), *The Truth in Photographs: Edward Burtynsky's Revelations of Excess*, Germany: Steidl, p. 16. 2.
- Lyotard, J. F. (1991), *Matter and Time: The Inhuman, Reflections on Time*, California: Stanford University Press, p. 42. 3.
- Mitchell, W. J. (2000), *E-topia: Urban Life, Jim – But Not as We Know It*, Cambridge: MIT Press, pp. 3, 7. 4.
- Paramita, K. D. (2009), 'Culture Based Architecture: Recognising the Difference', ARC 6988 Design Methodologies, MAAD lecture notes, Sheffield: The University of Sheffield, p. 3. 5.
- Piotrowski, A. and Robinson, J. W. (eds) (2001), *The Discipline of Architecture*, Minneapolis: University of Minnesota Press, pp. 54, 76, 42, 45. 6.
- Platzer, M. and Wit, W. de (2007), *Lessons from Bernard Rudofsky*, Architekturzentrum Wien, [http://www.azw.at/event.php?event\\_id=639&lang\\_id=en](http://www.azw.at/event.php?event_id=639&lang_id=en). Accessed 3 June 2010. 7.
- Rudofsky, B. (1964), *Architecture Without Architects – A Short Introduction to Non-Pedigreed Architecture*, Garden City, New York: Doubleday & Company, Inc., p. 2. 8.
- Schneekloth, L. H. (1998), 'Unredeemably Utopian: Architecture and Making/Unmaking the World, Architecture, Design and Utopia', *Utopian Studies*, 9: 1, p. 1. 9.
- Zucker, P. (1961), 'Ruins: An Aesthetic Hybrid', *The Journal of Aesthetics and Art Criticism*, 20: 2, p. 119. 10.

### SUGGESTED CITATION

Germen, M. (2010), 'Using 2D photography as a 3D constructional tool within the metaverse', *Metaverse Creativity* 1: 1, pp. 33–48, doi: 10.1386/mvcr.1.1.33\_1

### CONTRIBUTOR DETAILS

Murat Germen received his BSc in City Planning from the Technical University of Istanbul, in 1987, and his MA in Architecture with Henry Adams Gold Medal for academic excellence from the Massachusetts Institute of Technology in 1992, where he studied as a Fulbright Scholar. Germen has published, exhibited widely and internationally. He has awards and honourable mentions from international competitions like IPA, PX3 - Prix de la Photographie, EPSON International Panorama Awards. Germen has published research output at various international conferences such as SIGGRAPH (2006, 2007), ISEA (2009), MutaMorphosis: Challenging Arts and Sciences (2007), Towards a Science of Consciousness (2009), Cyberworlds, CAe (2007, 2008, 2009), EVA London (2008, 2010), Computer Art Congress/CAC.2 (2008), Creativity and Cognition (2007), eCAADe (2006, 2010) and ASCAAD (2007).

Contact: Sabanci University, FASS, Orhanli, Tuzla, Istanbul 34956, Turkey.

E-mail: [muratgermen@sabanciuniv.edu](mailto:muratgermen@sabanciuniv.edu)