

WTC. A DISCUSSION ON BUILT SPACE REGENERATION

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Abstract. Before 9/11 WTC was an international landmark. The definition of the two high-rise buildings identity, their tourist, social, visual and economic significance, disappeared with the destruction of their materiality. As a result, the contemplative visual and unwritten discourse of the Lower Manhattan disappeared together with the architectural, urban, technological essence and also with the philosophy of stability and equilibrium of a prosperous society. At the social-mental level this event triggers a crisis in personal and collective consciences (of the American Nation but also of the Nations), and a crisis of humanity. The architectural-urban and ideas competition organized to select the best urban-social-architectural concept proved to be a difficult task. Not only it had to “fill” a particular place on earth, but it also needed to configure a philosophy of place that would ‘heal” the wounds of the local and international communities, namely the lack of security and prosperity brought on by a no longer hidden technology of aggression bringing cities and communities under threats never experienced before at times of peace. In its first part the article discusses the competition, proposals and the finalized urban project. The particular challenges related to the selection of design in the case of WTC are doubled by a certain complexity related to the institutional arrangements common to most large urban development projects. It is also clear that there is interdependency between the project governance and the project results. These aspects are discussed in the second part of the article.

Key words: architecture, competition, trends, memory, urbanity.

1. About competition and the discourse of the cultural landscape

We considered this particular case-study for its uniqueness regarding contemporary context generated by issues of globalization and the new format brought on by global economy. Also, the problematic of space as the result of 9/11 disaster is of particular interest considering the impact

of all factors related to social and urban conscience, urban landmark and local icon, perceived as philosophy-of-life or the understanding and interaction with the urban realm as a cultural space.

This paper presents premises, research and thoughts on problems and solutions to challenges brought on by the tragedy

of 11 September 2001 at World Trade Center NY. The special identity of the two towers, their touristic, social, visual and economic representation disappeared with the destruction of their material representation; along with that disappears the contemplative discourse of Lower Manhattan, the architectural, urban, technological essence, but also the philosophy of permanence and stability of a prosperous society.

At the social-mental level this event triggers a crisis in personal and collective consciousness of the American Nation but also sends an important signal of crisis in the conscience of humanity.



Fig. 1. World Trade Center, New York, aerial view March 2001, ©Jeffmock
Source: Wikimedia Commons (2012)

The architectural - urban and ideas competition organized to select the best urban-social-architectural concept was challenging not only because it had to “fill” a significant place on earth. It also needed to configure a wound healing philosophy for the nation and the international community generated by the sentiment of insecurity and the deficit of moral prosperity resulted from this no longer hidden conflict, a

situation bringing cities and communities under threats never experienced before at times of peace.

In this case the architectural competition proposed to build on the sacredness of the place by embedding a supplementary message to that of urban landmark and architectural icon.

The comments and ideas are manifold as the event shook the accepted personal and collective mentalities, trying to deconstruct at a philosophical level the common considerations on peace, harmony and the evolution of a prosperous society able to find solutions and the drive for change from within, with no need for an exterior impulse. The collective and individual drama has to find an answer in the architectural-urban-visual complex concept, based on the philosophy of making good by bringing in a sum of creative and sacred energies to the place.

Hence, the competition is based not only on the master plan design, but also on the activation of a new philosophy of space/place that would encompass hope, expressed as an aesthetic space of liberating vision.

The competition, sponsored by Lower Manhattan Development Corporation (LMDC), but also supported by contributors like The New York Times and New York Magazine, has been won at its first call, the concept call, by the Studio Daniel Libeskind. Other remarkable figures of the participation, sustaining similar discourses for space reconversion were Peter Eisenman, Norman Foster, Zaha Hadid, Steven Holl, Rem Koolhaas and Richard Meier.

Libeskind defines initially a concept of mass buildings with two separate entities, meant to occupy the height of the *image* and *mass - volume* of the ensemble, restoring the global image grouped around a memorial site dedicated to the loss of place and humanity.

After the award of the first phase of competition, Liebeskind is invited to join David M. Childs from SOM (who also designed a solution called the *Freedom Tower* for the developer Larry A. Silverstein).

Their collaboration, in the form of guidance from Libeskind during the concept and schematic design phase, leads to the fusion of the two proposals, one supported by the public development agency (LMDC) and the other by the private investor (Silverstein Properties Inc).

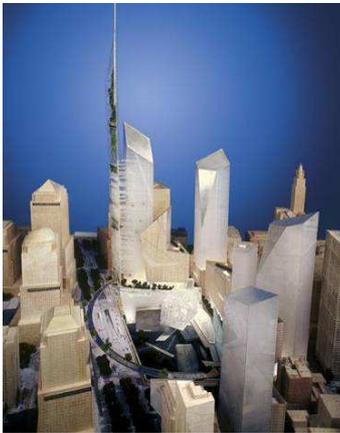


Fig. 2. D. Libeskind competition proposal.
Source: LMDC (2013c)

From a formal point of view the result seems quite close to Liebeskind's vision, although the overall height is increased along with the growth of the gross surface of the towers. This proposal wins the second (and final) phase of the competition : a core area guarded by high-rise volumes, a memorial place that includes the concept of wedge of light / park of heroes, as here the September

sunlight marks the time when the tragedy occurred.

Other solutions try to re-create the twin towers in an alternative formal-architectural manner, attempting to fill the remaining void with image and significance, or to generate completely new meanings like: World Cultural Center, Green Room, Sky Park.

There are proposals that create a constructed latticed barrier to suggest protection for the memorial area, or in the case of Richard Meier's proposal a two stage development in the shape of three united towers to symbolize a double reflection of earth and sky.



Fig. 3. R. Meier competition proposal.
Source: LMDC (2013b)

Another "reflection" is proposed by Coop Himmelbl(l)au, as the core of the site is materialized in the shape of a clepsydra with an interior suggesting a glass cathedral.



Fig. 4. Coop Himmelbl(l)au competition proposal.
Source: The City Review Inc (2009)

In a specific manner, Eisenman designs volumes equal in weight, parallelepiped, uniform and clean as texture, linked by an internal flowing transparent surface of glass, trying to give the site a formal initial recognition of the place.



Fig. 5. P. Eisenman competition proposal.
Source: The City Review Inc (2009)

Zaha Hadid promotes an accessional form, significantly taller than the former twin-towers, placed at the core of the site. The modelling of the vertical volume is made in the shape of a double ascending tube of a natural undulating dynamic.

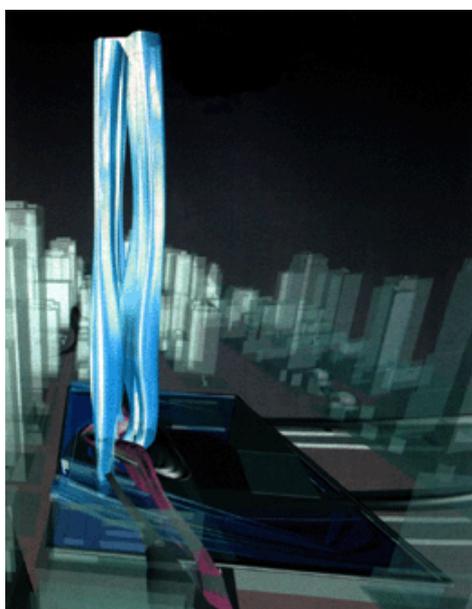


Fig. 6. Z. Hadid competition proposal.
Source: The City Review Inc (2009)

In his own manner of conceiving autonomous formal-functional-aesthetic and economic concepts, Foster designs

two united and faceted towers which mirror the environment, recalling site's memory and augmenting it through the new scale of the proposed volume.



Fig. 7. Foster and Partners competition proposal.
Source: LMDC (2013a)

The dramatic novelty of the competition allows the study of specific particulars of an after-*disaster-re-development* along with the possible formal solutions to crisis at all levels: cultural-philosophic, urban planning and image, architectural, psychological. The problematic is diverse, complex and difficult to evaluate. The proposed volumes and spaces, the new urban life place and its identity are not easy to value; all is based on an architectural experiment, a new urban redevelopment technology based on insertion applied to a particular site.

By considering all levels of the crisis, the space is oriented towards the memorial essence, gaining the features of a sacred place announced by the verticality of the forms that sustain in composition and urban matrix the evocative theme of the site. The verticality is accentuated by all proposals submitted in the competition, an attempt to refill the empty image of the iconic (place). A contemporary refilling technology but from different perspectives: of reconstruction, symbolic insertion, landmark re-creation insertion, the structuring spatial phenomenology or spatial deconstruction, all meant to

enhance the urban significance and construct a place of memory.

Therefore all proposals are interesting to illustrate the process of search for the best urban-architectural solution to a situation that exceeds the ordinary circumstances. This brings about essential questions regarding architecture and its response to a complex and changing environment.

2. About built space regeneration

As a result of the final design process, D. Libeskind elaborated a master plan which was based on his first concept and ideas as well as on the competition's brief.

Following the master plan, several different teams of architects or architectural offices were involved in designing the architecture of each urban 'object': the new office towers, memorial, museum and performing arts center.



Fig. 8. View from Hudson River by Night - render.

Source: Silverstein Properties Inc (2013e)

This assembly of professionals is called by the developer "an unprecedented amalgam of architectural minds" and the key strategy to a "unified plan" and delivery of a "21st-century urban

center" (WTC Team, Silverstein Properties Inc, 2013f).



Fig. 9. Rendering of the WTC site.

Source: Silverstein Properties Inc (2013e)

According to WTC web site (Silverstein Properties Inc, 2013f), in spite of a numerous and complex design team, the proposed designed schedule was quite tight:

- conceptual design - September 2006
- schematic design - March 2007
- design development - July 2007
- construction drawings - April 2008

The WTC web site (Silverstein Properties Inc, 2013d), offers an exact account of the office towers:

1. World Trade Center, architect David M. Childs of Skidmore, Owings & Merrill; 1.776 feet height and designed to become America's tallest building, 2.6 million square-foot of office spaces, observation desk, world-class restaurants, broadcast and antennae facilities.
2. World Trade Center, architect Foster and Partners; 88 story and designed to be the second tallest skyscraper in NY City - 1.349 feet.

3. World Trade Center, architect Richard Rogers and Rogers Stirk Harbour + Partners.
4. World Trade Center, architect Maki and Associates; 72 story tower.
5. World Trade Center, architect Kohn Pedersen Fox Associates; building developed by the former property owner: the Port Authority of New York and New Jersey.
6. World Trade Center, architect 52 storey, 1.7 million-square-foot office tower, is the flagship of the development.



Fig. 10. Aerial rendering of Memorial and Museum.

Source: Silverstein Properties Inc (2013c)

The memorial and museum were opened in 2012. The architectural design was developed by a great team of architects: Michael Arad (Handel Architects), Peter Walker (Peter Walker and Partners), Davis Brody Bond (Davis Brody Bond LLP DBB) and finally Snohetta.

"**THE MEMORIAL** will remember and honor the nearly three thousand people who died in the horrific attacks of February 26, 1993, and September 11, 2001. The Memorial will consist of two massive pools set within the footprints of the Twin Towers with the largest manmade waterfalls in the country cascading down their sides. They will be

a powerful reminder of the Twin Towers and of the unprecedented loss of life from an attack on our soil.

The names of the nearly 3,000 individuals who were killed in the September 11 attacks in New York City, Pennsylvania, and at the Pentagon, and the February 1993 World Trade Center bombing will be inscribed around the edges of the Memorial pools."(Silverstein Properties Inc, 2013b)

According to Michael Arad, the architect of *Reflecting Absence*, as quoted by WTC site: „The design strives to make visible what is absent. The primary responsibility we have is o those we lost that day". (Silverstein Properties Inc, 2013a)



Fig. 11. Museum Design Study: Slurry Wall

Source: Silverstein Properties Inc (2013c)

Some remarkable ideas are to be noted as part of this elaborated design process:

- The architecture competition presents a positive mutation in the case of WTC Competition, proving its coherence and cohesion in achieving the best team of professionals and bringing in "healing" philosophies of memory and community through architecture and urban planning.
- The hypothesis of urgency under which the process took place is exceptional for all times, and this

- changed the perspectives in which the urban – social and urban-global space is designed.
- The technology of architectural and urban space development is quite impressive : here, the competition of ideas under a state of emergency involved different types of submissions and subsequent commissioning to invited architects (most of them also professors and theoreticians), sponsored and non-sponsored participants, a mix that managed to generate the answer to the need of urban regeneration in a global cultural context and to produce the best formula to redraw and redirect the sense of space into a place of memory.
 - The architectural lobby that managed to bring together great names through the whole design process is a novel approach among similar examples, where the architect designed objects and not particular spaces, or landmark places to re-imagine the view of the city. Brand architecture in this case should be read as a regenerated landmark and reorientation of the initial message rather than just a collection of iconic buildings to replace a former local icon.
 - Social motivation was strongly involved in solving the particular problems related to the project.
 - The complexity of the problem is impacted by both the uncertainty of this new type of hazard but also by larger issues of global security.
 - The redefinition of *genius loci* is made by converting the space to cultural memory and reorientation along with reconstruction.

- The result could be described as a huge event of commissioning, designing, redesigning and rethinking the place and the management development tools to generate integration at social, humanitarian and emotional levels along with a new urban identity that redefines both the present and the future of the city.

3. A short review of project critiques

While the first section of the article discusses the role of the international competition technology in setting a solution for the *after-disaster-re-development* of a landmark urban site and the challenges brought up by the need to satisfy both the creation of an architectural icon but also a place of memory, the second part identifies some of the features of this new development technology. As such, probably the main ingredients are the presence of a significant number of renowned architects but also a master plan flexible enough to allow this varied presence but still clear enough to preserve some unifying architectural features.

Discussing the expected project results, the first part of the article shows that the applied development technology leads to interesting urban and architectural results. Currently the project is only finalised in part, but it may be anticipated that in the end it should become a success not only commercially but also as a global memorial and cultural destination.

Critiques are to be expected. Because of their significant impact as built infrastructures as well as the wide social and economic effects, large urban projects are usually subject of heated debates and analysis around their results. There is also a somehow normal public

expectation for these results to reasonably satisfy both public and private interests. WTC makes no exception, only here the special significance of the place-event makes things even more complicated.

While there is no comprehensive case-study of WTC, a brief literature review reveals several critiques pointed out by various authors:

- The “lack of robust public planning” (Beauregard, 2003, p. 151) “public planning marginality” (Beauregard, 2003, p. 147) and the incapacity to achieve “a major planning success” (Beauregard, 2003, p. 147).
- The inherent institutional fragmentation as for any other major urban project leading to certain setbacks and a limited approach when it comes to strategic planning (Gualini and Majoor, 2007, p. 298).
- The unclear jurisdiction of the project participants (LMDC, City of NY, PA and Silverstein) within the project coalition this leaving the whole enterprise with an unclear commitment towards the participatory planning (Hajer, 2005).

The first two observations probably apply to most urban mega-projects. The last one is more specific. According to Hajer this situation of “unclear” project governance arrangements left room for the private developer to promote own design and less room for a more participatory approach but also, as Hajer puts it, led to the clear differentiation between the urban planner (Liebeskind) and the architect (Childs-SOM), where the first serves the public interest and the later the private intent.

As the first part of the article showed, the final result of the master plan competition is a mix between the Liebeskind’s first phase solution (promoted by PA and LMDC) and Child’s Freedom Tower (promoted by Silverstein Corporation). But this design allowed in fact the presence of a significant number of internationally renowned architectural firms to design the specific parts of the ensemble and to imprint the final result with a personal touch.

It is also true that while it is a mix scheme development, most of Ground Zero is for private office use and a relatively small portion is dedicated to public use (the memorial and public space, the cultural center or the retail section).

Thirdly, the significance as place of memory and area of after-disaster rebirth legitimizes the public interest not only from the part the local but also for the international community.

In the view of the current article the high level of public expectations justifies a certain level of public scrutiny and discussions regarding the balance between the public and the private interests served by the project. The problem here is how to assess this balance.

Is it a question of actual comparison between the allocated spaces for public or private use? Does it relate to the architectural-urban features? Should the project include more social amenities or even residential use?

Neither of the critiques proposes a project assessment/evaluation model but a rather general approach that is desirable for any such project:

- more (effective) participatory planning
- better institutional arrangements
- clearer jurisdiction within the project coalition

The WTC mixed governance model involving public bodies (Port Authority-PA), development agencies (Empire State Development Corporation - ESDC, Lower Manhattan Development Corporation - LMDC) and private bodies (Silverstein Corporation) makes even harder to assess

the influence or the impact of the desires and objectives of each stakeholder on both project definition and implementation.

For the moment a temporary conclusion would be that WTC is a successful design and planning experiment, maybe a first of its kind. As the implementation advances and most of the ensemble is finalised, in its both public and private sections, an ex post evaluation of the results would be more accessible and relevant.



Fig. 12. The Future Manhattan Skyline.

Source: Silverstein Properties, Inc (2013e)

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Received: 18 January 2013 • **Accepted in final format:** 24 January 2013