

Santiago Calatrava's World Trade Center Transfer Station - "White Ghost"

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Abstract: On March 4, 2016, the new World Trade transportation hub was reopened. As one of the important projects for the reconstruction of the World Trade Center zone during the 9/11 terrorist attack, it was displayed in the ruins in an extremely strange manner. The leading architect Santiago Calatrava called it "a bird being released from a child's hand". There is no doubt that this transportation hub has been full of controversy since its birth. Can this architecture bear the weight of history? I will illustrate this blot in New York from multiple angles. The earliest World Trade Center metro station was completed in 1971. Located underneath the old Twin Towers, the 20th-century metro station did not have much above-ground building. As two high-rise buildings collapsed in the terrorist attack, the metro station suffered a devastating blow.

Keywords: Santiago calatrava; World Trade Center transfer station

1. Introduction

Usrlman. "Photos of the original WTC bathtub from Liberty Street (1969)". Digital image. Wikipedia. January 1, 1969 published. Accessed June 3, 2020. The temporary WTC station was built in 2003 and its main body is truss structure. In order to restore the traffic as quickly as possible, the metro station used assembled steel as the main material [1].

Mapio. "Temporary World Trade Center PATH Station". Digital image. Mapio. December 22, 2003 published. Accessed June 3, 2020. <https://mapio.net/pic/p-10985/> The permanent Calatrava-designed station reopened in 2016, having multiple functions for transportation and commerce.

The old setting of this building is mainly underground and the above-ground parts are almost entirely new designs, as shown in Figure 1 and Figure 2.



Figure 1. Original foundation wall in new station

David W. Dunlap. "A Vestige of the Original World Trade Center Returns to Duty". Digital image. NyTimes. December 18, 2016 published. Accessed June 4, 2020. <https://www.nytimes.com/2016/12/18/nyregion/a-vestige-of-the-original-world-trade-center-returns-to-duty.html>.

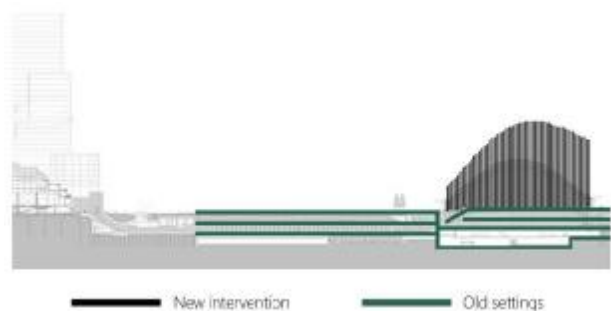


Figure 2. New design of section of WTC station

World Trade Center. "World Trade Center Transportation Hub". Digital image. Panynj.gov. 2016 published. Accessed June 4, 2020. <https://old.panynj.gov/wtcprogress/transportation-hub.html>.

2. Architectural Features and Modern Significance

The reconstruction of the station has great historical significance. Next to it is the 9/11 Memorial museum and Memorial Pool (the base of the destroyed Twin Towers). In this case, we have to broadly understand the old setting. Not only the metro lines underground but also the whole zone has huge influence on the new-built station.

WTC station is a member of the block, witnessing the horrible disaster[2-3].

When we look at it, we cannot distinguish it from the historical background and New York City.

SOM. "One World Trade Center". Digital image. Archdaily. 2016 published. Accessed June 4, 2020.

<https://www.archdaily.com/795277/one-world-trade-center-som>

From the master plan, we can find that this station declined to join the surroundings. The majority of buildings are square and orthogonal, reflecting the architectural modernity and rigorous urban planning.

This thorny building resembles a city freak, which is incompatible with the old setting[4-5].

Michael Kimmelman, an architectural critic working for New York Times, described it as "a disaster for architecture and cities and a symbol of a boondoggle".

The architect's ambition on this project is very obvious, but he used extreme visual impact to imply this disaster. Instead of healing the wound, it is tearing the wound!

At this sad massacre site, Calatrava mistakenly set a symbolic monument.

Meredith TenHoor, associate professor of architecture in Pratt Institute, regarded this symbol as "a casual and surreal reminders of death".

The skeletal structure is constantly impacting the surrounding old buildings and breaking off from the underground railway track[6].

There are two pools lying quietly, next to this white monster, named 9/11 memorial pools. Looking at the clear water, we cannot see the high-rise buildings of the past, but we can feel the accumulation of history. New York people can quietly think about time and enjoy peace in this memorial park.

Hufton+Crow. "The Oculus". Digital image. Architecturaldigest. October 24, 2017 published. Accessed June 4, 2020.<https://www.architecturaldigest.com/story/santiago-calatrava-explains-designed-oculus-for-future-generations>

Looking at the metro station from the memorial pool, the commemorative calm has been broken, or in other words, these are two ways of telling history.

The sharp spurs pierced the sky and the high-rise glass buildings.

Hufton+Crow. "The Oculus". Digital image. Architecturaldigest. October 24, 2017 published. Accessed June 4, 2020.<https://www.architecturaldigest.com/story/santiago-calatrava-explains-designed-oculus-for-future-generations>

After discussing its failed massing, I will start with the material to analyze this blot.

The cost of white marble is very high, and it is difficult to find the response of this material to the surrounding buildings.

I understand that the building wants to look in the mirror on the surrounding glass curtain wall, reflecting its self-conceit.

Even more ironically, marble is imported from Italy, and the United States cannot produce this building material. Buildings that do not belong to the United States are built in the United States. This forms a paradox. Furthermore, transportation and construction costs of marble greatly increased costs, reaching staggering \$4 billion.

Using foreign materials to build the most expensive station in the world is undoubtedly an unforgivable waste of public resources.

More importantly, the new materials have nothing to do with the old settings and history. I called it a white ghost, an expensive skeleton pretending to be flying.

When I was an intern in Tongji Architectural Design Company, I took part in the design of a high-speed railway station project in China. I have some thoughts on station design. This large public building needs to pay more attention to the efficient use of internal space and to reflect the cultural spirit of its area.

Adam Meng. Taihu South Railway Station. Tongji Architectural Design Company. Designed in 2018.

In the WTC Station, the tall building is too narrow inside. The architect wanted to show the sacredness of church too much, but he ignored it as a public station, serving thousands of people in rush hours.

People will only catch the metro or do limited shopping, and will not pray here.

Functionality is more important than visual shape, which is what the station design should achieve.

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Hufton+Crow. "World Trade Center Transportation Hub". Digital image. Archdaily. 2016 published. Accessed June 4, 2020.

<https://www.archdaily.com/783965/world-trade-center-transportation-hub-santiago-calatrava>

The huge inner court also needs more maintenance.

One of the busiest metro stations in US needs a lot of unnecessary management.

Many officials involved said this station is "a logistical nightmare".

Cleaners try their best to wipe the window at the top, but they forgot how people have time to glance when they need to catch the metro in a hurry.

WTC station is not only a blot on the city, it has also become a blot on the hearts of New Yorkers traveling underground in Manhattan all the year round. The new design destroyed the sense of ritual in the old station.

Mr. Staple, as someone who witnessed the plane crashed into the building, he couldn't believe that the station would be reborn in this weird posture.

I understand it as an explosive destruction of painful memories.

The new station is no longer a restoration in the old settings. It completely changed the entire zone, and partly changed the history.

The visual impact cannot numb the tragedy or soothe the trauma in the heart. A crazy architect designed a crazy building in a crazy place!

Porcupine? Hedgehog? Dinosaur skeleton? It makes no sense to argue what it looks like. Anyway, it was built.

When photographers take pictures of the entire World Trade Center zone, it takes more time to think about the angle because this thorny building is really conspicuous. To a certain extent, it dominates the aesthetics of the entire WTC zone. It uses sharp acute angles to split the view and perspective, highlighting its autonomy. Don't forget how small it is compared to the surrounding giant public buildings! The white clown has no applause, only silence.

3. Conclusion

In conclusion, this station in ruins cannot show the spirit of New York. On the contrary, this building destroyed the old setting and disturbed the short peace after the tragedy. This blot permanently casts a cool colour on the relics. Bibliography

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