



# CRITICAL ANALYSIS OF DECONSTRUCTIVISM; A STUDY OF ITS APPLICATIONS AND IMPACT ON THE BUILT ENVIRONMENT

Khyati Sharma<sup>1</sup>, Nitika Nancy Nehru<sup>1</sup>, Pardeep Singh Maan<sup>1</sup>, Akshay Chaudhary<sup>2</sup>

Chitkara School of Planning and Architecture<sup>1</sup>, Civil Engineering Department<sup>2</sup>, Chitkara University,  
140417, Punjab. India

## ABSTRACT

Here comes to sight, the nucleus of this research, around which all the content will revolve. An architectural practice which focuses on “deconstruction” concepts that became the basis of de-constructivist architectural style i. e. Deconstructivism. The term first appeared in the 1980’s, as an idea developed by French philosopher Jacques Derrida, who influenced and introduced it; deconstruction and its relation to deconstructivist architecture. How are we planning to conduct the study? Is there a road map? Well, this research’s methodology is to keep validated case studies (in respect of accuracy and authenticity), narratives, ethnographies, that hold remarkable potential to investigate new researches, and grounded theories. First, this research explains a critical analysis of Deconstructivism. A movement of PoMo (Postmodern) Architecture, characterised by surface manipulation, non rectilinear shapes, deconstructivist projects and buildings initially seem to be fragmented and lack any visual logic; however, they are unified under the principles and concepts of deconstruction philosophy. Moreover, iconic deconstructivist architects are known to focus on one or two concepts in deconstruction and make them fundamental principles of their personal styles in architecture. Peter Eisenmann focused on the concepts of presentness and trace, Daniel Libeskind concentrated on the concept of absence (of obvious harmony, continuity, symmetry et cetera), Frank Gehry focussed on binary oppositions and free play.

Second, the research is a study of its applications and impact on the built environment. Deconstructivism does not follow “rules” or acquire specific aesthetics. It is about discovering different possibilities of playing around with the forms and volumes, keeping the functionality in mind. It also challenges the viewer as to how they perceive things and how open they are to transformation.

**KEYWORDS:** Deconstruction, Deconstructivist Architecture, Deconstructivism, Jacques Derrida, Postmodern Architecture, Surface Manipulation, Deconstruction Philosophy, Eisenmann

## INTRODUCTION

There has always been a significant interaction between architecture and the human sciences, such as philosophy, psychology, and sociology that generally gives birth to a variety of architectural styles inclusive of being formal, archetype, pocket friendly, elegant, or having a repetition to give a sense of order and unification, and so on [13]. Consequently, any new idea or principle that originated in a certain society is reflected in its architecture. One such architectural practice which reflects post-modernism in the buildings is Deconstructivism, characterised by surface manipulation, fragmentation, and non-rectilinear shapes [7].

The era of modernism gave birth to various -isms like minimalism, brutalism, cubism, monumentalism, organic architecture etc. The post modernism style captured the zeitgeist of the late 1980's. Then came deconstructivism, which also gave tribute to the previous -isms, but at the same time it proved to be a *slap* and some sort of *sarcasm* for the previously practiced architectural styles. The term defines itself as, building up a structure and then breaking it (deconstruction), to promote something, or tributing the originality of the previously built structure. This particular style does not follow any “rules” nor it is a rebellion against any social dilemma [1]. It is simply the unchaining of infinite possibilities of playing around with the volumes and forms and exploring the asymmetry of geometry while maintaining the core functionality of the space. Being a medley of Russian constructivism and modernism, even with some influence from postmodernism, cubism, and expressionism, deconstructivism wasn't a very impressive or impactful movement that took the world by storm. The standard rules of design were broken and the “Form Follows Function” was neglected, but somehow the elegance of modernism persisted [2].

Before talking about any architectural style, it is important to understand that the intangible traits of the region are as important as the tangible are. In fact, the intangible assets of any place shape its tangible assets. The architectural styles that are practiced can be related to these intangible assets that are being mentioned, for instance, the Art Deco can be related to jazz music. Similarly, deconstructivism relates to rap music [11].

The deconstructivist movement was first noticed in the late 1980s, through some imprecise and flexible ideas developed by Jacques Derrida, a friend of Peter Eisenmann (presently also known as the Father of Deconstructivism) and later during the Deconstructivist Architecture exhibition at MoMA (Museum of Modern Art), 1988, where works done by Zaha Hadid (the first female Pritzker winner- 2004; majorly known for deconstructivism and neo-futuristic architectural styles), Bernard Tschumi, Peter Eisenman, Rem Koolhaas, and Daniel Libeskind were spotlighted. They presented a series of drawings with their critical point of view and experimentation spirit that defied the “geometric norms” at that time, therefore disturbing the

traditional perception of architecture and opening people's eyes to the boundless possibilities of breaking architectural rules [15].

Some of the very notable examples of deconstructivism complexity are The Guggenheim Museum in Bilbao, Spain, the Dancing House in Prague, the Vitra design museum in Germany, the Walt Disney concert hall in Los Angeles, and structures designed by Frank Gehry. Another pioneering example of the ground-breaking deconstructivism movement could be the Wexner Centre for Arts in Ohio state by Peter Eisenman. It took the typical form of a castle, which was then infused with complexity in a series of cuts and fragmentations. We shall discuss these buildings in detail later as we progress with the research.

## **SOCIO-POLITICAL IMPACT (ARCHITECTURE PUSHED TO THE EXTREME)**

Since deconstructivism gave the impression of fragmentation of a constructed building, that is too commonly absent of obvious harmony, continuity, or symmetry, it challenged all existing social patterns, as it also challenged the very values of unity, stability, and harmony. At a point, several architects refused to take the label of 'deconstructivist', distancing themselves from this type of movement. An architectural style that supports the exact opposite of what an architect would dream of i.e., pure form, conventional designing patterns, avoiding any kind of instability or disorder, remained indigestive to many parts of society throughout the years. This is exactly what disturbs our thinking and makes these projects deconstructive [4]. Although the leader of this movement, Jacques Derrida, with his ideas and philosophy, managed to influence much of architects into accepting and applying this type of architecture [9].

This architectural style has been criticised with both good as well as bad commentary. Some architects like Charles Jencks viewed deconstructivism as a new paradigm, while some questioned the wisdom behind it and the impact it might have on the built environment and future generations of architects [5]. To express the discomfort and anxiety caused by deconstructivism as it lacks logic, few like Kenneth Frampton even claim it to be 'elitist and detached'. Others like Nikos Salingaros believe an architecture that creates disorder, as in the current case, is no longer architecture [10].

## **ECONOMICAL IMPACT (APPLICATIONS COME TO VIEW)**

Talking of the economic context of deconstructivism, we observed that the costs are very high because formal architectural properties hold the main focus. Besides paradoxes with high costs, these deconstructive discourses create an elite atmosphere, thus remaining unclear and vague to wider social masses [3]. However, deconstructivism doesn't have only negatively superior qualities to offer. Let's discuss some of its applications and how they affected the economy of the region they were built in:

## **SPAIN AFTER THE "BILBAO EFFECT"**

The Guggenheim Museum was opened in 1959 to promote the acknowledgment of contemporary and modern art through exhibitions, research initiatives, education programs, and publications. This free-flowing ribbon-like structure has been built out of titanium, due to its marvellous resistance to corrosion, durability, and an

incredible range of tones depending on the intensity and reflection of the light. The building seems to change its appearance as the weather changes (refer to Figure 1), looks bright with the weather being pleasant (Figure 2) while dull when it's dark around. This one building had a pivotal role in shaping the economy of the whole country. To a city with only 350,000 inhabitants, the museum says it has attracted more than 20 million visitors. Bilbao has now become the most fascinating destination for tourists and investors. Although, the scenario was completely different before this building was put up. Spain was a dry and dull country with no jobs [6]. The museum succoured in transforming the city's image with its charisma. With calculations in 2017, previously done researches suggest that the museum generates around €400 million per year for the local economy.



Figure 1: Guggenheim Museum, Bilbao, Spain  
Source: Wikipedia commons



Figure 2: Guggenheim Museum, Bilbao, Spain  
Source: Wikipedia commons

## THE DANCING HOUSE OF PRAGUE

Set on a property of great historical importance, this building resembles a pair of dancers, Fred and Ginger. The site was previously destroyed by the US Bombing of Prague in 1945 (Figure 4). However, Gehry developed the idea of a building consisting of two parts, static and dynamic, which he later incorporated into this building. Today, the curved structure is an office building that also has a rooftop restaurant that offers amazing views of the city, thus making the Dancing House a popular tourist attraction (Figure 5). This 9-storeyed building stands over the ruins of the house destroyed in 1945 and is supported by 99 pre-fabricated concrete pillars, all custom-made, varying in dimension and size. Most of the floors are functioning as office spaces and hotel rooms, restricted to the general public, but the building still has spaces for tourists. A welcome gallery and shopping centre on the ground floor with a high-end luxury restaurant on the top floor, along with a terrace make this masterpiece breathtaking [14]. Figure 3 represents an illustration of the idea sketch of the Dancing House.



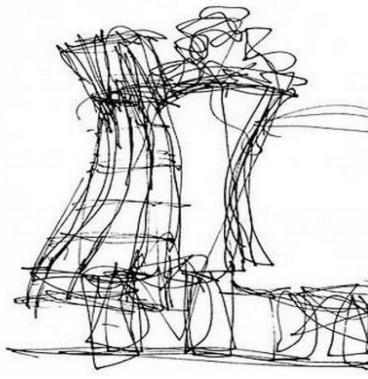


Figure 3: Rough sketch by Frank Gehry



Figure 4: Building site (1945)



Figure 5: The Dancing house, Prague(2010)

## WALT DISNEY CONCERT HALL IN LOS ANGELES

It is one of Gehry's best-known projects, internationally recognized for its façade. Occupying an entire city block in Downtown LA, this architectural landmark took more than 10 years to build; made from metal-clad panels which echo the billows of the giant 2,265-seat auditorium below. The Walt Disney Concert Hall shines like a giant silver flame and is credited with reawakening its urban surroundings (Figure 7). However, the early 20th century also marked structures that make up the historic core of Downtown, for example, the Braly Block (Continental Building), which was the first skyscraper of the city, Grand Central Market, and Beaux Arts Biltmore Hotel [8]. The Guggenheim Museum and the Walt Disney Concert Hall look somewhat similar in their designs, both offering a similar sense of motion. Figure 6 is an illustration of the idea sketch of the building.

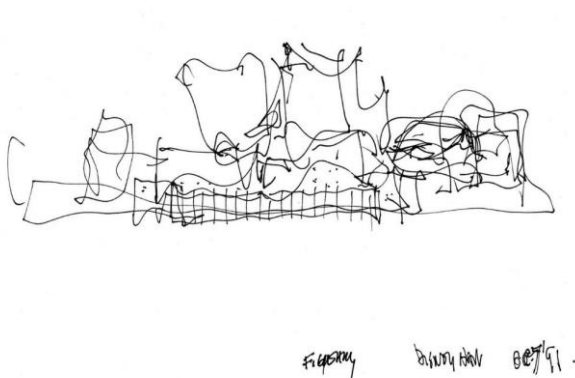


Figure 6: The rough sketch of Walt Disney concert hall by Frank Gehry



Figure 7: The Walt Disney concert hall building

**THE SHARD, LONDON (CONSTRUCTION OF THE SPIRE)**

The tallest known building in the United Kingdom, The Shard, 309 meters high, has a glass façade and 11,000 white glass panels. The building is said to have changed the British Capital's skyline. Figure 8 is an illustration of the open corners that don't touch, allowing the building to 'breathe'. As for the impact on the built environment, 20% of the steelwork comes from recycled sources and 95% of the construction materials are recycled.

But how could all that rising add up in the UK's listing economy despite considering all the poverty in the country?

Without attempting to be indelicate, famed architect Renzo Piano was intent on designing a structure that stood against the London skyline. The piano was reluctant to the idea of a building this high in the UK. He created designs that were strongly opposed by huge masses of local authorities, thus forcing him to re-think his design, which later turned into the current appearance of Shard. The architect initially believed that the space shouldn't become a playground for the rich and powerful only. However, forced to put up a structure like that, we suppose this has to be enough sarcasm highlighting the criticism of the constructed building [12].



Figure 8: Courtesy of the view, Shard  
Source : ©www.great-towers.com

## RESULTS AND DISCUSSIONS

We studied deconstructivism in two parts, one being the applications and the other being the impact on the built environment. Through some of the case studies, we put these two together in order to gain the true knowledge of deconstructivism and the buildings that were actually built in this architectural style. Also, it is important to mention the very names associated with 'true' deconstructivism and the neo-futuristic style of architecture, those include Peter Eisenman (the Founder), Rem Koolhaas, Zaha Hadid, Daniel Libeskind, Frank Gehry, Renzo Piano and many more. These people took the courage to not only move out of their comfort zones by thinking completely out of the box but also managed well to extend those zones with their flexible minds by breaking the stereotype of perfectly aligned, linear buildings, which wasn't pretty much impressionable for a long period as negative connotations of demolishing were carried by deconstructivism. However, for now, we conclude that there is a certain limit to how far ideas can be applied by this type of architecture, which is why it wasn't completely enacted and executed in architecture. Getting mixed reviews to date, there do stand buildings that have been created by architects in this unconventional way that isn't at all mainstreamed, attributed to deconstructivism, despite the disbeliefs of their creators in the concept of deconstructivism. Therefore the paper sets the terms, deconstructivism, and sustainability, and offers insights into the practice of deconstructive architecture including the talk about the loopholes that hide within. It concludes that despite facing utter opposition from huge masses of people, deconstructive buildings still manage to impress and attract, which could not have been possible without these good and bad criticisms.

## CONCLUSION

## INFERENCES

The primary condition of design is recognising the needs. A living space must be designed keeping in mind, the type of users that will occupy it.

Talking about the pros and cons of deconstructivism, the cons may weigh the pros of deconstructivism under variable circumstances.

For instance, structure tends to become *iconic* when added a touch of deconstructivism, but is it required if the architect's aim is to construct an institutional space like a *hospital*?

Also, it has been observed that a deconstructive building brings a raise in the economy along with *job generation*, but is it required if the building has to be used as a *residential complex*? Certainly not.

This implies the amount of benefit or damage that would be offered by deconstructivism depends upon the type of space that is to be created.

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## References

- [1] Anon., Deconstructivism. [Online] Available at: <https://www.hisour.com/deconstructivism-27944/>, 2020.
- [2] Banham., The New Brutalism: Ethic or Aesthetic? Architectural Press, 1966.
- [3] Bergilez and Genard., Minimalisme architectural: quand l'éthique s'inscrit dans le style. In Intervalles 1: Minimalism(e)s., from [www.cipa.ulg.ac.be/intervalles1/contents.htm](http://www.cipa.ulg.ac.be/intervalles1/contents.htm). Liège, CIPA, 2004. Retrieved October 20, 2007
- [4] Colquhoun., A. Colquhoun. Essays in Architectural Criticism. MIT Press, 1985.
- [5] Fox, ed. Ethics and the Built Environment. Routledge, 2000.
- [6] Frampton. Modern Architecture, a Critical History. Thames and Hudson, 1980.
- [7] G. Broadbent London Academy editions., Deconstruction: A Student Guide, 1991.
- [8] Jodat Consultants\_Tehran Ganj Honar Press, Deconstruction Architecture, 2007.
- [9] Illies, C., & Ray, N. Philosophy of Architecture. Philosophy of Technology and Engineering Sciences, 1199–1256. doi:10.1016/b978-0-444-51667-1.50047-1, 2009.
- [10] Mohtashami, N. Quantitative assessment of deconstruction buildings using a Building Deconstruction Matrix. Pacific Science Review B: Humanities and Social Sciences, 2(3), 113–117. doi:10.1016/j.psr.b. 2016.11.001, 2016.
- [11] Rogers, S., Deconstructivism: 7 Icons of the Postmodern Architecture. [Online] Available at: <https://weburbanist.com/2011/06/13/deconstructivism-7-architectural-wonders-of-the-world>, 2020.
- [12] Scott., The Architecture of Humanism. Architectural Press, 1980.
- [13] Spence, Senses of place: architectural design for the multisensory mind. Cogn. Research 5, 46 <https://doi.org/10.1186/s41235-02000243-4>, 2020.
- [14] UK Essays, The Impacts of Deconstructivism towards the Future of New Zealand Architecture Designs. Retrieved from <https://www.ukessays.com/essays/architecture/the-impacts-of-deconstructivism-towards-the-future-of-new-zealand-architecture-designs.php?vref=1>, November 2018.
- [15] Venturi., Complexity and Contradiction in Architecture. New York, Museum of Modern Art, 2006.