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## **Reflection about the Mega-Projects Produced by the Contemporary Architecture**

### **Reflexión acerca de los Mega-proyectos Producidos por la Arquitectura Contemporánea**

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#### **Resumen:**

*La arquitectura contemporánea genera formas no convencionales, desafía la gravedad y sorprende al mundo con estructuras que hace poco eran inconcebibles. Sin embargo, está perdiendo su enfoque social. Al priorizar la forma artística crea edificios sobrevalorados que frecuentemente se vuelven inútiles después de poco tiempo debido a que su funcionalidad no responde a necesidades sociales. Este ensayo plantea una reflexión acerca de la arquitectura contemporánea liderada por los llamados "starchitects" de nuestra era. A través del análisis de varias obras arquitectónicas alrededor del mundo, este ensayo critica constructivamente la tendencia contemporánea de hacer íconos sin alma alrededor del mundo y plantea una metodología para crear arquitectura vinculada a intereses sociales.*

**Palabras clave:** Reflexión, mega-proyectos, arquitectura contemporánea.

#### **Abstract:**

*Presently in the industry, architecture generates non-conventional shapes, defies gravity and surprises the world with structures that only a few years ago were impossible to build. However, it is losing sight of its main objective, people. While focusing on sculptural designs, architects are creating non-functional architecture that responds to their artistic and conceptual intentions but forgets its context and its users. This architectural tendency has become the new international style and can be found all over the world. This essay constructively criticizes these architecture style by analysing several icons around the globe. Furthermore, based on the urban development of Medellin proposes a methodology to create architecture focus on the society.*

**Keywords:** Reflection, mega-projects, contemporary architecture.

## **1. Breaking Architecture's Boundaries**

Presently in the industry, architecture generates non-conventional shapes, defies gravity and surprises the world with structures that only a few years ago were impossible to build. However, it is losing sight of its main objective, people. While focusing on sculptural designs, architects are creating non-functional architecture that responds to their artistic and conceptual intentions but forgets its context and its users. This architectural tendency has become the new international style and can be found all over the world. Architects such as Ghery and Calatrava have built and continue to build their sculptures on all five continents. Their projects are designed as new city icons but totally disavow their location, culture and environment; they are foreign insertions that do not generate many benefits for the locals. Instead, they are expensive, fashionable designs that are often repeated from one city to another. This manifesto critiques this new architectural style and proposes a way to create buildings with social and economic outcomes that enable the improvement of people's lives. It explores the idea that, in order for architecture to successfully generate icons that truly enhance a city's development, it is necessary to understand a city's unique location, culture, environment and needs.

To design successfully social and economical responsible projects architectural designs have to consider these 7 basic principles:

- To have a project that belongs to its landscape, the inspiration and concept of a building's design must come from the unique characteristics of its locations rather than from personal interests.
- Involving the community in the design process creates a sense of belonging to the users; this generates strong relationships between them and the project and improves the design by considering locals' needs.
- Thinking globally provides a perspective of technology and design innovations, however, using the same design criteria in every city generates a soulless architecture that many times is ineffective in attaining its goals.
- Iconic buildings are very important to their cities when they truly represent their culture; otherwise they are just part of an international architecture that does not belong to a place. Buildings that could have been constructed in any place in the world do not accomplish their objective of becoming a symbol of a city.
- To generate positive social repercussions, projects have to be designed as a part of the city. Buildings have to belong to an urban plan and this plan has to be part of a major social and political proposal.
- Combining disciplines is the essence of design. Buildings cannot only be thought of from an architectural perspective, they must be planned with a multi-angle view. Architecture has to interact with economics, urbanism, engineers and the political process.
- Iconic buildings have to be designed and considered as a social investment. Furthermore, their designs have to be functional in order to generate a positive social repercussion.

These principles should be used as fundamental guidelines when commencing any new architectural project. Using these ideas will enable new structures to be positive investments for the future of their communities. This should be measured through the

consideration of more direct benefits to the local population and infrastructure rather than a less tangible economic model that uses trickle down rationale to justify large expenditure on architectural projects. The recommended design method to achieve this is SWOT (Strengths, Weaknesses, Opportunities and Threatens) analysis, being a financial project tool it enables to the designer to structure the project into cost-benefit parameters identifying positive and negative factors of the product in a practical way. In the first stage, this method analyses the characteristics that are considered as the inner factors of a project; the ones that the design is able to contemplate and interact with such as the local environment and community. These inner factors are denominated as “Strengths” and “Weaknesses”. The objective of the designer is to enhance the existing strengths and transform its weaknesses after the intervention. The second stage of the method analyses the factors that are out of the control of the project. These factors are identified as “Opportunities” and “Threats” such as the political landscape, pre-existent urban plans and natural factors. The challenge of the designer is to identify the opportunities and take advantage of them while avoiding threats that can affect the project. A successful intervention integrates all these factors into a project that is capable of generating a positive social repercussion.

This Manifesto has chosen a selection of projects that accomplish or regret in certain ways the 7 key principles, in order to show in practical study cases how this base idea affects in the social repercussion that each structure generates on its local environment.

The city of Bilbao (Spain) as first study case has experienced substantial changes using architectural design as a catalyst for its development. It did not build the Guggenheim museum simply because they wanted an iconic building; it was the visible solution to a citywide investment to combat a long list of problems. At the time, the city was suffering through an unemployment rate of more than 25%; its industry had become obsolete; they had severe traffic congestion problems; there were many social issues such as large-scale violence, urban deterioration, pollution and a poor public transport system. Bilbao confronted these problems with a holistic plan focused on improving citizen’s daily life. The project enhanced their standard of living through the creation of a new subway line, a new drainage and water/air clean-up system, a new airport and new residential and business complexes (Plaza, 452-467). The Guggenheim museum designed by Ghery was the key point: the city spent \$228.3 million on this building that was part of the plan that transform the old industrial dockland into the icon of the new identity of the city. In order to take Bilbao out from the economic decline into which it had plunged, the new museum attracted attention to the Bilbao as now being a desirable tourist destination. Currently, Bilbao is on the world stage as a cultural city as a result of the infrastructural improvements combined with the Ghery designed museum. The investment of the project was recovered in the first 8 years of operation. (Brown, par. 1)

What differentiates Bilbao’s Guggenheim from the other projects in this manifesto is not its shape nor the architect’s inspiration, but rather its conception as a part of a bigger strategy that interrelates urban planning, architecture, marketing and economics, one of the key principles of this manifesto. It successfully transformed the city’s weaknesses into strengths and generated new opportunities leaving the city threats in the past. The building design understood locational needs and intentionally ignored its environment. This created a completely new concept about the city, a new Bilbao. The project demonstrates how architecture can go over its boundaries and generates a social impact when its major objective is enhancing the lives of local citizens. After Gehry’s building

revolutionised the economy of Bilbao the entire world wanted to replicate his architectural remedy (Bobman, par. 3-7) with Disney going as far as to build a version of its own in Los Angeles.

Other architects have also been affected by Bilbao's success. Santiago Calatrava's studio designs projects all around the world; he is a very famous architect for his sculptural structures that defy gravity. Calatrava's designs are visual masterpieces; nevertheless, his work cannot "evoke much beyond formal beauty and lustrous competence" (Torres, par. 2). He is an architect that creates large-scale art sculptures and uses the world as a museum to present them. However, his conceptual ideas are very abstract and are detached from life and context (Torres, par. 5) Calatrava "takes his inspiration from natural and human forms" (Eforex, par. 2) he has designed buildings inspired by organic structures, human postures and the "things that he sees around him" (Eforex, par 4.) Nonetheless many of his designs are very similar despite different conceptual underpinnings and different locations. His work has generated controversy due to the high cost of his structures and many were deemed as impractical because of their limited useful space (Bernstein, par. 4). Projects such as the "City of Art and Science" in Valencia (Spain) cost €1.1 billion (Eforex, par. 6) and the price of his transit hub at Ground Zero has risen to \$3.8 billion (PHAIDON, "Santiago Calatrava hits back at critics over cost"). To give a global context, the combined cost of these two buildings represents more than the 20% of the GDP of an oil producing country such as Ecuador. (Ministerio de Finanzas del Ecuador, par. 14) However his projects are not generating the social impact that was intended or anticipated because they do not adhere to the fundamental principles outlined earlier by failing to understand their locations. They are attempts to be icons in cities that already have a culture and symbols and is not part of an overall social development plan. Hence, these structures appear as foreign objects inserted out of context, which could have been constructed in any city in the world.

In contrast to this strategy of constructing soulless, iconic, contextually barren buildings to unsuccessfully meet the goals of promoting social change, Medellin, Columbia has taken a different route. After an exhaustive analysis of the city's situation in the early 2000's, the city authorities decided to improve citizen's quality of life using well-designed buildings as catalysts of development. The buildings had the objective to enhance the esteem of the people by making them feel proud of their neighborhoods and their city. The plan contemplated the best architecture for the poorest people. The impact of this intervention is clear: in the 1990's, Medellin was only known for being the home of the world's most famous drug trafficker Pablo Escobar and was one of the world's most violent cities. (Herald, par. 1-6) Its homicide rate was 444 per 100,000 habitants in the 1990's. Last year, this number had been reduced to 51.4 per 100,000 habitants. (Henningan, par. 4).

The "Parque Biblioteca España" designed by Giancarlo Mazzanti is part of this network of urban and social projects that allowed the cultural and social transformation of the city. The building was designed to be the face of a new Medellin. It is located in Santo Domingo, a neighbourhood that used to be one of the city's most violent and dangerous (Henningan, par. 3). The building's express intent was to highlight the social problems and therefore start to reform it from its roots. This neighbourhood was built as products of illegal invasions of land and therefore the authorities have ignored it for many years. The project is an answer to many problems: it provides Santo Domingo the public space that the citizens need in a visible and recognised fashion. Furthermore, to decide the

characteristics and program of this multifunctional building, the community was asked to describe their imaginary city. The architects then interpreted their needs and developed a building that works as a meeting point confronting the identified deficiencies of educational and entertainment spaces within the community by their innovative architecture. Involving the community in the design decisions generated a feeling of belonging to the project, making the citizens proud of it and as a result, of their neighbourhood.

The “Parque Biblioteca España” is another project in the network that exists in the city. The mayor of Medellin, Aníbal Gaviriani, refers to the regeneration projects in Medellin as the reinvention of architecture elements. Escalators are used all over the world, but in Medellin they were built to connect isolated communities located on high mountains and reduce the journey of their citizens when they go to work. Cableways are also very prevalent throughout the world but again in Medellin they are used as a massive transportation system that transformed dangerous neighbourhoods into tourist hubs (Wallace, 43).

The architecture of Medellin was not conceived as a sculpture nor was it inspired by paintings; it was inspired by citizen’s needs and problems; it is monumental while being totally functional. Furthermore, the city intervention fully accomplishes the principles established in this manifesto by being a successful architectural intervention that changed the social environment. Analyzing the urban project using a SWOT method, it is clear that Medellin’s project improved the strengths of the city by taking as a central pillar of the design plan its citizens. Since the design transformed the weaknesses of each neighbourhood into strengths, eradicating violent neighbourhoods while it transformed them into touristic destinations. The design of each project takes advantage of the master plans already conceived and look as an opportunity to belong to a network of projects conceived all around the city, complementing the plan with each new intervention and avoiding in this way the threatens for the project. The model of Medellin was designed looking to eradicate the violence and can be replicated using SWOT to structure the bases of each design project, having as objective improving society with each new design.

In about 20 years Medellin changed from being known for its violence, drugs and crime to being declared this year the most innovative city on the planet. (Henningan, par 12)

The architectural design has the power to generate positive social repercussions and even change the destiny of local communities as can be seen in the experience of Bilbao and Medellin. The 7 key principles were inspired on the succeed and fail of the projects exposed in this manifesto in order to generate a strategy capable to successfully create architecture with positive social repercussions. Using the 7 principles since the conception of the design will allow to the architect to be inspired by local characteristics rather than abstract and detached ideas from life, and effectively solve people's needs while having projects with strong relationships with its environment that truly enhance our cities development.

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