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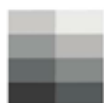
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A CRITICAL ANALYSIS OF THE ARCHITECTURAL WORK OF MILTON BARRAGÁN

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Abstract: This paper presents part of the research done for a doctoral thesis on the work of the Ecuadorian architect and sculptor, Milton Barragán. Belonging to the modernist movement and affiliated with 'brutalism' undertook most of his work in Quito, Ecuador. Milton Barragán has been the main source of research information, providing material archiving and video format interviews about his biography, his influences and his work.

The results presented correspond to early phases of the research study, and comprise a characterisation of his architecture and a preview of the critical analysis of his work based on studies of the influences on and the creative processes of four of his most important works: the Artigas Building (1974), the 'Templo de La Dolorosa' (1979), the CIESPAL Building (1980) and the 'Templo de la Patria' (1980).

His works emerge from the site, with dialogues and connections between the architecture and the environment being established. Milton Barragán interprets 'brutalism' through a prominent use of reinforced concrete and taking on structural and construction challenges. The application of sculptural concepts and the organic use of the exterior spaces make his work an element of great architectonic and heritage importance.

Keywords: Milton Barragán, Brutalism, Ecuador, Architecture, Quito

1. Introduction

This article presents the progress in the research on the architect, Milton Barragán. The framework in which the research was done is outlined below.

1.1. Context

Despite its great architectural, historical and conceptual interest, "brutalism" has never achieved either the favour of the architectural community or the general public (Vidler, 2012). In many cases, this has generated strong indifference towards the most of the brutalist buildings, and the demolition of many. Examples such as the Trinity Centre Multi-Storey Car Park in Leeds, United Kingdom (Owen Luder, 1964-69) demolished in 2007, the AfE-Turm in Frankfurt, Germany (Staatliche Neubauleitung Frankfurt, 1972) demolished in 2014 or the Holy Trinity Chapel in New York, United States (Eggers and Higgins, 1964).

At the same time there are theoretical and technical differences regarding the management and intervention of the modern architectural heritage. The conceptual and architectural diversity of the various buildings make it impossible to apply a general criterion. As part of this debate, Solá-Morales (1982) proposed "let the building speak", as this is the most versatile and reasonable solution to the problem of the modern architecture heritage.

Therefore, the exhaustive collection of documentation about the buildings amenable to intervention, as well as the critical analyses undertaken, assume a particular importance in obtaining a broad and rigorous vision of the heritage situation. Architectural heritage presents a problem (Solá-Morales, 1982), in that the debate about a building's design when intervening or conserving it entails an equally complex effort as for that of a new building.

In addition, Latin American architectural production has been scarcely studied or even ignored for decades (Sambrić, 2012), and this aspect is particularly acute in the case of Ecuador.

Milton Barragán undertook most of his architecture in the city of Quito. The convergence of landscape, city, architecture and sculpture in his initiatives has created architectural solutions of great interest and relevance. His work is quite unique and stirring character, such that his buildings form part of the core profile and memory of Quito. He is one of the quintessential people of the modernist architecture movement in Ecuador, and very few, rather cursory studies consider this architect and his work.

This combined state of affairs led to the interest and direction of the thesis that shapes the theme of this paper, which presents the results of the early phase of research. A brief summary of the doctoral thesis is presented in order to describe the context for this paper.

1.2. The Thesis

The dissertation is a theoretical study about Milton Barragán, and provides an interpretation of his architecture by means of a holistic approach, in which different methodologies, observers and perspectives overlap with the aim of giving a broad characterisation and critical analysis of his work.

The thesis was conceived in five phases.

Phase 1. Theoretical Framework. Theoretical study and critical analysis of the modernist movement and "brutalism".

Phase 2. Biography and Influences.

Phase 3. Creative Process. Study of the creative process involved in four of his architectural works.

Phase 4. Three perspectives. Confrontation of three subjective visions about the architect's work.

Phase 5. Conclusions. Characterisation and critical analysis of the work of Milton Barragán.

1.2.1. Scope and objectives

The thesis studies the entire body of work by Milton Barragán and includes a more in-depth analysis four of his most emblematic projects: the Artigas Building (1974), the Templo de la Dolorosa (1979), the CIESPAL Building (1980) and the Templo de la Patria (1980). The relevance of brutalist architectural, the application of sculptural concepts and their relationships with the city and its landscape mark out these four as milestones of particular singularity and interest within his work.

The objective was to provide a critical analysis of the work of Milton Barragán, using a system in which the theoretical framework of his architecture, the influences on the architect, the creative processes involved and the different perceptive visions of these buildings.

1.2.2. Methodology

A synthetic-analytical method was used to conduct the research. Milton Barragán himself was the key source of information, giving interviews and providing material from his archive. The observation techniques were made using various media: plans, texts, photographs, direct study of buildings, ethnographic studies and video interviews of the architect. The methodologies are described below for each phase.

Phase 1. Theoretical Framework. The theoretical postulates of Reyner Banham and Team X are reviewed, updating the theoretical view by studying brutalist examples from the 1950s and 1960s versus later versions by the movement. The results obtained served to describe the place of Milton Barragán within the brutalist movement.

Phase 2. Biography and Influences. Study and biography of Milton Barragán, with special emphasis on what influenced him – modern movement and 'brutalism' – in both a historical context and in the relationship with sculpture. Information was compiled from biographical documents and two video interviews with the architect. The results of this phase give a contextual framework to the man who is Milton Barragán.

Phase 3. The Creative Process. This phase reveals the both the conceptual and circumstantial origins of the projects. The process he followed when he generated his projects was determined through interviews with Milton Barragán, characterising his works based on the germinal pretension and motivation of each project (Fig. 1).

Phase 4. Three perspectives. The subjective perception of 'atmosphere' is of paramount importance in understanding architecture. Three perceptual groups are proposed that interact independently with the buildings. On one hand is the architect's vision, who by means of interviews *in situ* demonstrates the vision of his own work. On the other hand, an ethnographic study of each building was done, interacting with both the direct users of the buildings and people who indirectly relate to them.

The ethnographic study was done through interviews and workshops, determining how the buildings are used, perceived and lived in the present day. The objective was to establish how users, the city and society in general take ownership of the buildings. To conclude, the author makes a phenomenological analysis of the works, including his own perspective as an additional element to those already mentioned, avoiding imposition and monopoly. This phase complements the previous three by introducing qualitative and perceptive parameters.

Phase 5. Conclusions. This phase draws together all the perspectives obtained during the study in order to gain a holistic overview of the work of Milton Barragán, characterising it and sketching a reasoned critical analysis. The actions taken are reviewed, as well as the circumstances of each project's process, so deriving a new critical view that is closer to the perceptive and subjective values of architectural works.

Based on these results, certain intervention and conservation guidelines on the buildings under study are proposed. The four buildings possess a strong cultural heritage value due to the symbolic, urban, landscape, historical and identity that they have acquired over time.



Fig. 1 Milton Barragan's interview. 13 de diciembre de 2016

1.2.3. Progress

Currently, phase 1 has been partially completed and phases 2 and 3 have been completed. A summary of the results is outlined below.

2. 'Brutalism'

This style or trend arose within modernist architecture and during the 1950s, 1960s and 1970s. Few documents deal with this movement; the book 'The New Brutalism' by Reyner Banham stands alone in generating a timid theoretical approach. This book established the three characteristics that define brutalist architecture: memorable character as image, clear exhibition of the structure and appreciation of the inherent nature of the building materials (Banham, 1966). The first criterion (memorable character as image) has a certain subjective bias, and it therefore difficult to assess objectively.

The second and the third criteria refer to constructive sincerity, cited by Banham (1966). A review of the brutalist production reveals the common link of this constructive sincerity, whether it is embodied using brick, metal or reinforced concrete. The buildings display themselves just as they are, showing off the materials used and the way in which they are organised.

The building materials are just as important as the process that has given them shape (formwork, joints, welding, assembly). This generates a conceptual paradigm of constructive sincerity that grants an astonishing freedom, since no common aesthetic or compositional pattern is imposed between buildings, but rather an attitude.

3. Milton Barragán

The architect and sculptor, Milton Barragán explicitly ascribes to "brutalism", interpreting it in a singular and personal way (Ferrer, 2014). Place and sculptural conception are formalized in their proposals, establishing with their architecture relationship and dialogue with the city and the landscape.

3.1. Biography

Milton Barragán Dumet was born in 1934 in Huigra, Ecuador. His skills for drawing and mechanics developed early in life. At the beginning of his high school studies, he moved to Quito, meeting the Dutch painter Jan Schröder, who instructed him in pictorial techniques and who helped to generate Barragán's interest in European artistic trends. "It was at that moment that a great curiosity and

eagerness arose to know the great European museums" (Milton Barragán, personal communication October 24, 2016).

After completing his studies in architecture he lived in Europe for two years. On his return he began to develop his professional activity as an architect in Quito. In addition, he was professor of Architecture at the Central University and Pontifical Catholic University in Ecuador. In the 1960s, he was the Ecuador correspondent for "L'Architecture d'Aujourd'hui"; he participated in politics, he has served as president of the Centre for Ecuadorian Culture and he is a collector of pre-Columbian art pieces. Nowadays, he continues to be active as an architect and sculptor.

3.2. Influences

As a result of the Second World War, a group of European architects arrived in Ecuador in the 1940s. Kart Kohn, Otto Glass, Oscar Etwanik, Giovanni Rotta and Max Ehrensberger brought with them the ideology of modernist architecture, at the same time as the Uruguayan architects, Guillermo Jones Odriozola and Gilberto Gatto Sobral (Moya and Peralta, 2011).

In 1948, the School of Architecture of the Central University of Ecuador was inaugurated by Jones Odriozola, an architect who had been entrusted with the Urban Plan for Quito in 1942. He was accompanied by the architect, Gatto Sobral, who later became the School's director. Sixto Durán Ballén and Jaime Dávalos were later incorporated as teachers, both having trained in the United States (Ferrer, 2014).



Fig. 2 Relaciones Exteriores Building (1961, Quito)¹

Within this academic environment, Milton Barragán designed the Ministry of Foreign Affairs (1961) in Quito as his Final-Year Project; this building, once constructed, led him to be awarded a scholarship in France (Fig. 2). Until that time, his knowledge of modern European architecture had come through the art and architecture magazines and books that he came across. "My interest in art was piqued while I was at university, consulting books; from that was born my obsession to go to Europe, as soon as possible after I completed my studies, (Barragán, 25 October, 2016)".

It was during his stay in France, while giving a lecture at the Sorbonne, that he met Le Corbusier, visited his studio and several of his works. He was particularly impressed by the Marseille Housing Unit and the Ronchamp Chapel (Barragán, 25 October, 2016). Le Corbusier would become his most significant reference, but Milton Barragán was also fascinated by other modern architects, such as Marcel Breuer, Mies Van Der Rohe and Frank Lloyd Wright. This interest would lead him to develop his particular brand of 'brutalism', which he explicitly ascribes and applies in his projects. (Barragán, 25 October, 2016) His relationship with the world of sculpture led him to understand architecture in a particular way.

4. The Creative Process of Milton Barragán

This section describes the creative process of four works by Milton Barragán. All the information was obtained from the architect directly, through interviews with the architect in which the original plans were inspected, serving as a guide and support for his explanations.

¹ Material provided by Milton Barragán.

4.1. The Artigas Building

This is a building for residential and commercial use, situated in Artigas Square in Quito. It was built in 1974 as a commission of Dr. Plutarco Naranjo. The project was required to resolve the need for a medical office and for an anti-allergy laboratory where the promoter could undertake his medical activities. The upper floors would include residential apartments to be sold on.



Fig. 3 Artigas Building a) Artigas Square view b) Windows detail c) Avenida Colón facade²

4.1.1. The Creative Process

The project was borne from the local landscape. "The building was a visual endpoint of the Avenida Colón, and this made the project a very interesting challenge from the point of view of the relationship between the building and urban layout" (M. Barragán, personal communication, 15 November, 2016). The Avenida Colón is one of the most important transverse axes of the city of Quito and carries a great amount of traffic and urban buses. "The central idea was to create a visual screen that limited the views along the Avenida Colón" (Barragán, 15 November, 2016).

The importance of the visual closure that Milton Barragán gave to this project led him to carry out a more detailed and sculptural study of the facade of Artigas Square (Fig. 3). He singled out the first floor, corresponding to the clinic, through sculptural treatment. "The outside plastic look to me was very important. That is why the windows were placed in a deeper plane, which produces sharper shadows and a greater contrast, taking advantage of the wonderful light in Quito" (Barragán, 15 November, 2016). This approach required proprietary methods to develop the design. "Projects always come out of a drawing, essentially; but in this particular case I used a plastic model for the sculptural facade. It is a brutalist message of a sculptor" (Barragán, 15 November, 2016). He developed a structural system using a concrete latticework on the supporting facade, which stood free of the rigidity of the continuity of pillars between the different storeys. The premise of relatively dim lighting for the laboratories allowed him to play with the composition of the windows, obtaining oblique pieces of great depth and endowed with great formal expressiveness. Adding drama and dynamism, the work on the facade would be completed by alternating the height of the storeys of the two volumes that were divided by the hinge of the axis of the Avenida Colón, an alternation that produces a suggestive effect of two hands that are interlaced (Barragán, 15 November 2016).

The material used is the reinforced concrete that you see. A roof garden was included on the roof of the two volumes, though this part of the project was never realised. Milton Barragán (15 November, 2016) defines the project as the "Forefather of Brutalism in Quito".

² Material provided by Milton Barragán.

4.2. The CIESPAL Building

This administrative building houses the International Centre for Further Studies of Communication for Latin America. It is located in the Diego de Almagro Street in Quito (Fig. 4). This project was carried out jointly with another Quito architect, Ovidio Wappestein. It was built in 1980.



Fig. 4 CIESPAL perspective³

4.2.1. The Creative Process

The project arises from a series of technical and architectural challenges, imposed by the specific challenges posed by the plot of land and the specification of requirements. The Diego de Almagro Street used to be a ravine that drained water from the surrounding land, which was vaulted over and backfilled. The plot of this building project is located on one of the series of backfills (M. Barragán, personal communication, 28 November, 2016). This circumstance generated an unstable ground surface, and the presence of a shallow water table. The specification of requirements included an auditorium for 400 people (Fig. 5.e) and a series of rooms and administrative spaces. The limited area of the plot forced to the building to be elevated in height, but the open floor plan needed for the auditorium left no possibility of creating a reinforced concrete arcade of normal dimensions (Barragán, 28 November, 2016).

For this reason, the strategy of burying the auditorium was adopted. The basement auditorium is accessed from Calle Diego de Almagro via a sunken courtyard (Fig. 5.d). A novel system of *caisson* foundations was chosen, opting for a fungus-shaped structural system, influenced by the project of the National Library in Buenos Aires (Testa, C., 1962) and Torre Velasca, Milan (BBPR Architects, 1958). This created a central structural core, or 'trunk', containing the vertical circulation and services (Barragán, 28 November, 2016). Then, on the upper levels, the administrative areas, classrooms and workshops were developed. "The project emerges, tree-like, [as a canopy] over a central trunk" (Barragán, 28 November, 2016). The building creates a special relationship with its environment due to the singularity of its form (Fig. 5.c). It serves as a suggestive abstract element for the city. Spatially, it communicates with the Diego de Almagro Street by means of a footbridge that spans the hollow that comprises the patios that allow the underground basement to be illuminated, and which contain sculptural compositions and vegetation (Barragán, 28 November, 2016). These gardens form part of the cityscape and are visible to pedestrians walking on the higher level in the streets above –Almagro Street and Andrade Marín Street. On the ground floor deck there is an outside auditorium and a series of spaces for rest and relaxation (Barragán, 28 November, 2016). The project design included a mural for the auditorium, though this was not executed (Fig. 5.a).

The facades are made of exposed concrete, taking advantage of the compositional design of the structural system (Barragán, 28 November, 2016). The cantilevered beams of the upper floors are organised in a neat and symmetrical grid. "The structure, appearance and use of materials obey the brutalist concept" (Barragán, 28 November, 2016).

³ Material provided by Milton Barragán.

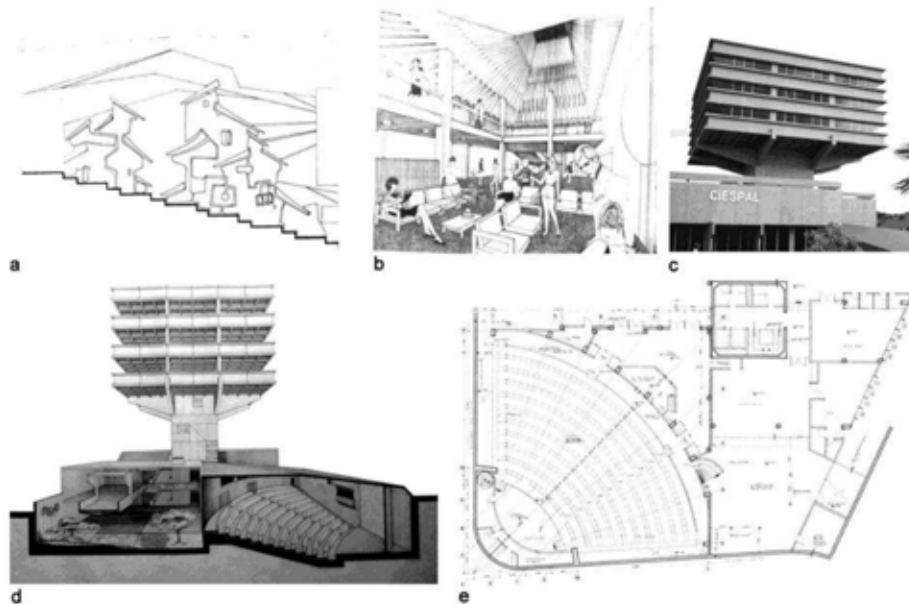


Fig. 5 CIESPAL. a) Mural design for auditorium b) Interior view c) Photography from Almagro Street d) Section e) Auditorium plan⁴

4.3. *Templo de la Dolorosa*

The La Dolorosa Temple is a religious landmark that contains a nave for church services, with crypts and velatory on a lower level. It is located on the Avenida América and Avenida Mariana de Jesus, in the western sector of Quito City, at the foot of the Pichincha Mountains. It was completed in 1979.

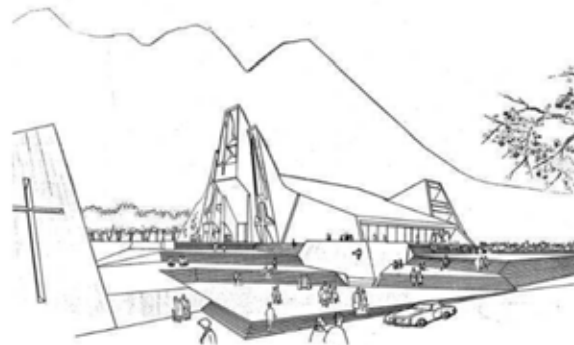


Fig. 6 Templo de la Dolorosa perspective⁵

4.3.1. *Creative process*

"The composition recreates the interplay of volumes of the Pichincha mountain" (M. Barragán, personal communication, 12 December, 2016).

By means of a series of inclined planes, oblique and warped surfaces, a formal dialogue is developed with the mountains of the Pichincha volcano, establishing a geometric abstraction that configures this project (Fig. 6). Its privileged position allows visual connection of the building with the mountain situated to its west, establishing a conjunction of landscape, city and architecture (Barragán, 12 December, 2016).

⁴ Material provided by Milton Barragán.

⁵ Material provided by Milton Barragán.

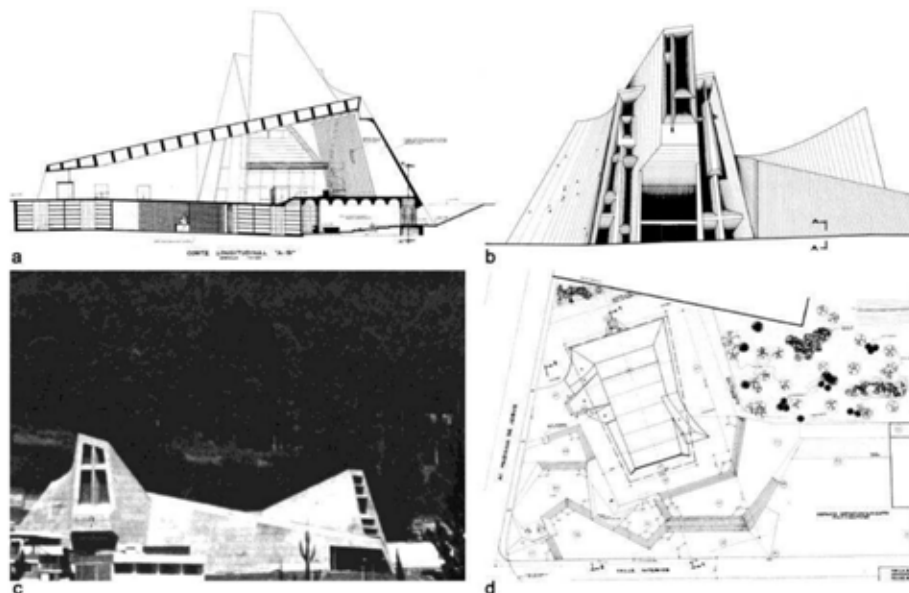


Fig. 5 Templo de la Dolorosa. a) Section b) South façade c) Photography from Avenida América d) Placement plan⁶

The topography of the site was used to create access to different levels and to implement a system of outdoor terraces around the building (Fig. 7.d), with the initial intention of creating meeting spaces. Nowadays, the terraces have been converted into parking areas (Barragán, 12 December 2016).

The concept of the project includes a large sculptural element, resulting in a series of volumes full of plasticity and evocation (Fig. 7.b). "The idea is to create the sensation – when viewed from any of its facades – of a single entity. This was achieved by means of the truncated pyramid design, which houses the main nave, and which develops as a series of pyramids that serve as a counterweight and balance." (Barragán, 12 December, 2016).

The concrete is again brutalist, playing this time with soft and progressive forms, creating an almost textile feel overall (Fig. 7.c). Structurally the building is made up of concrete supporting walls that form the skin of the building. To support the main space, there are hanging beams spanning up to 40 meters (Fig. 7.a). A pond was originally designed to collect rainwater, but it was never executed (Barragán, 12 December, 2016).

Barragán (12 December, 2016) defines this project as "Homage to the faith of the Quito Christians and homage to the landscape of my city, which seems to me incomparable in terms of light and contrast. It forms a good architectonic-sculptural piece that achieves the best marriage between architecture and landscape".

4.4. *Templo de la Patria*

This monument was originally conceived as homage to the identity of the nation of Ecuador, though at the present time it is thematically related to the battle of Pichincha, in which the army of Simón Bolívar prevailed over Spanish royalist troops in Quito on 24 May 1822.

The building contains a museum with a series of exhibition halls (Fig. 9.a), an external auditorium and gardens that serve as a vantage point over Quito City. It was built in 1977 in the Cima de la Libertad ('Liberty Mountain'), place of the battle of independence in the mountains of Pichincha, at an altitude of 3,100 metres.

⁶ Material provided by Milton Barragán.

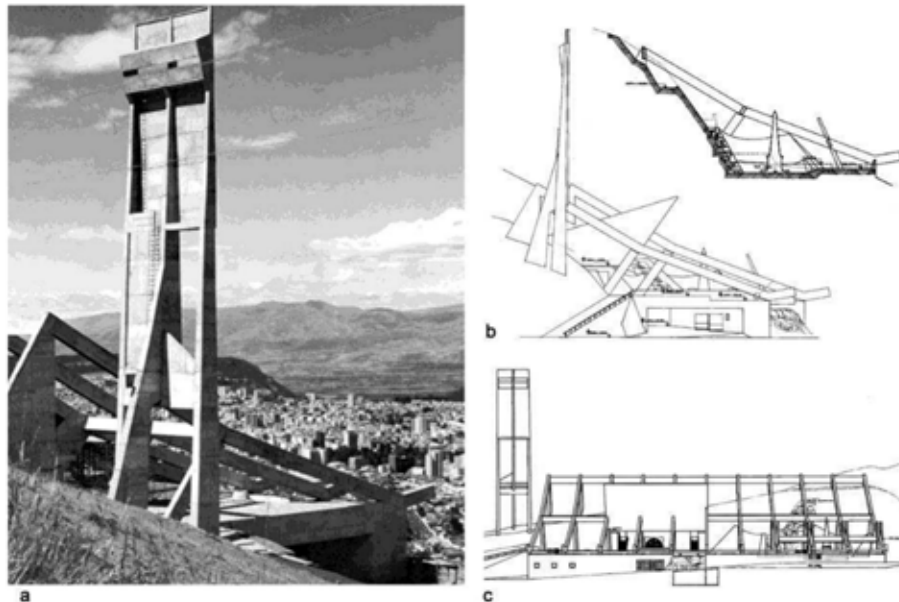


Fig. 6 Templo de la Patria a) Photograph of the tower and Quito b) Sections c) Main facade

4.4.1. The Creative Process

"It is an extraordinary and very beautiful view, where we can appreciate the telluric wealth, the soil, the ravines, the Andes and the wonderful light of this city of Quito" (M. Barragán, personal communication, 13 December, 2016). An obelisk was erected on the Cima de la Libertad in 1922 to mark the centenary of the battle of Pichincha. "An opening was made in the mountain face to place the obelisk and have a parade ground. This was a mistake because the platform damaged the landscape" (Barragán, 13 December, 2016). In this setting, Milton Barragán applies his architectural ideas as being one with its surrounding environment. "The criterion that attracted and inspired me was the idea that Pichincha is a guardian mountain of Ecuador ... the fundamental concept is the proposal of a structure of great spans, very open, coinciding with the slope of the mountain" (Barragán, 13 December 2016). The project plays with the reconstruction of the mountain through an abstract and symbolic system formalised by oblique beams (Fig. 8.b, 8.c and 9.b)..

"To recover the landscape and, if possible, sublimate it even more, to give it greater importance and greater meaning within the architectural and spatial conception" (Barragán, 13 December, 2016).

Milton Barragán establishes communion between the place and its natural specificities by incorporating a stream into the building. The natural watercourse that flowed through the site of the building was incorporated into the project, keeping its course by means of upper gardens that serve as a viewpoint over the city (Fig. 9.c). However, the stream was diverted and this original idea never materialised (Barragán, 13 December 2016).

In formal terms, an element is again created between the architectural and sculptural: a watchtower 40 metres high built of reinforced concrete serves as a mast for the national flag (Fig. 8.a). "The watchtower is a counterpoint to the horizontal element represented by the leaning structures" (M. Barragán, personal communication, 13 December, 2016). There is no symbolic concept, but only aesthetic and sculptural. "The structure as a whole was worked as a sculpture inserted in the landscape" (Barragán, 13 December, 2016).

Barragán (13 December, 2016) defines this project as "A temple to our nationhood that tries to make the landscape an element of meditation of our identity as a country".

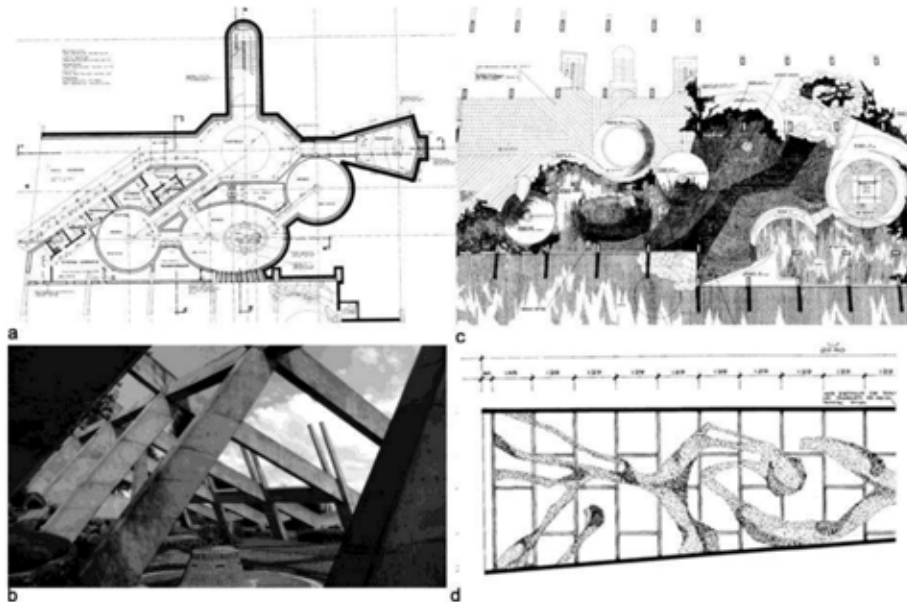


Fig. 6 Templo de la Patria a) First level plan b) Second level plan c) Garden photograph d) Mural access detail⁷

5. Results and Discussion

The results obtained (phases 2 and 3) include the characterisation and critical analysis of the work of Milton Barragán based on his influences and the description of creative processes. These results will be reviewed once the investigation has been completed.

5.1. Characterisation of the work of Milton Barragán

Milton Barragán is inspired by the brutalist works of Le Corbusier, especially in the use of materials and certain formal conceptions. Milton Barragán is ascribed to 'brutalism' in his fundamental precept of constructive sincerity, making prominent use of the exposed concrete. The integration with the environment is interpreted in a particular way in each one of its projects. He seizes the opportunity to create a dialogue with the landscape or to include the building within it, always attentive to the tensions of the urban fabric and opportunities to participate in and improve the city.

His profile as a sculptor allows him to sensitively approach the formal theme of his buildings, creating a singular language to conceiving compositions, volumes and surfaces. His passion for work leads him to take care of even the smallest detail, with a particular interest in developing the constructive and decorative part of his projects. He takes on innovative challenges in terms of the technological and structural, experimenting with the possibilities of reinforced concrete.

Exterior facades and gardens work endow humanity, in contrast to the apparent dehumanisation of the brutalist movement. There is a certain organic feeling in his treatment of exteriors, gardens and water features. Milton Barragán's architecture is brutalist, but coexisting with this is an artistic and natural component.

5.2. Critical analysis

Milton Barragán's architecture possesses a freedom of artistic thought and yet, at the same time, a trust in technology and the good execution that is part of his profession. Its great value lies in proposing strategies that are sensitive to the environment around the buildings and formalising them correctly. It is knowledge of what to do and doing it well.

His work is the product of a gentle dance between architecture and sculpture. It reveals the union of two arts, without reaching the excesses of deconstructivism. His buildings are impregnated with a powerful sculptural language without ever sacrificing the essence and architectural logic.

⁷ Material provided by Milton Barragán.

It is a profound and sensitive process, similar to the Chinese architect Wang Shu, winner of Pritzker 2102, who creates his understanding of contemporary architecture and urbanism through traditional Chinese painting. The place becomes the subject, considering it as conceptual holder of the project. Without fear, without blocks. The audacity of Milton Barragán leads him to participate, transform and sublimate the landscape with his architecture, creating a whole between the artificial and the natural. Two opposites forming a single entity.

In order that intervention finds its place, it must first make us see what already exists in a new light. We throw a stone into the water. Sand swirls up and settles again. The perturbation was necessary and the stone has found its place. But the pond is no longer the same as before (Zumthor, 1992, p.18).

This dialogue between the landscape and architecture shines more strongly in projects in which urban conditions allow greater freedom, such as Templo de la Patria and Templo de la Dolorosa. Both enjoy privileged situations in the landscape, one facing it and other included within it.

In both, the mountain is taken as the germinal idea for the project. This is an atypical position in the design of architecture and urbanism in Quito, which generally turns its back on landscape and surroundings. What is more, the mountain archetype takes on enormous relevance in the Andean cosmogony, establishing a subtle connection with the traditional local imaginary. They are two philosophical proposals in themselves, transcendent and which invite reflection.

The Artigas building and the CIESPAL building have different conditioning factors. They are immersed in the city and with spatial limitations, so the dialogue is directly with the city. In these two cases, it is the urban axes and the spatial relationships with streets that determine the architectural strategies used. Both buildings are unique in their urban space, condensing rules and transformations through the interpretive logic of their designer, outside the order and uniformity of their environment. These buildings are implanted like follies within the city of Quito.

Milton Barragán generates his architecture from the most essential and timeless premises, in a classic form that lies beyond the stylistic meaning of the term. Light, material, space and form. Artistic sensitivity conditions the design process and the decisions are linked to a pure concept of architecture. The ideas arise from the need that the sculpture needs to transmit through abstraction, composition, light, materials.

The 'brutalism' that characterise his buildings help Barragán to formalise his ideas. The exposed concrete allows him to give the drama needed to transmit his architecture. It is not a one-way path from idea to form, because the qualities of the material, with its qualities and possibilities, also condition the idea. The idea is respectful to technique, and the technique is generous with the idea. Both are sublimated in a process of dialogue. In the works of Milton Barragán, technique and art unite in a congruent whole, like architecture and environment.

6. Conclusions.

The architectural importance of Milton Barragán has been proven in this investigation. The great architectural and cultural heritage value of the buildings discussed opens the possibility of extending the study to the rest of his works. The inclusion of perspectives and reflections of other arts in architecture – in this case sculpture – create expressive and moving results, expanding the perceptual, spatial and sensory experience. The conceptual and concrete elements with which Milton Barragán creates both the sculpture and architecture are very similar, as he states himself, and this also applies to others arts. This study becomes a manifesto to vindicate the need for architecture that opens up visions and postures beyond the purely architectural, giving congruent meaning to architectural work and a successful connection with its environment.

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