

Catetinho: The first presidential house in Brasília, Brazil

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ABSTRACT: Among the monuments of Brazilian modernist architecture, Catetinho, built in 1956 near the construction site of Brasília, is one of a kind. The only work by Oscar Niemeyer built out of wood, it was intended to be a temporary office for the President of the Republic during the construction of the new capital city. This work discusses the current state of conservation of the Catetinho, how its design and construction techniques impact conventional wisdom on the preservation of both modernist and wooden buildings, and recommended strategies to protect material integrity and the intelligibility of its original design. The research points out that, while the hastily detailed structural system is itself a risk factor to the Catetinho's durability, conservation efforts can be helped by a clear vision as to which, among the existing materials and techniques, are essential to the building's identity.

Keywords: 1950s, Catetinho (Brasília), Wood, Maintenance, Restorations

1 INTRODUCTION

Catetinho, built in 1956 near the construction site of Brasília, is the only work by Oscar Niemeyer (1907–2012) built out of wood, it was intended to be a temporary office for the President of the Republic during the construction of the new capital city, and was nicknamed after the Catete presidential palace in Rio. Because of its historical importance as the very first structure in this building campaign, it was listed as a national historical heritage site in 1959, and now houses a memorial museum.

This work discusses the current state of conservation of the Catetinho, how its design and construction techniques impact conventional wisdom

on the preservation of both modernist and wooden buildings, and recommended strategies to protect material integrity and the intelligibility of its original design. It is based on the inventory the authors conducted on the building and grounds in 2017, at the request of the National Institute for Historic and Artistic Heritage (IPHAN).

The Catetinho (Fig. 1), originally named Presidential Residence #1, actually served as provisional housing and offices for the executives of the New Capital Development Company (Novacap) on the construction site of Brasília. Occasionally, President Juscelino Kubitschek (1956–60, affectionately known as JK) himself would visit the building and perhaps spend a night there (Silva



Figure 1. Catetinho, exterior view. P.P. Palazzo, 2016.

1970). It is generally regarded as the first building in the construction campaign of the federal capital, and in this quality, it is the subject of anecdotes and legends crafted to magnify its history.

The Catetinho is a particularly sensitive heritage site, due both to its original construction as a temporary shelter, and to the lack of systematic records of its management and maintenance throughout its six decades of existence. Careless restorations in 1995 and 2012, hasty interpretations of its role as a memorial, alternating with long periods of material and administrative neglect, have added to the building's ills.

Moreover, the preservation of modernist architecture is still far from having a relatively consensual set of principles, of the sort that has been developed over the past century and a half with respect to ancient works of art. The usual conflation of "modern" with "contemporary," even in sound historiography (Bruand 1981), has only compounded the problem, by encouraging public officials to treat the conservation of the Catetinho in the same way they would handle routine maintenance of any recent public building.

Drawing a successful preservation strategy to confront these challenges requires understanding the Catetinho's history and the context of modern architecture in Brazil, as well as analysing its original frame, to show the response of temporary construction methods to the building's survival well beyond its intended life span. Moreover, its use as a public museum impacts the patterns of deterioration and the requirements for conserving the collections and providing accessibility.

2 THE CATETINHO: A PALACE OF PLANKS

2.1 *Wood and the ethos of spontaneity in Brazilian modernist architecture*

Modern architecture in Brazil is famed for its various free-form concrete structures of the 1940s and 50s, not the least the marble-clad palaces designed by Oscar Niemeyer in Brasília. Reinforced concrete became such an integral part of Brazilian culture in the second half of the twentieth century that popular architecture not only adopted this construction system, but also made its own several high-style motifs, such as the iconic columns of the Alvorada presidential palace (Lara 2009).

A lesser-known strain within Brazilian modernism, however, favoured a rustic approach, creating straightforward—if unmistakably avant-garde—structural solutions combining concrete with plain materials such as stone rubble and exposed timbers, evidenced in the work of Italian-born architect Lina Bo Bardi (Bierrenbach and Rossetti

2014). This current appeared as early as 1944 in Lucio Costa's Park Hotel São Clemente, in Nova Friburgo, upstate Rio de Janeiro. This quaint building of timber and glass expresses Costa's definition of architectural modernity as "the stuff of the mind" rather than mere choice of materials (Comas 2010).

This rustic strain, purported as an authentic expression of the *genius loci*, relates to what we would like to call an "ethos of spontaneity" in Brazilian culture. Akin to sociologist Gilberto Freyre's archetype of the "cordial (meaning emotional) Brazilian" (Freyre 1986), it posits spontaneous action as the epitome and acme of national culture. Rather than explicitly defining or defending this ethos, Lucio Costa unwittingly expressed it in the opening lines of the report with which he won the design competition for Brasília itself: "I am only putting out a possible solution, which was not sought after but appeared, so to speak, complete" (Costa 2014, 29).

The construction campaign of the Catetinho expresses a combination of all these aspects of Brazilian modernism. It was the spearhead of the greatest intellectual and technical effort of the twentieth century in Brazil: the construction of Brasília, a major achievement of a modernistic cultural and political élite.

At the same time, the founding myth of the Catetinho, as told by the former Novacap public relations official, César Prates, enshrined the ethos of spontaneity: in this narrative (Prates 1983), the company executives, including Oscar Niemeyer, met in a bar in downtown Rio de Janeiro on October 17th, 1956, to discuss the erection of a provisional shelter near the construction site of Brasília. In the act, Niemeyer drew a "napkin sketch"—quite literally—of the building. Over the following few days, Prates's brother and the other Novacap executives secured a private loan to fund the construction—it was intended as a personal gift to President JK. The engineer, Roberto Magalhães Penna, a close collaborator of the Novacap group, rushed his construction firm, about the middle of the way from Rio to Brasília, to ship the required materials in time for the next presidential visit to the site, less than a month later. The whole process was described by Niemeyer as "enthusiastic," with the construction process driven by will power more than anything else (Fig. 2).

2.2 *Architecture and context of the Catetinho*

Niemeyer conceived the Catetinho as a slender prism on *pilotis* with a shallow roof and continuous veranda, after the archetypal modernist housing blocks of the age. This effect was achieved with no more resources than some dimension wood, originally intended for scaffolding, and a few bricks, all

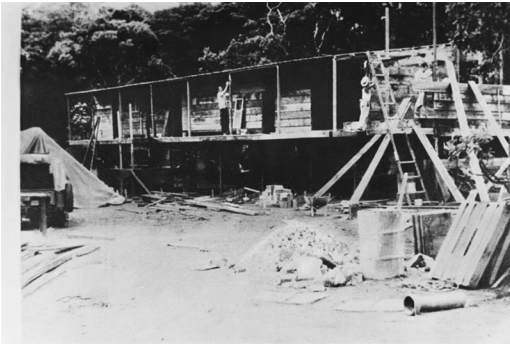


Figure 2. The Catetinho under construction on the last week of October, 1956. Federal District Public Archives (ARPDF), Novacap collection D4.4.b2 514.

picked up from Magalhães Penna’s construction company along the way. The original posts, beams, floor planks, and siding were made of dimension wood, locally known as *ipê* (*Handroanthus* or *Tabebuia*, genera of flowering plants in the family *Bignoniaceae*, see Mabberley 2008). This tree genus is native to central Brazil and was once widely used as building material, before being declared an endangered group in the 1980s. A slab of unreinforced concrete was poured at grade to stabilise the posts and create a level ground floor plate, over which a small brick room provided minimal bracing for the whole building. Beams were created with makeshift assemblies of wood planks screwed eccentrically to the posts (Fig. 3). The roof was a simple rafter and purlin grid supporting corrugated metal plates. The main floor counted only five suites and a large office, so that a service building with kitchen and janitor’s quarters had to be added a couple of months after inauguration.

The Catetinho is a precursor and a summary of the construction of Brasília itself, both in its architecture and in its building process. After he completed this “plank palace,” Niemeyer designed several provisional buildings for housing, schools, and even an air passenger terminal, with similar materials and designs: elongated blocks on slender posts with corridors on one side and shed roofs.

Over the years, the Catetinho suffered several removals and additions with no documental record. Beginning in the 1970s, its emerging identity as a museum superseded that of a listed memorial site. This entailed the accretion of various objects and pieces of furniture, collected from abandoned buildings around the city or merely intended to compose allusive settings. The records of these transactions were not cared for and eventually went missing, making the task of reconstructing the Catetinho’s history as a museum the stuff of conjecture.



Figure 3. Pilotis of the Catetinho. P.P. Palazzo, 2016.



Figure 4. Replacement of the interior sheathing in progress, showing roof structure, first half of February, 2012. Federal District Historic Preservation Office (Supac) digital archive.

In the same way that modernist architecture became ingrained in Brazilian culture during the second half of the twentieth century, it played a significant role in the development of institutional and ideological frameworks for historic preservation in the country, impacting the preservation of the Catetinho. Modernist artists and intellectuals, including Lucio Costa himself, were recruited into the heritage service as soon as it was created, in 1937. Their aesthetic and political activism has had consequences up to the present day, having influenced the selection of properties to be listed, conservation policies, and even selecting a few of their own works to be listed as heritage—since no age cut-off has ever been in place.

The listing of the Catetinho as a national heritage site in 1959 speaks of the close interaction between

modernist intellectuals and the federal government. The listing request came directly from President JK, and it was given expedite treatment by the heritage department, staffed by former colleagues and friends of Niemeyer's. This fast track entailed, however, a lack of documentation and discussion about the site and its future uses. The department head's speech commemorating the listing is all that remains in the manner of a statement of significance (IPHAN 1959). No known documents had ever made authoritative statements about appropriate reuse of the building or its surroundings.

Over time, the Catetinho was turned from a memorial dedicated to the pioneering work of Novacap and JK into an interpretive museum filled with objects devoid of historical significance, intended to give an atmosphere that is reminiscent of a frontier station in the 1950s. This situation has entailed particular challenges for its physical conservation as well as the preservation of its historic significance.

3 PRESERVATION AND CONSERVATION

3.1 *Preserving modern architecture in Brazil*

The history of conservation and restoration is strongly influenced by religious, philosophical, aesthetic, and political ideas, on the ideological level, and, on the technical level, by the cumulative achievements of science. Restoration, therefore, is not so much (or only) a technical matter, but, above all, a cultural phenomenon. (Macarrón Miguel 2008).

By creating a unique character for each city, historic preservation can strengthen local cultural identity and economic power in the global stage. On the other hand, depending on the way in which its historic significance is emphasised and captured by interest groups, there is a risk it will be commoditised, sterilising its meaning (Lima 2012). This is not only a matter of social value—as important as this aspect of historic preservation may be—, but can impact decision-making in ways that can threaten a historic site's physical integrity and the authenticity of the meanings it conveys (Lira 2009, 113).

In Brazil, historic sites can be listed at the federal, state, or county level. Since their rulings and technical specifications are binding, this often generates uncertainty regarding jurisdiction. The civil society finds itself at loss to understand the processes and values attached to historic sites, particularly with respect to modernist architecture. The preservation of recent sites can then be perceived as subjective and arbitrary, not to mention a burden on their owners (Oksman 2011). In the specific case of the Catetinho, a further complication is that it is presently owned and managed by the Federal District government. As such, the

District's historic preservation office must contend with two, at times conflicting, tasks: setting directives for the building's conservation and managing its daily use as a memorial museum (Perea and Palazzo 2017).

Most building pathologies in Brazil are related to poor design, incorrect execution, and lack of adequate maintenance. In wood structures, these factors are compounded by biotic agents and the weather, particularly the alternation between intense solar radiation and high humidity typical of tropical climates (Brito 2014, Cruz 2001, Gonzaga 2006, Jankowsky 1990, Lepage 1986, Motta 2010, Oliveira 2016, Palma and Cruz 2007, Tampone 2016, Vidal, et al. 2015).

Gonzaga (2006) explains that ultraviolet solar rays, even without penetration, act on the surface of the wood, destroying the pigmentation of the outermost layer and opening small crevices where moisture penetrates, causing retraction and providing room for fungi, bacteria, and insects to proliferate. Infrared rays penetrate even deeper, causing surface collapse.

Bacterial attack occurs slowly, and, as a result, the wood becomes more hygroscopic. This, in turn, increases vulnerability to other xylophages adapted to wet wood. In addition, wetting and drying cycles can cause the deformation of the wood pieces, especially in clapboard built the traditional way, with the boards nailed across their upper edges (Larsen and Marstein 2005). This is precisely the case at the Catetinho, highlighting the fact that modern architecture does not, necessarily, improve upon construction and waterproofing techniques used before the twentieth century (Fig. 5). The deformation is caused by moisture differentials due to rainwater infiltrating the outward surfaces



Figure 5. Side view and detail of clapboard bracing at the Catetinho. M.M. Mennucci, 2017.

of the boards and air circulation drying out the inward surfaces.

3.2 Previous interventions on the building

The makeshift nature of the materials and haste in construction (less than three weeks) meant that pathologies soon appeared, and the building underwent several interventions over its sixty-year history. These interventions were, more often than not, plagued by either a heavy-handed approach to building maintenance—without taking heritage values and good practices into account—or the intent of restoring the Catetinho to a supposedly pristine, though conjectural, original appearance.

Two major restoration campaigns, in 1995–97 and 2012, were especially damaging to the physical integrity of the historic fabric. These and other aggressive, undocumented interventions in 1957, 1960, 1978, and 2002 count for most of the known changes to the building:

- Clapboard bracing removed from both ends of the *pilotis*, in 1957, and southeast bracing recreated in 1995;
- Original rolling mat blinds removed from the corridor balcony before 1978, and from the windows at some point between 1978 and 1995;
- Replacement of some original 15 × 15 cm posts in *ipê* wood with composite posts made up of twin 7 × 15 cm profiles in *Ormosia (angelim)* wood, conspicuously screwed together, in 1995;
- Replacement of some load-bearing beams and all of the porch railings, both in *ipê* wood, with *angelim* wood, in 1995;
- Clapboard, interior wall and ceiling sheathing, and roof plates entirely replaced in 1995–97;
- Interior sheathing replaced again in 2012 (Fig. 4);
- Original plumbing siphons replaced with new, production-line parts in 2012, even though there had been no running water in the building for decades and the original parts were in a fair state of conservation;
- Complete reconstruction of the ground floor slab in 2012—at which moment it may or may not have been in its original state—to create an accessible route from the parking lot to the kitchen;
- Repainting and priming on several occasions, including changes in paint colours, with neither recorded justification, nor a precise record of the existing or new products and techniques employed (Fig. 6).

Further modifications to the building and its surroundings stemmed from the use of the Catetinho as a museum, since 1972. The building and its furniture remained, presumably, from late 1959 until 1972 in the exact state they had been left in when the Catetinho ceased to be used as a

provisional housing and workplace. Its opening to the public not only as a memorial, but as an interpretive museum, however, required new infrastructure and furnishings:

- A very conspicuous, though architecturally compatible, administrator's house and cafeteria were erected, probably in 1972 or even before, just a few metres from the original building;
- The lighting fixtures were replaced several times between 1997 and 2012, resulting in incompatible layouts and insertions directly onto the sheathings; moreover, the strong lighting poses a threat to the museum collection;
- Incompatible emergency lighting was deployed in 2012, even though they were unnecessary, given that all rooms have direct access to exterior areas;
- In spite of heavy-handed accessibility renovations carried out in 2012, the main exhibition rooms on the upper floor are still only reachable by stairs and a corridor with railings that are not building code-compliant.

3.3 Present state of preservation and conservation

In the five years that have elapsed since the last major intervention, the Catetinho has received minimal physical conservation, and already shows new problems caused by diverse environmental agents. Its functioning as a public museum has been hampered by a variety of factors, among which are to be counted the construction of a highway overpass nearly blocking the entrance to the grounds, in 2014, and the lack of much needed funding for research and education.

The ceiling over the ground floor, suffering from water run-off (Fig. 8), and the floor paint in the areas most exposed to sunlight and rain, that is, the stairs and the edge of the veranda (Fig. 7), have



Figure 6. Scraping and repainting in the Catetinho veranda, first half of February, 2012. Supac digital archive.



Figure 7. Veranda floor and stairs showing deteriorated paint coat in exposed areas. M.M. Mennucci, 2017.



Figure 9. Posts showing damage by rot, loss of supporting section creating a habitat for insects and arachnids, and cracking due to buckling. M.M. Mennucci, 2017.



Figure 8. Ceiling on the ground floor of the Catetinho showing deterioration. P.P. Palazzo, 2017.

sustained the strongest damage. Sheathings in the kitchen annex are moderately compromised by fungi and termites. Most of the dimension wood in the building—posts, beams, and boards—need attention to their excessive moisture content during the rainy season, and several parts are infested with arachnids, insects, fungi, and bacteria.

Structural damage to the posts reflects the difference in species and assemblies used, as well as biological factors, and bodes ill for the durability of the building. The unprotected insertion of the posts into the concrete slab has caused rot in their lower ends, whereas their middle and upper parts display cracks due to buckling and bolt corrosion (Fig. 9).

Due to the temporary purpose of the Catetinho, its physical conservation is often at odds with the preservation of its architectural character. Indeed, much of the damage that begins to take place shortly after each intervention can be ascribed to the lack of design detailing such as waterproofing, flashing, or even a sturdier structural concept. This contradiction requires particular attention, on the historic preservationist's part, to inconspicuous

interventions such as wood treatment, joint detailing, and choice of paint. This is to avoid future need for intrusive solutions such as bracing, or even the repeated replacement of major parts of the construction.

Much of the furniture is not original to the Catetinho, yet has historical value on its own. Direct sunlight and heat has been causing constant damage, to the point the upholstery needs replacing every few years.

4 CONCLUSIONS

The research points out that, while the hastily detailed structural system is itself a risk factor to the Catetinho's durability, conservation efforts can be helped by a clear vision as to which among the existing materials and techniques are essential to the building's identity, something that was not explicitly considered in previous restorations. A strict maintenance plan will then be able to preserve the appearance and materiality, although some original features and information, such as the paint coating and some of the furniture, are irrevocably lost.

The present situation of the Catetinho highlights the conflicting nature of requirements that often arise when preserving modern heritage. On the one hand, the building's intrinsic concept as a temporary structure is key to the historic values it embodies. This aspect requires respecting and preserving its materiality even at the expense of introducing better architectural detailing to reduce the rate of material deterioration. On the other hand, what little is left of its original structure is also crucial archaeological evidence, the loss of which may be resented in future research.

On top of these two sides to material conservation, a more general expectation regarding

modernist architecture is its pristine appearance. The matter of patina in modernist heritage is an ongoing discussion among specialists, but it is often taken for granted that modernist historic sites should appear to the public exactly as they sprang out of the designer's mind. This expectation, coupled with another common misconception, that modern architecture is identical to standard contemporary building practice, might explain, in part, the heavy-handed and poorly documented interventions that were imposed on the Catetinho.

The lack of definition regarding the Catetinho's purpose, as well as the absence of preservation criteria sanctioned by its management are a continuing liability: maintenance work will inevitably take place in the near future, but it might be carried out in the absence of specific conservation guidelines. This paper has offered theoretical and technical clues to the issues that must be addressed on both regulatory and managerial levels. These issues are not specific to the Catetinho, but reflect the conflict between general principles of historic preservation and the day-to-day tasks of presenting and interpreting the heritage value of modern architecture.

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