

CONTENTS

INTRODUCTION

A HOUSE IN THE SUBURBS OF SAO PAULO 3

CHAPTER ONE:

THE CURATOR 4

CHAPTER TWO:

BRAZILIAN MODERNISM FROM 1922 10

CHAPTER THREE:

CONTRADICTIONS 15

CHAPTER FOUR:

SUCCESSES AND RESOLUTIONS 21

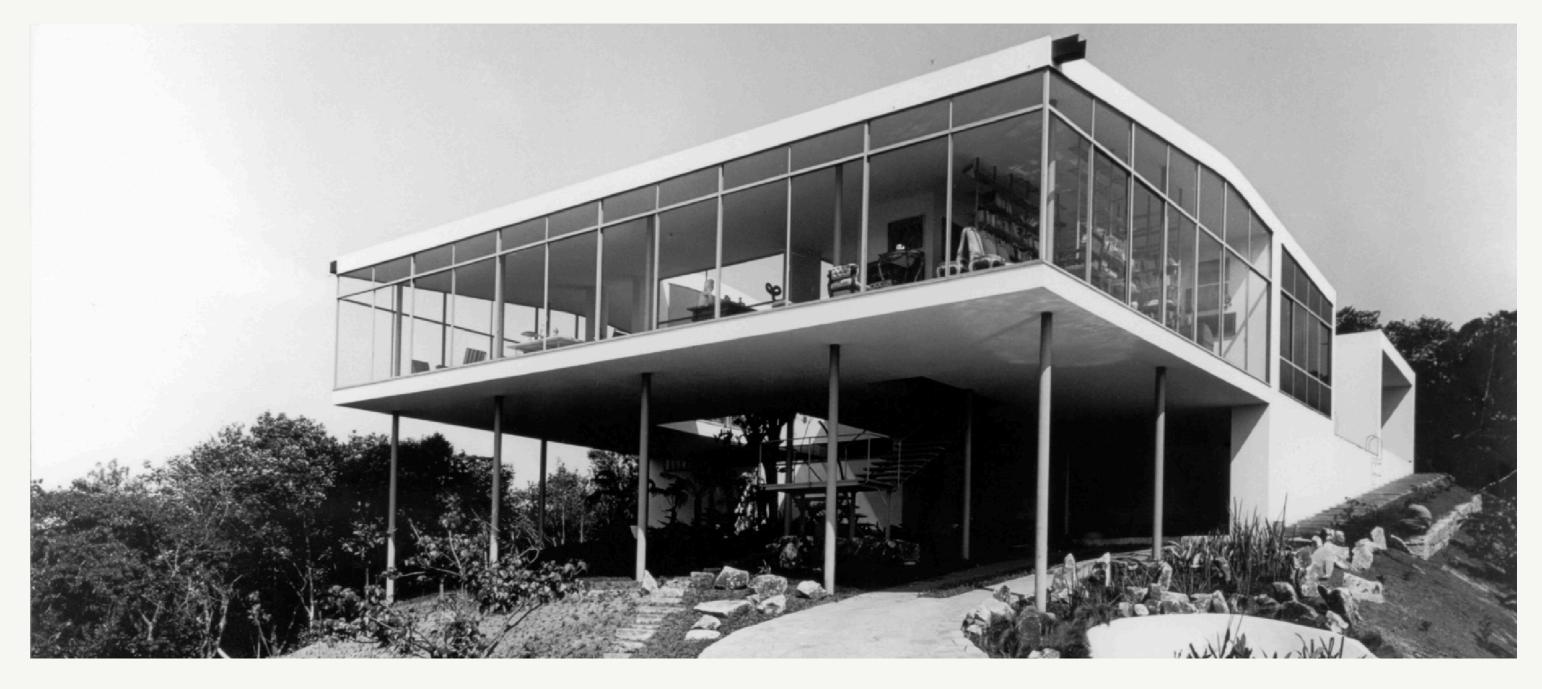
CHAPTER FIVE:

AFTER BRASILIA 25

CONCLUSION 30

BIBLIOGRAPHY 31

IMAGE REFERENCES 33



A house in the suburbs of Sao Paulo

Casa de Vidro, newly built (Scheier, 1951)

Lina Bo Bardi (1914-1992) was an Italian-born Brazilian architect. Alongside her husband, the writer and curator Pietro Maria Bardi, she emigrated to Brazil in 1947. (Curl & Wilson, 2016)

Built in 1951, Casa de Vidro was Bo Bardi's first project in her new home country. A deeply personal work, it was the couple's home until their deaths (Bardi et al, 2014 p.195). The house and collection are now managed by the Instituto Bardi (Getty, 2019 p.5).

Casa de Vidro is considered to symbolise Brazil's post-colonial hybrid identity, as Bo Bardi's design blends European Modernism with vernacular traditions (Unwin, 2015 p.225). Evidence of the complex relationship between the house's stylistic influences and the building's evolving function for the Bardis provides compelling insights into this emerging identity.

This dissertation analyses Casa de Vidro as an architectural allegory of Brazil's pivotal social and political changes in the 20th century. It will examine Casa de Vidro within its historical and cultural context, from the emergence of Brazilian Modernism in 1922 to its zenith with the inauguration of Brasilia in 1960 (Lara, 2008 p.69).

The interior of Casa de Vidro holds the extensive art collection of Pietro Maria and Lina Bo Bardi. What part does this play in the conversation about Brazil's post-colonial identity? We will examine how their collection, and the manner of its presentation, expresses the Bardis' social consciences and their attitudes towards marginalised communities.

To achieve this, we must understand how Modernism became established in Brazil, and the architectural landscape that existed

when Casa de Vidro was built. Doing so will reveal the tensions between Modernism and vernacular architecture that Casa de Vidro sought to unify – tensions that reflect deep-seated cultural contradictions in post-colonial Brazil.

Modernism thrived in Brazil – but its golden age came to an end. While Casa de Vidro shared the success of Modernism in its heyday, Lina Bo Bardi ultimately rejected its limitations. Through critical analysis and comparison with European modernism and Brazilian vernacular architecture, this dissertation seeks to reposition Casa de Vidro as more than the modernist icon it has become. As we will see, Casa de Vidro evolved into a living representation of Brazil's postcolonial identity: a potent symbol of change, and a politically progressive experiment.





1. The Curator

Casa de Vidro's design is dominated by a large steel and glass structure. It makes up almost half of the house's plan and all of its front elevation (Unwin, 2015 p.225). The Bardi's living room sits inside this glass box. Despite its minimalist aesthetic, the space is inhabited by an eclectic collection of culturally significant objects (Bardi et al, 2014 p.202).

As a room, it embodies the spirit of a collector: a series of spaces displaying a collection with a wide curatorial span. No single style or genre dominates, while the placement of the objects is artfully arranged (Bardi et al, 2014 p.202).

The living room recalls the Eurocentric archetype of the 'White Cube': an

architectural answer to a colonial problem. A place where the postenlightenment collector keeps exotic artefacts. (Azoulay, 2019 p.153)

However, does Bo Bardi's intention achieve something more progressive: redefining the complex relationship between objects, people and collectors (Lima, 2014, p.69)?

^{1:} Living room with a view of the fireplace and atrium (Kon, 2002)

^{2:} Frans Francken the Younger, Kunst- und Raritätenkammer (Chamber of Art and Curiosities), 1636. Oil on panel.

A curatorial space

Casa de Vidro's living room is an unconventional gallery. Wall space is scarce. Glass walls draw attention to the lush garden outside, just as the interior and its artefacts are visible to the outside world (Unwin, 2015, p.225). Elevated and illuminated within the jungle, it is an enormous glass display case.

But unlike a museum display case, Casa de Vidro is not hermetically sealed. The windows open up to connect the interior to its distinctive surroundings without a barrier (Unwin, 2015, p.229). Sheer curtains, added at a later date, are a simple concession to shade (Getty, 2019 p.53).

Modernist glass and steel sitting within a seemingly wild and tropical rainforest re-contextualises the landscape. The act of viewing through a window frame becomes an analogue of an artists viewfinder: framing the natural world and collecting it as a view. In this act of translation, the view is contained, tamed (Bhabha, 1994 p.53).

The collection relies on freestanding furniture: shelves, plinths, desks and tables, display the various objects in the collection. Many items sit on the floor, which is tiled and reflective, as if to further illuminate the room's contents (Bardi et al, 2014, p.202).

The furniture itself is a collection. Photos from 1951 show an Eames chair and a Charlotte Perriand lounger as a counterpoint to antiquated wood carved furniture, alongside work that Bardi had collected from Brazil's northwest. Many pieces of furniture, including the library shelves, were designed by Lina Bo Bardi especially for the space. Her use of steel tubing, glass and leather show are reminiscent of Bauhaus furniture. (Bardi et al, 2014 p.196)

A granite-faced chimney and hearth form a mantlepiece, doubling as a shelf for various small pieces of sculpture and ceramic art (Getty, 2019 p.120).

Like a museum, the collection at Casa de Vidro appears to be subject to constant change. Indeed, a number of items from the collection were removed upon Pietro Maria Bardi's death in 1999 at the behest of the children from his first marriage (Getty, 2019 p.425). Arguably, changes are accommodated by the design: the free floor plan and eclectic arrangement allow for new pieces to be removed and inserted seamlessly.

The glossy grey piloti extending vertically through the space suggest a light separation of the floor plan, enhanced by groups of furniture that lend themselves to intimate areas for conversation, work and dining. All of these areas double as display areas (Bardi et al, 2014, p.196).

The strong spatial emphasis towards the act of collection is a signifier of the work of the Bardis (Bhabha, 1994 p.159). But why?



3: Living Room (Kon, 2001)











The house is a connector

What purpose did this environment serve for Lina Bo Bardi and Pietro Maria Bardi?

Any concessions to a domestic scale, (a dining table, a library, a hearth), are unified by a slab ceiling and continuous windows. Separating elements, like glass and steel bookshelves, the piloti and the glass internal courtyard do not

to be seen in . The room is a gallery. It lends itself to domestic actions insofar that they become part of the display (Unwin, 2015 p.225).

Casa de Vidro was an entertaining space for the Bardis when they were establishing themselves in Brazil, and the way that it welcomed its elite guests was dramatic and impressive. The approach is via a path that presents the house at a complimentary angle. break the view. This is a room to see and The entrance is a hidden staircase

that opens straight into the living room, in all of its splendour. It is a choreographed presentation of the Bardis' 'gesamkunstwerk'; or rather a collection of artifacts that come together to create a unified work (Bardi et al, 2014 p.196).

A door separates the living room from a large kitchen. Although utilitarian in design, the kitchen has a scale and beauty that transcends mere function. It caters for more than two people:

there are two ovens and a large refrigerator. Details suggest that it is meant to be seen. White tiled walls contrast with the black tiled floor. An extractor hood in glass and steel recalls the impressive windows in the living room. (Benton, 2023)

In demonstrating the capability to entertain large groups of people, the kitchen tells us that Casa De Vidro serves a purpose beyond a private, domestic use. Casa de Vidro has

functionally opened its boundaries to a public-facing role, with an intention to establish the Bardis within the elite society around them (Benton, 2023).

- 4: Pietro Maria Bardi at an event at the Casa de Vidro (Instituto Bardi, nd)
- 5: Casa de Vidro newly built (Scheier, 1951)
- 6: Lina Bo Bardi and Gilberto Gil in the living room at the Casa de Vidro (Instituto Bardi, nd)
- 7: Lina Bo Bardi on the stairs at the Glass House (Habitat (1952)
- 8: The kitchen at Casa de Vidro (Kon, 2001)

Collecting is the work of the coloniser

Ariella Aïsha Azoulay is a cultural theorist who posits that the process of collecting, cataloguing and photographing art was weaponised by western powers (Azoulay, 2019, p.58). Succinctly, she states that 'museums are instruments of violence' (Azoulay, 2019 p.58). Academic studies of colonised cultures were often co-opted for hegemonic purposes. By understanding colonised territories through their art, those in power could use their learnings to extend their influence (Azoulay, 2019 p.82).

A founder of post-colonial studies, Edward Said, takes issue with the study of culture in colonised territories within Asia and the Middle East. When romanticising these cultures, he says scholars infantilise the Orient, regarding it as a representation of an 'old world to which one returned' (Said, 1979 p.58). Or they refer to the Orient as 'the mother' (Said, 1979 p.88), suggesting that it is the source, and that Europe's enlightenment has imposed a temporal shift across the continents. By travelling to countries outside western pedagogies, the coloniser travels back in time, or so they think. (Said, 1979 p.143)

And what of the grand museums built to display collected artifacts? The 'White Cube' is a concept born from colonial attitudes to curation, where the object is shown in an environment that embodies what Azoulay calls a triple separation from its origin: spatial, temporal and political (Azoulay, 2019 p.112). The art object is 'neutralised' when it is removed from its origin and placed in a standardised space (Azoulay, 2019 p.96). By transposing works into a neutral environment, Azoulay theorises that museums use the term 'art history' as a protective umbrella. 'Art for Art's Sake' is a concept that separates the work from its social history – and imperial plunder (Azoulay, 2019 p.81).

Furthermore, by removing artworks from their context and local knowledge, the collector is shedding layers of information about the object (Said, 1979 p.165). The cultural theorist Homi Bhabha would see this as an act of hybridisation. By viewing the object through a collector's

eyes, by their own learnings, they are committing an act of cultural translation. Both the collector and the environment that receives them are changed by the exchange. Bhabha sees these acts of hybridisation as the product of colonial occupation (Bhabha, 1994 p.159) The interpretation of Oriental works is flawed as the collector can only translate them via their own knowledge (Bhabha, 1994 p.6).

Separation from objects is proof of colonisation (Azoulay, 2019, p.78). The origin culture, and its people, are deprived of their objects (Azoulay, 2019 p.59). These objects represent not only their material wealth, but symbols of strength and rebellion (Azoulay, 2019 p.73). By separating communities from their art, and engaging the people in other labours, the colonist would also disrupt the continuing production of art (Azoulay, 2019 p.74).

Does reparation assist decolonisation? Many cultures and environments were changed beyond restoration, meaning that communities lost knowledge of their objects, resulting in what the anthropologist James Clifford calls 'ambiguous reparation' (Clifford, 1997 p.212). However, Azoulay believes that decolonisation cannot happen without the repatriation of such objects, and the act of holding them in western museums and collections is a continuation of the abuses of colonial power. She believes that art history is again weaponised, relegating the colonial violence to the past, and outside of accountability (Azoulay, 2019 p.77).





^{9:} Lina Bo Bardi's collection (Kon, 2001)

^{10:} L'institut d'Napoleon, built to house artifacts from Egypt (Linda Hall Library, nd)









Bo Bardi as a curator

Lina Bo Bardi became known as a collector of Brazilian folk art and artifacts. In 1959 she was made director of the Museu de Arte Moderna da Bahia (or MAM BA). She fulfilled the role by showing a deep interest in the people and culture of the region, which was inhabited by an historic Afro-Brazilian community (Lepik, 2014, p.17).

In 1962, Bo Bardi convinced the governor of Bahia to provide an existing building, the Solar do Unhão, to house the museum. The buildings were in the Portuguese colonial style and had served as slave quarters. Their proximity to the sea reminds us of the origin of Afro-Brazilian people (Bader, 2014 p.227). Unhão opened with a show called Nordeste, which was an exhibition of handicrafts (Lima, 2014 p.73).

Bo Bardi was creating a space for Bahian work that did not gloss over the ugly truth of colonialism. It was also future facing: practicing inclusion in modernity rather than relegation to the past (Azoulay, 2019 p.88). Unlike Casa de Vidro or MASP, Solar do Unhão was an example of adaptive re-use of an existing building (Bader, 2014 p.227), a theme Bo Bardi would return to decades later at SESC Pompeia (Bader, 2014 p.265).

Bo Bardi was passionate about displaying the works of others. At MASP in Sao Paulo, she curated a series of shows with an anthropological focus (Lima, 2014 p.71), such as A Mão do poro Brasiliero (in English: The hand of the Brazilian people) (Lima, 2014 p.74).

Even Bo Bardi's approach to 'classical art' was innovative. Glass easels at MASP displayed both the front and the back of paintings. This design gesture was celebrated for allowing people to see the inner workings of an elite art world (Lima, 2014 p.74).

^{11:} Bo Bardi restoring tiles at Solar do Unhão, early 1960s (Bardi Institute, nd)

^{12:} Nordeste Exhibition, Solar do Unhão, 1963 (Bardi Institute, 1963)

^{13:} Lina Bo Bardi on the eve of the Bahia Exhibition, Ibirapuera, Sao Paulo, 1959 (Javurek, 1959)

^{14:} Bo Bardi''s exhibition design at MASP (MASP, nd)

Collecting without colonising

How does Casa de Vidro perform in the debate around collection and colonialism?

The open living space recalls the 'White Cube' museum, a colonial paradigm that created a demand for works to be looted from their origin. Azoulay believes that such environments are not neutral spaces. She believes they control the narrative of what is acceptable and progressive. (Azoulay, 2019, p.153)

But Bo Bardi departs from the White Cube archetype in her method of display. The works are grouped with furniture at a human scale, among domestic activities (Bardi et al, 2014 p.196). Reminiscent of Bo Bardi's echibition techniques at MASP, the works are placed so they can be examined from every angle (Lepik, 2014 p.20). They are spatially unified beyond their origins (Azoulay, 2019 p.112): the jar of arrows sits beside the Qing dynasty plate; both of them equal (Bardi et al, 2014 p.196).

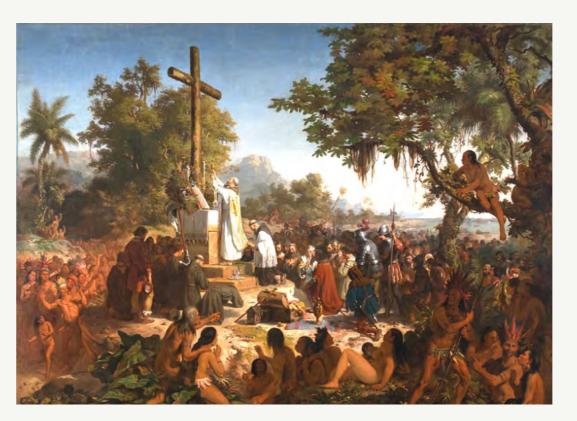
Despite her commitment to modernism, Bo Bardi is not afraid of antiquity, 'poor cultures' or a complex arrangement of contrasting styles (Lima, 2014 p.71). The pieces are not randomly assembled: the composition is carefully considered, demonstrating an understanding of each piece (Bardi et al, 2014 p.196). By including the work in a modern display, is she removing the separating construct of the temporal (Azoulay, 2019 p.112)?

In *Orientalism*, Edward Said contends that the orientalist diminishes people by defining them as theatrical representions that are temporally archaic (Said, 1979 p.63). Bo Bardi shows sensitivity by recognising contemporary cultural innovations from regional communities. She describes the Brazilian people as 'full on invention, full of courage'. Her admiration is palpable (Lima, 2014 p.83).

Homi Bhabha would see Casa De Vidro's collection as a glorious mirroring of Brazil's hybrid society (Bhabha, 1994 p.37). The concept of 'Brazilianness' invoked debates in the 20th Century, in part as a result of Brazil's changing political landscape (Lara, 2008 p.69).

Perhaps Casa de Vidro is a repository space that tells a complex story of migration. It is a glass case; a lens that captures a representation of a hybrid population.

For Azoulay, colonists used the camera lens as an accomplice to colonial looting and violence (Azoulay, 2019 p.82). The regional handicrafts displayed at Casa de Vidro have been removed from their community and context. Is this an act of colonial mimicry (Bhabha, 1994 p122)? These pieces might represent wealth removed from indigenous communities. But Bo Bardi's work alongside regional communities suggests mutual trust and consent between both parties (Azoulay, 2019 p.136), otherwise the collection could be seen as uncanny outside of its origin (Bhabha, 1994 p.165).





15: First Mass In Brazil (Mirielles, 1859-1861)16: A collection of large objects at Casa de Vidro (León, 2011)

A contact zone

Assessing Casa De Vidro's role as a curatorial space is key to understanding the building. Indeed, in 2018 the Getty Foundation reclassified the house as a House Museum, meaning that the collection displayed is integral to the historic preservation of the property (Getty, 2019 p.425). Architectural critic Ana María León suggests that the living room is incomplete due to the removal of a number of Pietro Bardi's objects by his family (Leon, 2011).

As an anthropologist who studies the role of museums in post-colonial discourse, James Clifford believes that museums are 'Contact Zones'. The are interstitial spaces that can provoke conversations between curators and peoples who represent an object's origin (Clifford, 1997 p.191).

Clifford sees that a heterogenous approach to curation must admit its asymetric power dynamics, and that reciprocity has a different meaning to each party (Clifford, 1997 p.194)

Casa de Vidro expresses itself as an interstitial contact zone in many respects: between the objects sitting alongside each other, outside their origins (Bhabha, 1994 p.19). Bo Bardi represents a European pedagogical approach that cannot remove itself from its colonial past, and with it the dark history of collection from colonised communities (Wisnik, 2014 p.41). But her commitment to dialogue with communities representing the origin, rather than 'proxy experts', suggests Bo Bardi created contact zones, and thereby worked towards decolonisation in her curatorial work (Azoulay, 2019 p.88 p.96).

2. Brazilian Modernism from 1922

Brazil's Modernist 'golden age' started in 1922 (Lara, 2008 p.71), extending to the 1960 inauguration of the city of Brasilia (Bardi et al, 2014 p.135).

The beginning of Modernism in Brazil was marked by a 1922 show in Sao Paolo: Semana de Arte Moderna (Or Modern Art Week). A collective of artists, writers and composers staged exhibitions, concerts and readings. Sao Paolo's role as host is indicative of the growth and industrial wealth of the

city. Previous cultural events had been mainly centred around Rio De Janeiro (Lara, 2008 p.69).

The artists involved, although inspired by European Modernist and avant garde art movements, were keen to place themselves outside of Europe's cultural dominance, and used the Semana to negotiate a distinctive Brazilian artistic voice (Lara, 2008 p.69).

The poet Oswald de Andrade led a key

group of the Semana and produced the Manifesto Anthropofago (Cannibalistic Manifesto). It posited Brazil as a digestive organ that takes the influences of American and European art movements alongside regionalist Brazilian thought, and regurgitates it into a new Modernist hybridisation in reflection of Brazil's modern identity (Andreoli & Forty, 2007 p.15). This manifesto preempts Bhabha's theories of hybridisation as a product of colonialism (Bhabha, 1994 p.37).



Also in attendance were Anita Malfatti and Tarsila do Amaral: female painters, both born in Brazil, who adopted avant garde techniques. Both were influenced by Cubist and Fauvist artists in Europe, but sought to portrat Brazilian people flora and colours in their work (Lara, 2008 p.70).

So when Lina Bo Bardi arrived in Sao Paolo in 1947, one could argue that the stage was already set for Modernism in Brazil (Bardi et al, 2014 p.195). Getúlio Vargas led a populist revolution in 1930 that kickstarted a hegemonic focus on industrial and pedagogical growth. This was reflected in its new infrastructure and architecture (Lara, 2008 p.69). The Brazilian people, already used to seismic societal change, embraced Modernism in their public buildings, bringing modern details into the homes of an emergent middle class (Lara, 2008 p.132).

Both European and home-grown
Brazilian architects developed a
distinctive form of Modernism in Brazil,
often referred to as 'Architectura Nova'
(Lara, 2008 p.28) The architectural
historian Kenneth Frampton suggests
that architectural styles become more
distinctive the further away they are
from their European origin. They are on
the 'periphery' (Lara, 2008 p104). For
Brazil, 'peripheral' mutations accounted
for the meteorological climate, the
landscape, and botanical diversity
(Bardi et al, 2014 p.135). Casa De Vidro

is indicative of a style of Modernism that responded to the environment, not a facsimile of buildings across the Atlantic, or "Europeans in the Tropics" as the historian Boris Fausto would have it (Fausto, 1999 p.246).

This 'native modernity' (Lara, 2008 p.69) took into account Brazil's diverse racial identity, and played into Vargas' political movement towards nation building and a distinctive 'Brazilianness' (Lara, 2008 p.123). It was an optimistic product that the new regime would use as a signal to the wider world. Brazil was creating its own identity, outside of colonialism (Andreoli & Forty, 2007 p.25).

17: Anita Malfatti, a Brazilian artist who exhibited at the Semana de Arte Moderna. One of her paintings: Tropical (Malfatti, 1917) 18: Semana De Arte Moderna Program Cover (Di Cavalcanti, 1922)

17

Establishing Modernism

In 1930, the Brazilian Lúcio Costa was named director of the Escola Nacional de Belas Artes (ENBA). The art school was comparatively new compared to its European contemporaries, as higher education had previously been banned in colonial Brazil. In 1808, (during a period of transition between Portuguese rule and 1922's independence), the ENBA was established by a migrant group of French artists (Lara, 2008 p.73-74).

Costa was strongly inspired by Le Corbusier, having partly trained in Europe, and quickly amended ENBA's curriculum to Bauhaus and Le Corbusian principles (Lara, 2008 p.73-74). Costa's fervour for Modernism was not dogmatic; he advocated for the simplicity of Brazilian rural construction, and referred to it within his designs. This was heretical to most European Modernists, whose teleological approach recommended a break with history (Andreoli & Forty, 2005 p.26)

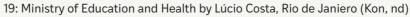
However, his loyalty to Le Corbusier was apparent when, in 1936, Lucio Costa invited Le Corbusier to Rio to consult on the Ministry of Education and Health in Rio de Janiero (Lara, 2008 p.74). Brazil's stylistic adherence to Le Corbusier's principles would continue through the period, culminating in Brasilia; the new administrative capital where Costa would invoke Le Corbusier's Ville Radieuse (Andreoli & Forty, 2005 p.37).

International recognition of Architectura Nova came, in 1943, when the New York Museum of Modern Art exhibited 'Brazil Builds'. It showcased the work of ENBA teachers Lucio Costa and Rino Levi, and displayed the talents of a young Oscar Niemeyer (Lara, 2008 p.79).

Niemeyer balanced Modernism with local Brazilian references. Recalling Andrade's 'Cannibalistic Manifesto', he united Modernism's industrial processes with the vernacular's artisan hand (Andreoli & Forty, 2005 p.26).

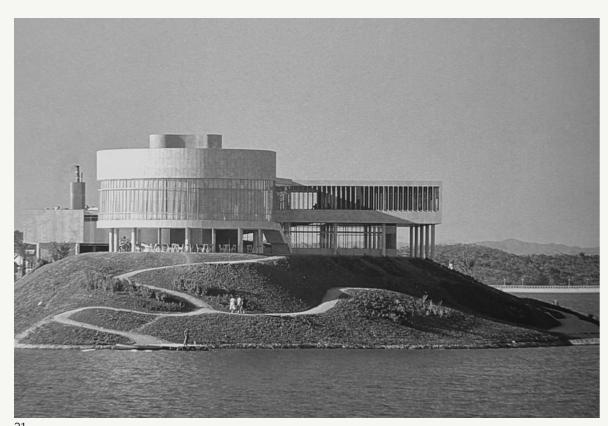
Financial growth in Brazil accelerated the evolution of Modernism: as a result young architects like Niemeyer were able to submit a number of works, both completed and under construction, into the exhibition. The result was a reputation for a new kind of Brazilian Modernism that momentarily transcended its borders and was subject to a warm reception by the developed world (Lara, 2008 p.79).







20: Brazil Builds, Book Cover (Goodwin, 1942)



Populism as a client

As Brazil's new president, Getúlio Vargas governed in a system of 'Conservative Modernism'. In reaction to the 1929 New York stock market crash, he installed a nationalist agenda, reducing the need for foreign imports, boosting industry to regenerate foreign exports, and centralising power within a federal government (Lara, 2008 p.69).

The government's developmentalist rhetoric extended to commissions of flagship architectural projects; the first notable example being Costa's Ministry of Education and Health in 1936 (Andreoli & Forty, 2005 p..114).

Oscar Niemeyer made his name in the early 1940s with a series of municipal buildings commissioned by local government in Lake Pampuhla. A

ballroom, church, casino and restaurant, positioned around an artificial lake, were integral in creating a suburb for emergent middle and upper classes. Niemeyer's dynamic geometries and ambitious parabolic curves showed his skill, although the local authority struggled to populate the development; a foretelling of Niemeyer's later work in Brasilia (Andreoli & Forty, 2005 p.119).

Bo Bardi's adopted city of Sao Paolo was primed for development. Previously overshadowed in size and prominence by Rio de Janiero, Sao Paulo expanded from coffee industry boomtown to a commercial and administrative giant. Sao Paulo's population grew approximately 270-fold in the 20th century. In the same period the urban area increased to 400 times its original size (Andreoli & Forty, 2005 p.132).

'Conservative Modernism' did not extend to social housing or any of European Modernism's original utopian beliefs. The endeavour towards modernity was more ideological, hoping to kickstart the emergence of a wealthier economy (Andreoli & Forty, 2005 p.110). Niemeyer, despite his communist politics, engaged in government projects, hoping his work would inspire the poor (Lara, 2008, p.97). In many ways this worked: the population of Brazil embraced this new Modernism. Increased immigration and population growth during this period left very little sentiment towards traditional, colonial or baroque styles (Lara, 2008 p.126). State support, social mobility, media marketing and an architectural consensus within Brazil created a 'perfect storm' where Modernism could flourish (Lara, 2008 p.132).







- 21: Casino, Pampulha, 1940 (Corbis, nd)
- 22: Yacht Club, Pampulha, 1940 (Moch, nd)
- 23: Getúlio Vargas (Unknown, nd)
- 24: Avenida Paulista, 1902 (Unknown 1902)
- 25:Avenida Paulista, 1956 (Liebeskind Family Collection, nd)



Making room for the vernacular

Kenneth Frampton believes that architectural styles are more prone to innovation the further they are from their central origin (Lara, 2008 p.104). By his theory, Brazil is a peripheral territory. James Clifford thinks that peripheral zones are exciting frontiers where new discoveries are made (Clifford, 1997 p.193).

In Brazil, Functionalist adaptations to Modernism responded to climate and local building practices. Brazilian builders were happy to use concrete, (it was easily sourced, mixed on site and suitable for a changeable climate), but other European materials were not available (Lehmann, 2014 p.138).

Brazilian craftsmen continued to work with tropical timbers, traditional adobe walls and stone (Lehmann, 2014 p.146). Remnants of Portuguese rule continued in the use of decorative ceramic facades, as used by Costa in the Ministry of Education and Health (Andreoli & Forty, 2005 p.117).

Despite Vargas' wish to categorise a 'Brazilian Style', regionalist variations occurred across Brazil's vast landscape. Tropical homes in Bahia prioritised air flow and shading, as well as dealing with heavier rainfall. Drier areas in the central highlands required more insulation. Again local knowledge of the natural world would imprint itself into the design, fabric and layout of new buildings (Lehmann, 2014 p.136).

In Sao Paulo, Gregory Warchavik's Casa da Rua Santa Cruz was an early incarnation of modern housing with regional adaptations. Built in 1927 and widely regarded as the first Modernist house in Brazil, it bears similarities to Walter Gropius' house at Dessau. However, closer inspection betrays the influence of the vernacular: the windows require awnings to shade them from sunlight and the flat concrete slab roof hides ceramic tiled roofs on the back veranda (Lehmann, 2014 p.136).

Throughout Brazil's modernist period, Sao Paulo developed its own regionalist style of Modernist architecture, often referred to as Brutalismo Paulista. Comparisons were made between Brutalismo Paulista and British post-war Brutalism in part due to the use of concrete and simple geometries. In both territories the techniques supported Sao Paulo's rapid expansion and London's post-war recovery (Lehmann, 2014 p.145).





27



26: Warchavik's house on Casa da Rua Santa Cruz (Zanella, nd)

27: Tiles at the Ministry of Health and Education (Kon, 2002)

28: MASP in Sao Paulo (Domus, nd)



HABITAT



29: Bo Bardi working as a journalist in post-war Milan,

1946 (Bardi Institute, 1946) 30: Lina Bo and Pietro Maria Bardi (Zingg, nd) 31: Bo Bardi's Habitat magazine (Bardi Institte, 1951)

Lina Bo Bardi steps on to fertile ground

By the time Lina Bo Bardi emigrated to Brazil in 1947, her voice as an architectural commentator was well established. In Italy, she graduated from the Faculty of Architecture in Rome in 1939, the year WWI began. There was little to design, but much to discuss. As a result she earned a reputation as an editor of the architectural publication Lo Stile (with Giò Ponti) and later as a deputy editor at Domus. Her work extended beyond writing to illustration and design (Cosentino, 2014 p.51-54).

Her experience observing wartorn Italy from an architectural perspective shaped her humancentred philosophies. In 1945, Domus commissioned Bo Bardi and Carlo Pagani to travel around Italy, cataloguing the destruction left in the wake of war (Cosentino, 2014 p.58).

It is therefore unsurprising that the optimism of 1940s Brazil was attractive to Lina Bo Bardi. She was a young architect who had produced very little in terms of built environment, but had a wealth of knowledge from her experiences. Moving to a country removed from post-war Europe, with a government-led mandate to build must have brought great relief (Cosentino, 2014 p.61).

Bo Bardi was an artistic polymath, a fervent sketcher, interested not only in architecture but the natural

world (Cosentino, 2014 p.54). When, in 1947, Pietro Maria Bardi was asked to co-found MASP, a new museum to celebrate the Modern Art of the region, it was the perfect opportunity for Lina Bo Bardi to exercise her creative skills and socialist leanings to create a project in Italy ensured that she had rehearsed within the public realm (Lepik, 2014 p.17).

Lina Bo Bardi has described Brazil as a place "where the creative juices of the people flow" (Wisnik, 2014 p.40). Coming from Italy, where the 'Arte Povera' movement celebrated the hand of the artisan (Wisnik, 2014 p.42), Bo Bardi saw the creative potential of the existing culture: she would later coin a similar term in Portuguese: "arcuitectura pobre" (Lepik, 2014 p.23).

While these nascent ideas and inspirations are present in details such as the use of local timber, her first Brazilian works. Casa de Vidro and MASP, were undeniably European in approach. One wonders if this was in a wider response to early Brazilian Modernism: while working with a 'cannibalistic manifesto' that Brazil could claim as its own creation, the country still needed to reflect its status as an industrially modern country (Lehmann, 2014 p.146).

The Bardis used their public profiles and Pietro Maria Bardo's connections to establish themselves and their works in Brazil, as if they were principal actors in a performance (Lepik, 2014 p.26). Lina Bo Bardi would understand the metaphor of walking on to a stage,

(she was involved with Sao Paulo's Teatro Oficina, designing productions and rebuilding their theatre (Bardi et al, 2014 p.299)). Brazil in 1947 was a stage well set for her arrival, and her creatively dormant yet formative years for her part.

Designing Casa de Vidro was an act of establishment within her adopted home. It showed the confidence of an architect who could balance strident Modernism with the functionality of a 'casa rurale' (Lepik, 2014 p.26) – an architect who had a journalist's eye for regional context. War-ravaged Europe had shown her architecture formed and destroyed by politics, and the resulting human suffering. She understood her role as an architect who could invoke social change (Cosentino, 2014 p.61).

And yet, the existing artistic optimism created in Brazil by Lucio Costa, Rino Levi and Oscar Niemeyer was tied to Vargas' populist government. The work of centralising the federal system, of unifying a broad and diverse nation under a monotheistic style of architecture (formed in Europe and transported to the tropics) (Lara, 2008 p.69), was simplistic and potentially an act of erasure (Bhabha, 1994 p.39).

An architecture for Brazil would need to answer the needs of its many migrants and underserved populations. It was a country that was expanding rapidly, ever more hybridised, and needed more than glass boxes containing an intellectual elite.

3. Contradictions

Casa de Vidro is an artefact of a time of transition. Sao Paulo had been growing since 1888, when the abolition of slavery in Brazil brought economic migrants from Europe to fill the labour gap. This continued throughout the 20th century when Europeans fled the destruction and instability wrought by WWII (Andreoli & Forty, 2005 p.134). They brought European cultural values and thinking. As a work by one such European, Casa de Vidro presents a number of contradictions that tell a story of Brazil at the time.

Contradictions are apparent in the construction of the home: we find orthodox European Modernism literally tethered to more traditional styles of building that treat light, volume and visual contact in a radically different way (Unwin, 2015 p.225). We can use the contrasts to indicate tensions between European architectural utopia and Brazilian reality: both socially and environmentally.



32: Casa de Vidro viewed from the internal courtyard (Kon, 2021)







33: Casa de Vidro (Kon, 2001)

34: Villa Savoye (Fondation Le Corbusier, nd)

Stylistic contradictions

Casa de Vidro emerges from the rainforest as a visual representation of key Modernist architectural principles, largely born out of European creative movements (Unwin, 2015 p.225). By comparing Casa de Vidro to other works, we can see how it contradicts orthodox Modernism.

Le Corbusier presented the Villa Savoye in 1931. A revolutionary building in terms of its clean Modernism, it was aligned to his principles set out in Vers Une Architecture in 1923. Villa Savoye embodied the 'machine for living in'. Le Corbusier believed that modern methods of construction were not only an answer to a post WWI housing crisis, but that the materials; iron and cement, were 'the index of a great power to build', meaning that a government's

access to these building methods signified its success. (Danchev, 2011 p.226-229)

Villa Savoye's ribbon windows, concrete slabs and thin steel piloti were exterior signals of its open plan interior. Le Corbusier believed that 'the exterior is the result of an interior' (Danchev, 2011 p.227), so continuous glazing is a signifier of continuous space (Unwin, 2015 p.144). Similarly, Mies Van der Rohe's Farnsworth House, built contemporaneously to Casa de Vidro, bears many similarities in volume, transparency and an illusory suggestion of 'floating' (Unwin, 2015 p.65).

These principles are immediately evident in the approach to Casa de Vidro. The expanse of glazing is unbroken by internal walls: the plan of the living room is obviously open. This

open volume, set between concrete slabs, is supported in mid-air by steel piloti that extend upwards from the ground. A void sits between the suspended volume and the ground, concealing a stepped entrance. No vernacular building method is initially visible; it is all glass, steel and concrete. (Unwin, 2015 p.225)

Villa Savoye sits within a tempered setting. A rural home, it is circled by trees with a view towards the Seine. However, the connecting land is a sedate meadow. The ground immediately under the house is paved as a further removal between the house and the natural world. (Unwin, 2015 p.137)

Mies van der Rohe believed in working carefully with the surrounding landscape, offsetting his interventions to natural slopes and features. Farnsworth House, finished by Mies in 1951, carefully places itself with a

southward view of the Fox River. Trees provide shade and privacy, but gentle lawns separate the house from them. The steps, piloti and platforms that separate the house from the lawns are married to the house: white, minimal and clean. (Unwin, 2015 p.68)

However, the path towards Casa de Vidro masks a number of contradictions. In contrast, Lina Bo Bardi appears to have invited the natural world to consume Casa de Vidro. The rainforest is lush and dense, extending towards the windows with very little margin of clearance. Design sketches of Casa de Vidro show the lush vegetation and plants and trees ascending through the internal courtyard. Sights and smells of the

landscape penetrate through open windows. In the service areas, small niches built into the mortar render allow a foothold for small plants (Getty, 2019 p.272).

Unlike the clean paving of Villa Savoye, a path cuts through the vegetation, laid from irregular stone shapes, softly sweeping in a curve towards the house. Irregular paving continues below the house, softening the clean lines of the white concrete and glossy piloti (Unwin, 2015 p.225).

Compared to Farnsworth House and Villa Savoye, Casa de Vidro is consumed by the landscape around it.

A hybrid identity

Modernism was well developed when Lina Bo Bardi completed Casa de Vidro in 1952. In the 30 years since Semana de Arte Moderna and the Cannibalistic Manifesto (Andreoli & Forty, 2007 p.15), Sao Paulo had formed an identity around its own regionalist style: Brutalismo Paulista (Lehmann, 2014 p.145).

The ingenuity of Brazilian builders was invaluable in creating their own interpretation of Modernism. They used their innate local knowledge of materials and vernacular building methods when budget or availability impeded the construction methods devised in Europe. (Lehmann, 2014 p.142)

Deviations in orthodox Modernist details in Casa de Vidro tell a story of the region. Parquet floors in the living areas and bedrooms are made from Pau-Marfim and Peroba (both South American hardwoods). Black São Caetano ceramics are used in the bathrooms. (Getty, 2019 p.75)

Lina Bo Bardi was well known for working and designing on-site with craftspeople, asking for their input in her design (Wisnik, 2014 p.40). Infusing the design with local knowledge further the hybridised Casa de Vidro.

The service wing is constructed with ordinary brick (Getty, 2019 p.58), and the garage building was designed with rustic mortar coverings inlaid with pebbles and ceramics. Getty, 2019 p.272). The first garage had a thatched roof, a Brazilian detail, though it was later replaced in 1958 (Getty, 2019 p.88).

Mixing Modernism with vernacular craftsmanship sits in direct contrast to Le Corbusier's analogy of the aeroplane as a design zenith: pure design in service to function (Danchev, 2011 p.266). By allowing local methods to exist in her home, she denies the monotheistic doctrine of European supremacy in Modernist design.

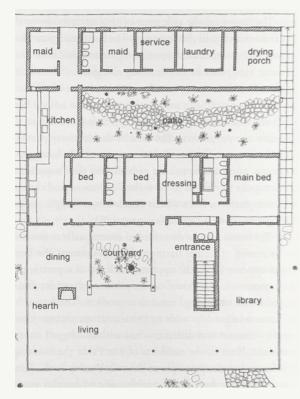








- 36: Steps made from local timbers are framed by local rock at the entrance to Casa de Vidro (Kon,
- 37: Render at Casa de Vidro is perforated with niches to allow for planting in the surface (Oliveira, nd) 38:Traditional ceramic flooring in the service corridor at Casa de Vidro (Getty, nd)



39

Environmental contradictions

Until Modernism, the Bandeirista house was a common exemplar in Sao Paulo. Dating from the 17th century, it was a hybrid of local building techniques and colonial order (Dauden, 2019).

The houses were constructed from rammed earth, rendered white, with tiled roofs (a Portuguese introduction). Small shuttered windows, usually rectangular in shape, paired with thick walls to create thermal comfort internally. Cooking took place outdoors on traditional chimneyed grills. Internal plans were subdivided, often with a central living area directly connected to bedrooms. Often a semi-open veranda sat on a key elevation, for shade and ventilation. The simplicity of the



40

Bandeirista was based on availability of materials as well as response to climate. (Dauden, 2019)

Universal rules of Modernism are tested in translation. In Brazil, insulation gave way to ventilation. Light gave way to shade. Vernacular, regional, knowledge became as important as technological advance. (Unwin, 2015 p.225)

Architects in Brazil adapted architectural elements and re-emphasised them against environmental conditions. Lúcio Costa's Ministry of Health and Education used brise-soleil and piloti; details that were very much of Le Corbusier's oeuvre. They also served as a counter to Rio de Janiero's climate (Andreoli & Forty,

2005 p.114).

Other elements needed some help in cultural translation. Early photographs of Casa de Vidro show the glazing of the living room without window coverings. After a year, light-filtering curtains were added as one of the first adjustments to the house, intended to provide protection from the harsh sun (Getty, 2019 p.88).

Bedrooms to the rear of the house, with brick walls, and small shuttered windows facing the rear had more in common with the Bandierista house. The room sizes were modest in comparison to the vast living room space, with the principal bedrooms enjoying a view into an enclosed courtyard (Unwin, 2015 p.229).



42

These rooms appear to have felt more successful to Bo Bardi: in 1956, she wrote to her husband: 'Our house is very beautiful, the garden is marvelous, but today I would never think of making such a house, it is the residuals of my convictions regarding "undefined progress." Today I would make a house with a wood-burning stove made of stone, with no windows and surrounded by a large park' (Getty, 2019 p.93). In later years, she would experiment with structures that tested her theory.



43

- 39: Plan of Casa de Vidro (Unwin, 2015)
- 40: Curtains in the living room at Casa de Vidro (Kon, 2001)
- 41: Brise Soleil at the Ministry of Health and Education by Lucio Costa (Kon, nd)
- 42: Bedroom windows to the rear of Casa de Vidro (Getty, nd)
- 43: A Bandeirista house, Sao Paulo (Shieh Arquitetos, nd)

Public and private: the elite and the poor

The population boom in Brazil in the first half of the 20th century created a need for housing (Andreoli & Forty, 2005, p.108). Modern architecture had a 'trickle-down' effect in Brazil. Middle class Brazilians took to modern architecture as a form of national pride and adopted Modernist details into their own homes (Lara, 2008 p.36).

Brazilians hoping to create their own piece of 'Architectura Nova' could purchase a plot in one of the new suburbs. The plots were priced by the width of the frontage, and, like Casa de Vidro, the plot often extended until it met a hillside or a river, providing a natural boundary (Lara, 2008 p.56).

Architectural academic Fernando Luiz Lara studies 'auto-constructed houses' built by Brazil's emergent middle classes. He identifies differences between houses like Casa de Vidro (designed by an architect schooled by European pedagogies), and self-initiated designs built around existing Brazilian family dynamics (Lara, 2008 p.20).

Lara finds that in spite of exterior details that extolled the optimism of Architectura Nova, with geometric roof designs and modern facades, the interior of middle class houses bore similarities to the Bandeirista-type houses from Brazil's past. Dining rooms are prominent to emphasise the importance of a family meal. Living rooms are directly connected to bedrooms, with girls' bedrooms positioned under the protective gaze of parents. Small kitchens sit to the rear of the property. (Lara, 2008 p.46-60)

Open plan layouts like the living room at Casa de Vidro did not translate in to middle class houses (Lara, 2008 p.36). Just as it was argued that there are two Brazils: coastal and inland, the contrasts between houses like Casa de Vidro and the auto-constructed houses of the middle classes suggest that Modernism was subdivided by social class (Lara, 2008 p.20).

External details changed too. Although inspired by the grandeur of Brazil's new public buildings, auto-constructed

houses had minimal access to new materials and technologies. As a result, window sizes stayed small, not a wall of windows like Bo Bardi's. Colonial Portuguese details like brightly tiled facades were a recurrent feature (Lara, 2008 p.40)

The houses in Lara's study point towards post-colonial terms in Homi Bhabha's The Location of Culture:

- Mimicry: the houses are copying Modernism (Bhabha, 1994 p.121).
- Cultural translation: the details are changed by the construction methods of the people (Bhabha, 1994 p.37).
- Hybridisation: the result indelibly changes both Modernism and traditional housing (Bhabha, 1994 p.52).

Bhabha does not make value judgements about whether these developments are good or bad. He sees them as products of Colonialism. It is evident that, regardless of Brazil's political freedom from Europe, evidence of inequality is present in the creative behaviours of its people (Bhabha, 1994 p.159).

Casa de Vidro's design hints at its own social contradictions. The living room, accessed by the main entrance, suggests an open inclusivity. The kitchen is not hidden, although a utility space is connected directly to the dining area. Guests would have visual and aural contact, and used it as a thoroughfare to access the back garden. However, segregation exists between these rooms and the hidden, more traditional, service wing to the rear of the property. This is where the servants resided and worked away from the gaze of the Bardis and their esteemed guests. (Unwin, 2015 p.225)

The position of Casa de Vidro within the wealthy suburb of Morumbi is also an act of social segregation. Perched on a hillside, separated from the city by the landscape around it, and originally enjoying panoramic views eventually obscured by plants as an act of privacy, the house is a sentinel of the elite. In line with Vargas' Architectura Nova, Casa de Vidro seeks to inspire, rather than to integrate. (Unwin, 2015 p.226)







46



44: A small modernist house in the neighbourhood of Carlos Prates (Lara, 2006)
45: An advertisement using a modern house to sell cladding stones (Casa e Jardim, 1954)
46: Southwest section of Casa de Vidro (Bardi et al, 2014) Annotated by A. Chipperfield
47: Rear Elevation of Casa de Vidro (Bardi et al, 2014)

Contradiction as an identity

From 1922's Semana de Arte Moderna onwards, Brazil's 'cannibalistic' design community embraced the contradictions of a hybrid society (Lara, 2008 p.69). Casa de Vidro, while apparently cut from the same cloth as Villa Savoye and Farnsworth House, is happy to engage with hybridisation.

There is a careful balance between wilderness and clean lines. The house is bold and orthogonal, unapologetically geometric, and does not seek to retain the natural world beyond a margin of careful landscaping.

Yet it feels as though the materials and landscape of Bo Bardi's adopted country are tracing themselves through the fabric of the house. It is as though Bo Bardi sought to obscure the house as soon as it was installed.

However, the integration is not as generous in social terms. It is a private house, built for display: display of its art; display of its owners; display of luminaries invited to parties. Bo Bardi divided her house between these spaces and the staff quarters at the rear. Staff remain concealed within the staff quarters. Windows face to the rear rather than into the internal courtyard. The divide is clear spatially, in plan and also in the materials used. (Unwin, 2015 p. 229)

The contradictions within Casa de Vidro represent the social context of Brazil at the time of its construction in 1952. Modernism reflects a new optimism, the natural world is objectified, tamed. Old conservative social structures remain, but are reframed (Lara, 2008 p.36)

As Brazil developed and changed in the period after 1952, how did Casa de Vidro's contradictions fare? If its original design is a snapshot within time, do these contradictions predict tensions arising through a process of decolonisation?

How can a house like Casa de Vidro continue to evolve in resolution of these tensions? Will later changes to the house will give us clues about Bo Bardi's Brazilian integration?



4: Successes and Resolutions

1943's 'Brazil Builds' exhibition in New York made Brazilian architecture momentarily famous. It was the pinnicle of the 38-year Modernist heyday between the Semana de Arte Moderna, and the inauguration of Brasilia. The exhibition was underpinned by the United States' 'Good Neighbor' policy, which encouraged its institutions to work with Latin American countries so as to ensure their neutrality in the Second World War. Brazil took the baton and ran with it. (Andreoli & Forty, 2005 p.8)

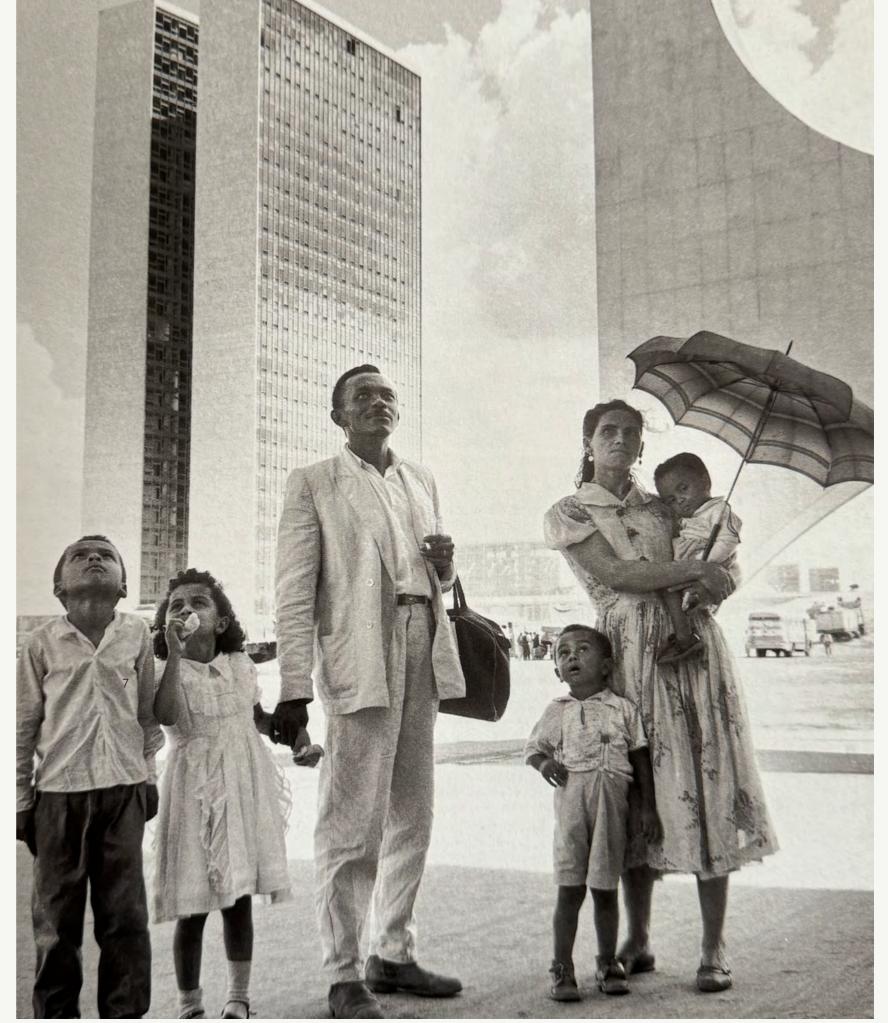
Modernism was a success in Brazil: the art historian Nikolaus Pevsner said in 1961 that Brazilian design was leading the world in Functionalist and Rationalist design (Lara, 2008 p.81). As we have seen, middle class Brazilians adopted Modernism in their optimistic new homes (Lara, 2008 p.132).

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What made Brazil's society so
accepting? And what aspects of Casa
de Vidro embody a persuasive language
that would engage the Brazilian people
in the Modernist project?

Certainly, its contradictions made the design dynamic and interesting, but how did Casa de Vidro, and indeed Brazilian Modernism, go one step further, to resolve the contradictions? Did they create a truly hybridised form of Modernism that transcended its original source, becoming a talisman of Brazilian identity?



Optimism, growth and identity

Brazil is a post-colonial nation: almost all of the built environment was constructed in the 20th century (Andreoli & Forty, 2005 p.108). From 1889 the motto on Brazil's flag: 'Ordem e Progresso' had urged its people to create a future facing society. Brazil's post-colonial identity was one of nation building (Lara, 2008 p.68).

Paradigms that contributed to the growth of Brazil are the coffee boom of the late 19th century (Andreoli & Forty, 2005 p.108), and the accellerated modernisation and industrialisation brought by Vargas' government (Lara, 2008 p.69).

As a colony, Brazil had been a series of small fortified trading posts. Colonising Conquistadors and African slaves were the colonial migrants. This time, the invite came from within, and migrants were travelling of their own free will. (Andreoli & Forty, 2005 p108)

The population grew from 18.1m people in 1900 to 57.28m in 1952 (Statista, 2015). Cities grew to house millions of Italians, Portuguese and Spanish migrants. The majority of these migrants centred themselves around Rio de Janiero and Sao Paulo (Lehmann, 2014 p.141). Sao Paulo was transformed beyond recognition (Andreoli & Forty, 2005 p.132).

Migration, industrial advance and an educated population laid the groundwork for a widespread embrace of Modernism. The architecture of a free Brazil sought to represent this new promise of freedom (within Vargas' populist framework of course). (Lara, 2008 p.69)

Architects like Oscar Niemeyer, although on the left politically, designed grand public buildings rather than small housing projects for the working class. Niemeyer believed that high-profile buildings

would inspire the people to adopt modernism for themselves (Lara, 2008 p.97). His confidence in the Brazilian psyche shows the optimism of the time.

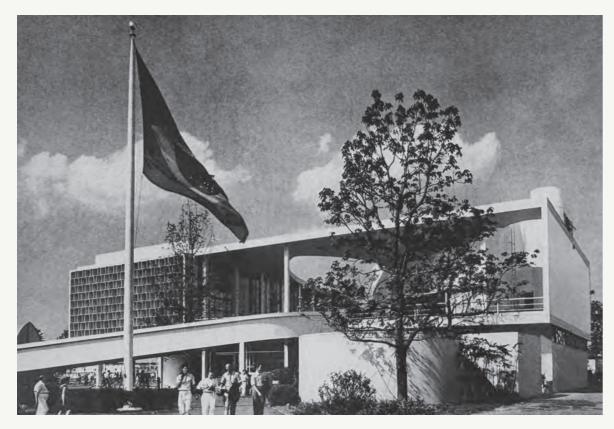
Brazil fulfilled its role as a 'peripheral' site (as Kenneth Frampton would have it), by delivering an interpretation of Modernism that was distinctive in its ambition (Lara, 2008 p.112). Oscar Niemeyer's roof-lines were beautiful curving geometries that created recognisable silhouettes, becoming national emblems of Brazil's 'order and progress'. Lucio Costa's sprawling facades, paying homage to Le Corbusier' principles, deepened the portico. Supporting pillars were now formed from dynamic curves of concrete. Charismatic forms became a Brazilian leitmotif. (Andreoli & Forty, 2005 p.22-25)

Politically, the peripheral adaptation of Europe's postwar optimism was transformed into a manifesto less about providing stability, but rather of defining Brazil's identity (Lara, 2008 p.23). Brazilian Modernism put national identity and people into the design: Lina Bo Bardi's MASP was built around the ephemeral activities that would happen in its open areas (Bardi et al, 2014 p.238). Local materials were not a compromise, they would be celebrated, with local timbers, adobe walls and stone construction (Lehmann, 2014 p.146).

These regionalist adaptations worked together with a hegemonic urge to use Modernism as a branding exercise for Brazil's emerging independent economy. They defined Brazilian architecture as charismatically ownable (Lara, 2008 p.23).



^{50:} Oscar Niemeyer's vast waved Copan Building (1966) sits within an expanded Sao Paulo (Kon, 2004)



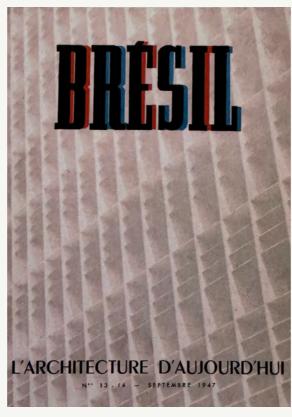
51: The Brazilian pavillion at the New York World Fair, 1939 (Casa de Lúcio Costa)
52: International magazines publish special Brazilian issues (L'Architecture D'Aujourd'hui, 1947)

53: MASP (Kon, 2002)

The symbiosis of design and politics

'Conservative Modernism' was a good deal for Vargas: the world applauded Brazil's Modernism, despite its detatchment from its utopian origins. With support from the United States, the wider world celebrated Architectura Nova at the 1939 New York World Fair and the 1942 Brazil Builds Exhibition. International media outlets published special Brazilian issues of design magazines (Lara, 2008 p.79)

Of course, this was an image of Brazil that was only enjoyed by a minority of privileged Brazilians, and old colonial structures of wealth and poverty remained. Architectural academic Luiz Reconman has written that there are two Brazils, one modern and one



backward (Andreoli & Forty, 2005 p.121). The majority of people observed the progress of the economy without receiving any direct intervention in the form of public housing or improved health services (Lara, 2008 p.114).

Modernism was such a powerful paradigm that it now pushed traditional, indigenous and regional variations to the periphery. Unlike the middle classes who could 'autoconstruct' their houses from ideas in magazines, traditional practices remained the preserve of the poorer working classes, and existed in regions of Brazil that sat outside of industrial hot spots (Lehmann, 2014 p.135).

Perhaps this is why Bahia and Northern Brazil were so interesting to Lina Bo



Bardi? In Bahia, she discovered the second Brazil that Luiz Recaman refers to, but Bo Bardi did not view the creative works of Northern Brazil as 'backward'. Her human centred approach to architecture and design demanded that the work of the people sat within her work, not beyond it (Lepik, 2014 p.17).

It is important that we recognise where Casa de Vidro sits within this story of governmental sponsorship of a design movement. Finished in 1952, the house is a snapshot of the beginning of Lina Bo Bardi's archeological interpretation of Brazil. Designed before her exploration of other regions of the country, and at a time when both Bardis were attempting to integrate themselves into elite society (Lehmann,

2014 p.142), Casa de Vidro embodies Architectura Nova's optimistic Modernism: glass, steel, and concrete extol the manifesto of a new industrial power (Lara, 2008 p.22).

Yet while we are not seeing the full effect of Brazil on Lina Bo Bardi, her act of joining a modernist structure to earthy, modest rear rooms, using stone paving and pebbled earthen renders pre-empts her future explorations into Brazil's outer regions (Oliviera, 2014 p.161).

Bo Bardi is detatching herself from Architectura Nova. Modernism is not an irreversible paradigm: a story of before and after.



Why is Casa de Vidro still relevant?

Casa de Vidro's enduring appeal is often credited to its seemingly effortless balance of identities: Italian education married to a Brazilian landscape.

It is objectively beautiful in its proportions. In its innovative approach to materials: the glazing, the steel and concrete to create lightness and suspension. Its seamless integration into the hillside and permeable approach to the natural world creates a depth to the house (Unwin, 2015 p.225). It is not just a transplant that represents Fausto's term: 'Europeans in the Tropics' (Fausto, 1999 p.246). Metal and glass carefully transcend into stone, masonry, shadow, earth and trees: a gentle gradient from industry to nature (Unwin, 2015 p.225).

Casa de Vidro happily displays a fusion of identities co-existing symbiotically. Just as the art collection of the Bardis sought to display and celebrate fine art alongside indigenous works with equal reverence (Bardi et al, 2014 p.196), Casa de Vidro never seeks to dress one detail as another. In this way, it can be seen as reflective of Brazil's multicultural identity, and Lina Bo Bardi's open and inquisitive recognition of a cultural intelligence outside of her own education (Lepik, 2014 p.19).

Lina Bo Bardi's social consciousness, perhaps born out of her travels around Italy in the wake of WWII (Cosetino, 2014 p.58), was activated further by her emerging knowledge of the Brazilian people. Her work with MASP, and her further projects in Bahia were distinctively people-focused (Wisnik, 2014 p.46).

Lina Bo Bardi did not consider Modernism and Regionalism to be exclusive from one another. She raised concerns about Brazil's new Modernism being a threat to its intricate balance of cultural language, including questions around the design for Brasilia (Lehmann, 2014 p.146).

She did not see design in a temporal sense – before and after – and was happy to afford space to both the traditional and the modern, saying: "the truth in the vernacular lay forever beyond time because nobody could determine its edge" (Lehmann, 2014 p.146).

Contemporary culture suggested that Modernism was guided by a single hand, that of the architect, versed in western pedagogical hierarchies (Bhabha, 1994 p.29); Bo Bardi's ability to collaborate with other makers, communities and site workers meant she was able to access a collective knowledge (Wisnik, 2014 p.40). It was a knowledge that retained its connections to the community around it, and their treatment of the landscape, materials and vernacular building techniques. It was anti-colonialism in action: refusing to let foreign power interrupt the knowledge of the people (Azoulay, 2019 p.83).

Casa de Vidro continues to show a polygenous collection of art and objects (Bardi et al, 2014 p.196), The objects are not shown in a context of ethnographic appropriation, and appear to be more reflective of Bo Bardi's ongoing moral relationship with the people whose work she collected (Clifford, 1997 p.192).

Even now, after her death, Lina Bo Bardi's legacy shares Casa de Vidro with her art. By naming other makers and cultures as contributors to her work, Lina Bo Bardi continues to include them in her celebrated modernity. When you remove temporality, these art movements are still alive, and thereby Casa de Vidro is still alive. It is still relevant (Azoulay, 2019 p.93).

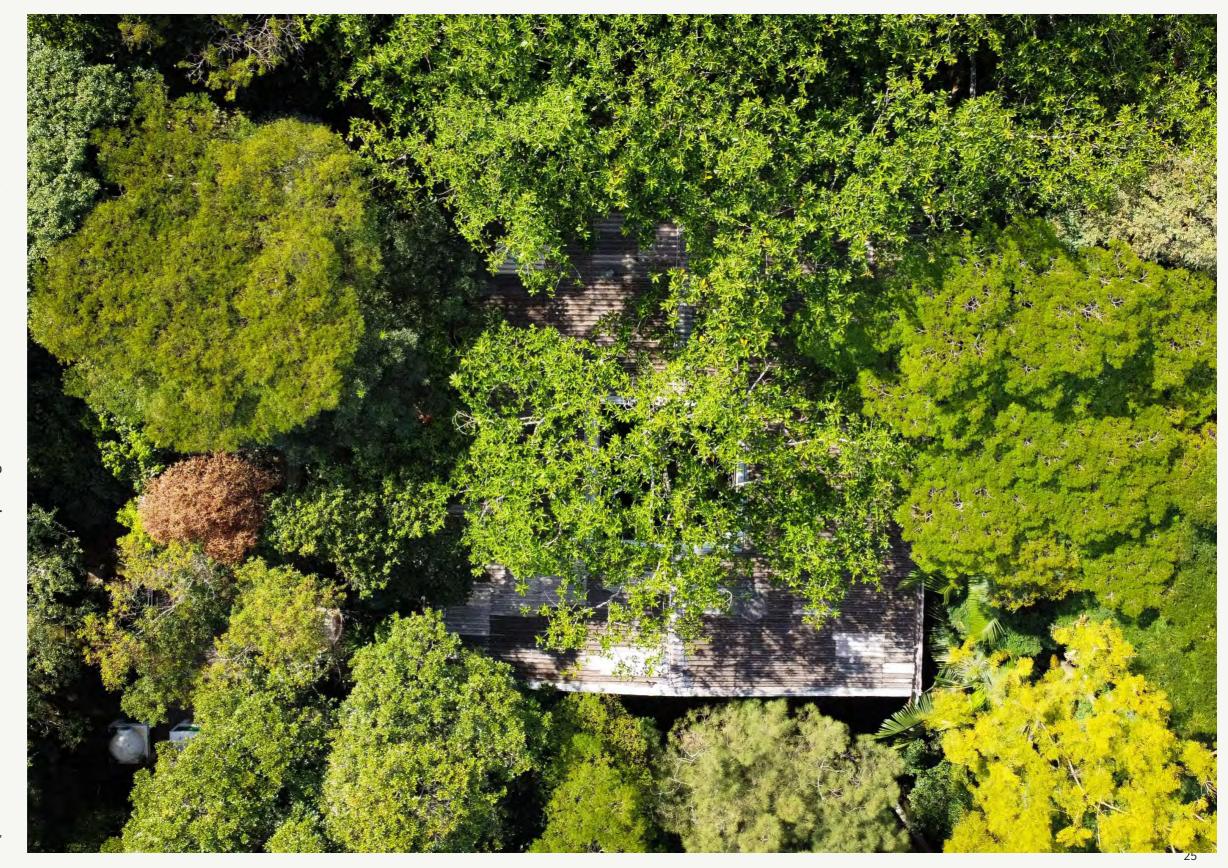
54: A view through the atrium (Kon, 2001)

5: After Brasilia

After the 1960 inauguration of Brasilia, international admiration for Brazilian architecture ebbed away. It had been 38 years since Modern Art Week and 30 years since Vargas' revolution. Vargas himself had died by suicide in 1954 after his presidency had turned into 14 years of dictatorship. Vargas' promise of democratic optimism had turned into control. (Lara, 2008 p.21)

The ties between Brazilian politics and architecture and politics were apparent during this time. Lina Bo Bardi was pragmatic: the focus of her work changed. With this, Casa de Vidro would continue to evolve beyond its original design (Bardi et al, 2014 p.196).

From 1960 to Lina Bo Bardi's death in 1992, what changes did she make, and what do they tell us about the political and social landscape of Brazil (Lima, 2014 p82)? How does the transformation from private house to 'House Museum' dictate her legacy (Getty, 2019 p.425)?



55: Aerial shot of Casa de Vidro (Boy/Instituto Bardi, 2001)

Brasilia was the culmination of Modernism

After Vargas' suicide in 1954, the new president (Lara, 2008 p.21), Juscelino Kubitschek de Oliveira, continued the drive for modernisation. His campaigning slogan was 'fifty years of progress in five'. Unlike Vargas, he would increase foreign investment. His background as a doctor propelled him to introduce centralised healthcare. The governing principles of 'Conservative Modernism' became more focused on spending for public infrastructure. (Green et al, 2021)

As mayor of Belo Horizonte in the 1940s, Kubitschek had given a young Oscar Niemeyer some of his first commissions: a church, a casino and a restaurant formed key parts of a new suburb, Pampulha. These buildings, completed in 1943, would be celebrated in MOMA's Brazil Builds exhibition. (Lara, 2008 p.79)

As President, Kubitschek was able to offer Niemeyer an opportunity to design a whole new capital city for Brazil. In 1956, the government began planning Brasilia in earnest. (Green et al, 2021)

Alongside Lúcio Costa, his old master

from the ENBA, Niemeyer designed Brasilia. It was a tribute to Le Corbusier: its plan is the shape of an aeroplane, recalling Le Corbusier's manifesto Vers One Architecture with its celebration of aeronautic function. (Andeoli & Forty, 2005 p.39)

Kubitschek's government's success in growth was matched by its spending. Building the first phase of a city in four years had been ambitious, and required swift funding. As the country grew, so did inflation. Brazil's people grew restless and Brasilia was criticised by many. Kubitschek's ambition was seen to be out of step with the real needs of the Brazilian people and he stood down in 1961. (Green et al, 2021)

By 1964, Brasilia would be the backdrop for a coup d'etat, resulting in a military dictatorship that would last until 1985 (Green et al, 2021).

Brazil's Modernist heyday had come to an end. The new regime limited the work of left-leaning architects, artists and musicians. Those with Communist links, such as Oscar Niemeyer and Lina Bo Bardi, would find themselves out of favour. Niemeyer retreated to Paris and worked in exile (Gestalten, 2016). Lina Bo Bardi would diversify in her own way.



56: Photo Of Brasilia (Colombini, nd)



Cultural Shifts

Under right-wing authoritarian rule, Brazilian creativity would not disappear. Architects, like Lina Bo Bardi, had to find a way of working that would sit under the radar of the government.

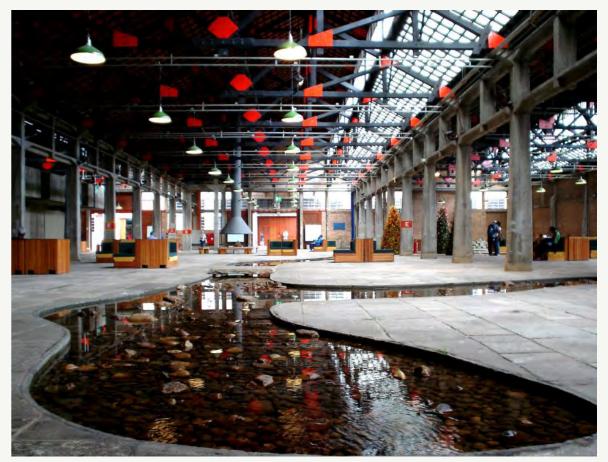
As creative voices were pushed to the periphery, they encountered influences that had previously been outside of their insular city elite. Lina Bo Bardi engaged in fewer projects: when she did work, the projects were more peripheral and favoured vernacular materials chosen through contact with local residents (Bergdoll, 2015).

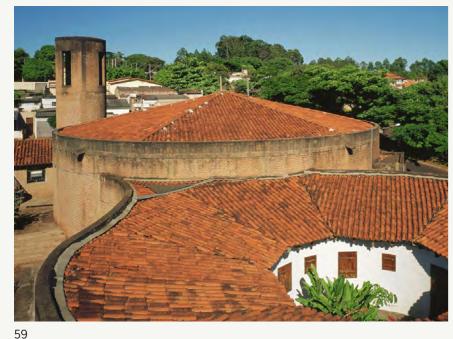
The Igreja Espírito Santo do Cerrado is a small church in Uberlândia, finished in 1982. In her design, Bo Bardi mixed brick, timber and stone with concrete (now so ubiquitous in the favelas that it could be considered a vernacular material) (Bergdoll, 2015).

60

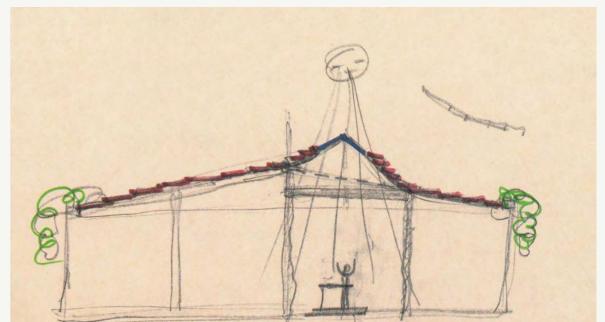
Her design for the SESC Pompeia, which she worked on from 1977 to 1986, is an early example of adaptive re-use within architecture that has inspired buildings like the Tate Modern. A pre-existing metal barrel factory, Lina Bo Bardi was determined to keep the existing structure to house a sports and cultural centre. Bo Bardi was led by the behaviours of people who had already inhabited the building, using the empty structures for socialising on the weekends. She saw the reinvention of the centre as an extension of this activity. SESC is evidence of Bo Bardi's respect towards the people and her use of public consultation in her work. (Pinto, 2021)

55: SESC exterior (Miura, 2010) 56: SESC Interior (Miura, 2010) 57: Igreja Espirito Santo do Cerrado, Uberlândia (Kon, nd) 58: Lina Bo Bardi designs Espirito Sando do Cerrado with the local community (Hidden Architecture, nd) 59: A sketch by Lina bo Bardi for Espirito Sando do Cerrado (Hidden Architecture, nd)













62

Casa de Vidro changed

At Casa de Vidro, Bo Bardi continued to use the house as a canvas for her learnings about Brazil. A key adaptation to the property was the design and construction of a studio in the grounds. Named the 'Casinha', it was home to the *Instituto Lina Bo e P.M. Bardi*, a foundation set up by the Bardis to support Brazilian culture (Bardi et al, 2014 p.195).

The building is an opposite of the glass house. It has a timber frame, diminutive in scale, embedded in the nature around it. Although it is supported by piloti, they are low profile and far removed from the Le Corbusier-like piloti of the house. The timber frame shows on the exterior of the building,

the roof is pitched and tiled. Internally, thick timber planks cover the floor. Internal storage is constructed from the same round poles as the primary structure. (Unwin, 2015 p.226)

The Casinha demonstrates Lina Bo Bardi's deep understanding of Brazilian vernacular architecture (Meyer, 2002) gathered in the 34 years since the construction of Casa de Vidro. Sited within a thicket of vegetation. it appears to work in partnership with nature rather than in exile from it, or merely as an observer. This building shows Bo Bardi's non-discriminatory attitude towards vernacular, regionalist methods of construction. It is future-facing; designed as a site for progressive work. It is deeply respectful: not romanticising the

vernacular as a living museum of the past. Bo Bardi called the materials used 'anti-eternal': she had designed nature's slow ingress into the building as an inevitable process.

Perhaps her learnings from the Casa de Vidro's more Euro-centric construction led to a strategic change. Over the years, the maintenance of its steel frame and flat roof had proved to be problematic within a jungle environment. Nature had proved itself as valuable critic, and Lina Bo Bardi was a willing student. (da Costa Meyer, 2002)

62: The studio (Kon, 2001) 63: Sliding door of the studio (Kon, 2001) 64: Studio interior (Kon, 2001(



Changes to the landscape

Across the wider site, much had changed since 1952. In 1978, a new phase of construction began on site with a wall of cement blocks around the perimeter of the estate. The method of construction was led by Bo Bardi's construction of SESC Pompeia; she likened the effect to 'poor architecture' (Getty, 2019 p.101).

The Bardis planted a garden that regenerated the original rainforest and allowed it to grow to a point where it consumed the facade of the house and masked the view from within (Unwin, 2015 p225). The original emphasis on elevation and display was gone and replaced by discrete privacy. The public had become personal. The house, and the Bardis, became embedded into the landscape.

Life within the house also changed, with a perforation between interior and exterior. The kitchen with all its labour-saving technologies had told a story of the glittering parties that helped establish the Bardis among the Brazilian elite. In 1953, they added two traditional Brazilian outdoor ovens, accessed from the rear of the kitchen (Getty, 2019 p.88) reminiscent of outdoor kitchens at Bandeirista Houses (Dauden, 2019).

Re-interpretation of Casa de Vidro

Lina Bo Bardi's first works in Brazil betrayed her identity as an Italian outsider (Lehmann, 2014 p.146). Casa de Vidro, in its original incarnation, was Modernist in its orthagonal geometry and materiality (Unwin, 2015 p.225).

However, Bo Bardi allowed the house to evolve over time. It is not a Case-Study house, perfect and unchanging in its design like Farnsworth House or Villa Savoye; rather an ongoing conversation between Bo Bardi and Brazil.

If Pietro Maria Bardi and Lina Bo Bardi were highly visible in their glass box in 1952, then they slowly removed themselves, retreating into vegetation; building their collections; exploring 'poor architecture' (Getty, 2019 p.101). The creation of the studio and their foundation gave the house to the study of Brazilian culture.

Casa de Vidro became a richer environment, evolving as Bo Bardi's understanding grew. Lina Bo Bardi's journalistic sensibilities allowed her environment to represent facets of Brazil. She was a Modernist but not dogmatic, and she sketched her naturalisation as a Brazilian citizen into Casa de Vidro.







68



65: The Caretaker's house (Boy/Instituto Bardi, nd) 66: The garden path with pebble rendered walls (Kon, 2001)

67: The outdoor ovens (Boy/Instituto Bardi, nd) 68: Mosaic wall with fragments of ceramic tiles and house number (Boy/Instituto Bardi, nd)

Conclusion

Casa de Vidro is not an ordinary suburban house. Lina Bo Bardi was an extraordinary architect, and as her most personal work, Casa de Vidro tells a compelling story of her life in Brazil and the people she worked alongside.

The enduring appeal of Casa de Vidro is arguably its graceful and intelligent balance of European Modernism and local craftsmanship. The house embodies Bo Bardi's interests with material honesty without over-romanticising the vernacular or straying into offensive cultural appropriation. Although Lina Bo Bardi was an observer and curator of creativity beyond her culture, her approach was always collaborative, not exploitative. She was never afraid to see the modernity in work that may have been denounced as 'primitive' by colonial powers (Azoulay, 2019 p.77).

Her vision was inclusive and progressive. While Bo Bardi was undoubtedly a beneficiary of Brazil's growth before the military dictatorship, her versatility and pragmatism allowed her to continue working throughout a difficult period. Her conscientious approach ran seamlessly during seismic governmental change. (Bergdoll, 2015)

And yet she was not an unyielding ideologue. Casa de Vidro shows that Bo Bardi was willing to change her creative direction and methods as she learnt more about her country. This is most prominent in the design

of the 'Casinha' in the grounds of Casa de Vidro (da Costa Meyer, 2002).

Her public work also evolved: from the orthogonal simplicity of MASP (Lepik, 2014 p.20), to the sensitive re-use of slave quarters at Solar do Unhao (Bader, 2014 p.227), and the revolutionary adaptive re-use of a vast complex at SESC Pompeia (Bader, 2014 p.265). She was prepared to confront uncomfortable truths and make the personal public.

Is her reputation as a champion of Brazilian identity deserved? We must admit that as a privileged, white European, she could never separate herself entirely from her own lived experience (Bhabha, 1994 p.87). The cultural translations she created from Brazilian customs came through her European education and experiences (Bhabha, 1994 p.165). But when she incorporated these ideas into her creative work, it was with great sensitivity and generosity (Bader, 2014 p.265).

Casa de Vidro is a testament to her reputation as an 'architect thinker' who could bridge the gap between Modernism and vernacular cultures, offering each party equal importance (Wisnik, 2014 p.46).

While Lina Bo Bardi entered the story of Brazilian Modernism as a main character, she generously built a stage where the people could step into the limelight.



69: Lina Bo Bardi in her study at Casa de Vidro (Instituto Bardi, nd)

Bibliography

Curl, J and Wilson, S (2016) The Oxford Dictionary of Architecture. Oxford: Oxford University Press.

Lara, F.L. (2008) The Rise of Popular Modernist Architecture in Brazil. Gainesville: University Press of Florida.

Lehmannn, S (2014) "Truth in the Vernacular": Contextualising the Late Work of Lina Bo Bardi. Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M. p.135-150

Lepik, L (2014) "Simplicade e Clareza": Lina Bo Bardi as Role Model', Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M. p.17-28

Wisnik, G (2014) 'A History of Lina Bo Bardi's Critical Reception'', Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M. p.35-48

Cosetino, C.C (2014) 'Early Years and Wartime: Lina Bo Bardi's illustrations and Journalism in Italy (1940-46)', Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M. p.51-64

Lima, Z.R (2014) 'Between Cabinets of Curiosities and Teatro Povero: Lina Bo Bardi's Tactics of Display', Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M. p.67-84

Bader, V.S (2014) 'From Italy to Brazil: From Vernacular Building to Modern Architecture', Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M. p.87-100

de Oliviera, O (2014) 'Myth, Popular Culture, and Collective Memory: The Humanistic and Symbolic Dimension in the work of Lina Bo Bardi', Lina Bo Bardi 100 : Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag : A.M. p.153-166

Bardi, L.B. et al. (2014) Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Edited by A. Lepik and V.S. Bader. Ostfildern: Hatje Cantz Verlag: A.M.

Bhabha, H.K. (1994) The Location of Culture. London: Routledge

Andreoli, E. and Forty, A. (2004) Brazil's Modern Architecture. London: Phaidon

Azoulay, A. (2019) Potential History: Unlearning Imperialism. London: Verso.

Fausto, B. (1999) A concise history of Brazil. Cambridge, UK: Cambridge University Press.

Said, E.W. (1994) Orientalism. 25th Anniversary edition. New York: Vintage Books: A division of Random House.

Clifford, J. (1997) Routes: travel and translation in the late twentieth century. Cambridge, Mass.: Harvard University Press.

Awan, N., Schneider, T. and Till, J. (2011) Spatial Agency: other ways of doing architecture. London: Routledge.

Unwin, S (2015) Twenty Five Buildings Every Architect Should Understand. London: Routledge.

Bibliography (cont'd)

Danchev, A. (2011) 100 Artists' Manifestos. London: Penguin.

Getty (2019) Casa de Vidro - Lina Bo Bardi architect: Conservation Management Plan. Available at: https://www.getty.edu/foundation/pdfs/kim/instituto_bardi_casa_de_vidro_cmp_english.pdf (Accessed: 15th August 2024)

Herscher, A. and León, A.M. (2022) "En la frontera de la decolonización," ARQ (Santiago), (110), pp. 114–121. Available at: https://doi.org/10.4067/S0717-69962022000100114 (Accessed 25th September 2024)

Leon, A.M (nd) Lina Bo Bardi as Migrant: from Collector to Cohabitant. Available at https://www.cca.qc.ca/en/articles/issues/30/of-migration/82606/lina-bo-bardi-as-migrant-from-collector-to-cohabitant (Accessed 25th September 2024)

Daudén, Julia (2019) "Brazilian Houses: 9 Examples of Residential Vernacular Architecture". Available at: https://www.archdaily.com/909366/brazilian-houses-9-examples-of-residential-vernacular-architecture (Accessed 24th December, 2024)

Statista (2025) Population of Brazil from 1800 to 2020 https://www.statista.com/statistics/1066832/population-brazil-since-1800/ (Accessed 18th December, 2024)

Bergdoll, B (2015) THE NON-CONFORMIST: THE ARCHITECTURE OF LINA BO BARDI https://www.artforum.com/features/the-non-conformist-the-architecture-of-lina-bo-bardi-224305/ (Accessed 10th January, 2025)

Pinto, T (2021) Building of the month February 2021 - SESC Pompéia, São Paulo, Brazil (https://c20society.org.uk/building-of-the-month/sesc-pompeia-sao-paulo-brazil (Accessed 2nd January, 2025)

da Costa Meyer, E (2002) After the Flood https://www.harvarddesignmagazine.org/articles/after-the-flood/ (Accessed 2nd January, 2025)

Green et al (2021) Brazil: Five Centuries of Change Brown University https://library.brown.edu/create/fivecenturiesofchange/chapters/chapter-6/presidents/juscelino-kubitschek/ (Accessed 18th January, 2025)

Gestalten (2016) The Politics of Oscar Niemeyer's Architecture https://uk.gestalten.com/blogs/journal/the-politics-of-oscar-niemeyer-s-architecture (Accessed 18th January, 2025)

Images

Cover image: Chipperfield A (2025) Casa de Vidro as a set [Collage]

Introduction: Schier, P (1952) Casa de Vidro Newly Built [Photograph]. Available at: Available at https://institutobardi.org.br/en (Accessed 21st October 2024)

- 1: Kon, N (2002) Living room with a view of the fireplace and atrium [Photograph]. Available at: https://www.nelsonkon.com.br/en/casa-de-vidro/ (Accessed 21st October 2024)
- 2: Francken, F (1636) Kunst und Raritätenkammer [Oil on panel]. Available at: https://useum.org/artwork/Chamber-of-Art-and-Curiosities-Frans-Francken-the-Younger-1636 (accessed 24th December 2024)
- 3: Kon, N (2002) Living room [Photograph]. Available at: https://www.nelsonkon.com.br/en/casa-de-vidro/ (Accessed 21st October 2024)
- 4: Instituto Bardi (nd) Pietro Bardi at an event at the Casa de Vidro [Photograph]. Available at https://institutobardi.org.br/en (Accessed 21st October 2024)
- 5: Scheier, P (1951) Bardi House Newly Built [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 6: Unknown (nd) Lina Bo Bardi e Gilberto Gil at the Glass House. [Photograph]. Available at: https://institutobardi.org.br/en/ (Accessed 21st October 2024)
- 7: Habitat Magazine (1952) Lina Bo Bardi on the stairs at the Glass House. [Photograph]. Available at: https://institutobardi.org.br/en/ (Accessed 21st October 2024)
- 8: Kon, N (2001) The Kitchen at Casa de Vidro. [Photograph] Available at: https://www.nelsonkon.com.br/en/casa-de-vidro/ (Accessed 21st October 2024)
- 9: Kon, N (2001) Lina Bo Bardi's Collection. [Photograph]. Available at: https://www.nelsonkon.com.br/en/casa-de-vidro/ (Accessed 21st October 2024)
- 10: Linda Hall Library (nd) L'institut d'Napoleon [Etching]. Available at: https://www.lindahall.org/experience/digital-exhibitions/napoleon-and-the-scientific-expedition-to-egypt (Accessed 2nd January 2025)
- 11: Bardi Institute (nd) Bo Bardi restoring tiles at Solar do Unhão, early 1960s [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 12: Bardi Institute (1963) Nordeste Exhibition [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 13: Javurek (1959) Lina Bo Bardi on the eve of the Bahia Exhibition, Ibirapuera, Sao Paulo [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 14: MASP (nd) Bo Bardi's exhibition design at MASP [Photograph]. Available at: https://www.domusweb.it/en/movements/brutalism.html (Accessed 15th January 2025)
- 15: Mirielles, V (1859-1861) First Mass In Brazil [Painting]. Available at: https://tidsskrift.dk/bras/article/download/120083/169137/254537 (Accessed 21st October 2024)
- 16: Léon, F (2011) A collection of large objects at Casa de Vidro [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 17: Malfatti, M (1917) Tropical [Painting]. Available at: https://en.citaliarestauro.com/anita-malfatti-paintings/ (Accessed 10th January 2025)
- 18: Di Cavalcanti, E (1922) Semana De Arte Moderna Program [Book Cover]. Available at: https://icaa.mfah.org/s/en/item/781791#?c=&m=&s=&cv=&xywh=-866%2C-233%2C3430%2C1920 (Accessed 21st October 2024)
- 19: Kon, N (nd) Ministry of Education and Health by Lúcio Costa, Rio de Janiero [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 20: Goodwin, PL (1942) Brazil Builds [Book Cover]. Available at: Brazil's Modern Architecture, Phiadon, 2004.
- 21: Corbis (nd) Casino Pampuhla, 1940 [Photograph]. Available at: Brazil's Modern Architecture, Phiadon, 2004.
- 22: Moch, M (nd) Yacht Club, Pampuhla, 1940 [Photograph]. Available at: Brazil's Modern Architecture, Phiadon, 2004.
- 23: Unknown (nd) Getúlio Vargas [Painting]. Available at: https://www.globalsecurity.org/military/world/brazil/history-56.htm#google_vignette (Accessed 2nd January 2025)
- 24: Unknown (1902) Adam Von Bülow's residence on Avenida Paulista, 1902 [Photograph]. Available at: https://www.architectural-review.com/essays/electric-avenue-avenida-paulista-as-a-microcosm-of-urban-brazil (Accessed 21st October 2024)
- 25: Liebeskind Family Collection (nd) *The Conjunto Nacional, 1952-56, by David Libeskind is the most striking building of its time on the avenue* [Photograph]. Available at: https://www.architectural-review.com/essays/electric-avenue-avenida-paulista-as-a-microcosm-of-urban-brazil (Accessed 21st October 2024)
- 26: Zanella, W (nd) Warchavik's house on Casa da Rua Santa Cruz [Photograph] Warchavchik Family Archive
- 27: Kon, N (2002) Ministry of Health and Education [Photograh]. Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 28: Domus (nd) MASP at Sao Paulo [Photograph] Available at: https://www.domusweb.it/en/movements/brutalism.html (Accessed 15th January 2025)
- 29: Bardi Institute (1946) Bo Bardi working as a journalist in post-war Milan [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 30: Zingg (nd) Lina Bo and Pietro Bardi [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 31: Bardi, LB, (1950) Edition No. 10 of Habitat magazine, with pictures of the Glass House on the cover [Magazine Cover]. Available at: https://institutobardi.org.br/en (Accessed 21st October 2024)
- 32: Kon, N (2001) Casa de Vidro viewed from the internal courtyard [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 33: Kon, N (2001) Casa de Vidro [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)

Images (cont'd)

- 34: Fondation Le Corbusier (nd) Villa Savoye, angle des façades sud-ouest et sud-est [Photograph]. Available at: https://www.villa-savoye.fr/en/discover/history-of-the-villa-savoye (Accessed 21st October 2024)
- 35: Crews, M (nd) Farnsworth House [Photograph]. Available at: https://savingplaces.org/places/farnsworth-house (Accessed 2nd January 2025)
- 36: Kon, N (2001) Casa de Vidro steps [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 37: Oliveira, O (nd) Render at Casa De Vidro perforated with niches [Photograph] Available at: Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Ostfildern: Hatje Cantz Verlag: A.M.
- 38: Getty (nd) Ceramic flooring [Photograph] Available at: https://www.getty.edu/foundation/pdfs/kim/instituto_bardi_casa_de_vidro_cmp_english.pdf (Accessed 21st October 2024)
- 39: Unwin, S (2015) First Floor Plan [Drawing]. Available at: 25 Houses Every Architect Should Understand, Routledge, 2015.
- 40: Kon, N (2001) Living room curtains [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 41: Kon, N (2004) Brise soleil at the Ministry of Health and Education [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 42: Getty (nd) Rear windows [Photograph] Available at: https://www.getty.edu/foundation/pdfs/kim/instituto_bardi_casa_de_vidro_cmp_english.pdf (Accessed 21st October 2024)
- 43: Shieh Arquitectos (nd) A Bandierista House [Photograph] Available at: https://www.archdaily.com/909366/brazilian-houses-9-examples-of-residential-vernacular-architecture
- 44: Lara, F (2006) A Small Modernist House [Photograph] Available at: The Rise Of Popular Modernist Architecture In Brazil, University Press of Florida, 2008.
- 45: Casa e Jardim (1954) An advertisement for cladding [Photograph] Available at: The Rise Of Popular Modernist Architecture In Brazil, University Press of Florida, 2008.
- 46: Bardi et al (2014) Southwest Section [Drawing] Available at: Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Ostfildern: Hatje Cantz Verlag: A.M.
- 47: Bardi et al (2014) Rear Elevation [Drawing] Available at: Lina Bo Bardi 100: Brazil's Alternative Path to Modernism. Ostfildern: Hatje Cantz Verlag: A.M.
- 48: Kon, N (2001) Casa de Vidro Kitchen Window [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 49: Unknown (1960) A Candango, or builder, shows the new capital to his family [Photograph]. Available at; Brazil's Modern Architecture, Phiadon, 2004.
- 50: Kon, N (2004) Oscar Niemeyer's Copan Building [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 51: Casa de Lucio Costa (1939) The Brazilian Pavillion at the World Fair [Photograph]. Available at: Brazil's Modern Architecture, Phiadon, 2004.
- 52: L'Architecture Au'jourd'hui (1947) Brésil [Magazine cover]. Available at: Brazil's Modern Architecture, Phiadon, 2004.
- 53: Kon, N (2002) MASP [Photograph]. Available at: https://uk.gestalten.com/blogs/journal/how-lina-bo-bardi-shaped-brazilian-modernism (Accessed 21st October 2024)
- 54: Kon, N (2001) A view through the atrium [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 55: Boy/Instituto Bardi (2001) Aerial shot of Casa de Vidro [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 18th January 2025)
- 56: Colombini (nd) Brasilia [Photograph]. Available at: https://loeildelaphotographie.com/en/brasilia-50-years-later/ (Accessed 21st October 2024)
- 57: Miura, P (2010) SESC Exterior [Photograph]. Available at: https://c20society.org.uk/building-of-the-month/sesc-pompeia-sao-paulo-brazil (Accessed 18th January 2025)
- 58: Miura, P (2010) SESC Interior [Photograph]. Available at: https://c20society.org.uk/building-of-the-month/sesc-pompeia-sao-paulo-brazil (Accessed 18th January 2025)
- 59: Kon, N (2004) Igrejo Espirito Sando do Cerrado [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 60: Hidden Architecture (nd) Lina Bo Bardi designs with the community [Photograph] Available at: https://hiddenarchitecture.net/espiritu-santo-do-cerrado-church/ (Accessed 18th January 2025)
- 61: Hidden Architecture (nd) Lina Bo Bardi sketch [Drawing] Available at: https://hiddenarchitecture.net/espiritu-santo-do-cerrado-church/ (Accessed 18th January 2025)
- 62: Kon, N (2001) The Studio [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 63: Kon, N (2001) Sliding door of the studio [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 64: Kon, N (2001) Studio Interior [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 65: Boy/Instituto Bardi (2001) The Caretaker's House [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 18th January 2025)
- 66: Kon, N (2001) The Garden Path [Photograph] Available at: https://www.nelsonkon.com.br/en/ (Accessed 2nd January 2025)
- 67: Boy/Instituto Bardi (2001) The Outdoor Ovens [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 18th January 2025)
- 68: Boy/Instituto Bardi (2001) Rendered wall with mosaic [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 18th January 2025)
- 69: Instituto Bardi (nd) Lina Bo Bardi in her study at Casa de Vidro [Photograph]. Available at: https://institutobardi.org.br/en (Accessed 18th January 2025)