


**More than Brasília:  
Lucio Costa's role in systematizing academic education and  
heritage protection programs in Brazil**


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**Abstract:** Recognized worldwide as the urbanist of Brazil's capital, Brasília – declared a World Heritage Site in 1987 – and a Doctor Honoris Causa of Harvard University, Lucio Costa is considered one of the most influential modern architects in Brazil. However, he is hardly ever mentioned in other fields such as heritage preservation and academia. Even though his works were fundamental to establishing Brazilian conceptions of cultural heritage. In this paper, therefore, we examine his performance at the *Escola Nacional de Belas Artes* (ENBA) and the former *Serviço Nacional do Patrimônio Histórico e Artístico Brasileiro* (SPHAN), along with other critical moments in his career, in order to underline the importance of his role in the institutionalization of architectural teaching and heritage preservation in Brazil.

**Keywords:** Academic Education; Cultural heritage; Lucio Costa; Historiography; architecture education.

**Resumo:** Reconhecido mundialmente como o urbanista da Capital brasileira, Brasília – declarada Patrimônio da Humanidade em 1987 – e Doutor Honoris Causa da Universidade de Harvard, Lucio Costa é considerado um dos arquitetos modernos mais influentes do Brasil. No entanto, ele é raramente mencionado em outros campos, como preservação do patrimônio e academia, embora seus trabalhos tenham sido fundamentais para estabelecer as bases da concepção brasileira de patrimônio cultural. Neste artigo, portanto, examinamos sua atuação na Escola Nacional de Belas Artes (ENBA) e no antigo Serviço Nacional do Patrimônio Histórico e Artístico Brasileiro (SPHAN), além de outros momentos importantes de sua carreira, a fim de sublinhar a importância de seu papel na institucionalização do ensino de arquitetura e preservação do patrimônio no Brasil.

**Palavras-chave:** Educação Acadêmica; Patrimônio cultural; Lucio Costa; Historiografia; Ensino de arquitetura.

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## Introduction

In the meantime, in an apparent contradiction between avant-garde and memory, several Brazilian artists and intellectuals' trajectory along the first half of the 20<sup>th</sup> century was outlined. Linked to the ideology of the so-called Modernity, in Brazil, however, the constant search for a national identity, in addition to the participation of several of these professionals in the State's technical staff, unfolded into actions and results that permeated the appreciation of the new side by the preservation of what they considered, in their narrative, more representative of the national culture (MICELI, 1979; CHUVA, 2003).

Linked to this moment and this group, Lucio Marçal Ferreira Ribeiro de Lima Costa, best known as Lucio Costa, became one of the most celebrated members, active in several fields and under a fine line between contemporary trends seen as a force for change and what History allows to add as a reference. However, Costa's professional activities go beyond those he experienced in urbanism. He is most recognized, including on the international level, mainly for his Pilot Plan for the Brazilian federal capital, Brasília. Declared Cultural Heritage of Humanity by United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1987.

Costa also emphatically participated in the academic and preservationist field in the country, specifically, when the teaching of Architecture and Urbanism was restructured in Brazil so far associated with the Visual Arts during his period as director of the National School of Fine Arts (*Escola Nacional de Belas Artes: ENBA*). Moreover, having for almost forty years played a significant role in the structuring and management of the nation's conservation field, serving in one of the boards of the National Historical and Artistic Heritage Service (*Serviço do Patrimônio Histórico e Artístico Nacional: SPHAN*).

Born of Brazilian parents in the French city of Toulon on February 27, 1902, Lucio Costa received a solid education in Europe, attending the Royal Grammar School in Wycombe, England, where, according to his account, he would play cricket in the summer and rugby in the fall. He also lived in Paris, France, in Friborg and Beatenberg in Switzerland, and studied at the Collège National in Montreux before returning to Brazil with his family in 1916. Once back in Brazil, he was enrolled at the most prestigious school of architecture in Brazil at the time by his father, who, according to Costa, "strangely always wished to have an artist son" (SLADE, 2007, p. 51).

Since his graduation in 1923, Lucio participated in several field research and drawing contests that contributed to his formation, leading him to become the architect we know as a significant national and international reference in Brazilian urbanism. This article is precisely about how national history unfolded in the academic and preservationist fields, specifically under the sphere of architecture (even though intertwined with art and urbanism). As Lucio Costa's participation and activities in both fields as the central thread, looking at the outstanding and even crucial moments which have shaped much of what, nowadays, can be seen as characteristic of the academic field.

Thus, supported by the experiences he performed in both fields and, mainly, based on the existing literature about the two areas covering Lucio Costa and connections to them, the purpose of this article is to cross-check such information, simultaneously highlighting the historical aspects of a professional whose works have already been acknowledged by such fields, but not always known when mentioned somewhere.

### **Structuring Brazil's academic education**

During the period of effervescence known as the 1930 Revolution, the debates around national educational issues became more intense within the *Associação Brasileira de Educação* (ABE), leading the country's president, Getúlio Vargas, to propose widespread cultural reform by recruiting young professionals and idealists to occupy important positions. Among them was Lucio Costa, who became the new director of the ENBA in 1930 at the twenty-eight years old. According to Costa himself, the idea of inviting him to become a director stemmed from the positive reception of a paper he wrote at the request of Manuel Bandeira, published in 1929, in which he explained his views concerning the Brazilian situation at the time (CENTRO CULTURAL BANCO DO BRASIL, 2012).

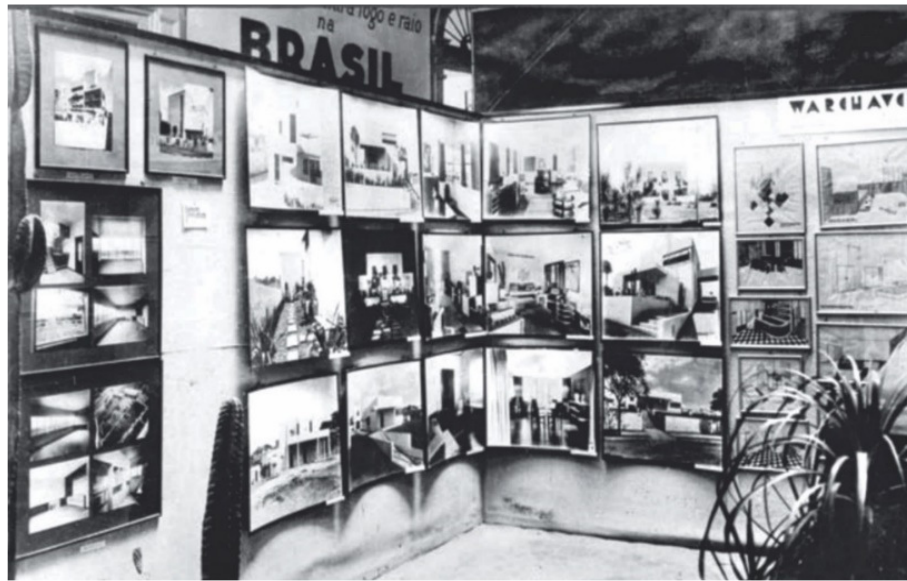
At the start, Costa was welcomed by ENBA. He was a former student of the institution. In his early professional years, he was linked to the movement in defense of the neocolonial language disseminated by José Mariano Filho – former director of ENBA and president of the *Sociedade Brasileira de Belas Artes* (SSBA). This institution was created in 1910 under the name of Juventas Artistic Center

and has been active until now as a traditional organization of public interest that promotes and disseminates the Visual Arts.

Commissioned by the Brazilian Society of Fine Arts and by Mariano Filho, in the early 1920s, Lucio Costa set out on a study trip to the Brazilian colonial cities of the State of Minas Gerais, such as Diamantina, which have been prolific from their several on-site records up to later reflections. As an example, when Costa returned to Rio de Janeiro, he recorded his impressions in the article “Considerações sobre nosso gosto e estilo” (Considerations about our Taste and Style), published in a newspaper, *A Noite*, on June 18, 1924, which reads: “I found a style entirely different from this greenhouse colonial, laboratory colonial that emerged in recent years and which, unfortunately, the people have already been accustomed to the point of classifying the true colonial as innovation” (SLADE, 2007, p. 51).

However, even though such initial ties with the dominant academic ideas at the time, established both under the institutional and personal spheres, right after Costa took office at ENBA, 1930, he started the expected modernization process, replacing academicist with “modernist” teachers in the midst of political and ideological clash that has lasted for over a decade and that began to fall under his name since then. Furthermore, the political and ideological clash between eclecticism and modernism was already rooted in academia. However, it was with Costa that, for the first time, a Director was willing to promote such pro-modernist changes in a National School. In which the climax was undoubtedly the 18<sup>th</sup> General Exhibition of Fine Arts of ENBA.

Better known as *Salão 31* (fig. 1) – although the event took place at Dona Olivia's house, outside the institution's building and without a jury or any award – the Exhibition was a transgressive space in many ways. It brought together contributions not only from ENBA teachers and students but also from external artists such as Portinari, Guignard, Tarsila do Amaral, Cícero Dias, Di Cavalcante, and Bruno Giorgi, among other participants of the pioneering *Semana de Arte Moderna* held in 1922<sup>1</sup>. Acquiring a political-cultural dimension that, in the words of Mário de Andrade, written in a letter to Tarsila do Amaral, “had a seismic effect on the School of Fine Arts” (quoted in SALÃO 31) by violating the ENBA's tradition, previously dedicated only to academicism, and opening.



Source: Arquivo Warchavchic, Biblioteca da FAU – USP, São Paulo.

### FIGURE 1

#### **Salao 31 was organized by Lucio Costa with exhibitions of the architectural modern Gregori Warchavchik**

Like any other transition in history, though, Costa's actions soon generated oppositions. Christiano das Neves, a former patron at ENBA, and José Mariano Filho, who accused Costa of bringing a “pernicious orientation” to the School and having sold out to the “new style”. Costa countered those criticisms through newspapers like the *Diário da Noite* and *O Jornal*. His actions were also supported by professors and students, who even called a strike against the decision to dismiss Costa as Director. As Cavalcanti (2006, p. 17) wrote: “He was deposed by the academics, triggering the strike and the standstill of Rio's main avenue by a march of students in his favor, which included the special participation of Frank Lloyd Wright”. At the time, the American architect was in Rio de Janeiro, participating in a jury for the second international competition to design the new Columbus Lighthouse in Rio de Janeiro (SEGAWA, 2010).

Among the students, we can highlight Jorge Machado Moreira, Ernani Vasconcellos, and Carlos Leão, architects who would later join the group responsible for the new project of the *Ministério da Educação e Saúde* (MES), under the initial consultancy provided by Le Corbusier, who would also influence his work more than other top names. Moreover, support for Costa also came from outside the

architecture sector: intellectuals and artists also lamented the situation, as the artist Cândido Portinari wrote in Costa's defense:

This is not a simple student strike. (...) I have no hope that any name taken from our friendly art group, namely the School of Fine Arts – an impediment to the development of art in Brazil, by the way – could continue the work started by Lucio Costa, a work that, though interrupted, already comprises a milestone in the history of Brazilian art (quoted in SALÃO 31).<sup>2</sup>

In the late 1930s, a group led by architect Luiz Signorelli, trained at ENBA, created in Belo Horizonte the School of Architecture of the nowadays Universidade Federal de Minas Gerais (UFMG). The first in South America unrelated to the Polytechnic Schools and Schools of Fine Arts. This fact, added to international reformulations in higher education in the area of the time, corroborates the intentions of Costa. Still, to understand your proposal better, we can return further into the past and examine what he was fighting for and against.

Therefore, a long tradition of teaching was broken, which, as in Europe until then, unified Architecture and Visual Arts. It had ENBA as an excellent reference in Brazil, founded in 1826 as the *Academia Imperial de Belas Artes* (AIBA). Headed by Joachim Lebreton and prodigious artists such as Jean-Baptiste Debret and Nicolas Antoine Taunay, the Imperial Academy of Fine Arts shaped the dominant style in Rio de Janeiro, Brazil's capital at the time, and trained the most influential painters who, over time, synthesized "national events and facts" also summarized "how social types and groups".

It was not only in the plastic arts that AIBA exerted its classicist influence. Among the professors, we can highlight the architect Auguste-Henri Victor Grandjean de Montigny. He taught at AIBA until 1850, and his program for the Architecture course was divided into two sessions: Theoretical and Practical. Through his classes, Montigny influenced the next generations of architects using the French neo-classical language and city landscapes through his buildings. These included the old Customs House, currently the *Casa França-Brasil*, and the first building to house the Academy itself, demolished in the late 1930s – when it had already been reconfigured at ENBA and operated in an eclectic building, the building of the current National Museum of Fine Arts in Rio de Janeiro – of which the only remainder is its portal at one of the entrances to the Rio de Janeiro

Botanical Garden (fig. 2). An effort from Rodrigo Melo Franco de Andrade and Lucio Costa and José de Souza Reis.



Source: Authors' photo. © Sávio Guimarães.

## FIGURE 2

### Remaining AIBA portal relocated for IPHAN to the Rio de Janeiro Botanical Garden

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From the 1850s, Brazilian architects started to experiment with new tendencies like eclecticism. It was only after the Republic's Proclamation in 1889; however, that eclecticism became the ideal Republican-style in contrast to the neo-classicism promoted during the Imperial Age. During the First Republic, there was also a pronounced development in the quality of the workforce, mainly due to a new wave of immigration and new schools such as the Lyceum of Arts and Crafts of Rio de Janeiro, founded in 1856, under the guidance of Francisco Joaquim Bétherncourt da Silva, a former student of Mongitgny's. Furthermore, the Lyceum of Arts and Crafts of São Paulo, founded in 1873 under Ricardo Severo's direction (both institutions are still active today). Around this time, the ENBA, Costa's alma mater, was created in Rio de Janeiro to replace AIBA. The new institution was inaugurated on November 8, 1890, under the direction of Rodolfo Bernardelli.

Nevertheless, in both cases: the classicism taught at AIBA or the eclecticism and neo-colonialism taught at ENBA prior to Costa, the teaching process was centered on “copying” the classics and reproducing them with a few necessary adjustments. However, for some future architects, there was still space for creation in the composition process. Thus, what was fought by Lucio Costa, above all, was the “stylistic copy”, which he called “ecletico-acadêmico”. In sum, a problem dealing with importation and application of any style despite the local constructive technical system.

Therefore, aiming to renovate the curriculum and teaching by leaving behind the previous method of copying and introducing the new spontaneous art in vogue, Lucio Costa went to São Paulo to meet the Ukrainian architect Gregori Warchavchik and invite him to become a professor at ENBA. Warchavchik was one of the first modern architects in Brazil along with Rino Levi, the author of the seminal “A arquitetura e a estética das cidades” (Architecture and the Aesthetics of the City), published in October 1925.

Moreover, through Mário de Andrade, Lucio Costa also had contacts with other intellectuals like Paulo Prado and Olívia Penteadó (COSTA, 1995). He also invited the architect Affonso Eduardo Reidy and the Belgian architect Alexander Buddeus to become professors of art and composition, similarly to Walter Gropius’s appointment of Wassily Kandinsky as a professor at the Staatliches Bauhaus in Weimar in June 1922<sup>3</sup>.

Although Lucio Costa and his supporters lost the battle and were removed from his office in September 1931, the Exhibition organized by Costa was undoubtedly one of the most innovative, controversial and, subsequently, the most studied of all its editions. As history itself has shown, Costa's actions were short-lived but left deep impressions on architecture’s trajectory and teaching in Brazil. Costa’s inclusion of disciplines such as Urbanism and Landscaping helping new architects assume a much more practical position in response to urban challenges and the implementation of new techniques, including in the area of heritage preservation. As Costa wrote:

The reform will aim to equip the School with a technical-scientific course as perfect as possible and guide artistic education towards greater harmony with construction. Classics will be studied as a discipline, and *styles* as a critical orientation, not for direct application (COSTA, 1995, p. 68).<sup>4</sup>



In his writings, Lucio Costa reveals the importance of studies linked to the history of art and architecture on the introductory course, designed to install a sense of criticism and universal education without forgetting that technological development is also essential to professional life. In his essay “Sobre Arquitetura” (On Architecture), he wrote that “it is interesting to know how, under identical or different conditions of times, material, technique or program, the problems of construction have been architecturally resolved in the past” (COSTA, 1962, p. 113). Furthermore, when asked about the academy's colonial style's specific teaching, he replied that knowledge of the style is indispensable to comprehend how those buildings had been adapted to the Brazilian environment and weather (COSTA, 1995). In another essay, “Interessa ao estudante” (Of Interest to the Student), expounded on his vision of the interconnections between theory, design and architectural practice:

So, on one side, history and theory of architecture; on the other side, the practice of architecture as a profession. These are activities embodied in the discipline that was conventionally called – redundantly – Architecture Composition [*Composição de Arquitetura*]. Where we learn the art of technically composing buildings and setting them up, or simply put: architecture (COSTA, 1995, p. 117)<sup>5</sup>.

As for teaching art, including theoretical knowledge and practice, Costa wrote in his article “Ensino do desenho” (Teaching Drawing) in 1940 that: “drawing aims to develop in adolescents the habit of observation, the spirit of analysis and the taste for precision, providing them with the methods necessary to translate ideas into graphical records” (COSTA, 1995, p. 242). For this purpose, he proposed different modalities of drawing for different needs, making teaching more specific for each field. Art students, for example, would focus heavily on creative design; for illustrators, illustration design; for inventors, technical drawing. This subdivision not only developed students' graphic skills; it also instigated a higher quality of expressiveness in everyone's field of work. Again, a Bauhaus influence is evident in Lucio Costa's dream for the new National School of Fine Arts.

What matters is not the arts but Art. Art must be present in everything: in urbanization, architectural design, equipment, and interior decoration, in the utilitarian form of utensils, the layout and shape of printed material, and even clothing (CENTRO CULTURAL BANCO DO BRASIL, 2012, p. 24)<sup>6</sup>.

These and other considerations by Lucio Costa concerning architecture and education were elaborated from his experience and studies of other architects like Walter Gropius, Mies van der Rohe, and Frank Lloyd Wright. However, none of them seems to have been as decisive in Costa's formation as Le Corbusier. According to Costa himself, “[Corbusier] is the one who best understood the triple dimension of social, technological and artistic” (*Apud.* SEGAWA, 2010, p. 81). In 1935, Costa experienced his finest moment as an architect and educator when he simultaneously designed the building and proposed the academic program for the University of the Federal District, Rio de Janeiro, in collaboration with anthropologist Anísio Teixeira.

In 1934, Costa published the work “Razões da nova Arquitetura” (Reasons for a New Architecture) for a graduate course at the University of the Federal District's Institute of Arts. In this paper, Costa made various reflections on the concepts of beauty and development of his time—as he wrote, “a period marked by a professional atmosphere of holy war”. In the text, Costa argued that all the arts, including architecture, should avoid following individualistic impulses, given that what was seen at the beginning of the 20<sup>th</sup> century was “in the large majority, aimless and rootless works” (COSTA, 1995, p. 108).

Eleven years later, in his 1945 essay “Considerações sobre o ensino da arquitetura” (Considerations on the Teaching of Architecture), he emphasized that architectural composition should cover integral planning of the building, which comprises: (1) preliminary studies, (2) the draft project, (3) study of the structure, (4) study of the installations and (5) final project of execution with its respective details and specifications.

With the gradual national assimilation of the transformations already occurring internationally in the field of higher education in question, the reform of the curricular matrix of the undergraduate course in Architecture and Urbanism, rejected in the initial clashes of ENBA, although considered necessary by many intellectuals of the period, would be implemented only in 1946 (CORDEIRO, 2012), with the creation of the Faculdade Nacional de Arquitetura (FNA) of the Universidade do Brasil; currently, the Universidade Federal do Rio de Janeiro (UFRJ).

The 1930s to the 1960s represented the turning points for Brazilian architecture and urbanism, and Lucio Costa is acknowledged as having crucial participation in it. Throughout his projects, Costa consistently demonstrated a

direct application and materialization of his ideals. Works included the influential building for the Ministry of Education and Health, the Brazilian Pavilion for the New York World Fair in 1939 – designed in collaboration with Oscar Niemeyer, and the Parque Guinle residential complex built in Rio de Janeiro in the 1940s. Above all, his victorious submission for the contest to design the new capital's urban plan, Brasília, in 1957. They consolidated their name in the projective field, obviously, but also in the academic field, their thinking and actions gained momentum. Costa's colleague at SPHAN, the poet Carlos Drummond de Andrade, before responding to Lucio Costa's request to revise the Pilot Plan Report that he would send to participate in the tender for the nation's new capital, expressed his first contact with the image of what it would become:

Historical day for me was the day that Lucio Costa appeared to me, as discreet as ever, placing a sheet of paper scrawled in a hurry, with words and a drawing sketch that apparently meant little. I took the leaf and had in my fingers nothing less than the city of Brasília, nonexistent and complete, as a germ contains and summarizes the life of a man, a tree, a civilization. The first notion of a city different from all the others hitherto imagined was shown there, in the rudimentary traces of a cross (or an airplane) planted on the ground or taking flight. Lucio's pilot plan said very little for a layman accustomed to seeing cities in operation and not on paper, a role that is not at all luxurious like that of large architectural firms. I spoke in a scrawl and it pulsed. Without understanding, I felt the vibration of the forms implied in that sheet of paper that changed the history of the Government of Brazil and, to a certain extent, Brazilians' lives. I was moved (ANDRADE, 1982, p. 3).<sup>7</sup>

Regarding this great moment of his career and the history of Brazilian urbanism, it is appropriate to emphasize that his proposal for the construction of the new federal capital of Brazil, winner of the national competition unanimously awarded by the jury made up of national and international professionals presents much more than a summary of numerous strategies tied to modern thought which, at the time, represented the urbanistic practices in many places all over the world.

In fact, amidst his experiences in the academic and preservationist field, Lucio Costa's project proposal for Brasília was presented by him in his famous report (COSTA, 1991) based on analogies that include: the forms of the spatiality of the most remote ancient times, the horizontality of the millenary eastern embankments, the interior-exterior mediation of medieval and Renaissance loggias, the monumentality of the famous Baroque perspectives, the civic-mindedness of the English Mall, the buzz of Times Square, the 19<sup>th</sup>-century bucolic public parks and

seaside resorts, among other references charged with knowledge of Architecture and Urbanism.

Likewise, in the essay “The new scientific and technological humanism”, requested by the Massachusetts Institute of Technology (MIT) on the institution's centennial occasion in 1961, Costa once again highlighted the importance of technical and scientific evolution for architectural practice. He was also awarded the title of Doctor Honoris Causa by Harvard University in 1960 and *France's Légion d'Honneur*, in 1970. He was also nominated honorary member of several class institutions, such as the renowned Royal Institute of British Architects (RIBA) and France's *Académie d'Architecture*. Moreover, he called attention to aesthetics studies and how crucial it was to connect the initial plastic conception to the final form and technology. This is demonstrated in his paper “Considerações sobre arte contemporânea” (Considerations about Contemporary Art):

When it only satisfies technical and functional requirements, it is not yet architecture; when you lose yourself in formal and decorative intentions, everything becomes just a design; however, when creators – from a famous or academic background – take into consideration the simple choice of sparing some pillars, or the relationship between the height and width of some gaps, (...) coordinating and guiding the entire group of confusing and contradictory details in a particular direction to transmit accurate rhythm, expression, unity and clarity, which gives the work its character of permanence – then this is Architecture (COSTA, 2001, p. 58).<sup>8</sup>

As Zein (2001) argues, the symbolic strength achieved by both the modernist experiences implemented in Brazil and its supporters outside architecture schools led to criticism that completely changed Brazilian architecture. Consequently, from the 1930s to the 1960s, there were several turning points for Brazilian architecture and heritage studies, and Lucio Costa's participation is undoubtedly recognized as fundamental to this.

### **Structuring Brazil's heritage preservation**

From the early 20<sup>th</sup> century, a series of theories and guidelines on conservation started to emerge in national and international organizations support by law and scientific procedures. For example, civil proposals such as that by the *Sociedade dos Amigos dos Monumentos Históricos do Brasil*, envisioned in São Paulo

in 1924, and that by preservation inspectors implemented both on the state level, as in Bahia in 1927, and Pernambuco in 1928, and on the national level, as in the case of the *Inspetoria dos Monumentos Nacionais* (IMN), created in 1934. In the Brazilian context, after the coup that instituted the *Estado Novo* (New State) national government in 1937, it was up to a small group of specialists to create and organize the Brazilian Heritage List within the newly established SPHAN, created by Decree-Law n. 25/1937. Furthermore, SPHAN – between regimental changes and successive names – would thus consolidate an increasing improvement of proposals and actions intended to protect cultural heritage in the country, whose aim was, after all, to safeguard portions of national memory.

At the SPHAN, together with Mário de Andrade, Carlos Drummond de Andrade, Gilberto Freyre, Manuel Bandeira, and Renato Soeiro, Lucio Costa was invited by Rodrigo Mello Franco de Andrade (director of SPHAN from 1937 to 1967) to work as a consultant architect and section director. According to the institution's records, in the first years alone, the organization added 246 buildings to the registration book called *Livro do Tombo*, earning the title of the “heroic phase” in the later literature on Brazilian architecture (SAIA, 1977; CAVALCANI, 1993). Most of these listings focused on the material and architectural heritage dating from between the sixteenth and eighteenth centuries, which was highly criticized. However, thanks to the efforts of the folklorist and novelist Mário de Andrade, recognition and safeguarding of the immaterial and ethnographic heritage became increasingly regular in the following years, even if it is also criticized today for the attempt to encapsulate all artistic expression and intangible heritage under the same umbrella concept of “cultural heritage”. It would be somewhat anachronistic to evaluate all the initiatives undertaken in the 1930s and 40s based solely on our current views and knowledge.

According to Rubino (2002), SPHAN was initially being divided into three sections. Firstly, the registration section, in charge of legal matters and official recognition of cultural heritage sites. The second was the preservation and restoration section, responsible for safeguarding and intervening in heritage locations. Furthermore, the communication section, which was responsible for disseminating the institution's intellectual output in essays and articles, was published in various outlets like academic journals and newspapers. For example, in this context, Costa wrote a series of newspaper articles containing his reflections on the comparison between Spanish and Portuguese America, analyzing the entire

social, technical and aesthetic situation to explain to the non-specialized public the importance of SPHAN for protecting Brazil's heritage.

In the report "Documentação necessária" (Necessary Documentation), Costa addresses the influences of Portuguese, indigenous and African architecture on the Brazilian style, just as his contemporary Gilberto Freyre was doing areas of Brazilian psychohistory and historical anthropology. In another richly illustrated essay, "Mobiliário Luso-Brasileiro" (Luso-Brazilian Furniture), from 1939, Costa classifies and analyzes the manufacturing processes and aesthetic value of "Brazilian furniture" and its influence and variance from the "Portuguese furniture made in Brazil" (COSTA, 1995, p. 464). He was also sensitive to the importance of Jesuit architecture in Brazil, as shown in his published essay "A arquitetura dos jesuítas no Brasil" (The Architecture of Jesuits in Brazil) 1941.

These works established the registry entry "Brazilian Art and Architecture" within the SPHAN and consequently delimited which artifacts should be preserved or not. Hence, it is unsurprising that the English historian John Bury, trained at Oxford, qualifies Lucio Costa as one of the most influential art historians and architects in Brazil in his book *Arquitetura e Arte Colonial no Brasil* (BURY, 2006). Costa's sensitivity towards these remnants can be seen not only in paper and ink, though, but also in his proposed intervention for the São Miguel Arcanjo Archaeological Site.

Declared a UNESCO World Heritage Site in 1983 (extended in 1984), the ruins of São Miguel das Missões in Brazil, and those of Santa Ana, San Ignacio Miní, Santa María la Mayor, and Nuestra Señora de Loreto in Argentina, are historical evidence of the Jesuit missions established in the seventeenth and eighteenth centuries on lands originally occupied by Guarani indigenous communities (CUNHA, 2018). According to International Council on Monuments and Sites (ICOMOS) reports, these settlements maintained two necessary interconnected components: firstly, the European convent comprising the main church, residence, and colleges; and secondly, a section occupying the remaining three sides of the central square, erected primarily for the local indigenous populations that included livestock areas, yerba mate plantations, dwellings, and so on.

According to the nomination documents, therefore, the properties' surviving ruins testify to the Society of Jesus's experience in South America of fostering an urban atmosphere to spread the Christian faith among the indigenous populations,

the reason why it was registered under Criterion (IV) relating to Outstanding Universal Value (OUV)<sup>9</sup>. International documentation about this place declares that:

The surviving remains of the Jesuit Missions of the Guaranis represent outstanding examples of a type of building and of an architectural ensemble that illustrate a significant period in the history of Argentina and Brazil. Their archaeological remains are deemed historical monuments of the respective local communities and are a living testament to Jesuit evangelization efforts in South America (UNESCO, 1992).

One of the first records to attribute the Jesuits missionaries with responsibility for first propagating European architecture in Brazil, adapting it to the county's environment and topography, was *Voyage pittoresque et Historique au Brésil*, published between 1834-39 by the French painter Jean-Baptiste Debret (1975), a member of the aforementioned French Artistic Mission.

Moreover, it should be mentioned that, while the preservation of monuments holding remembrance purposes is a timeless practice identified in all continents, the successive theories and guidelines disseminated in Europe from the 19<sup>th</sup> century arrived in Brazil through travellers wrote records that can be considered the first works representing an official recognition of the local culture, among so many others later (FAUSTO, 1999). Likewise, also in Brazil, cultural preservation took place initially through the establishment of museums, still in the Imperial Period, intended mainly for the conservation of moving cultural goods, such as in the palatial galleries and curiosity offices from the 16<sup>th</sup> and 17<sup>th</sup> centuries and in the early national museums, helping to assert the European nationalities being formed since the 18<sup>th</sup> century.

According to Costa (1995, p. 496), since visitors were “generally little or poorly informed”, architects were expected to promote the contact between passers-by and the past impregnated in the stones. A feeling that he had experienced and recorded in a letter to the Minister of Finance in 1939: “I admire the ancient architecture more and more, particularly our ancient architecture. The old houses and old furniture from colonial Brazil satisfy and thrill me even more” (quoted in COSTA, 2001, p. 120).

At the São Miguel Arcanjo Archaeological Site, Costa’s ideal can be most clearly observed in the museum (fig. 3) inaugurated in 1940. Here the main intention was to create frames and views integrating inside and outside. This allowed contemplation not only of the artifacts dispersed inside the building,

carefully collected by the caretaker João Hugo Machado but also of the old ruins, visible through the museum's large glass windows, turning the remnants of the church and the artifacts displayed inside the museum into a single space for appreciating Brazil's history.



Source: Authors' photo. © Sávio Guimarães.

**FIGURE 3**

**Missions Museum at the São Miguel das Missões Archaeological Site. São Miguel das Missões, Brazil**

The São Miguel Archeological Site's physical authenticity has been maintained throughout the conservation of the original construction materials and techniques ever since its listing as a National Cultural Treasure by SPHAN in 1938, forty-five years before it was made a World Heritage Site by UNESCO. After several name changes, SPHAN became the present-day National Institute of Historic and Artistic Heritage (*Instituto do Patrimônio Histórico e Artístico Nacional*: IPHAN).

Under IPHAN's guidance, the *Parque Histórico Nacional das Missões* was established in 2009, aiming to provide complementary management of the surrounding biodiversity and to regulate urban development in the buffer zone through the project "Enhancement of the Cultural Landscape and the National Historical Park of the Jesuit Missions of the Guarani" together with the Argentine and Paraguayan governments. As well as the São Miguel Arcanjo Archaeological



Site, in which Costa was responsible for dozens of other analyses and new projects for historical sites.

For example, his judgment was significant to delimiting the Grande Hotel's present architecture, built between 1940 and 1944, in the historic center of Ouro Preto, a colonial town in Minas Gerais. The project competition promoted by the Ouro Preto prefecture ended up with two final proposals, one developed by Carlos Leão strongly linked to the neocolonial language and another designed by Oscar Niemeyer under the modern influence. As the director of the Studies and Registry Division (*Divisão de Estudos e Tombamento*: DET), Lucio Costa was invited to make the final decision, which was in favour of Niemeyer's project.

Repudiating the attempt to mimic the framework built during the city's *gold cycle* and seeking to respond to Rodrigo's reservations regarding such a current project, Lucio sought to adjust the new architecture to the context of the old city and to make the clash between the old and the new the least visible possible (RUBINO, 2002, p. 16)<sup>10</sup>.

According to the building's scale, projects like these reveal Costa's theoretical approach to harmonizing volumes and landscape views in the best way possible. In his essay "Arquitetura Civil" (Civil Architecture) from 1947, he even proposed an architectural classification based on the building's dimensions and features and how it should be used to recommend an appropriate method of preservation (SANTOS, 2007).

Among the diversity of actions Lucio Costa performed in cultural heritage, he also took part in works to disseminate information and educate about the heritage, which is now increasing due to audio-visual and digital technological platforms. In an additional example, he helped to spur awareness of Brazilian Baroque and painter Antonio Francisco Lisboa, popularly known as Aleijadinho, through essays and even a script for a short film about the artist, directed by Joaquim Pedro de Andrade in 1968.

This documentary, *O Aleijadinho*, produced and distributed by Embrafilme, can be considered one of the first records of Aleijadinho's life and work. Probably, the most significant expression of Brazil as a colony and, to this day, Brazilian artists most studied and internationally recognized (BURY, 2006; MANGUEL, 2001). The plasticity achieved in the works by Aleijadinho, later also seen in works by Oscar Niemeyer, generated immediate comparisons mainly by Lucio Costa and a

consequent appreciation of this strand of modern architecture in Brazil (PICCAROLO, 2019).

Among so many possible considerations about the representative asymmetry generated in the first decades of preservation in Brazil, it is significant to emphasize the fact that, since the mid-20<sup>th</sup> century, along with the conformation of social sciences and historiographical currents such as New History, the expansion of the concept of culture and interpretations of actions in the field have also diversified the views, both on the theme of cultural preservation and the continuous rethinking of the possibilities of creation and learning process. Thus, it is conducted under greater dialectics among various cultural paradigms to yield more equitable results.

On account of the significant contributions from other fields such as archeology, geography, anthropology, and so forth, architectural heritage studies became more interdisciplinary from the mid-20<sup>th</sup> century, followed by an increased number of works focused on diversity memory of certain places. Simultaneously, the possibilities for expanding professional teaching on heritage education became more systematic across undergraduate and postgraduate programs. As Farah (2008, p. 32) notes:

The first significant initiative for training specialist architects to work with the restoration was the "International Specialization Course" promoted in 1965, as a project of the *Facoltà di Architettura* of the *Università Degli Studi di Roma* in conjunction with the International Center for the Study of the Preservation and the Restoration of Cultural Property (ICCROM).<sup>11</sup>

In the theoretical field, commonly referred to collectively as the “patrimonial charters”, which includes the Athens Charter (1931), the Venice Charter (1964), the Convention for the Protection of the Cultural and Natural Heritage (1972), and the Amsterdam Declaration (1975), among others, numerous codes and guidelines for defining and safeguarding cultural heritage have been disseminated as a result of professional meetings.

Moreover, in Brazil, the inclusion of subjects related to cultural heritage during the undergraduate courses of Architecture and Urbanism has contributed to the professional concern regarding the theory and practice of heritage studies, including the history, analysis, restoration and/or addition of new buildings. Here we can highlight the pioneering spirit of the Conservation and Restoration Technical Course (*Curso Técnico de Conservação e Restauração*), launched at the Universidade

Federal do Ouro Preto (UFOP) in the 1970s and recognized as one of the first experiences in regular technical training in the conservation of movable and integrated properties.

Similarly, the mobile course in the cities of São Paulo, Recife and Belo Horizonte between 1974 and 1979 were only possible due to an agreement signed between the Ministry of Culture, the Fundação Pró-Memória with universities. Moreover, since 1981, established in Universidade Federal da Bahia (UFBA), the pioneering Specialization Course in Conservation and Restoration of Monuments and Historic Sites (*Curso de Especialização em Conservação e Restauração de Monumentos e Conjuntos Histórico*: CECRE) has developed into a Professional Master's Degree in Conservation of Monuments and Historical Centers as of 2010.

Almost a hundred years after implementing the first policies and actions to preserve Brazil's national heritage, the clash between local and international demands in Brazil remains a constant issue. Nevertheless, significant signs of progress are visible thanks to the pioneering work started by members of the former SPHAN, including Lucio Costa. His efforts and contributions in this area can now be better understood through biographies or the places dedicated to his career as an architect and preservationist (PESSOA, 2004), such as the *Espaço Lucio Costa* and *Centro Lucio Costa* (CLC).

The *Espaço Lucio Costa* (fig. 4) was inaugurated in the most iconic square in Brasília, the *Praça dos Três Poderes* in 1992. It was designed by Oscar Niemeyer himself to house everything related to Costa's new capital, from sketches and historical photographs to a large-scale architectural model.

Additionally, the *Centro Lucio Costa* (CLC) was created in 2010 via an agreement between the Government of Brazil, IPHAN, and UNESCO to celebrate IPHAN's transformation Specialization Course into a master's degree program in the Preservation of Cultural Heritage. Thus, the *Centro Lucio Costa* (IPHAN, 2014) in Rio de Janeiro, was born as an International Heritage School to assist seventeen Portuguese and Spanish-speaking countries across South America, Africa, and Asia. It offers training courses on heritage management and heritage education for professionals and non-professionals alike, sharing the results and dilemmas of heritage preservation in Brazil with the rest of the world.



Source: Authors' photo. © Sávio Guimarães.

**FIGURE 4**

**Lucio Costa Space (*Espaço Lucio Costa: ELC*), Brasília, Brazil**

## **Conclusions**

As this study aimed to demonstrate, it is vital to bear in mind that Lucio Costa became one of the pillars for Brazilian architecture because of his association with the international programs of modernism and his respect for Brazilian national history and professionalism in responding to its preservation issues. This is unquestionably the most crucial aspect of Lucio Costa's work: theory is not something abstract, disconnected and existing only in Plato's ideal world, but is instead the foundation or groundwork necessary for a particular action.

Since childhood in Europe and during his period at the ENBA, Lucio participated in several research trips and drawing contests that contributed to his education, leading him to become the Lucio Costa we know today as a significant national and international reference in Brazilian architecture and heritage studies. Therefore, it is no surprise that when he became director in the early 1930s, he started to apply changes that he had been pondering for over a decade since his undergraduate days and changed the way we deal with Brazil's and educational agendas until today.

Likewise, in the field of cultural heritage, Costa's performance at SPHAN for decades, since its inception in 1937, has dramatically helped in officialize hundreds of Brazilian cultural assets as national cultural heritage by being listed and restored, as well as, in this specific field, he became a spokesman for the choices and actions undertaken by the agency responsible for the continuous expansion of the values, discourses and narratives that characterize the national preservationist sphere.

Our intention in this study, therefore, has been to demonstrate just how influential his career was for the establishment of Brazil's heritage management and educational agendas by emphasizing his ability to recognize and propose suitable preservation methods through a thorough and systemic approach to historical and bibliographic studies, along with taking advantage of modern technologies, clearing the way for subsequent changes that shaped and still influence the way we teach, learn and integrate architectural theories and practice today.

## NOTES

1. If 1822 represented Brazilian political independence from Portugal, 1922 symbolized Brazil's cultural independence from the strict academism of the Academy of Letters, as well as a heightened consciousness of the social problems and political currents within Brazil.
2. Original in Portuguese: "Não se trata de uma simples greve de estudantes. (...) Não tenho esperança de que nenhum nome tirado do nosso viciado meio de arte, isto é, da Escola de Belas-Artes – entrave ao desenvolvimento da arte no Brasil – possa continuar a obra iniciada por Lucio Costa, obra que, embora interrompida, já é um marco para a história da arte brasileira." (Authors' translation).
3. Moreover, according to Segawa (2010), Buddeus was responsible for introducing the magazines *Form and Morden Bauformen* to ENBA.
4. Original in Portuguese: "A reforma visará aparelhar a escola de um curso técnico-científico tanto quanto possível perfeito, e orientar o ensino artístico no sentido de uma perfeita harmonia com a construção. Os clássicos serão estudados como disciplina; os estilos como orientação crítica e não para aplicação direta." (Authors' translation).
5. Original in Portuguese: "Assim, portanto, de uma parte, história e teoria da arquitetura, de outra, teoria e prática da profissão de arquiteto, atividades consubstanciadas na disciplina que se convencionou denominar, como redundância, Composição de Arquitetura, e onde se aprende a arte de compor tecnicamente os edifícios e de ambientá-los, ou seja, simplesmente, a arquitetura." (Authors' translation).

6. Original in Portuguese: “o que importa não são as artes, mas a Arte. A arte deve estar presente em tudo: na urbanização, na concepção arquitetônica, no equipamento e na ambientação de interiores, na forma utilitária dos utensílios, na disposição e feitio dos impressos, na indumentária.” (Authors’ translation).
7. Original in Portuguese: “Dia histórico pra mim foi aquele em que Lucio Costa me apareceu, discreto como sempre, botando em minha mesa uma folha de papel rabiscada às pressas, com palavras e um esboço de desenho que aparentemente pouco significavam. Peguei a folha e tive entre os dedos nada menos do que a cidade de Brasília, inexistente e completa, como um germe contém e resume a vida de um homem, uma árvore, uma civilização. A primeira noção de uma cidade diferente de todas as outras até então imaginadas mostrava-se ali, nos traços rudimentares de uma cruz (ou um avião) plantada na terra ou alçando vôo. O plano-piloto de Lucio dizia bem pouco para um leigo habituado a ver cidades em funcionamento e não no papel, um papel nada luxuoso como o dos grandes escritórios de arquitetura. Falei em rabisco e pulsava. Sem entender, eu sentia a vibração das formas implícitas naquela folha de papel que mudava a história do Governo do Brasil e, em certa escala, a vida dos brasileiros. Comovi-me.” (Authors’ translation).
8. Original in Portuguese: “Enquanto satisfaz apenas às exigências técnicas e funcionais, não é ainda arquitetura; quando se perde em intenções meramente formais e decorativas, tudo não passa de cenografia; mas quando – popular ou erudita – aquele que a ideou para e hesita ante a simples escolha de um espaçamento de pilares ou da relação entre a altura e a largura de um vão, (...) coordena e orienta em determinado sentido toda a massa confusa e contraditória de pormenores, transmitindo assim ao conjunto ritmo, expressão, unidade e clareza, o que confere à obra seu caráter de permanência – isto sim é arquitetura.” (Authors’ translation).
9. Criterion (IV): to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history. (UNESCO World Heritage Centre - The Criteria for Selection, 18/05/2020).
10. Original in Portuguese: “Repudiando a tentativa de mimetizar o arcabouço construído no ciclo do ouro e buscando responder às ressalvas de Rodrigo em relação a um projeto tão evidentemente moderno, Lucio procurou ajustar a nova arquitetura ao contexto da cidade antiga e tornar menos visível o choque entre o velho e o novo, indicando a Niemeyer algumas alterações, uma concessão formal que buscou criar um elo de continuidade, reforçando a homologia que o grupo SPHAN apreçoava entre duas obras arquiteturas.” (Authors’ translation).
11. Original in Portuguese: “A primeira iniciativa de relevo para formar arquitetos especialistas para atuar no campo disciplinar da restauração foi feita através do ‘Curso Internacional de Especialização’ promovido em 1965, iniciativa da Facoltà di Architettura da Università degli Studi di Roma em conjunto com o International Centre for the Study of the Preservation and the Restoration of Cultural Property - ICCROM.” (Authors’ translation).

## REFERENCES

- ANDRADE, Carlos Drummond de. *Lucio Costa e o papel mágico*. Jornal do Brasil, 3 mar.1982.
- ANDRADE, Rodrigo Melo Franco de. *Rodrigo e o SPHAN: coletânea de textos sobre o patrimônio cultural*. Rio de Janeiro: MEC/SPHAN/FNPM, 1987.
- BURY, John. *Arquitetura e arte no Brasil colonial*. Brasília: IPHAN/MONUMENTA, 2006.

CAVALCANTI, Lauro (ed.). *Modernistas na repartição*. Rio de Janeiro: UFRJ, 1993.

CAVALCANTI, Lauro. Moderno e brasileiro: anotações para a história da criação de uma nova linguagem arquitetônica. In: PESSOA, José et al (ed.). *Moderno e nacional*. Niterói: EdUFF, 2006.

CENTRO CULTURAL BANCO DO BRASIL. *Lucio Costa: 1902-2002*. Brasília, 2012.

CHUVA, Márcia. Fundando a nação. *TOPOI: Revista de História*, Rio de Janeiro: Programa de Pós-Graduação em História Social da UFRJ, v. 4, n. 7, p. 313-333, 2003.

CORDEIRO, Caio Nogueira Hosannah. A Reforma Lucio Costa e o ensino da Arquitetura e do Urbanismo da ENBA à FNA (1931-1946). SEMINÁRIO NACIONAL DE ESTUDOS E PESQUISAS. 9. *Anais...* João Pessoa: Universidade Federal da Paraíba, 2012.

COSTA, Lucio. A arquitetura dos jesuítas no Brasil. *Revista do Serviço do Patrimônio Histórico e Artístico Nacional*, Rio de Janeiro: SPHAN, n. 5, 1941.

COSTA, Lucio. *Sobre Arquitetura*. Porto Alegre: CEUA, 1962.

COSTA, Lucio. *Registro de uma vivência*. São Paulo: Empresa das Artes, 1995.

COSTA, Lucio. *Relatório do Plano Piloto de Brasília*. Brasília: GDF, 1991.

COSTA, Maria Elisa. *Com a palavra Lucio Costa*. Rio de Janeiro: Aeroplano, 2001.

CUNHA, Fabiana Lopes da; SANTOS, Marcilene dos; RABASSA, Jorge (eds.). *Latin American Heritage: interdisciplinary dialogues on Brazilian and Argentinian case studies*. New York: Springer, 2018.

DEBRET, Jean-Baptiste. *Viagem pitoresca e histórica ao Brasil*. São Paulo: M. Fontes, 1975.

FARAH, Ana Paula. Restauro arquitetônico: a formação do arquiteto no Brasil para preservação do patrimônio edificado. *História*, São Paulo, n. 27, v. 2, 2008.

FAUSTO, Boris. *A Concise History of Brazil*. Cambridge: Cambridge University Press, 1999.

IPHAN. *Centro Cultural Lucio Costa (CLC) – Escola do Patrimônio*. Brasília, 2014. Available at: <http://portal.iphan.gov.br/clc/pagina/detalhes/1188>. Accessed Apr. 2, 2020.

MANGUEL, Alberto. *Lendo imagens: uma história de amor e ódio*. São Paulo: Companhia das Letras, 2001.

MICELI, Sérgio. *Intelectuais e classe dirigente no Brasil (1920-1945)*. São Paulo: Difel, 1979.

PESSOA, José (ed.). *Lucio Costa: documentos de trabalho*. Rio de Janeiro: IPHAN, 2004.

PESSOA, José et al (eds.). *Moderno e nacional*. Niterói: EdUFF, 2006.

PICCAROLO, Gaia. *Architecture as Civil Commitment: Lucio Costa's Modernist Project for Brazil*. Abingdon: Routledge, 2019.

RUBINO, Silvana. Lucio Costa e o patrimônio histórico e artístico nacional. *Revista USP*, São Paulo, n. 53.2002.

SAIA, Luís. Até os 35 anos, a fase Heróica. *Revista Cj Arquitetura*. Rio de Janeiro, n. 17, 1977.

SALÃO 31. Disponível em: <http://www.salao31.com/o-salao-de-31>. Acesso em: 12 abr. 2019.

SANTOS, Helena Mendes dos. *Tradição e contradição na prática preservacionista*. Niterói, 2007. Dissertação (Mestrado) – Universidade Federal Fluminense.

SEGAWA, Hugo. *Arquiteturas no Brasil: 1900-1990*. São Paulo: Edusp, 2010.

SLADE, Ana. Arquitetura moderna brasileira e as experiências de Lucio Costa na década de 1920. *Arte & Ensaio (UFRJ)*, v. 15, p. 46-53, 2007.

UNESCO. *Jesuit Missions of the Guaranis: San Ignacio Mini, Santa Ana, Nuestra Señora de Loreto and Santa Maria Mayor (Argentina), Ruins of Sao Miguel das Missoes (Brazil)*. Paris, 1992. Available at: <https://whc.unesco.org/en/list/275/>. Accessed Apr. 5, 2020.

ZEIN, Ruth Verde. *O lugar da crítica*. Porto Alegre: Centro Universitário Ritter dos Reis, 2001.

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