NIEMEYER IN THE DESERT
Presence of the Russian Avant-Garde in Ibirapuera Park

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This article traces how Oscar Niemeyer and his team’s early draft of the Ibirapuera Park project (1951–1954) employs resources from the art and architecture of the Russian avant-garde of the early 20th century. It presents similarities with two projects by architect Ivan Leonidov regarding formal citations and the dispersion of volumes in space. It states a strong link between the Brazilian architect’s work and the suprematist conception of space, which employs empty space as a “desert condition” that aesthetically elaborates on the isolation characteristic of the modern condition. Such use of space articulates Niemeyer’s tragic perception of the modernization process in Brazil. However, the marquee in Ibirapuera Park suggests an integration of the otherwise dispersed volumes. It allows for the social appropriation of space and the coexistence of diverse groups, thus producing a space where integration between bodies remains possible.

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INTRODUCTION

The modernizing aspirations in the architecture of the Ibirapuera Park (Figure 1) by Oscar Niemeyer and team1 (1951–1954) point to the contradictions inherent in Brazil's modernization process. As part of the celebrations of the IV Centennial of the City of São Paulo, which took place in 1954, the Ibirapuera Park project was intended to become an emblem of São Paulo’s rise and Brazil’s transition from an agricultural condition to a new industrial vocation. An emblem, indeed, of its projection as a country effectively participating in the world’s political and cultural scene.

The heroism and freedom with which Niemeyer operated his vigorous and delicate geometries were typical of a Brazil that opened up with originality to the world. With regard to the formal choices of the Ibirapuera Park project, as analyzed by engineer and poet Joaquim Cardozo, it is a “perfect and appropriate indication, the ideal language to convey, to as many as want to know, the importance and degree of technical and industrial development of the great State” (Cardozo, 1952).

This rhetoric of grandeur has a touch of passionate utopianism, very typical of that period’s attempt at overcoming the traumas of underdevelopment. This can be symbolized, for example, in the

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1 Niemeyer’s team, invited by Francisco Matarazzo, included architects Zenon Lotufo and Eduardo Kneese de Mello, with the collaboration from Gauss Estelita and Carlos Lemos.
episode involving one of the most iconic installations in the original project for the Park, which was eventually built: the Aspiral, which—as the name suggests—combined the “aspiration” for a modern São Paulo with the form of an ascending “spiral”: a monument made of jute and plaster covering an iron frame (Figure 2).

As a kind of logo for the city’s IV Centennial advertising, the Aspiral design was endlessly repeated on posters, texts and even on the parapets of houses at the time (Cruciol, 2021). In fact, a few building issues—helped by torrential rain—caused the structure to collapse and suffer a tragic fall.2 That incident seems symbolic of how the structure of the large metropolis (and of the country as a whole) was not capable of sustaining its own aspirations for development. After its tragic collapse, the Aspiral was not rebuilt and, as Cruciol (2021) ironizes, “with water the representation of São Paulo’s progress was dismantled.”

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2 There have been several revisions since the original Aspiral design: the inclination changed from 45 to 60 degrees in relation to the ground, and the idea of using concrete was modified two days before the Centennial celebration, when it was deemed unfeasible. Still, according to Cruciol (2021), there is no exact explanation as to why the structure gave way.
TRACES OF THE RUSSIAN AVANT-GARDE IN NIEMEYER’S PRELIMINARY PROJECT

Regarding the dilemma of modernization and backwardness in a work of avant-garde architecture in Brazil, there is a defining choice for the project which stands out: the literal use of elements from projects for the Russian avant-garde architecture from the 1920s, in particular, by architect Ivan Leonidov.

This subject requires in-depth studies, being briefly mentioned by a few sources. In an interview with Costa (2022), Paulo Mendes da Rocha quickly commented on the fact that the design of the Ibirapuera Park cited elements from a project by Leonidov, and Gurian (2014) showed a juxtaposition of drawings from these two projects. However, no study was carried out that deeply researched Niemeyer’s use of the Russian avant-garde. This is what we intend to prove in this article. In our hypothesis, more than a citation of architectural forms or compositional similarities, Niemeyer’s dialogue with Leonidov’s work takes place at the level of conception of space. In this sense, we can read in Niemeyer’s work a fundamental reflection on the modern condition.

This use of the Russian avant-garde is most noticeable in the drawings for a preliminary version of the Ibirapuera project, which we will take as our main object of analysis (Figures 3 and 4). Niemeyer’s composition for the Park was formulated with emphasis on the interaction between two architectural elements: the semi-spherical planetarium, later developed as the Palácio das Artes, which today constitutes the Oca building, and the auditorium, shaped like a trapezoid in the plan, which was built only in 2005 with several changes to its shape.

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3 Perrone et al. (2020, p. 8) reuse Gurian’s (2014) scheme and suggest that Niemeyer could have known about Leonidov’s projects through his friendship with Le Corbusier, who was a great admirer of the Russian architect.

4 The project underwent several changes before being built, for reasons such as construction limitations, adaptation to topographical conditions, and program needs that appeared during its development. It reached its final configuration, with a very different appearance, in February 1953 (Gurian, 2014, p. 18).

5 Almost in a retroactive gesture, a smaller planetarium was added to the project and built in 1957 with characteristics similar to the previous idea of the Palácio das Artes. The auditorium originally had an internal capacity for 3,000 people, but the built version holds only 800 (Niemeyer, 1952, p. 9).
Figure 3
Oscar Niemeyer and Team (1952). Preliminary Project for the Ibirapuera Park [Plan]
Source: Niemeyer (1952).

Figure 4
Oscar Niemeyer and Team (1952). Preliminary Project for the Ibirapuera Park [Perspective]
Source: Niemeyer (1952).

Figure 5
Ivan Leonidov (1930). Project for the Palace of Culture of the Proletarsky District [Elevation and Plan]
Scattered throughout the Park, pavilions with various purposes appear in the plan as rectangular shapes that dynamize the composition. In the relationship between the shapes of the pavilions and the planetarium–auditorium pair (Figure 6), the space is structured as a generatrix, open to movement. Furthermore, a restaurant near the lake, which was removed in the final version of the project, stands out in the perspective drawing due to its pyramid shape. The five most important architectural elements are linked by the large marquee, which in this initial version had a more aggressive form than the one actually built. It had an organic aspect like that of a root or a river with its tributaries, also vaguely resembling a body without a head, with five “limbs” that spread out.

When compared with the drawings for the Palace of Culture of the Proletarsky district (Figure 5), made by Ivan Leonidov for a competition in 1930, Niemeyer’s project shows clear similarities in principle. Leonidov’s proposal was a scientific, cultural and sports complex, which would house several facilities aimed at training actions in favor of a communist society for the future.

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6 If we take the plan from top to bottom, the largest pavilions in the draft are identified respectively as: Pavilhão das Indústrias, Pavilhão das Nações Estrangeiras and Pavilhão dos Estados. After being redesigned and built, they function today respectively as the Bienal Internacional de Arte de São Paulo building, the Museu Afrobrasil—redesigned on the opposite side—and the Pavilhão das Culturas Brasileiras.

7 The elevation and plan of the Palace of Culture were originally published together and appear as such in the books. Probably due to an editorial mistake, the plan appears inverted: the pyramid is located adjacent to the sports court in the right corner of the plan but appears to the left in the elevation.
Regarding the elevations, we see, in both projects, scenes located in an empty space that extends horizontally, with small incidences of vegetation and sprawling architectural volumes, elementary geometries: the semi-sphere, the pyramid, the rectangular marquee. Comparatively, in the right corner of Leonidov’s elevation, there is a great zeppelin and a vertical structure similar to an obelisk, while the same area of Niemeyer’s drawing is occupied by the bold geometric volume of the Ibirapuera auditorium.

It is not difficult to associate the elements of the two plans as well: the circle (plan of the semi-spherical volume), in Leonidov’s project, represents an auditorium in the middle of a sector designed for mass actions, and the trapezoid shape (which we saw in Niemeyer’s auditorium) appears here associated with the historical–scientific sector of the Palace of Culture program.

We can find a common preference in the graphic style of the drawings themselves (in the sense attributed to the term by Sainz), as they use simple outlines to huge empty spaces. The differences, however, appear in the propensity for curved and somewhat soft lines by the very Brazilian Oscar Niemeyer, as well as his use of small hatches that suggest the textures and materiality of objects. Leonidov, in turn, uses solid but subtle shading on the zeppelin.

Both projects are undoubtedly permeated by a modernizing discourse. If the symbolization of São Paulo’s technical development is present in the intention of the Ibirapuera project, Leonidov proposed that the architecture of a revolutionary society should make use of a high degree of technology. The Russian architect made the proposals of his avant-garde contemporaries (including figures like El Lissitzky) seem, comparatively, “technically and structurally modest” (Cooke, 1990, p.12). Not by chance, he inserts the modern and machinic figures of

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8 By coincidence, the Ibirapuera Park received an obelisk by sculptor Galileo Emendabili.
9 By graphic style of architectural drawing, Sainz refers to everything that concerns how drawing resources are used, putting in parentheses the architectural referent itself. He considers, in this sense, the variables of the formal appearance of the drawing, such as stroke, technique and color. Therefore, the concept differs from architectural style: two different graphic styles can be employed to represent the same architectural style, and two very different architectural styles can be represented using the same graphic style (Sainz, 2009, pp. 202-207).
10 We might consider a certain elective similarity from the political-ideological perspectives of the architects: the modernizing background of Niemeyer’s communist ideology, or his broad Marxism in the least, would have some similarity with the promotion of a modernizing agenda through Soviet avant-garde architecture.
the zeppelin and the plane into his projects: flight appears as a symbol of the unlimited possibility opened by technology.

Niemeyer refers to another one of Leonidov’s projects in the preliminary design of the Ibirapuera Park. The design of the restaurant, whose square roof would be suspended by rods connected to a central mast, is a practically literal transposition of a structure found in the project for the Club of the New Social Type, from 1928 (Figures 7 and 8).
In fact, the use of the mast and risers in a pyramid shape was not Leonidov’s prerogative, as it had already been explored by contemporaries including the Vesnin brothers in projects such as the *Palace of Labor* (1922). Therefore, it is necessary to note a fundamental difference in the way in which Leonidov composes with these forms, which distinguishes him both from his Soviet peers and from the architecture of the French neoclassicals of a century earlier, who operated with similar geometries: Leonidov’s regular forms are dispersed in the space of the plan in an irregular and asymmetrical way, creating a “rarefied space” (De Magistris & Korob’ina, 2009, p. 186) without an evident compositional center.

**COMPOSITIONAL DECENTERING**

This compositional strategy, by “avoiding the notion of center,” leads to a rupture or a “disorder” of the classical composition, structured from a center and with symmetrical relationships, as observed by Blanciak (2014). The abolition of the traditional tsarist order and the break with a feudal structure would allow the emergence of a new and dynamic revolutionary society: a context in which to conceive an architecture that operates through a “dynamic composition, as one that is the result of a movement” would only make sense (Blanciak, 2014, p. 138).

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**Note:**

11 If we dare even more in our digression, this formal grammar of elementary geometries does not differ much in relation to the neoclassical architecture of the 18th century of Claude-Nicolas Ledoux or Étienne-Louis Boullée. In fact, it has its roots there: “The circle and the square”, writes Ledoux, “these are the alphabetical letters that authors use in the texture of the best works” (Starobinski, 1988, p. 55). The quest to explore geometric figures of the universal, which would point to a deeper reality closer to the absolute, resonates as a recurring theme in modern art and architecture.
The compositional *decentering* that Leonidov proposes in his plans (Figure 9), with its dispersion of volumes and the fragmentation of space in its compositional dimension, points to the central problem of the modern condition: the fragmentation and impossibility of a peaceful reintegration of society in space. Even though the socialism established in the Soviet Union rhetorically appealed to a utopian communion, we know that this was not exactly how things turned out. On the contrary, as Scully Jr. (2002, p. 19) shows, the condition of modernity—by definition—is the awareness of the impossibility of reintegration between the subject and the surrounding environment or, in other terms, between architecture and space or between construction and nature:

Nothing remains between the bodies as a force capable of integrating them. In this way, the most authentic modern architecture is the one capable of poetically incorporating this tragic awareness of human destiny, rather than covering it up in an ideological or compensatory way. Consequently, in this case, modern constructions will seek radical individuation, causing the relationship between solids and space to assume aversive contours, of reciprocal repulsion, and not of choreographic fusion. (Wisnik, 2009, p. 147)

This decentering of volumes spread across a space also operates in the Ibirapuera Park and across Niemeyer’s work as a whole.¹² This includes the design of the *Institute France Lusitane Miguel Torga* in Paris from the 1980s (Figure 10), in which the architect created in the plan a similar “dialogue” between the circle and another geometric volume—a restaurant and an auditorium, respectively—to the one present in the Ibirapuera Park.¹³ In effect, this project by Niemeyer looks like a kind of edited version without the large marquee of the Ibirapuera Park, with its space full of scattered geometric volumes. Also, the *Institute France* demonstrates strong similarities with Leonidov’s compositions, in particular the blueprint for the *Club of the New Social Type* (Figure 11). The asymmetrical arrangement of

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¹² The idea of separate, asymmetrically arranged rectangular pavilions was already present in a previous proposal by Rino Levi for the design of the Ibirapuera Park, but Niemeyer radicalizes the dispersion in the plan space and introduces more daring geometries.

¹³ This formal “dialogue” is a topic explored in several other works by Niemeyer, such as the project for the *Memorial Zumbi dos Palmares* in São Paulo (1988) and the *Centro Cultural Internacional Oscar Niemeyer* in Asturias, Spain, built in 2011.
circular shapes, grids of rectangles, linear axes indicating marquees and, most notably, the iconic oblong shape representing a sports court, contribute to our understanding that the Brazilian architect based his design decisions on spatial, formal and compositional resources originating from the Russian avant-garde.

Figure 10
Fundação Oscar Niemeyer (1987). Institute France Lusitâne Miguel Torga in Paris
[Model]
Source: https://www.oscamiemeyer.org.br/obra/pro383.

Figure 11
Ivan Leonidov (1928). Project for the Club of the New Social Type, Moscow
[Plan]
In the particular case of Ibirapuera Park, however, there is a difference to Leonidov’s use of compositional decentering, revealed by the analysis of the structuring presence of the marquee: the articulation it weaves with the buildings creates an agglutination that seems to paradoxically restrain the sense of dispersion of space. In fact, the marquee has a position that can be read as central in relation to the main buildings to which it is connected. Nice were the very heart of the project. Joaquin Cardozo writes:

The main theme of this great composition is the union of the different buildings by the large marquee; for the first time, this constructive element occupies such an important and central position, and it is its presence that gives unity to the whole. (Cardozo, 1953, as cited in Gurian, 2014, p. 71)

It is interesting to note that, although not totally, the appearance of a notion of “center” sounds problematic in a project that operates from an avant-garde spatial conception based on decentering. More than that, such a contradiction points to a dilemma typical of Brazil’s modernizing aspiration at the time, elaborated in the dialectic between center and margin, later explored in potent works such as those of artist Hélio Oiticica. In short, the issue can be translated into some questions: how can the symbolic notion of center be abolished in a country that has always been marginal due to its status as a colony? Or, in artistic terms, how could an avant-garde sense of modernizing aspiration at the time be adopted, while in a struggle to inaugurate an artistic tradition at all? In fact, the attempt to open a symbolic center will reach its peak in Brasilia; the artificial center of the country is established in a rarified space. However, in the Ibirapuera Park project, the problem in our view is about creating a center in an organization that values decentering, and this issue is treated in a rich and nuanced way by Joaquín Cardozo. Hence, the artificial center of the country is established in a rarified space. However, in the Ibirapuera Park project, the problem in our view is about creating a center in an organization that values decentering, and this issue is treated in a rich and nuanced way by Joaquín Cardozo.
as if the architect were capable of creating a force that could integrate bodies previously dispersed in a rarefied space. We will return later to this difference in relation to Leonidov’s spatiality created by the marquee; for now, it will be essential to research the meaning of the dispersion of volumes in space present in both projects.

**CONDITION OF DESERT**

To understand the strong dispersion of volumes in a rarefied space in the works of Niemeyer and Leonidov, one should have as a starting point that, in the Russian architect’s work, it consists in the adoption of a particular conception of space, originating from painting. In fact, it is the introduction of the formal and spatial system of suprematism—a branch of abstraction led by painter Kazimir Malevich—into constructivist architecture (Cooke, 1990, pp. 35-36). Ivan Leonidov was deeply influenced by the suprematist composition of geometric shapes suspended in an empty space, which in painting is the white background of the canvas. His plants, in fact, look like gigantic suprematist compositions in space.

The use of rarefied space in Leonidov’s projects made him the target of criticism from his contemporaries. It was even the case of the constructivists themselves, who accused him of designing “barracks” in spaces that were “deserts” (Cooke, 1990, p. 36). For an architect who linked himself to the suprematist lineage, however, this would sound like a compliment, as what Malevich intended was, precisely, to take painting to the *desert*:

> When, in the year 1913, in my desperate attempt to free art from the ballast of objectivity, I took refuge in the square form and exhibited a picture which consisted of nothing more than a black square on a white field, the critics and, along with them, the public sighed, “Everything which we loved is lost. We are in a desert… Before us is nothing but a black square on a white background!”.
> (Malevich, 1927, p. 68)

The emptying of art of its possibility of objectively representing the world leaves it in a *condition of desert* (Valle, 1993, p. 56). For Malevich (1927), the only possible path would be that of art as pure feeling, detached from objects. In his words, “a blissful sense of liberating non-objectivity drew me forth into the ‘desert,’ where nothing is real except feeling… and so feeling became the substance of my life.”
Instead of a portrait or still life representation, the viewer of a suprematist work is shocked by the mere (and disconcerting, even hideous) presence of a black square on an empty, white background. In other cases, Malevich would fill this neutral background with geometric shapes (Figure 12).\textsuperscript{14} Imagining an art that gave up on the representation of objects was a challenge to the entire figurative artistic tradition based on a \textit{tabula rasa} typical of modernist discourse. But the desire to make art and life restart from new bases is linked, in the case of Malevich and Leonidov, to the historical concreteness of profound political and social transformations.\textsuperscript{15} To make art begin anew, there is nothing fairer than starting the paintings from a white canvas.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Suprematism_Malevich_1915.jpg}
\caption{Kazimir Malevich (1915). Suprematism (Oil on Canvas, 60×70 cm). Ludwig Museum, Cologne}
\end{figure}

\textsuperscript{14} Despite being geometric, the shapes received slight inclinations at the edges, moving them away from their universal character and highlighting their singularity as something that is stubbornly “one” (Bois, 2016, p. 144). Leonidov was more rigorously geometric, which brings Malevich’s irregular treatment of form notably closer to Niemeyer.

\textsuperscript{15} It is possible that readers adhering to a stricter strand of critical theory point out the differences between a utopian intention in a revolutionary context and São Paulo in the 1950s, to make case out a discursive and political weakening of Niemeyer’s work in relation to the Russian avant-garde. To these, it is important to historically situate Leonidov’s production in relation to the criticism he received from his avant-garde colleagues, who themselves did not see the constructive need for his design decisions and branded him a utopian. Others were even more severe, accusing the architect as a “petty bourgeois who operates in an abstract void” (De Magistris & Korob’îna, 2009, p. 186). The revolutionary process itself did not recognize Leonidov as one of its powerful spokesmen.
But as Gullar (1985, p. 126) states regarding Malevich’s art, “this desert—which is the world without objects—is not empty. It is, so to speak, filled with the absence of objects.” Indeed, Malevich’s “focus on the invisible had been crucial to the development of Suprematism” (Henderson, 2019, p. 74). In this way, it is possible to understand suprematism also as a conception of space, that is, as a system that values not only the isolated plastic form, but above all the relationship between different formal units in an empty space—though full of power—generating a condition of desert.16

We defend here the idea that the Ibirapuera Park project is deeply rooted on the suprematist spatial paradigm. In this sense, the Brazilian architect used not only stylistic features and geometric shapes from Leonidov but also ways to articulate in his design the condition of desert as a tabula rasa of space. This conception of space also informs other important works by Niemeyer: Brasília is built on such a system. In our opinion, Niemeyer’s use of this spatiality can be read as an articulation of his “acute perception of Brazil’s modernization process, built on a vacuum of history. Hence the specificity of the tragic sense intuited by the architect, formalized as a kind of moment zero of creation” (Wisnik, 2022, p. 33). The void as a tabula rasa translates well this vacuum of history, typical of Brazilian self-understanding, and the dispersion of volumes generates a radicalization of the autonomy of architecture that points to the isolation at the heart of the modern condition (Wisnik, 2022).

If we access these relations through drawing, it is agreeing with Telles (1994, p. 95) that Niemeyer’s forms are not exactly sculptural but appear as “flat figures that arise, paradoxically, from a background.” This confirms, in our view, the strong link between the Brazilian architect’s conception of space and the suprematist strand, founded ipsis litteris in this paradigm.

The presence of the marquee, however, complicates the suprematist space, as it suggests an integration of the otherwise dispersed volumes. It should be noted that the use of this structure is undetermined in the project, which allows an opening for integration not only between

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16 The introduction into architecture of a system originating from painting is part of a broader context of figurative contaminations, in which the avant-garde in visual arts informed, in certain episodes of modern architecture, “not only its more epidermal figurability but also the deepest structure of the architectural organism” (Fiz, 1986, p. 10).
architectural volumes but also between the users of the Ibirapuera Park: currently, the marquee—with an area of approximately 26,000 m² and 650 m long—is occupied by strollers from the most diverse social classes, cyclists, street vendors, athletes and many urban tribes such as skateboarders and breakdancers. As Zein (2012, p. 134) describes:

The marquee is there not only to shelter us from the rain and the sun but also to define a here and a there, a squeezed landscape from the horizon and a more open view nearby, a route and a succession of events, making and breaking into uncertain territories, vague and not static, of tribes and types. People use it at will but in full coexistence: clashing and ignoring each other, navigating between individuals, crowds and groups.

The circulation and coexistence of different groups and unexpected activities are possible by a structure that “does not determine human action but, on the contrary, provides for multiple social appropriation of space” (Franco et al, 2006). In this sense, a dialectic seems to operate between the drawing as design that determines and fixates a space in the project and the indeterminacy of the use of this space, which remains open to being re-signified.

Now, the possibility of social appropriation and the dynamic coexistence between different classes and ways of life makes the Ibirapuera Park—and its marquee in particular—a powerful case for discussing contemporary potentialities of the use of urban space and architecture. This seems to bring up to date the desire of an avant-garde architect like Leonidov for social communion in a space devoid of hierarchies.17 In our view, Niemeyer’s architecture actualizes, within contemporary conditions and by paradoxically complicating suprematist spatiality, a desire present in the Russian avant-garde to produce a space in which, even amidst a tragic and generalized cultural condition of isolation, an integration between bodies remains possible.

17 As a caveat, it is not a matter of affirming here an exact transposition in the Ibirapuera Park of the imagined practices of socialization in the proletarian architecture of Leonidov, but the updating of a general idea of socially engaged uses of space through appropriation in a context in which classes no longer matter. This would, in fact, relate to Niemeyer’s own ideal of an egalitarian public culture (Underwood, 2003, p. 115).
REFERENCES


