ON CAPITAL AND ARCHITECTURE: ARCHITECTURAL CAPITAL IN THE CONSTITUTION OF SOCIETY

Bruna da Cunha Kronenberger[*]
Frederico Rosa Borges de Holanda[*]

[*]Universidade de Brasília, Faculdade de Arquitetura e Urbanismo, Programa de Pós-Graduação em Arquitetura e Urbanismo, Brasília, DF, Brazil

Abstract

Reflecting on society and the diverse assets at our disposal through which we shape our place within it signifies comprehending the multiple dimensions that constitute it. For Pierre Bourdieu, it is crucial to understand the various types of capital (resources, means and capacities) that we mobilize in order to meet our needs, and that characterize who we are. By incorporating architecture into the constitution of society, based on the space syntax theory, we argue that the way we organize ourselves – bodies in space and time – and the way we organize places constitutes a social macrostructure, into which architectural capital is inserted, which is the ability of a subject to mobilize architecture for his or her purposes. This capital entails possibilities or restrictions regarding how we occupy places and move within them, as well as the conditions that determine the visibility of others. It consists of both spatial capital and building capital, the former referring to open spaces with unrestricted access, and the latter to closed spaces with restricted access. This article aims to present the theoretical framework used to formulate the conceen of architectural capital.

Keywords

Theory of Capital; Habitus; Architectural Capital; Spatial Capital; Building Capital.

SOBRE CAPITAL E ARQUITETURA: O CAPITAL ARQUITETÔNICO NA CONSTITUIÇÃO DA SOCIEDADE

Bruna da Cunha Kronenberger[*]
Frederico Rosa Borges de Holanda[*]

[*]Universidade de Brasília, Faculdade de Arquitetura e Urbanismo, Programa de Pós-Graduação em Arquitetura e Urbanismo, Brasília, DF, Brasil

Resumo

Pensar na sociedade e nos diversos ativos dos quais dispomos e pelos quais nos inserimos nela significa compreender as diversas dimensões que a constituem. Para Pierre Bourdieu, carece entender os vários tipos de capital (recursos, meios e capacidades) que mobilizamos para atender nossas necessidades e que caracterizam quem somos. Ao incluirmos a arquitetura na constituição da sociedade, com base na Teoria da Sintaxe Espacial, defendemos que a forma como nos organizamos – corpos no espaço e no tempo – e a forma como organizamos os lugares constituem uma macroestrutura social, na qual se insere o capital arquitetônico, que é a capacidade do sujeito de mobilizar a arquitetura para seus fins. Esse capital implica possibilidades ou restrições em relação à maneira como estamos nos lugares e nos movemos neles e às condições de visibilidade do outro; ele é composto pelo capital espacial e pelo capital edilício, o primeiro referente aos espaços abertos, de acesso irrestrito, e o segundo, aos espaços fechados, de acesso restrito. Este artigo tem o objetivo de apresentar o arcabouço teórico utilizado para a construção do conceito de capital arquitetônico.

Palavras-chave

Teoria dos Capitais; Habitus; Capital Arquitetônico; Capital Espacial; Capital Edilício.

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1. Introduction

Reflecting on society and the various resources at our disposal necessitates comprehending the multiple dimensions that constitute it, extending beyond that of economics, even though it serves as the foundation of the social world. According to Pierre Bourdieu (2017), we cannot explain society without fully understanding capital in all its forms. While over recent decades, certain forms of capital have been widely discussed, such as cultural, political, social, and symbolic capital, the spatial dimension has gained increased attention. The way in which society organizes itself spatially has resulted in advantages for some and disadvantages for others, i.e., a differentiated distribution of a particular kind of capital.

By incorporating the socio-spatial structure into the constitution of society, and drawing on the spatial syntax theory (SST), we argue that the way we organize ourselves as bodies ordered into space and time, and the way we organize places, constitutes a social macrostructure (Holanda, 2022). Within this structure, the field of Architecture (capitalized to denote the discipline) refers not only to buildings but to all appropriated space – streets, squares, cities, and natural landscapes. Architectural capital – comprising solids, voids, and the relationships between them, on any scale – pertains to places as resources and attributes of the subject, implying possibilities or restrictions on how we appropriate spaces, and move within them, as well as the conditions for the visibility of the other. As with other forms of capital, architectural capital constitutes a lifestyle, and influences the way in which individuals appropriate both public and private spaces.

This article builds on previous writings by outlining the conceptual foundations of the notion of architectural capital, inspired by Bourdieu, and demonstrates how we have progressed in relation to geographical studies on spatial capital by exploring its morphological dimensions. The article has been organized into seven sections, with the first being this introduction. The second, "Starting point", discusses the epistemological assumptions that have guided the research. The third section, "Spatial Syntax Theory", presents the foundations and gaps of the theory related to the construction of the concept of architectural capital. The fourth, "The Theory of Pierre Bourdieu", examines the theory put forward by the French sociologist (1930-2002) that inspired the notion of architectural capital, addressing the concepts of capital, habitus, and taste. The fifth section, "The Spatial Dimension of Capital", advances the discussion of capital theory in relation to the field of urban geography by introducing the spatial dimension. The sixth section, "Architectural Capital", presents the eponymous concept, which encompasses spatial capital (along with its developments) and building capital, discussing how this type of capital also constitutes habitus and the tastes of subjects. Lastly, the seventh and final section presents the final considerations, which explore the contributions and limitations of the research.

2. Starting point

Studies in the field of Architecture encompass two approaches: the investigation of causes and of effects (Figure 1). We start from an understanding that architecture (with a lowercase "a", referring to a dimension of places) results from a social, economic, cultural, political, and environmental context, while simultaneously having effects on the environment and society – architecture is understood both as a dependent and an independent variable (Holanda, 2013).
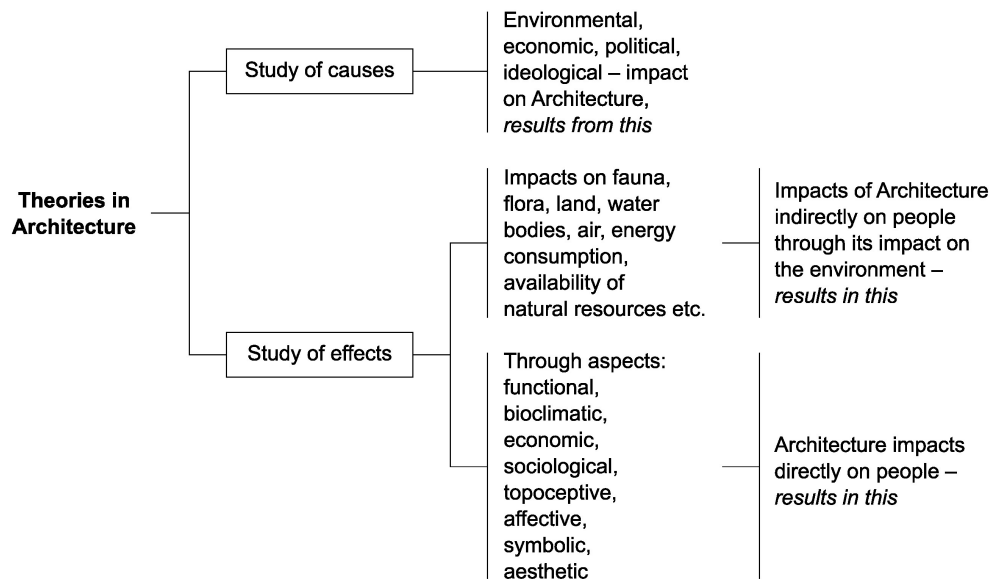
Figure 1. Causes and effects of Architecture

Source: Adapted from Holanda (2022).

With regard to these effects, we need to fully understand their multifaceted reality. On a previous occasion (Holanda, 2007) eight aspects of architectural performance were defined that help us comprehend its implications for the environment and society, namely: functional, bioclimatic, economic, sociological, topoceptive, affective, symbolic, and aesthetic aspects (Figure 1). While the first four are linked to the material implications of architecture, the resources mobilized to implement it, practical interference with subjects in terms of their organization in space and time, and the influence on their biological bodies, the last four relate to what architecture communicates to us – in other words, the first four do things, while the last four express things.

It should be emphasized that this is an analytical trick, and what truly matters is the spirit of its taxonomy, not whether the aspects are exactly eight or if they are precisely these. As it is with any taxonomy, just as with any theoretical construct, reality is always more nuanced than the construct – the inevitable yet necessary price to be paid for theorization (Holanda, 2010, p. 28).

This study aims to reveal the effects of architecture, namely the sociological aspects of the performance of places (Figure 2), which involves answering the following questions:

- How does the configuration of architecture influence the way in which individuals and groups locate themselves in space and move within it, and consequently, the possibilities and restrictions for encounters and avoidance, for the visibility of the other, and for the constitution of social structures ("syntax" of architecture)?
- How does architecture constitute life and our ways of living?
- How do the type, quantity, and relative location of activities in space and time imply usage patterns of place ("semantics" of architecture)?
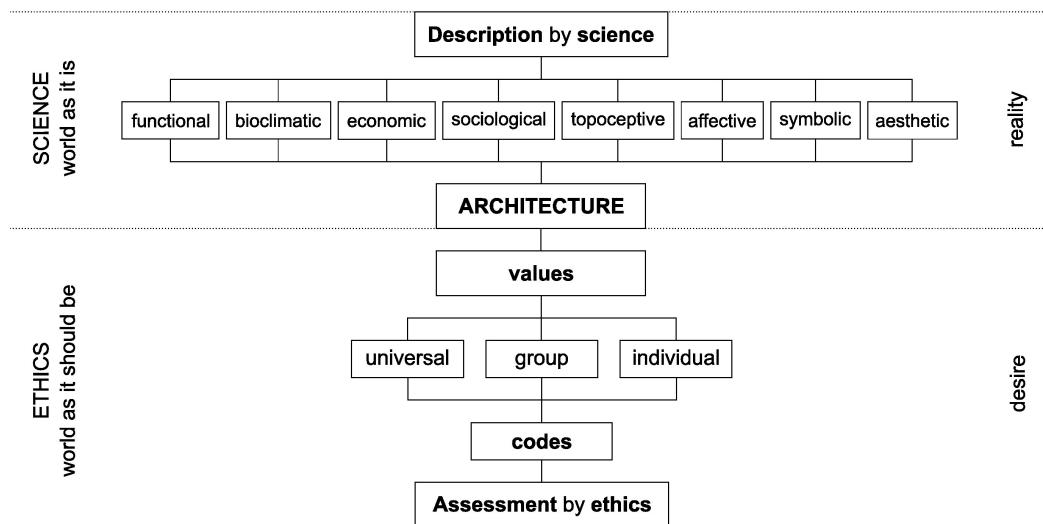

Figure 2. Science and ethics: the world as it is (the scope of objective reality) and the world as it should be (the scope of desire)

Source: Adapted from Holanda (2022).

3. Spatial Syntax Theory

If we are speaking of possibilities or restrictions regarding how we occupy places and move around within them, as well as the conditions for the visibility of the other, we are within the scope of spatial syntax theory (SST) (Hillier; Hanson, 1984). The central axiom of SST posits the existence of a social logic of space and a spatial logic of society: "*Space socially organized by humans is a function of forms of social solidarity*. We organize space with the aim of satisfying and reproducing systems of interpersonal encounters"[1] (Holanda, 2013, p. 264, emphasis in the original).

Bill Hillier and Julienne Hanson, the primary mentors of the theory, placed the connection between space and society at the forefront of attention. For them,

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1. This and all other non-English citations hereafter have been translated by the authors.

the relationship between urban space and social organization involves two formulations (Hanson; Hillier, 1987): the organization of space by society and the organization of society by space. The first refers to the way each society transforms its environment through boundaries, constructed objects, and differentiated spaces, resulting in distinct architectural identities. This involves concrete outcomes – residences, institutional buildings, and urban settlements, among others. These are fairly easy to identify and discuss, they "are relatively durable social products which outlast individual intentions and crystallize society in a material form" (ibid., p. 263). The second formulation consists of how society appropriates space, constructing patterns of encounters and avoidance. These patterns, while momentary and fleeting, should not be seen as merely social but rather as spatial phenomena. Thus, although society is not characterized solely by these physical interactions, it takes on a material form. Therefore, "if we are to understand the social nature of space, then we must also understand the spatial nature of human society" (ibid.).

The SST encompasses the relational nature of urban space, emphasizing that, beyond the individual elements that comprise it, the way they are linked with one another is significant (Medeiros, 2013). Spatial configuration, defined as the articulation of the elements within a specific spatial system (Bafna, 2003), is capable of revealing existing differential relationships, as various spaces have distinct conditions relative to the rest of the system. Some, on average, are closer or farther from others; some, on average, are more central to the movement among others, or outside it. Thus, the configuration of the road network is an important factor in defining movement patterns, revealing characteristics that either promote or restrict pedestrian and vehicle movement, as demonstrated by the literature through empirical analyses (Hillier; Penn; Grajewski, 1993; Penn et al., 1998; Chiaradia; Moreau; Raford, 2005; Loureiro; Medeiros, 2019; Kronenberger; Saboya, 2019).

The SST has developed techniques for analyzing spatial configuration, among which is the axial map, derived from a matrix of intersections of axial lines, understood as the longest straight lines capable of covering the entire system of convex spaces. These are the "primary places" in the public realm – areas within which we may walk in a straight line between any of their points (Hillier; Hanson, 1984). The axial map is a linear representation of spatial configuration, from which measurements representing its axial interrelations are calculated using various software designed for this purpose. These values may be represented numerically or graphically, along a chromatic scale where the most accessible lines trend toward red, while the least accessible trend toward blue. The most integrated lines are those that are the most accessible and permeable within the urban system.

Like any theory, SST has faced unjust criticisms, including the accusation of being "deterministic" (Holanda, 2019). It is not. Several studies based on SST have confirmed that architecture affects our lives by creating a field of possibilities (which may or may not be explored) and a field of restrictions (which may or may not be overcome), depending, in both cases, on the will and capacity of the subjects. Another injustice – the accusation of being the "mathematization of the obvious" (ibid.) – disregards that significant syntactic research, such as in *The Social Logic of Space* (Hillier; Hanson, 1984), *O espaço de exceção* [Exceptional Space] (Holanda, 2002), or *Urbis Brasiliae* (Medeiros, 2013), presents extensive non-quantitative contributions. We are not downplaying the importance of quantitative research; on the contrary, numbers have much to reveal about social reality. It should be remembered that, during the pandemic, all eyes were on the numbers.

On the other hand, certain criticisms deserve acknowledgment, and their solutions should be incorporated in order to obtain a better understanding of urban reality. On a previous occasion (Holanda, 2013), we emphasized the importance of considering the semantic implications of architecture alongside the syntactic perspective. There are "labels" that overlap with the physicality of places (their syntax), which qualify an institution and delimit a social domain: residences, schools, hospitals. Hence, architecture carries cultural meanings that do not constitute "attributes directly legible in physical structures – they are semantic attributes" (ibid., p. 163). It encompasses syntactic implications, contained within the configuration of places, and semantic implications, superimposed onto this configuration – and both significantly influence how places are appropriated.

A study on Vila Planalto, in Brasília, located 1.5 km from the Praça dos Três Poderes [Three Powers Square] and 6.1 km from the Bus Station Platform (the functional center), highlights the importance of considering local attributes (Figures 3, 4, and 5). Vila Planalto presents a social stratification very similar to that of the city, which is remarkable when we consider the inequality that prevails between the different regions of Brasília. Within the same borough, there are "families of different income levels, living, indeed, in different houses, lots, blocks, and streets, but constituting a continuous neighborhood. [...] The architectural and urban variety determines (I do not hesitate to use the verb) the social variety" (id., 2020, p. 15). The case of Vila Planalto exemplifies the role of local attributes and the importance of considering them in urban investigations.

Figure 3. Vila Planalto – building variety: low-income
Source: Holanda (2020).

Figure 4. Vila Planalto – building variety: middle income
Source: Holanda (2020).

Figure 5. Vila Planalto – building variety: high income
Source: Holanda (2020).

A more comprehensive study, which included other areas of Brasília[2] besides Vila Planalto (Holanda, 2020; 2022), corroborated the conclusions of the previous study. An analysis of ten locations demonstrated that, although there is a high correlation between income and distance from the center, we also need to observe the outliers, i.e., those areas where the distance from the center does not explain the income distribution. In these cases, even though location is of importance, what justifies the income variation is the different building types: for example, lot sizes, house or apartment, and the presence (or absence) of certain architectural features, such as a garage or elevator. In this case, the typological variety is related to access across various income levels.

Medeiros (2013) acknowledged the limitations of the SST and drew attention to what distinguishes it from other theories: the relational scope. The SST, or the syntactic analysis of space, as he also calls it, reaches street level without losing its connection to the totality of urban space. It allows for correlations with other aspects

2. Namely: Lago Sul; "upscale" Sudoeste [Southwest region]; horizontal condominiums in the Grande Colorado neighborhood; Superquadra 103 Sul [Superblock 103 South]; "vertical" Águas Claras; "economic" Sudoeste; Superquadras 409-412 Sul [Superblocks 409-412 South] (Blocos JK); Recanto das Emas; and Recanto das Emas.

of the city and society, such as socioeconomic factors, resulting in complementary analyses. The SST provides tools to represent and analyze space that enable us to quantify the different levels of accessibility of each street. The theory certainly does not reveal everything about spaces (none do), although in a possibly unprecedented manner, it provides insights into the logic of social practices and their relationship with the configuration of the places where they occur (Holanda, 2013).

4. The Theory of Pierre Bourdieu

Can all the resources at our disposal be converted into money, into economic capital? Can political influence be converted into paper notes? Can social relationships be converted into financial transactions? Can a higher education degree be converted into bank credit? For Pierre Bourdieu (1986), the difficulty of converting certain practices and objects into money stems from the fact that this conversion is rejected by the very intention that produces these practices or objects. According to the French sociologist, it would be impossible to explain the social world without capital in all its forms – not just the economic form. The notion of capital is related to any resource or power that is manifested in a social field; we continually perform various types of capital in many ways.

In the sociological tradition, particularly from the Marxist perspective, society is composed of two macrostructures: the economic infrastructure (social production) and the political-ideological superstructure (social reproduction), within which the different types of capital are distributed. In addition to economic capital, Bourdieu (2017) discusses cultural capital (educational qualifications) and social capital (social relationships), as well as symbolic capital. Other possible forms of capital however, are not dismissed by the sociologist.

Economic capital, located within the economic infrastructure, pertains to the resources derived from the production, circulation, distribution, and consumption of material goods and services. In terms of the political-ideological superstructure, we propose a taxonomy that encompasses political, ideological, and cultural capital. While political capital refers to the capacity to make or influence decisions, that is to say, exerting power over oneself and others, the latter two are related to universal and particular codes, respectively (Figure 2). Symbolic capital is of a "second order" and denotes the recognition of a resource: not simply the recognition of the object that constitutes an individual's material wealth, but rather a sign that qualifies and, therefore, promotes distinction.

Bourdieu (2017) identified the existence of three types of cultural capital: embodied, objectified, and institutionalized. Embodied cultural capital requires a process of inculcation and assimilation, which takes time and must be personally

invested – "it is a having that has become a being" (id., 1979, p. 4). Objectified cultural capital, on the other hand, results from the possession of properties such as books, paintings, and sculptures, which can be transmitted in their materiality. Institutionalized cultural capital refers to the possession of a diploma – "a certificate of cultural competence which confers on its holder a conventional constant" (ibid., p. 5).

Each individual possesses a total volume of capital, or global capital, derived from the distribution of different types of capital and constitutes a structure within the larger whole. While the overall volume of capital can suggest a distinction between social classes, the structure reveals more clearly defined divisions within the same class, which enables class fractions to be identified. University professors and directors of state-owned companies, for example, may belong to the same class, since their respective total volumes of capital may be similar. However, when examining the structure of these capitals, a university professor is likely to have a higher volume of cultural capital and a lower volume of economic capital, in contrast to what would be likely for the director of a state-owned company. Thus, while they belong to the same class, they are distributed across distinct class fractions.

Drawing on the notion of capital, Bourdieu (ibid.) defined a social space – not the physically located space of the field of architecture, but rather an abstract representation of the social scale – with three fundamental dimensions. Besides the volume and structure of capital, the evolution of these two properties over time is also considered. Each individual occupies a specific position within this social space, and each position can only be understood in relation to the others. This social space is configured as a system of differences, with individuals occupying various positions. Thus, the social space itself is characterized as a distinct space, in which each individual's position is qualified by their unique volume and structure of capital, thereby defining their position within that space.

Throughout their trajectory, in terms of the evolution over time of both the volume and structure of their capital, individuals may accumulate capital, change its structure, and shift their position within the social space. Members of the middle class, for example, direct their resources towards educating their children (cultural capital), hoping that the next generation will ascend towards the upper class, with greater returns in economic capital. The hierarchy of the different types of capital, however, is not static; it is subject to dispute among class fractions and may vary in certain conjunctures (ibid.).

A person's worldview depends on the position they occupy within this space, from which the desire arises to either transform or preserve: "The social positions which [...] are also strategic emplacements, fortresses to be defended and captured

in a field of struggles"3 (ibid., p. 229). Thus, strategies of reproduction emerge, which are the practices through which individuals tend to preserve or increase their assets, and therefore maintain or improve their position within the social space. However, everyone involved employs these strategies, which signifies that everyone is progressing in the same direction. Bourdieu argued that "permanence can be ensured by change and the structure perpetuated by movement"4 (ibid., p. 159). To preserve, one must modify.

From a Bourdieusian perspective, the volume and structure of capital, combined with social trajectory, result in a habitus. In the Bourdieu's words, habitus can be understood as the "unifying and generative principle of practices, [...] the embodied form of class condition and the constraints it imposes" (ibid., p. 97). Habitus "functions at every moment as a matrix of "perceptions, appreciations, and actions"5 (id., 2003 p.57), and thus different positions within social space result in different habitus, while proximate positions lead to similar habitus. Immediate affinities arise from the identification of one habitus with another, and this identification helps guide social encounters (id., 2017).

Bourdieu (ibid.) argues that individuals perceive practices and objects through the schemas of perception and appreciation of their habitus, which leads to different meanings for the same practice or object. This notion is linked to differential extrinsic gains, i.e., distinct advantages (social, economic, for example), depending on the individual's position within the social space. Variations in practices, therefore, indicate variations in the perception and appreciation of these advantages, such as the preference of the dominant class for practicing sports in exclusive, separate spaces (ibid.). As the Bourdieu stated: "[...] different conditions of existence produce different habitus [...]"6 (ibid., p. 164).

Systematic products of habitus, lifestyles "[...] become sign systems that are socially qualified (as 'distinguished', 'vulgar' etc.)"7 (ibid.). At the root of lifestyle, as addressed by Bourdieu (2017), we come across taste, the propensity, and the aptitude to appropriate a particular object or practice, whether through material

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3. N.B. For direct citations, the English version was used of Bourdieu, P. *Distinction – A social Critique of the Judgement of Taste*. Harvard University Press, Cambridge, Massachusetts. 1984, p. 244. Translated by Richard Nice.

4. N.B. For direct citations, the English version was used of Bourdieu (1984, p.164).

5. N.B. For direct citations, the English version was used of Bourdieu, P. Outline of a Theory of Practice. Translated by Richard Nice. Cambridge: Cambridge University Press, 1977, p. 95. (Emphasis in the original).

6. N.B. For direct citations, the English version was used of Bourdieu (1984, p.170).

7. N.B. For direct citations, the English version was used of Bourdieu (1984, p.172).

or symbolic appropriation. For Bourdieu, taste is indeed a topic of discussion! The ideology of natural taste naturalizes real differences, while in practice, tastes "function as privileged markers of 'class'"[8] (ibid., p. 9).

Taste transforms objects and practices into distinctive signals. Our choices are tied to our positions within social space, carrying distinctive values, even if without any intention of distinction. Bourdieu (2017) argued for the opposition between what he termed the taste of luxury (or freedom) and the taste of necessity, whereby the former is linked to the dominant class and the latter to the working class. The taste of necessity refers to a relationship of deprivation, to an inferior position in the social space, to holding less overall capital, and implies a taste for what is necessary for individuals in that position.

Bourdieu (ibid.) contended that three main items most strongly highlight this distinction: food, culture, and presentation, in which presentation is understood as the way the body is positioned and presented. Bourdieu stated that "the body is the most indisputable materialization of class taste, which it manifests in various ways"[9] (ibid., p. 179). The body, like taste, must be understood as a social product. The interest individuals assign to their self-presentation is "proportionate to the chances of material or symbolic profit they can reasonably expect from it"[10] (ibid., p. 194).

Bourdieu (2017) also highlighted the difference between form and function: while upper-class fractions are interested in form, those in the lower-class are more concerned with function. For the dominant class, the presentation of the dish matters more, for example, while for the worker, the meal must be nourishing, providing sustenance for their labor. Luxury taste is reflected in the French restaurant, with its meticulously organized dish, while the taste of necessity is reflected in the "lunch box", with rice, beans, and pasta. In this logic, "[T]he true basis of the differences found in the area of consumption, and far beyond it, is the opposition between the tastes of luxury (or freedom) and the tastes of necessity"[11] (ibid., p. 174).

For the Bourdieu, "[T]aste is what brings together things and people that go together"[12] (ibid., p. 225). Individuals tend to gravitate towards their peers, that is to say, towards others who occupy similar positions in social space, while distancing themselves from those who are different.

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8. N.B. For direct citations, the English version was used of Bourdieu (1984, p. 2).

9. N.B. For direct citations, the English version was used of Bourdieu (1984, p. 190).

10. N.B. For direct citations, the English version was used of Bourdieu (1984, p. 202).

11. N.B. For direct citations, the English version was used of Bourdieu (1984, p. 177).

12. N.B. For direct citations, the English version was used of Bourdieu (1984, p. 241).

5. The spatial dimension of capital

Bourdieu's theory lacks an understanding of architecture and society as material phenomena (as artifacts): society as a spatial phenomenon made up of bodies arranged in space and time, and architecture as a construct of volumes and spaces, solids and voids, barriers and permeabilities, opacities and transparencies.

In urban geography, the field responsible for the study of urban space, discussion around the spatial dimension of capital culminated in defining the concept of spatial capital, initially defined as a set of resources accumulated by an individual that results in the ability to access places and people (Lévy, 2013; Rérat, 2018). Possessing spatial capital signifies accumulating advantages stemming from the spatial dimension of society, where the scale of appropriation of these advantages becomes a key factor (Lévy, 2013; Rérat, 2018): "Cities are spaces of multiple speeds and a high spatial capital means the utmost appropriation and articulation of the various scales [...]" (Rérat, 2018, p. 2).

Spatial capital encompasses more than just an individual's place of residence or their ability to move within the city. Coined in the 1990s by Lévy (1994), the concept distinguishes between two dimensions: position capital and situation capital. The former pertains to a fixed location and its spatial assets, emphasizing the importance of the place of residence, while the latter refers to flows, i.e., the space an individual appropriates based on their possibilities of mobility (Rérat, 2018).

Position capital includes location; therefore, the spatial configuration directly impacts the dimension of spatial capital. This capital is intently tied to the place of residence, which transforms certain areas of the city into more desirable, valuable areas than others. In the case of situation capital, some authors (Flamm; Kaufmann, 2004; Kaufmann; Viry; Widmer, 2010; Kellerman, 2012; Rérat, 2018) have developed the concept of *motility*—the capacity or facility of mobility. This notion, borrowed from biology, refers to how an individual appropriates his or her possibilities of movement according to their personal aspirations, covering three key aspects: possibilities, skills, and appropriation.

The focus on possibilities relates to accessibility in terms of transportation networks, not only concerning physical infrastructure but also services, including prices, schedules, and other factors. These are the movement possibilities available to individuals based on their location and time. As a result, this "portfolio of access rights" (Flamm; Kaufmann, 2004) is also connected to a subject's place of residence (Rérat, 2018).

The focus on skills, or the aptitude for movement, relates to an individual's knowledge and abilities, as well as their organizational capacity; factors deemed essential for planning activities in spatial and temporal terms. Financial condition,

physical ability, and owning a car or bicycle, for example, are examples of some of the skills that refer to the resources individuals possess in order to take advantage of the available possibilities.

Lastly, the focus on appropriation pertains to the act of movement itself and concerns how individuals, using their competencies, appropriate the available possibilities. According to Kellerman (2012), there are basic reasons for mobility, daily movements, and the "pull effects" of events, places and people. During the appropriation phase, in addition to possibilities and skills, "as well as in light of the social and cultural contexts of mobility actors, possibly yielding several options of mobility modes for a specific planned movement, eventually leading to the choice of a specific mobility mode, or alternatively to avoidance of mobility at all"[13] (ibid., p. 175).

The greater or lesser possession of spatial capital results in differentiated urban advantages. At the same time, it highlights the unequal distribution of resources across space and society, affecting an individual's dominion over the city and influencing his/her spatial choices in terms of location and mobility. Understanding urban phenomena through the lens of spatial capital not only requires examining urban configuration, but also involves considering how individuals appropriate space and their dominion over the different scales. Spatial capital is a characteristic of territorially embedded subjects (Apaolaza; Blanco, 2015; Blanco; Apaolaza; Rongvaux, 2015; Apaolaza et al., 2016).

Spatial capital, as addressed in geography, reveals aspects of differentiated appropriation of the city (or places, in general) by individuals. Next, we explore how Architecture may enrich this approach by detailing the morphological attributes of sites, both at the larger settlement scale – such as the city as a whole – and at the smaller scale of its elements – streets, squares, and buildings.

6. Architectural capital

We propose the concept of architectural capital as a comprehensive idea that encompasses appropriated places at all scales. While the approach of geography focuses more on the means of appropriating places rather than on the attributes of the sites themselves, aspects such as location are still considered.

However, it is necessary to revisit the social macrostructures. Traditionally, sociology has viewed society as comprising two main structures: the economic infrastructure of producing goods and services, and the political-ideological superstructure. We propose a third: the socio-spatial structure, composed of the

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13. N.B. For direct citations, the English version was used of Kellerman, A. Potential Mobilities, *Mobilities*, v 7, n.1, 2010, p. 175.

physicality of our bodies and the places in which they are distributed (their syntax), as well as the categories layered over this physicality (their semantics). Bourdieu addresses social capital, which pertains to relationships between individuals. We do the same, except we emphasize the need to consider the arrangement of bodies in space – whether real or virtual – and time. Hence, social capital is situated within the socio-spatial macrostructure.

Arrangements of bodies are always positioned in concrete places, and places are the other side of the socio-spatial macrostructure, here translated into the concept of architectural capital. In correlation with the notion proposed by geography, architectural capital pertains to places at various scales, with nuances that geography fails to address. Thus, we propose that it is composed of both spatial capital and building capital (Table 1).

Infrastructure for producing goods and services
Economy:
Economic capital
Political-ideological superstructure
Politics:
Political capital
Ideology:
Ideological capital
Cultural capital
Socio-spatial
Social capital
Architectural capital (spatial capital + building capital)

Table 1. Social macrostructures and capitals
Source: Adapted from Holanda (2022).

The socio-spatial structure draws from the basic axioms of SST, which posit that society consists of bodies arranged in time and space and the places where these arrangements occur. Essentially, the theory examines the relationships between these two instances. In Bourdieu's framework, social capital is described as the "capital of social connections that may, when necessary, provide useful 'supports'" (Bourdieu, 2017, p. 112). Within the theoretical framework we have proposed, social capital is situated within the socio-spatial structure, further characterized as the system of encounters and avoidances in space and time: Who? With whom? Doing what? Where? When? For how long?

The second instance in our framework concerns places which we define as architectural capital (Table 1). This taxonomy is inspired by Milton Santos and his concepts of fixities and flows that shape the city: "We have things that are fixed, flows that originate from these fixed things, and flows that arrive at these fixed things" (Santos, 2014, p. 85). Within architectural capital, we redefine spatial capital, unlike that of urban geography, as spaces of unrestricted access to both flows and fixities, while building capital refers to fixities with restricted access.

The spaces of flows that constitute spatial capital refer to the "entire" urban context – the "global", in SST terms –, which signifies the appropriation of the city on a global scale: the quality of our movements depends not only on the means of mobility (as emphasized by the aforementioned geographers) but also on the types of channels through which we move. These channels correspond to public byways for the passage and circulation of people and goods, and are therefore closely linked to the urban configuration and the placement of a roadway within the larger urban fabric to which it belongs. Likewise, beyond the relational aspect (a key focus of SST), this network of roadways is also characterized by more specific variables, such as pavement quality, lighting, landscaping, and traffic signals. Each social subject corresponds to a certain spatial capital of flows: each of us engages with a specific design of the city – the one we appropriate in our daily lives or in special moments. The shorter and more comfortable our commute, the greater our spatial capital of flows.

Open, unrestricted fixed spaces, on the other hand, correspond to the "parts"– the "local", in SST terms. These include public spaces in which we may stay, such as parks, squares, streets (as spaces for staying), gardens, and plazas. The more we have access to quality places of this kind near our residence or that are easily accessible, the greater our spatial capital. Luxury vertical condominiums in Brazilian cities often seek proximity to these public byways – an additional factor that valorizes the value of the residence (Canedo; Medeiros; Gondim, 2019). Living near the city center or in areas with a higher accessibility correlates with greater spatial capital. Likewise, having access to urban infrastructure or being close to a park or a square, depending on the quality of these spaces, also implies a certain level of spatial capital.

Closed fixed spaces, with restricted access, constitute building capital, which, like open fixed spaces, correspond to the "parts" – the "local" – but differ in their restricted access. These include public or private buildings, residences, and private open spaces, such as clubs or even private parks, where access is granted through some form of resource. Therefore, local attributes, such as the quality of the buildings, the presence (or absence) of architectural or urban features, and

services like lot and building size, the inclusion of a garage, balcony, elevator, or pool, result in greater or lesser building capital.

The notion of architectural capital indicates the need to consider architecture in its various scales, as a constituent of society and also as an independent variable. Based on Bourdieu's (2017) theory of capitals, we argue that architecture should be understood as a resource or asset manifested within a social field, thus a specific type of capital, one that cannot be reduced to economic capital, although it relates to it. We believe that, like other forms of capital, architectural capital also constitutes a lifestyle and a habitus, which implies distinct tastes and different ways of positioning ourselves within society.

Beyond the social space, people with similar habitus also tend to gravitate toward each other in the physical space of cities, while simultaneously distancing themselves from those who are different. The relationship of proximity or distance in the social space is reflected in urban space, resulting in socio-spatial segregation, not only from a static perspective but also considering social dynamics, i.e., the interactions and movements of individuals who tend to converge or remain invisible. Possessing greater or lesser architectural capital, that is to say, the places we frequent and how we do so, leads to different forms of appropriating the city, and therefore, distinct habitus.

7. Final considerations

The proposal to include the socio-spatial structure in the constitution of society, alongside the infrastructure for producing goods and services and the political-ideological superstructure, is based on SST, which understands that the way we organize ourselves in space and how we arrange places constitutes a social macrostructure within which different forms of capital are distributed. This is supported by the work of Bourdieu, since the social world cannot be explained without capital in all its forms. However, Bourdieu refers to spatiality only sparingly.

On one hand, SST provides us with the notion that we socially organize space and are spatially organized as a society, thereby bringing the spatial dimension to the forefront. However, it addresses subjects only through very broad categories— gender, generation, social class. By incorporating Bourdieu's contributions, social subjects become more nuanced, highlighting various forms of place appropriation. On the other hand, Bourdieu contributes to the construction of architectural capital by identifying the subject and positioning him/her within a social space characterized as a system of differences. Architecture, as an independent variable, as we have argued, at all its scales, also influences how each individual embodies his/her capitals. The notion of architectural capital arises from this understanding.

Architectural capital refers to both the whole and its parts, in SST terms. Milton Santos, with his notion of fixities and flows, contributes to this theory for architectural capital, which consists of spatial capital (both fixities and unrestricted access flows) and building capital (fixed spaces with restricted access). While distinct individuals possess different material conditions for living in the city and various possibilities for movement, cities also become a system of differences, in which social space manifests itself. Where we live and how we live, the places we frequent, and how we move say a great deal about who we are as diverse individuals distinctly positioned within society.

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Bruna da Cunha Kronenberger

Architect and urban planner graduated from the Faculty of Architecture and Urbanism at the Universidade de Brasília (FAU/UnB). She holds a master's degree in architecture and urbanism from the Postgraduate Program in Architecture and Urbanism at the Universidade Federal de Santa Catarina (PósARQ/UFSC). She is a specialist in Environmental Geoprocessing from the Instituto de Geociências at UnB. She holds a doctorate in Urban and Regional Planning from the Postgraduate Program in Architecture and Urbanism at FAU/UnB. She is a member of the Grupo de Pesquisa Dimensões Morfológicas do Processo de Urbanização (DIMPU), the Laboratório de Configuração Arquitetônica (ConfigARQ) and Centro de Estudos de Espaços Públicos (CEEP). Currently, she is working as a volunteer professor at FAU/UnB and as architect at the Secretary of State for Urban Development and Housing (SEDUH) of Brasília.

> **Email:** brunakron@gmail.com
> **ORCID:** 0000-0003-4458-1137
> **Authorship contribution:** Conception; Formal Analysis; Investigation; Methodology; Project Administration; Writing – Original Draft.

Frederico Rosa Borges de Holanda

Architect from the Universidade Federal de Pernambuco Federal (UFPE, 1966). PhD in Architecture from the University of London (1997). Retired full professor, senior collaborative researcher, and emeritus professor at the Universidade de Brasília (UnB),

where he has lectured since 1972. His books include *O espaço de exceção* (2002) – based on his doctoral thesis of the same name and winner of the Anpur Rodrigo Simões Award for doctoral thesis in 1998; *Brasília: cidade moderna, cidade eterna* (2010) – winner of the Anparq Award in the "Book" category; *Exceptional Space* (2011); *Oscar Niemeyer: de vidro e concreto / Of Glass and Concrete* (2011) – bilingual Portuguese-English edition; *10 mandamentos da arquitetura* (2013); and *Construtores de mim* (2019). Organizer of the works *Arquitetura & urbanidade* (2003) and *Ordem e desordem: arquitetura e vida social* (2012). He founded a publishing house (FRBH) that has published ten titles in architecture and literature by authors from UnB and colleagues from other Federal Institutes of Education (IFES). He is dedicated to producing films on architecture and culture – from the collection, 131 titles are available online. His research focuses on the relationships between architectural and urban configuration, the use of spaces by social categories (classes, genders, and generations), and socio-spatial segregation. He coordinates the research group *Dimensões Morfológicas do Processo de Urbanização* and serves as a senior researcher at the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).

Email: fredholanda44@gmail.com

ORCID: 0000-0002-3592-2246

Authorship contribution: Conception; Formal Analysis; Investigation; Methodology; Writing – Review and Editing.