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Learning and unlearning through Urban Morphology

Aprender e desaprender com a Morfologia Urbana

Aprendiendo y desaprendiendo con Morfología Urbana

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Abstract

The aim of this essay is to bring to the dialogue contemporary challenges in morphological studies organized around (at least) two main issues: first, aspects related tothe theoretical-methodological debate and, subsequently, some reflections on the teaching and learning process. These challenges are of a reflective nature and accompanied by more questions than answers. However, it is precisely the existence of these questions that motivates the development of research withinthe theoretical field of Urban Morphology from the perspective of the contributions from Architecture and Urbanism.

Keywords: Urban morphology; Research; Morphological studies; Architecture; Teaching.

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Resumo

O objetivo desse ensaio é trazer para o diálogo desafios contemporâneos nos estudos morfológicos organizados em torno de (pelo menos) duas principais questões: primeiro, acerca de aspectos que envolvem o debate teórico-metodológico e, na sequência, alguns apontamentos sobre o processo de ensino e aprendizado. Tais desafios são de caráter reflexivo e vem acompanhados mais de perguntas do que de respostas. Entretanto, é justamente a existência das perguntas que motiva o desenvolvimento de pesquisas no campo teórico da Morfologia Urbana sob uma perspectiva dos contributos da Arquitetura e do Urbanismo.

Palavras-chave: Morfologia urbana; Pesquisa; Estudos morfológicos; Arquitetura; Ensino.

Resumen

El objetivo de este ensayo es plantear los desafíos contemporáneos de los estudios morfológicos, organizados en torno a (al menos) dos cuestiones principales: primero, los aspectos del debate teórico-metodológico y, posteriormente, algunas observaciones sobre el sobre el proceso de enseñanza y aprendizaje. Estos desafíos son de naturaleza reflexiva y se acompañan más de preguntas que respuestas. Sin embargo, es precisamente la existencia de estas preguntas lo que motiva el desarrollo de la investigación en el campo teórico de la Morfología Urbana desde la perspectiva de las contribuciones de la Arquitectura y el Urbanismo.

Palabras clave: Morfología urbana; Investigación; Estudios morfológicos; Arquitectrura; Educación..

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Introduction

Researchers in various countries have been devoted to the development of the theoretical field of Urban Morphology, which can no longer be regarded, in itself, as a major novelty. In this context, approaches, authors, notions, and concepts have inspired studies such as those presented in this issue of the *Cadernos de Pós-Graduação em Arquitetura e Urbanismo* of the Graduate Program in Architecture and Urbanism at FAU-UPM. This opportunity adds to the growing number of national and international scientific events that increasingly foster exchange and dissemination of morphological studies. This occurs alongside the existence of research networks such as the Lusophone Network of Urban Morphology, created in 2010 and derived from the International Seminar on Urban Form, which dates back to the 1990s, and whose 2024 edition was hosted at Universidade Presbiteriana Mackenzie, organized by Professors Heraldo Borges and Denise Antonucci.

However, despite the opportunities and the breadth of possibilities offered by research in Urban Morphology, whether quantitative and or qualitative, cognitive and or normative, certain issues continue to resonate and challenges persistently confront us. Thus, given that the mapping of contributions and the genealogy of morphological studies has been established and is being updated in a systematic and consistent manner, some points and reflections concerning the theoretical field of Urban Morphology are brought into debate. This is done not with the intention of formulating overarching questions or providing definitive answers, but rather of recording questions that may keep the theoretical field updated and alive from contemporary and regional perspectives.

Thus, the aim of this essay is to outline contemporary challenges in morphological studies, organized around at least two main issues: first, aspects related to the theoretical and methodological debate; and, subsequently, some reflections on the teaching and learning process.

A first issue concerning theories and methods...

From a theoretical standpoint, as stated by Kropf and Beloto (2022, p. 2), "(...) there are several distinct approaches to the study of human settlements under the banner of urban morphology." A careful reading of this seminal article, translated by Professor Gislaine Beloto, leaves no doubt that the integration of concepts common to certain theories, along with the recognition of gaps, constitutes a desirable path, but one that must be pursued with rigor. As noted by the same author, such rigor is expressed through criteria of consistency, but also of specificity, generality, comprehensiveness, and coherence (Kropf; Beloto, 2022). Parsimony and boldness may go hand in hand in order to bring forward meaningful contributions without losing the essence of the theoretical field, thus avoiding merely labeling research as belonging to Urban Morphology while, in

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fact, not practicing it. When should boundaries be drawn between urban studies and morphological studies? When, even while addressing "physical form, use or activities or movement, control, perception, continuity or change, and the movement or flow of materials and information" (Kropf & Beloto, 2022, p. 5), does one cease to be within the domain of urban morphology? As in any composition, and returning to issues of consistency, the definition of a theoretical foundation may contribute to the search for answers.

Equally relevant is the combination of different fields of knowledge with research in architecture and urbanism, as well as the articulation between different areas of practice within these disciplines and the specific study of urban forms. Since the last decades of the twentieth century in Brazil, Santos (1984, n.p.) warned that, with the development of the first master plans, when "cities began to undergo serious analyses," the pursuit of increasingly detailed scientific descriptions led to the treatment of issues that were as varied as they were dispersed.

Are we not still facing the same challenge, namely that of acknowledging transversalities and seeking dialogue with Geography, History, Sociology, Mathematics, Anthropology, and Literature when studying an object as complex as cities? How can the necessary focus be maintained in order to contribute to research in Architecture and Urbanism? How can urban planning, ecology, and data-driven urbanism be combined while still maintaining, as a primary objective, research in urban morphology, if that is indeed the intention? Perhaps the key lies in the detail rather than in the enlarged picture, by giving particular attention to urban forms, to the elements that constitute them, and to their examination through documentary analysis, especially cartographic analysis.

The condition of comparative studies, it is important to recall, is one of the pillars of morphological studies. According to Scheer and Meneghetti (2022, p. 3), there are methodological procedures in research with different origins, but, in general, these involve successive stages of "(...) collection of formal data, recognition of patterns, development and testing of theories of change, and assessment of non-formal conditions." Among these, it is precisely in the second stage, that of pattern recognition, that comparable objects, under both diachronic and synchronic conditions, at the same scale and with standardized representation, may lead to reflections and tests of existing notions or, eventually, to the discovery of new theories.

However, forms and objects are not autonomous and must be interpreted in light of different social, cultural, political, historical, and geographical contexts in order to provide the minimum necessary conditions, thus avoiding "mistaking one thing for another." For these reasons, the incorporation of readings by local authors becomes essential, in our case, Brazilian and Latin American scholars.

Still regarding the specificities and generalities highlighted by Kropf (2022), which permeate the theoretical and methodological issues guiding any investigation, not

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necessarily limited to urban morphology, understanding Brazil and the aspects of urban form as they occur within the country has become a distinguishing feature of contemporary research. In a context where international dialogue is highly desirable, and where access to academic production transcends geopolitical boundaries, generating references in an expanded manner, examining the condition of a country that is itself continental in scale, diverse, and shaped by ancestral matrices is not a matter of choice.

Among many authors, it is necessary to highlight at least two, not exclusively from the field of urban morphology, who support two distinct approaches: the historical and the environmental. In the first case, one may consider Nestor Goulart Reis (1968), a full professor at the University of São Paulo, for the importance of his long-standing research on historical cartography and, more specifically, on the conditions of the Brazilian colonial period, both in terms of administrative policies and the formal rules governing streets, squares, and buildings. Throughout his career, Reis (2006) produced numerous significant publications, and, in the early decades of the twenty-first century, developed theories concerning the processes of urban and suburban growth, understanding them beyond city boundaries, extending toward the territory and to "human settlements in general."

The second author to be mentioned here is Ana Claudia Cardoso, a professor at the Federal University of Pará. Cardoso et al. (2020) have, in contemporary terms, sharpened analytical perspectives on the particularities of the urbanization process as it has occurred, and continues to occur, at both urban and regional scales in the Brazilian Amazon. Based on reflections on the theoretical foundations of the English school of urban morphology, grounded in M. R. G. Conzen, professors and researchers at the Federal University of Pará recognize the need, at the very least, to adapt these frameworks to the Amazonian context, given the differences related to the origins of concepts founded upon "(...) a strong cadastral tradition (production and archiving of cartographic records), in which private property conditions predominated or in which there was a strong presence of public policies in all spheres of life (...)" (Cardoso et al., 2020, p. 2). This condition of reflection, in which there is no submission to a prior or supposedly superior logic but rather a genuine dialogue, is essential.

Such authors, along with many others who develop morphological studies, seem to point toward a specialization both in the documentation and interpretation of canonical urban forms and in those forms located "outside the city," whose characteristics related to the speed of transformation, geomorphological peculiarities, specific social groups, and limited documentation are identified as the main challenges (Cardoso et al., 2020, p. 2). What futures may be shaped from the contributions of Brazilian researchers? Will a new school or approach emerge?

Within the horizon of future perspectives, it is also important to recall another unavoidable path opened by contemporary researchers. Indeed, articles and academic research published over the past decade have already helped us seek

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"non-colonialist" approaches not only in the field of urban morphology, but beyond it as well. One may recall the works of Viana (2019) on the material characteristics of a "self-organized" society in Maputo, Mozambique, as well as Spolaor and Oliveira (2021), whose reflections on form and informality contribute to definitively demystifying the notion that what is "unplanned" lacks order, among many other authors from different parts of the Global South:

> Urban morphology is frequently applied to cities with a strong urban history, albeit incorporating newer areas, in order to trace their origins and contexts, identify their scales and dimensions, recognize the agents that have shaped them, and support planning and future development. For cities characterized by unplanned contexts, morphological theories and concepts have been employed to demystify their apparent disorder (Loureiro, 2017) and to understand how to analyze settlements in which the boundaries between plots, buildings, and streets are not clearly defined or delimited (McCartney; Krishnamurthy, 2018). Some studies indicate that the time span of evolution of such settlements is short in relation to the scale of their transformation (Iovene, 2018), and that activities modify space on a daily basis (Viana, 2019). (Spolaor; Oliveira, 2021, p. 8).

Still regarding these multiple geographical displacements, which are indeed desirable, one must also consider the existence of temporal displacements and relationships with the ancestral past "(...) not as a relic to be locked in an archive, displayed in museum showcases, or dissected by specialists in a library, but rather as a political proposition for how we might live with one another" (Azoulay, 2024, n.p.). Time, place, and form thus once again assume the role of both inspiration and theoretical and methodological reference in Architecture and Urbanism.

... and another (brief) issue concerning learning and unlearning

By invoking Azoulay (2024), one rekindles the call to "refuse the relentless pursuit of the new," which, in turn, recalls the existence of an infinite line connecting past and future, offering clues for engaging with questions of teaching and learning. In this context, there is no direct reference here to the university environment, whether at the undergraduate or graduate level, nor to the moment of the "classroom." How can Urban Morphology "make visible" what another theoretical field in Architecture and Urbanism would not do more effectively or more thoroughly? The development of a morphological study can contribute to understanding the nuances of the empirical object and, in doing so, we move beyond a condition of control, of "this is how it is," or any other domain of preconceived ideas. It has also been widely noted by various authors that academic and technical studies

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should incorporate a morphological reading, even if it does not constitute the fundamental or central theoretical framework of the investigation itself.

In this sense, Urban Morphology can open up possibilities for deepening the understanding of spatial fragments from the perspective of architectural contributions and, in a sensitive manner, for engaging with aspects of the history and memory of peoples and territories. The study of predominant morphological approaches, as proposed by Professor Karl Kropf (Kropf; Beloto, 2022), grounded in the perspectives of European authors and attentive to local phenomena, does not preclude the importance of questioning the processes of formation of cities and territories situated within other non-formal conditions. It is, therefore, a form of learning that implicitly encompasses a dual movement, both from outside to inside and from inside to outside.

Specifically in the academic context, the contents of Urban Morphology, as argued by Oliveira (2015, 2018, 2022) in several publications, are dispersed across disciplines that approach cities from the perspective of physical form, agents, and processes of transformation, such as those included in the curricula of courses in architecture, geography, history, archaeology, among others. We may, therefore, be speaking of urban morphology without explicitly naming it. Whether there should be a specific discipline devoted to morphological studies within undergraduate or even graduate programs remains an open debate. However, it is clear that:

> (...) urban forms possess cultural and social significance that transcends the current functionality and, as such, they have layers of meaning and of significance (...) in appreciation and understanding of the aesthetic and of the accumulated layers of meaning the study of urban form offers an added value to quality of life (Barke, 2018, p.12).

If further references were still required to support this debate, one could return to Vítor Oliveira (2018, pp. 317–334), who proposes a set of contents for a course in Urban Morphology structured around classes guided by the notions of "What is urban morphology? Why teaching it? What contents should be taught in an urban morphology course? And how should we effectively teach it?" (Oliveira, 2018, p. 318). This proposal is also developed in greater detail in the publication *Urban Morphology: An Introduction to the Study of the Physical Form of Cities* (Oliveira, 2022).

Within the context of professional practice, the reflections are not different. Once again, in the aforementioned authors, there is a recognition of the role of morphological studies in the development of design action, in architectural and urban planning projects, through interdisciplinary connections and a deeper understanding of pre-existing conditions:

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> A major challenge for Urban Morphology in the coming years is to be able to identify its most important and specific contributions to contemporary cities and societies. Indeed, it is urgent to strengthen the morphological dimension of both debate and practice in cities. In this sense, Urban Morphology should devote less attention to the critique, modification, and transformation of its already sophisticated concepts, methods, and techniques, and greater attention to enhancing the conditions for applying its contributions in everyday life. This process will necessarily involve a certain degree of simplification, but it does not have to imply a loss of the fundamental content of the discipline (Oliveira, 2022, p. 205).

Final considerations

Could it then be argued that there is a movement of learning and, at the same time, unlearning through Urban Morphology? As intertwined trajectories, morphological studies have the potential to provide references for interpreting physical realities based on notions, theories, methods, and concepts that are, to a certain extent, "universal," but also through the construction of a sensitive gaze and the act of perceiving and recording ruptures and crossings, failures, errors, and mismatches. Detail matters.

Following this same path of learning and, simultaneously, unlearning, morphological studies can contribute to identifying and naming the multiple layers of meaning and material strata of the world. Once again, only a sensitive gaze can assist in appreciating the complexity of a work, the traces of erased memories and materialities, and the aspects that remained untold. At times, it is a diagonal line in a map among many others that intersect at ninety degrees; at other times, it is a shadow on a wall beneath several overlapping layers of paint. Detail matters.

It is also important to consider that equivalent processes of learning and unlearning are present in professional practice when shaped by an interest in Urban Morphology. Within a condition of exchange of ideas and ideals, design, across its various scales and dimensions, may be informed by the study of pre-existing conditions and prior experiences, in order to situate what has previously been done in relation to the same problem. However, if this movement is not accompanied by an inquiry into what should not be done, by respect for differences, by the ability to update or contextualize debates, and by a critical stance, by asking "should it be so?", then it remains incomplete. Once again, and at the risk of repetition, detail matters.

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