Teaching Architecture through Design References: The Contribution of Brazilian Journals in the Publication of Visitable Architectures

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Abstract: The aim of this work is to illuminate how the architectural publication in Brazil is influenced by the location of its economic poles. Although the main specialized journals are nationwide read and the published projects are frequently used as design references by students at architecture schools all over Brazil, it appears to be a favor for those projects located at the southeast region. In order to investigate this initial assumption, we selected two of the most influential architectural journals, AU and Project Design magazines, focusing on visitable projects that are, therefore, capable of offering an experience for learning about architectural project. The analysis covered three years of publications in which four states in Brazil were distinguished: São Paulo, Rio de Janeiro, Minas Gerais and Federal District. The collected data show that the published visitable projects coincide with the economic poles around centered cities in Brazil, as well as the location of architecture schools and specialized media, becomes evident; not only because of the greater number of projects in the São Paulo area, but mainly because most of the published projects are located in the capitals of the analyzed poles.

Key words: Architectural references, publications, visitable projects, architecture teaching, center.

1. Introduction

The Brazilian context in architectural design teaching is based, in a great part, on the use of preeminent works as project references. However, the largest collection of the most eminent, published and referred works are concentrated in the cities of Rio de Janeiro, São Paulo and Brasília. Notably for the states of Rio de Janeiro and São Paulo, this location also coincides with a scenario of economic importance in the country, as well as a greater concentration of architecture schools (Southeast region, Fig. 1) and specialized media.

It is a known fact that architects can learn about design from examples and case studies, so project references are a resource widely used by professors when teaching several design topics and contents at architecture schools [2, 10]. According to Unwin [9], studying other architect’s projects and works helps learning architecture in order to refine, influence and stimulate students’ design capacity. In this way, the publication of specialized journals has always been an important source of gathering information about architecture developed in other parts of the world and for building knowledge for new architecture projects.

The forms of legitimacy and recognition of certain architectures as project references have been solidified over the years from the very first publications of the area, in the form of treatises, books and journals [3] which have always emphasized buildings located nearby the largest centers of production of the architectural discourse. The cultural and technological context we experience nowadays favors the access to countless works of reference architecture, offering students a large contingent of information which, for its turn, has also influenced the practices at school ateliers.

The Internet has opened new possibilities in accessing...
various projects and has expanded geographical boundaries, but in Brazil, referenced and published works continue to highlight those located around the largest urban territories, which are the country’s main economic centers as well.

In addition, it is noteworthy that specialized publications in the area of architecture are also responsible for playing a role as mediators in the contact between students and the reference projects. However, it can be observed that, in general, a certain type of reference prevails, imbued with a strong visual appeal and photogenic images, in order to guarantee its popularity and visibility. According to Montaner [4], virtual space is presented with its seductive character hiding, nonetheless, a series of negative aspects, including the hegemony of technology and its systems of domination. Many architectural works have been consumed exclusively as beautiful photographs, as an eloquent two-dimensional representation cut out of a context [11], which reduces their spatial, material, sound, and environmental qualities to images that will stand out on printed pages. Notwithstanding, a published or eminent architecture is not a synonym to architectural quality to be taken nor as a reference or as an effective contribution to architectural learning.

When learning about architectural design, both reference architectures and the lessons learned from the experience in previous architectures [7] can contribute to learning the architectural know-how. Including the body into the experience of architecture makes it possible for us to introduce our individuality into that space [5]; thus putting ourselves as part of the material existence of an architecture can expand our learning capacity. Acknowledging that to understand an architecture requires not only studying its design but also experiencing it physically was the main criteria to select the projects to be analyzed in this study.

In the analysis presented below, we focused on constructed projects that can be visited and that are, therefore, capable of offering an architectural experience to students for they could also be used as a resource for project learning. For this reason, we have distinguished between visitable and non-visitable projects the ones analyzed selected through the pages (both printed and virtual) of two of the most accessed journals in Brazil: the *AU* magazine and the *Project*
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Design magazine. The collected data show that the published visitable projects coincide with the economic polarity, the location of the main press and publications of architecture, and also with the concentration of architecture schools in the southeast of Brazil.

2. Method and Materials

In order to investigate the initial assumption of how the architectural publication in Brazil is influenced by the location of its economic poles, two of the most influential architectural journals were selected, AU and Project Design magazines. To a start, the journals themselves signalize this reality by locating their headquarters in the southeastern of Brazil, despite their national relevance and scope, or the fact that both can reckon on printed and digital publications.

At the publications analysis stage our efforts focused on constructed projects that could be visited and that are, therefore, capable of offering an experience for learning about architectural project. For this reason, we have distinguished between visitable and non-visitable projects when analysing the 462 (four-hundred and sixty-two) projects published within a three years period.

The main selection criterion derived from the understanding that, to comprehend a work of architecture, it is required not only to study its design but also to experience it physically. In such a way, we focused on constructed projects that could be visited and be accessed by students and professors. Due to this criterion, some conventional typologies had to be suppressed in the analysis: residential projects in general were discarded although they have a large share of the published projects.

Therefore our selection emphasizes public and semi-public spaces, such as squares, recreation areas, community centers and subway stations; institutional buildings such as libraries, museums, schools and cultural centers; commercial spaces such as shops, showrooms, restaurants, bars, art galleries, gyms, offices, laboratories, hotels and theaters; sports venues such as racetracks, football stadiums, Olympic stadiums and gymnasiaums, among others.

The architectural projects published throughout the different existing media can be understood as a collection, or as a selection that elects some to the detriment of others, that separates them by categories and/or divides them by regions. In this way, we can also consider that different journals would allow us to see, from different points of view, what is produced in the field of architecture in Brazil. In the analysis of these journals, we focused on studying the number of project publications located in the states of those four main Brazilian economic poles to verify if the same economic polarity also applies to a polarity in the architectural journals publications.

The analysis covered four states in Brazil were distinguished: São Paulo, Rio de Janeiro, Minas Gerais and Federal District. Finally, we aimed to distinguish, by state, between those projects located in the state capital and those located in the cities around this center, to verify if the central context is preponderating over other contexts.

Both journals analyzed in this paper, corroborate this idea and support the perception of the existence of a polarity in the location of the majority of published project references.

3. Results and Discussions

3.1 About the Journals AU and Project Design

The Brazilian journals AU—Architecture and Urbanism and Project Design have been classified in Brazil as the two most important printed journals, for over the last 30 years, providing information and architectural references for professional and students.

Both their printed and digital versions broadcast projects developed by Brazilian architects that, to a large extent, are also located in the main poles of production and dissemination of reference architecture in Brazil: São Paulo (SP) and Rio de Janeiro (RJ). The poles of Brasilia (DF) and Belo Horizonte (MG) have also participated in these publications, although less frequently than the former.
This predominant configuration of a centrality around the poles of São Paulo and Rio de Janeiro can be visualized according to Tables 1 and 2, which illustrate the publications of these two journals, putting into comparison the number of projects published between the years of 2012 and 2014, distinguishing between visitable and non-visitable projects, according to criteria previously explained.

The presentation format of the projects in these two journals is very similar, constituted by an introductory image and texts combined with technical drawings, schemes, perspectives and other images. Finally, the technical data of the projects are presented, which may include credits for the architects and their collaborators, and/or the authors of other kind of projects such as structural, electrical, hydraulics and/or automation, as well as the main suppliers of the work.

The text portion may be constituted by presenting the project premises, its concepts and previous intentions, some context about the location and the project’s given situation, followed by technical, compositional and/or qualitative descriptions. The texts are combined with schemes, floor plans, situation plans and other architectural drawings to assist the reader in understanding the design as the descriptions progress. The journals present many discursive similarities among themselves, including the selection of projects that give prominence to São Paulo’s production. Nonetheless, these journals also present some projects abroad, although they are rarely from Latin America.

The theoretical and/or critical debate does not participate in the project discourse presentation, which could contribute to the development of a critical view about the projects that are consumed as a reference by the students who access these journals.

3.1.1. The AU Journal

The journal AU—Architecture and Urbanism [1] presents projects and works from all over the country and also from abroad, and intends to provide updating for professionals in the field of architecture, also, aims to contribute developing a reflexive critique of architecture in general and of the services delivered by architects and architectural offices. Its circulation, however, is concentrated in the southeast region, which holds 53% of its subscribers.

Within the three years analyzed, the journal expanded the number of published projects, including those projected in Brazil (Table 1). However, the largest volume of projects continued to be concentrated in the Brazilian economic centers: 65.6% of the Brazilian works published are located in the state of São Paulo (SP); 7.94% in the state of Rio de Janeiro (RJ); 9.93% in Minas Gerais (MG) and 4.63% in the Federal District (DF), which comprises 88.1% of the projects. Therefore, 11.9% remains for the publication of projects located in other Brazilian regions.

The number of projects that can be visited by architects and students for learning purposes is even more restricted: from 151 (one hundred and fifty one) of published projects (national and international), only 133 (one hundred and thirty three) works are visitable. Among these, the city of São Paulo concentrates 41.35% while smaller cities in the same state hold 6%. Similarly, the city of Rio de Janeiro holds 6% and the interior of this State, 0.75%. Different situations were found in Minas Gerais (MG) and in the Federal District (DF). While in MG, the number of works located in the capital (5.26%) and in the interior (4.51%) was almost equal in the years surveyed, in the DF the projects published occur in Brasília (3.76%) and there are none in its satellite cities.
3.1.2. The Project Design Journal

The Project Design Journal aims to present the main trends and references of the architecture market to professionals in the field, publishing national and international projects, interviews, technical material, news and debates related to the professional environment. Its online page is presented along with the other publications of Arco Editorial, which answers for the magazine. This publication has been a reference in the field for more than thirty years and has become an instrument for consultation and inspiration of professionals, as well as updating on the development of architecture.

During the years analyzed for this research, the journal published a total of 248 (two hundred and forty-eight projects), 92.4% of which were Brazilian projects, which shows a favoring for national projects. Of these, 79.5% were projects located in the main Brazilian Centers.

Among the Poles located in these poles, the majority were in the State of São Paulo (SP) (51.1%), and out of which 79.6% were in the city of São Paulo. The State of Rio de Janeiro (RJ) holds 13.2% of the visitable projects and its capital accounts for 91.7% of these projects. Minas Gerais (MG) and the Federal District (DF) represent 8.8% and 4.9%, respectively, of the visitable projects in the country. Their capitals concentrate 62.5% and 100%, respectively, of the projects in each state.
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Table 2  List of publications of Project Design journal during the years of 2012, 2013 and 2014 [8].

<table>
<thead>
<tr>
<th>Journal</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Projects/year</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total of published projects</td>
<td>88</td>
<td>79</td>
<td>81</td>
<td>248</td>
</tr>
<tr>
<td>Total of Brazilian published projects</td>
<td>79</td>
<td>72</td>
<td>78</td>
<td>229</td>
</tr>
<tr>
<td>Total of Brazilian published projects located in the poles</td>
<td>72</td>
<td>61</td>
<td>49</td>
<td>182</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Total of projects by state</th>
<th>SP</th>
<th>RJ</th>
<th>MG</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>33</td>
<td>7</td>
<td>3</td>
<td>6</td>
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<tr>
<td>RJ</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>MG</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Interior</td>
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<tr>
<td>Capital</td>
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<td>SP</td>
<td>33</td>
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<td>Interior</td>
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4. Conclusions

The learning process in architectural design involves different steps, such as assimilation, understanding, proposition and construction, which are different actions but are all part of the design act. Project references are a possible entry into this process and can help students develop significant skills related to architectural values, such as an understanding of the spatial and constructive qualities of a project that would make the student reflect about the architectural design problems.

In a moment determined by visibility and instantaneously [5], we can observe the prevalence of the image in the production of an architecture throughout different media. We firmly believe that introducing students to visitable projects can reclaim to the learning process those qualities in architecture that could not be perceived from a picture in the internet, and contribute to the formation of repertoire and of design criteria, embedded with theoretical reflection in the design process. The learning process in architectural design involves different steps, such as assimilation, understanding, proposition and construction, which are different actions but are all part of the design act.

By publishing projects that are visitable and, also, that are located in other cities than the capitals, journals may contribute to improve the design initiation of students.

Our research divided projects between visitable and non-visitble architectures and, also, those located at
state capitals and those located at cities around the state when analysing these two journals. The collected data show that the published visitable projects coincide with the initial assumption of the existence of a pole in publications that reflect the economic poles around centered cities in Brazil, as well as the location of architecture schools and specialized media, becomes evident; not only because of the greater number of projects in the São Paulo area, but mainly because most of the published projects are located in the capitals of the analyzed poles.

Although the Federal District (DF) has a low representation in number of projects, we decided to include it in this analysis because it is the second most important economic center of the country. The poles of Rio de Janeiro (RJ) and Minas Gerais (MG), although with greater representativity than the DF, still have a narrow presence in specialized publications (together, they correspond to 29% of total visitable published works).

Therefore, in the case of São Paulo (SP), an architectural polarity corresponded to the economic polarity, putting into evidence its importance as both the country’s largest economic pole and the most important producer and diffuser of Brazilian architecture production, accounting for 65% of projects published and visited.

The condition of centrality of SP in the analysis of visitable projects coincides with a centrality in the discourse of architecture that is disseminated by Brazilian publications and which nurtures the design references used by architecture students when creating their academic projects. This is relevant to stress because it determines the mainstream discourse of architecture in the whole country.

Although there is not an assumed mainstream discourse in the architectural contemporaneity, it is still possible to identify peculiar ways of making architecture within two states of the southeastern of Brazil. It is possible to verify, for example, a particular nuance in the way forms and materials are treated, in the plasticity of volumes, in the proportions between the parts that make up the buildings and environments that were designed by those professionals who had their works published. While in MG, there are dialogues to a certain regionalism, in SP, there is an attitude towards design that relates to the inheritance of the brutalism from the São Paulo School, which becomes indisputable by observing the use of reinforced concrete in structural solutions and its aesthetic choices. However, further from claiming for stylistic truths derived from specific regionalisms, this work hopes to contribute on how an architectural discourse may approximate students to the realization of a particular context and the design procedures capable of responding to the challenges of designing architecture in Brazil.

References