

Wooden architectures: a cartography of Lages-SC

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SUMMARY

The primary interest in this article focuses on analyzing the wood architecture in the context of the city of Lages, in the State of Santa Catarina. A work that is produced as an unfolding of other actions and that seeks to build a cartography of wood architectures from the macro-region of the State of Santa Catarina, to a microterritoriality, analyzing the details of a wooden shed in the municipality of Lages-SC. The data used come from bibliographic references and clues about wood architectures derived from a fieldwork, with exploratory character and subject to discovery, surprise and unforeseen circumstances. In this historical process, the architecture in madeira catarinense, in general, accompanied the process of historical, cultural and economic transformation of its context. It begins with indigenous housing, methods brought by Portuguese settlers with the incorporation and adaptations to local resources, changing, later, with the arrival of European immigrants, especially during the nineteenth century, in view of the diversity of cultural traditions and the intensification and mechanization of logging. Thus, it seeks to draw, through data and clues, cartograms that map the wood architecture, in order to characterize its cultural traits, technological roots and vernacular ties. A process that intends, thus, to record the riches of knowledge widespread in most of the construction of popular dwellings in the State of Santa Catarina.

KEYWORDS: Cartography. Wooden Architecture. Architectural Culture.

1 INTRODUCTION

The primary interest in this article focuses on analyzing the wood architecture in the context of the city of Lages, in the State of Santa Catarina. A work that is produced as an unfolding of other actions, such as a small cut out that once recorded the wooden architectures located around the former Batistella wood, also in Lages-SC (KRAHL, 2018). It is noteworthy that the theme of wood architecture is revealed as part of culture in the State of Santa Catarina, either by the climate issue or by the arrival of European immigrants in this region. Cultural expression read by some authors as genuinely national, the idea of the "araucaria house" is a mark of the existence of an architecture characteristic of southern Brazil.

Wood has always been an accessible material for humans and, therefore, has proved to be an indispensable raw material for its survival and also for the construction of dwellings. Each civilization, according to its characteristics and needs, attributed to wood certain uses. In this historical process, the Santa Catarina wooden architecture, in general, accompanied the process of historical, cultural and economic transformation inserted in its context. It begins with indigenous housing, methods brought by Portuguese colonizers with the incorporation and adaptations to local resources, changing, later, with the arrival of European immigrants, mainly during the nineteenth century, in view of the diversity of cultural traditions and the intensification and mechanization of logging. Therefore, this architectural expression may be read as a synthesis of the process of evolution through which the architecture of Santa Catarina has passed, having deep connection with the design of an architectural culture of southern Brazil that produces wood architectures.

The foremost objective of this work is to construct a cartography of wood architectures at various scales, from the identification of the concentrations of specimens of the wood industry cycle in the cities of Santa Catarina; then the wooden architecture in Lages-SC; and lastly, a more detailed analysis of one of these exemplaries. Thus, it is aimed to design, through data and clues, cartograms that map the wood architecture, in order to characterize its cultural traits, technological roots and vernacular ties. A process that intends, in this way, to record the riches of knowledge widespread in most of the construction of popular dwellings in the State of Santa Catarina.

2 METHODOLOGY

We seek to build a cartography of wood architectures at various scales, i.e., from a macro-region, using as reference the State of Santa Catarina, to a microterritoriality, analyzing the details of a wooden shed in the municipality of Lages-SC. The data used come from bibliographic references when dealing with the state geographic context, while the clues about the wood architectures analyzed here derive from the search for clues in a field work, with exploratory character and subject to discovery, surprise and unforeseen – a nomadic scientific practice (FIORIN, 2022).

Thus, we use a process of knowledge construction that gathers the records collected in the field under the method of cartography now described by Passos, Kastrup and Escóssia (2020), where a "do to know" guide the research work in a non-prescriptive way; that is, without ready rules, which does not mean to say that it is an action without direction. It constitutes as a starting point that does not have specific guidelines or preconceived formulas, but its assumption is the plan of experience: "the cartographic guideline is made by clues that guide the course of the research always considering the effects of the research process on the research object, the researcher and its results" (PASSOS; BARROS, 2020). Hence, to understand the peculiarities of each of these buildings, a photographic survey was carried out, based on cartographic thinking.

From this, not only are revealed the information supposedly expected in relation to the object researched, in this case the wooden architectures, but also other aspects very specific to it, sufficient to reveal the surprise and resize the research. "Ajar cracks that sharpen our gaze and our senses and lead us to a possibility of perceiving and interacting with space as a form of singular interpretation", within the practice of walking as a research modality (SOUZA; FIORIN; RODRIGUES, 2021).

In this sense, we highlight that these field trips are not exclusively to photograph these wooden buildings, but also serve as an understanding about what is not likely to be photographed, that is, the phenomenological aspects of architecture, of that which will be experienced by experience. These aspects are linked to the very essence of the human being who perceives, interprets and acts according to the stimuli of his context. This context, in turn, is inevitably linked to architecture, which, for Pallasma (2013), means that the images of architecture "are able to touch our emotions based on our unconscious relationships and on our biological historicity".

Being, therefore, the architecture understood as articulating the world's encounter with the human mind (PALLASMA, 2013), consequently reveals itself with the function of materialization also of what we are, the expression of our constitution and culture, described by Pallasma (2011) as a timeless function of "creating existential metaphors for the body and for life that concretize and structure our existence in the world. (...) ultimately recognize and remember who we are".

3 WOODEN ARCHITECTURES

In Brazil, the former indigenous dwellings are the first buildings to use wood as a construction method and, despite being considered primitive and rustic, met the needs of their users and the climatic requirements of the region. According to Silva (2000), many elements of indigenous construction techniques were incorporated into the methods brought by Portuguese

colonizers, such as *pau-a-pique*¹ technique, for example, and are still employed today in regions of the country where there is no availability of other resources.

In the Planalto Catarinense region, *Caingangue* natives built villages whose buildings were semi-buried and completely closed with leaves and branches to protect from the cold, taking the form of underground dwellings. This technique, however, was lost in time and, currently, we have only the archaeological remains as a source of knowledge of this architecture as revised by Beber (2016).

The Portuguese colonizers populated the region and founded Lages in 1766, where, already at that time, much of the buildings were built of wood due to the abundant availability of extraction of the material in the abundant *araucaria* forests of the region. According to Santos (2015), the mountainous region of Santa Catarina and part of the Campos de Cima da Serra, in Rio Grande do Sul, constitute the only areas of occurrence of the Luso-Brazilian constructive tradition in which there were residences made entirely of wood, defined by the researcher Avé-Lallemant², in 1858, as "the complete expression of the Plateau of Santa Catarina", or the "genuinely national" house, referring to the farmhouses built in *araucaria* that he met in Lages (AVÉ-LALLEMANT, 1980, p. 63).

The arrival of European immigrants in the 19th century greatly altered the process of using wood in construction throughout southern Brazil. The diversity of cultural traditions also brought new architectural solutions, combined with new constructive techniques. The turn of the century witnessed the intensification and mechanization of logging and the installation of sawmills, which allowed a standardization of building elements and a diffusion of wood architecture.

Figure 1 - Cartogram of concentration of wooden architectures in Santa Catarina



Source: Prepared by authors (2022) based on Claro surveys (1991, p. 179).

¹ The *pau-a-pique* technique is not structural, but a sealing technique. It is basically a wooden weave made up of vertical sticks (*paus a pique*) attached, on both sides, to horizontal sticks on which clay mortar is manually applied to fill in the voids. (OLENDER, 2006)

² Robert Christian Barthold Avé-Lallemant was born on July 25, 1812, in Lübeck, Germany. He established himself in Brazil, as a doctor in Rio de Janeiro, and was known for his exploratory travels across the country, as well as having influenced the Brazilian health system. (ACADEMIA NACIONAL DE MEDICINA, 2020)

In this context, Peixer (2002) analyzes some factors marked as fundamental for the process of formation of the city of Lages. Among them can be highlighted: the rural exodus caused by the attraction of labor during the wood cycle (1940-1970); conservative investment in land and real estate, as an option for speculation or transformation of them into leisure and or unproductive areas economically; the interests of local economic groups reflected in the interventions in the city and in the production of urban, social, political and cultural space, consolidating the dominant power of these groups; the interaction and the way of demographic occupation of space by the different ethnic groups that make up the Lagean population.

The city of Lages is actually the product of the actions of several groups, which generated as a result multiple and heterogeneous spaces. Regarding this process of formation, Corrêa (2004) conceptualizes the capitalist urban space as a social product, resulting from the actions accumulated over time and executed by the so-called concrete social agents, which produce and consume space. The complexity of the actions of these agents – even perceived in the history of Lages – is basically derived from the process of capital accumulation, the changing needs of reproduction of production relationships and the many class conflicts that emerge from this complexity.

The intervention of the State in the production and definition of urban space was a constant element in the city, a milestone since the beginning of the occupation of the region, already in the implementation of the village of Nossa Senhora dos Prazeres dos Campos das Lajens. According to Martins (1994 apud Peixer, 2002), Lages is the result of a late modernity, characterized by hierarchical urban production, centralized and defined by a territorial pact that privileges, precisely, the interests of economically strong groups.

According to Reis Filho (1978), the study of the evolution of cities is important so that they can be transformed, because, in each era, architecture is produced and used in a different way, relating in a characteristic way to the urban structure in which it is installed. On the architecture in Lages, local production followed some paths similar to the national scenario. Santos (p. 52, 2015) describes aspects that defined local architectural production until the end of the 19th century: the Portuguese constructive tradition, which influenced all regions of the country; society shaped by extensive livestock and dominated by rural aristocracy; slave labor; the use of traditional constructive knowledge and also innovations through adaptation to the local context.

The central region of the city, present-day Center neighborhood, is the nucleus where the city originated. It was composed of few streets, and its layout was defined in the first occupation, from three central squares joined by the main street of the layout. Only in the 20th century did the urban network of the city grow and the first major changes occurred in the political, religious, commercial and leisure spaces. According to Peixer (2002), there were three significant milestones of these changes that inserted the new traits in architecture: the construction of the Municipal Palace (1901); the Cathedral Nossa Senhora dos Prazeres (1912-1922); and the school group Vidal Ramos (1912-1913).

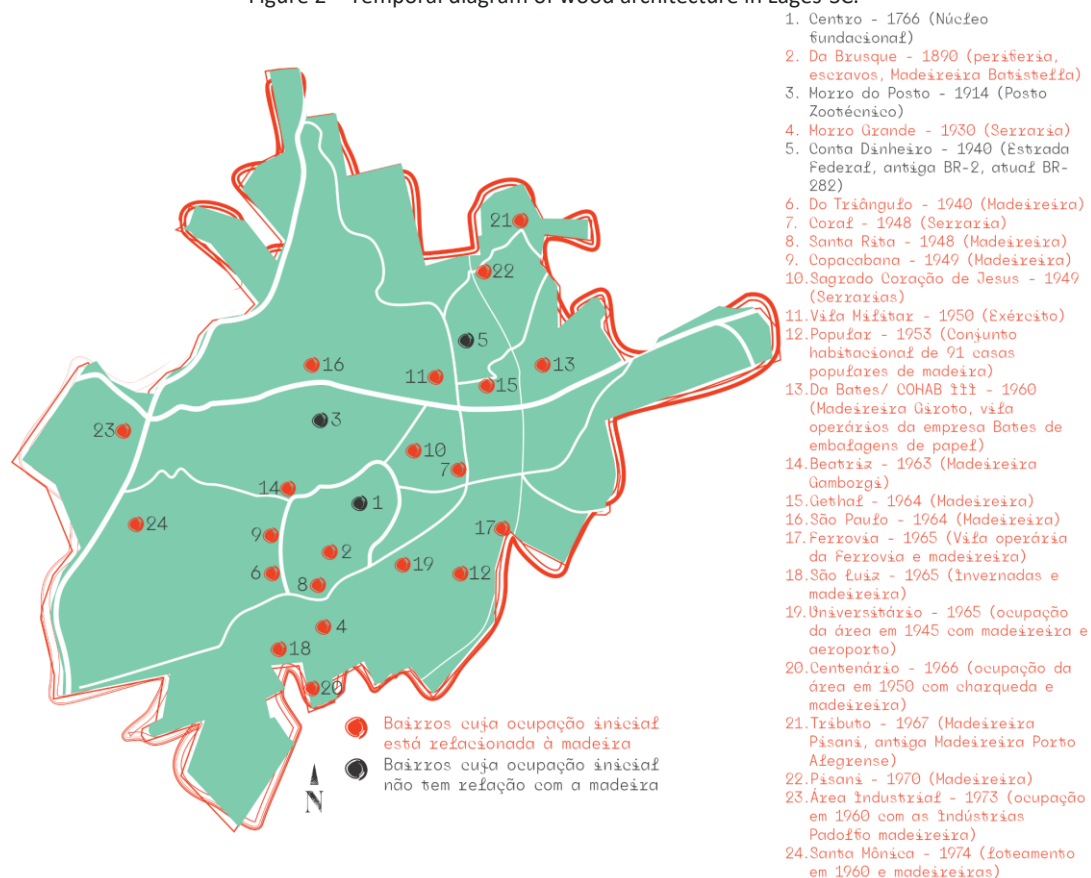
Due to the abundance of raw materials, Lages became, from the 1930s, a pole of extraction of wood being, for example, one of the main suppliers of wood for the construction of the city of Brasília. This fact attracted many people to the city – both Italian immigrants who founded the sawmills, as well as the rural population of the plateau and western Santa Catarina, who served as general labor. Thus, there was the development of this sector, which now had greater The new influences of the newly arrived workforce in the city changed the process of

using wood in construction. The diversity of cultural traditions brought new architectural solutions, as well as new construction techniques and the use of new materials. During this period, the intensification and mechanization of logging and the installation of sawmills allowed the standardization of building elements and the diffusion of wood architecture.

Due to these factors, it was possible to create a characteristic architecture, known as "Casa de Araucaria", exclusively Brazilian and common even today in the urban and rural landscapes of southern Brazil.

As a result of this exponential population growth, there was, in the same period, the development of civil construction in the city, which was based on the popular wooden house. It is possible to say that this typology was disseminated throughout the State of Santa Catarina. Thus, what previously presented some technical and aesthetic aspects characteristic of the different cultures of immigrants (Azoreans, Germans, Italians, Poles, among the main ones), began to follow a process of cultural miscegenation that is uniform as it is popularized. In claro's view, (1991, p.187) this traditional wood building system is the synthesis of the process of historical, cultural and economic evolution through which the architecture in Santa Catarina wood has passed, being the system we find more widespread among the constructions of popular dwellings, practically used throughout the state, with small variations. However, this entire system of extraction of unbridled wood in the city of Lages should be reconsidered so that it could be sustainable.

Figure 2 – Temporal diagram of wood architecture in Lages-SC.



Source: Prepared by authors (2022)

Data from Correio Lageano, in a special edition of Lages' Anniversary, show that at the height of the timber cycle, between 1950 and 1960, the export of sawn wood began, first to the

Latin market, Europe and, later, to the North American market. According to the National Pine Institute, the Serrano Plateau region accounted for 64% of the country's timber exports, while the remaining 36% were from forests in Paraná and Rio Grande do Sul.

According to Costa (1982) Lages was also responsible for a significant part of the wood consumed by the construction of the new federal capital, from 1957. According to Hildebrando (2009), the exploitation of araucaria forests in the 1950s was so intense that approximately 157 sawmills and 12 other similar industries operated in the region (COSTA, 1982), employing a relatively abundant workforce in an extractive system that was clearly predatory.

Figure 3 – Cartogram of some wooden architectures found in Brusque and Popular neighborhoods in Lages-SC



Source: Prepared by authors (2022)

Still, the cultural reference of "Wood Architecture" is remarkable in the local culture and, as such, expresses the existing relations, between user-building, which go beyond its materiality and, therefore, remains alive to this day, although it is less widespread and studied – according to data from the 2010 Census (IBGE), more than a third of the total number of

households in the city is wood.

Among the wooden architectures that we detected, in most houses, we found an architecture "of doing"; an emblematic shed, of simple structure, made of sawn wood, which drew attention for its size in relation to the other buildings in the surroundings.

Figure 4 – Wooden architecture on Horácio Lenzi street, in Da Brusque district of Lages-SC.



Source: Prepared by authors (2022)

This large pavilion with side seals of vertical planks in natural state, without finishing or painting and a roof of ceramic tiles of the French type is a joinery workshop. From it we understand two important issues: one related to wood architecture; another that concerns the cultural lessons of the wooden artifact itself. It feeds back the cultural sense of wood that we want to discuss, it is material and method, a doing and a knowledge. Thus, by the bias of detail, we recover the meaning of the method of cartography, from macro, to micro, we advance to go backwards.

When entering the shed passing through the detached yellow iron door with glasses and a worked railing, stands out the beautiful roof structure supported by scissors made of nailed lumber, which overcome a span of almost nine meters, creating the ample work space, where everything communicates and where, for more than sixty years people work with wood. On the floor boards supported by araucaria beams, can be seen the workbenches, tools and some furniture and parts in the process of restoration. Below the floor, a high soil base made of massive brick masonry recreates a basement taking advantage of the uneven terrain.

The record of how architecture is recreated in this shed was made during an afternoon of conversations, accompanying the work of 'Uncle Marco' and his son, Marco Júnior. Thus, this shed represents the history of the culture of three generations of the family marked by the bond with the craft of joinery. The father of 'Uncle Marco', Mr. Lourival Ferraz, was the one who began

working with wood and, in 1956, built the workshop, which once had more than twenty employees. He came from the interior of Lages and was adopted by a family of Germans with whom he learned this profession. Later, he went to the city of São Paulo to work in a large joinery, where he acquired experience to return to Lages and set up his own workshop, where he made carved furniture, decorative pieces and wooden frames.

Figure 5 - Shed Joinery Workshop in detail.



Source: Prepared by authors (2022)

Both say that at the beginning of the workshop activities, the context of the city was the peak of wood exploration in the region and that there were many sawmills and industries linked to this activity in the city. Due to this movement of the economy, the volume of work was large and of great regional scope, much, also, for the added value to artisanal labor and specialty; that is, even at the time, few people had the technical and artistic skills to do these works.

Both 'Uncle Marco' and his son remember that they spent their whole lives in this shed, because the family settled in the neighboring land and, even today, these plots have a direct connection with the workshop. Although they said that, over time, the family members moved to other neighborhoods or cities, when they were asked about which part of the building that drew their most attention or referred to some special feeling, they answered that it was the interior of the workbenches, in the middle of the countertops, tools and furniture – a place chosen for chimarrão wheels and receiving visits.

4 CONCLUSION

This article is an important record of the production of wood architectures, demonstrating a sense present in this materiality that draws an architectural culture in southern Brazil. It builds a geographical spatiality of wood, but also cartographs through clues, in order to characterize its cultural traits, technological roots and vernacular ties. This construct is also revealed as an inherent feeling in making and knowing how to deal with wood. We believe in the future understanding of how these wooden architectures can also contribute their set of

traditional knowledge to contemporary projects in a smarter way, without seeking to mimic or overthrow them and to take into account the cultural traits of tradition.

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