From Popular to Contemporary: a Review on Portuguese Vernacular Architecture

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ABSTRACT: This research is based on the main principle that history repeats itself. Therefore, it can create interest in subjects that, at first sight, may look anachronistic. The authors recall the growing position towards architectural solutions, that take reference from the past, and retrace the studies perceived by the architects of the "*Inquérito à Arquitectura Regional Portuguesa*" (Survey on Regional Portuguese Architecture) of 1955/57. Since they were looking for a middle way between government impositions and the radicalism of the International Style, the results influenced not only their individual designs but also acquired a pioneer status, thus raising many new questions.

1 INTRODUCTION

Presently there is a growing position towards architectural solutions, that take reference from the past, and retrace the studies perceived by the architects of the "*IARP - Inquérito à Arquitectura Regional Portuguesa*" (Survey on Regional Portuguese Architecture) of 1955/57. These architects were looking for a middle way between government impositions and the radicalism of the International Style. The results of this survey influenced not only the architects individual designs but also acquired a pioneer status, raising many new questions. Even though this idea can mistakenly be partnered with other researches such as "*Movimento da Casa Portuguesa*" (Portuguese House Movement) of 1940/50 and its stylistic arrangements defended by some Portuguese architects such as Raul Lino, it is impossible to disconnect it from concepts like communitarianism which the study of Portuguese vernacular architectural diversity endorses upon multiple local contexts. According to Maudlin (2010), the 'vernacular' is defined by social status (not only of buildings but also of builders).

2 TRADITIONAL ARCHITECTURE IN PORTUGAL

The question of traditional architecture, in Portugal, goes back to the end of the 19th century (Leal, 2005), thus multiple approaches being known. However, the occasional interest in the subject and its repercussions on the creation of a modern architecture predate the 1974 revolution and originate from a survey carried out under the former National Union of Architects (SNA-Sindicato Nacional dos Arquitectos).

Indeed, it were the great movements of the population that occurred during second half of the last century which, in the first phase, favoured the foundations for a rupture with a certain social consistency existing in rural areas, where architectural production had been outlined and modified over centuries by the human labour of successive generations (VV. AA., 2004; Salvado, 2019).

The gradual emigration to France in search of better living conditions, starting in 1961, and the military actions in the Portuguese former colonies, are thus an unequivocal result of the widespread misery in Portugal, and of the broken policies of the *Estado Novo* regime. Quickly the industrial antecedents, with an increasingly significant weight in the economy of the country and forged in the occasion of the transaction with the exterior, developed. Other phenomena such as tourism and, more radically, the totality of globalization, have contributed to the "depersonalisation" and "destruction" of many of the objects in which the distinctive qualities of many years have delayed the communities of this and other times (VV.AA., 2004; Salvado, 2019).

Alongside all this, the Portuguese 20th century reveals an exceptional proliferation of precursor studies to the theme occurring within the vernacular heritage. In effect, the "*Movimento da Casa Portuguesa*" (Portuguese House Movement) between 1940/50 defended by Raul Lino, among others, and the IARP (Inquérito à Arquitectura Regional Portuguesa) which was the Survey on Regional Portuguese Architecture between 1955/57 integrate two of the most important moments in which architects from completely different backgrounds have studied the theme (Leal, 2005; Salvado, 2019).

While Lino systematized what he considered as being the characteristic features of the compilation he proposed, a new wave of professionals, led by Francisco Keil do Amaral, made it imperative to operate a realistic survey, capable of questioning the verisimilitude of the formal premises of the "Movement" and mediate between the stylistic impositions of the Second Republic government and the international architectural background. Despite this, Raul Lino was indeed faced with the heterogeneity of the pieces in question, but his studies resulted in the typological mixing of mostly southern elements, such as clay, ceramic tiles, tiles, among others (Leal, 2005; Salvado, 2019). Instead, eighteen young architects, divided into six work teams, travelled from the North to the South of the national territory, confirming the local variety that contributed to discrediting the convictions unfounded in a Portuguese Architecture. At the same time, technicians from areas as diverse as Agronomy and Ethnology made detailed observations, so that Architecture was, in this case, only an integral part of the vast set of indicators representative of the circumstances and habits of life that inhabited the Portuguese popular culture of the last century (Leal, 2005; Salvado, 2019). Thus, between 1930 and 1940, under the definitive guidance of Henrique de Barros, emerged the "*IHR - Inquérito à Habitação Rural*" (Rural Housing Survey): the predisposition, through rural analysis, to improve the housing conditions of the Portuguese farmers and their sector (Leal, 2005; Salvado, 2019). In the field of Anthropology, Ernesto Veiga de Oliveira was responsible for coordinating the research around more or less labile objects included in the traditional architectural expression (Leal, 2005; Salvado, 2019).

3 NATIONAL CONTEXT

Regarding the produced literature on the subject, it was found in Leal (2009), which was inserted in the "Marques da Silva Conference 2008", a large volume of systematized information that points to a chronology of facts capable of situating, in Portugal, the origin of the question that it was proposed to study. In particular, how the different approaches produced relate to each other, and how relevant, over time, they are to the present day (Salvado, 2019).

This way, according to the publication of 1893 (Neves, 1983), the military and intellectual Henrique das Neves was the first to ponder questions of vernacular scope, with precedents in any Portuguese homogeneity (Leal, 2009; Salvado, 2019). It is, therefore, important to understand the political and social context in which this perspective is built, thus considering the triggering of the first nationalist manifestations and the growing taste for all that is Portuguese. This idea was later rescued as a fundamental precept of a Regime with a defined architectural program (Martins, 2010). Other voices, who understood the subject, expressed against or in favour of the underlying notion, in particular, António da Rocha Peixoto, whose erudition in the field of Anthropology and Ethnology allowed him to reject the possibility (Salvado, 2019). Generally, up until around 1930/40, the belief in a Portuguese architecture, composed of certain rules and characteristics, is widely accepted and recognized by a considerable number of architects, among them modernist names such as Carlos Ramos, Cristino da Silva, Jorge Segurado (Leal, 2009; Salvado, 2019).

If Henrique das Neves raised the hypothesis, Raul Lino was the one who was predisposed to assimilate it. The theme is already implied in texts (Lino, 1918) prior to the reference edition

(Lino, 1933), "*Casas Portuguesas*" (Portuguese Houses). At the same time, events such as the contest for the election of the "*Aldeia mais Portuguesa de Portugal*" (Most Portuguese Village of Portugal) in 1938 and the "*Exposição do Mundo Português*" (Exhibition of the Portuguese World) in 1940, consolidated these theses (Salvado, 2019).

By the 1940s, it was published the most varied interpretative studies on Portugal of that time, among them the "*Inquérito à Habitação Rural*" (Rural Housing Survey), carried out by the agronomist engineers of the former Technical University of Lisbon (currently University of Lisbon). As a way of determining the causes that influenced the lack of national agricultural productivity, the inhabited space of those who cultivated was the subject of detailed surveys, which reaffirmed the misery in which the populations lived (Leal, 2009). Initially, the arrangement of the produced work foreseen its organization in three volumes, referring to the North (Basto & Barros, 1943), Centro (Barros, 1947) and South zones (VV.AA., 2013). Clearly separated from the survey that the *Estado Novo* wanted to pass, only the first two volumes came to light, leaving the third to be made known only recently (Salvado, 2019).

In Geography, the administrative reform of the Portuguese territory was unfolded in the first half of the 19th century (Fernandes, 2017), with the contribution, in 1933, of Amorim Girão's "*Esbôço duma Carta Regional de Portugal*" (Sketch of a Regional Charter of Portugal) and more decisively "*Portugal, o Mediterrâneo e o Atlântico*" (Portugal, the Mediterranean and the Atlantic) by Orlando Ribeiro (1945).

From this point on, the critique of the amalgams of the "*Casa Portuguesa*" (Portuguese House) no longer limits itself to denying it completely, it now arises from the lack that a "serious, concise, well-oriented and realistic" work on the question would fill (Salvado, 2019). The architect Fernando Távora was the first to recognize this need in a 1945 text in the "*Alèo*" (Távora, 1945), which was to be reissued two years later because of its adaptation. Such document reports some of the logical procedures in which the study could be guided, from the point of view of the "environment", "existing architecture" and "possibilities of modern construction" (Távora, 1947). Simultaneously, Keil do Amaral endorses the idea in the article "*Uma Iniciativa Necessária*" (A Necessary Initiative), published in the magazine "*Architecture*" (Amaral, 1947). Shortly afterwards, the subject would be mentioned again as an integral part of the first National Congress of Architecture (1948), with the agenda, "*Architecture in the National Plan*" and "*The Portuguese Problem of Housing*" (VV.AA., 1948). Simultaneously, the first effort was made to carry out the "Survey" with the National entity responsible for Culture at that time, yet without any effect (VV.AA., 2004). It would take six years to start the fieldworks (Salvado, 2019).

Between 1955/57, the "*Survey on Regional Portuguese Architecture*" was carried out, contributing to the recognition of the architectural diversity of the different regions of Portugal against the notions of the "*Portuguese House Movement*", which was earlier recognized by Rocha Peixoto, among others. With explicitly different approaches, the eighteen architects, surveyed in groups (VV.AA., 2004) the Portuguese territory (with the exception of the Azores and Madeira archipelagos) which they described, sketched and photographed, giving rise to a vast research data which was published in the two-volume work (VV.AA., 1961), "*Arquitectura Popular em Portugal*" (Popular Architecture in Portugal).

For Portuguese architects, "*Arquitectura Popular em Portugal*" (Popular Architecture in Portugal) is a reference point and a Portuguese classic, the Survey came to occupy a meaningful place in the history of Portuguese architecture. According to Prista (2015), its recollection and interpretation supported and was upheld by, the building up of Architecture as a particular subject and practice of culture, a distinctive discipline and profession.

The anthropological and ethnological character that is presented by the relation between who constructs, and the constructed object, was still worthy of the attention, in a first moment, of the researchers of the National Museum of Ethnology, Benjamim Pereira, Ernesto Veiga de Oliveira, Fernando Galhano and Jorge Dias (Leal, 2009; Salvado, 2019). As a result of their intervention, other typologies of Portuguese popular architecture, so far not referenced, or that did not have individual analyses, such as granaries (VV.AA., 1963), haystacks, namely the ones from the Portuguese central littoral (Oliveira & Galhano, 1964), pastoral shelters, included in the work (VV.AA., 1969) "*Construções Primitivas em Portugal*" (Primitive Constructions in Portugal), mills, among others. Finally, the pieces drawn together by Galhano (1985) in "*Desenho Etnográfico*" (Ethnographic Drawing) and "*Arquitectura Tradicional Portuguesa*" (Portuguese

Traditional Architecture) by Oliveira and Galhano (1992), a direct product of the revision and expansion of the "Architecture", an article (Oliveira & Galhano, 1959), published in the 1*st* volume of "*Arte Popular em Portugal*" (Popular Art in Portugal).

At the turn of the millennium, this theme was again highlighted by the investigations that took place in the Portuguese islands, culminating with the publication of "*Arquitectura Popular dos Açores*" (Popular Architecture of the Azores) (VV.AA., 2000) and of Madeira (Mestre, 2001), thus completing the initial work. It should also be highlighted the publication of "*Etnografias Portuguesas (1870-1970)*" (Portuguese Ethnographies) by João Leal (2009), which includes the main works concerning popular architecture in the Portuguese 20th century; and the printing of the fourth edition of "*Arquitectura Popular em Portugal*" (Popular Architecture in Portugal) in 2004 (VV.AA., 2004).

In 2011, for the commemorations of the fifty years since the first publication of "*Arquitectura Popular em Portugal*" (Popular Architecture in Portugal), the Order of Architects proceeded with the organization of a large amount of the survey collected photos which never came to print (Salvado, 2019), making it available on an online platform (OAPIX, 2011). From this action resulted, in 2013, the itinerant exhibition "*Common Territory. Images from the Portuguese Regional Architecture Survey, Portugal 1955-57*", which had a selection of one hundred records from the archive of the Order of Architects (Salvado, 2019). In this continuity, the former Coimbra University School of Arts joined the celebrations, fomenting a retrospective debate entitled "*Survey on Popular Architecture, 50 years later*", which brought together four of IARP's architects (Salvado 2019).

4 INTERNATIONAL CONTEXT

Although less recurrently, it was possible to identify significant manifestations of the subject outside of Portugal. The first of these examples lead us to an Italian study produced under the rationalistic movement, committed to understanding the aesthetic importance of the rural house (Pagano & Daniel, 1936).

In the United States, publications which attest, once again, the dimension of "*Popular Architecture in Portugal*" stand out. From the parallelism found between the photographic exhibition "*The Family of Man*" (1955) and the neo-realist penchant that some images of the IARP Architecture Survey reveal; or the fact that Portuguese Popular Architecture preceded important works such as "*Architecture without Architects*" (Rudofsky, 1964) and "*House Form and Culture*" (Rapoport, 1969). According to Maudlin (2010), Bernard Rudofsky's 1964 exhibition and best-selling catalogue, "*Architecture Without Architects: A Short Introduction to Non-Pedigreed Architecture*" (Museum of Modern Art, New York), was highly influential in raising architectural awareness of vernacular architecture but it was also very selective in its choice of examples.

In England, the "*Vernacular Architecture Group*" was founded in 1952 (Maudlin, 2010). The group's activities have focused upon recording and documenting Britain's regional building traditions. Thus, establishing patterns, chronologies and typologies and producing a thorough record of a nation's traditional buildings in all their typological, chronological and geographical variety and richness (Maudlin, 2010).

In Spain, the theme cohabited with modernity in the quarterly magazine A.C. (1930-1937), deserving, years later, an in-depth look, by the author of "*Popular Spanish Architecture*" (Flores, 1973), Carlos Flores (Salvado, 2019).

In October 1999, in Mexico, the "*Charter on the Built Vernacular Heritage*" (Stockholm, September 10, 1998) was ratified by the International Council of Monuments and Sites (ICOMOS) 12th General Assembly. In this charter, this type of architecture is considered as "the fundamental expression of the culture of a community, of its relationship with its territory and, at the same time, the expression of the world's cultural diversity. (…) It is a continuing process including necessary changes and continuous adaptation as a response to social and environmental constraints." (ICOMOS, 1999).

In 2018, the European Union promoted a series of activities aimed at alerting European citizens to the importance of diversity, intercultural dialogue and social cohesion in matters of culture and heritage, in what was established as the first *Cultural Heritage European Year* (Salvado, 2019). In this sense, the *Davos Declaration* (2018) should be highlighted as it establishes pathways for

politically and strategically promoting the concept of a high-quality *Baukultur* in Europe. Consequently, the building can be regarded as culture and also creates space for culture (Davos Declaration, 2018). The points 4, 6 and 17 should be stressed:

"4. *Baukultur* embraces every human activity that changes the built environment. The whole built environment, including every designed and built asset that is embedded in and relates to the natural environment, is to be understood as a single entity. *Baukultur* encompasses existing buildings, including monuments and other elements of cultural heritage, as well as the design and construction of contemporary buildings, infrastructure, public spaces and landscapes. (…) 6. *Baukultur* refers to both detailed construction methods and largescale transformations and developments, embracing traditional and local building skills as well as innovative techniques. (…) 17. Highquality *Baukultur* calls for efforts in the field of education and awareness-raising, with a view to enabling better judgements regarding *Baukultur*. All those involved, public and private sector alike, bear responsibility for the quality of our built environment, which will be passed on as a legacy to future generations." (Davos Declaration, 2018).

5   BUILT HERITAGE RESEARCH FROM POPULAR TO CONTEMPORARY

The interdisciplinarity and interrelation, which link both research and education, are the basis to produce knowledge at Department of Civil Engineering and Architecture of the University of Beira Interior (DECA-UBI). Among the different research themes, attention is devoted to the built heritage in Portugal, and its connection with the engineering sciences as thermal comfort, acoustics and daylighting (Martins, Carlos & Nepomuceno, 2017).

Built heritage is a very important cultural asset as evidence of any development in the society. It refers to all aspects of the man-made environment such as houses, places of worship, commercial and office buildings, monuments and other places of historical significance. Built heritage helps to define a sense of place and identity for communities (Martins, Carlos & Nepomuceno, 2017). It is not only about monuments of exceptional value, but it also includes small modest vernacular buildings that represent other equally important historical, social and cultural values (Martins, Carlos & Nepomuceno, 2017).

Furthermore, the actual technical requirements are not always compatible with the former building. Regular maintenance of these buildings may include preservation, rehabilitation, restoration, reconstruction, adaptation and interpretation (Martins, Carlos & Nepomuceno, 2017).

According to the "*Charter on the Built Vernacular Heritage*" (ICOMOS, 1999) "due to the homogenization of culture and of global socio-economic transformation, vernacular structures all around the world are extremely vulnerable, facing serious problems of obsolescence, internal equilibrium and integration". Thus, a balance needs to be achieved since the future of built heritage conservation is focused on the sustainable built environment (Martins, Carlos & Nepomuceno, 2017). While heritage conservation is a key player in sustainability planning, interdisciplinary skills are needed to deliver the heritage studies and projects of the new generation architects which combine aspects of cultural heritage with the best preventive conservation, projects, methodologies and practices (Martins, Carlos & Nepomuceno, 2017).

Passive strategies have been used around the world for centuries. In the last decades, we became dependent on mechanical systems with rising economic and environmental impacts. It is therefore important to learn from the past to understand how houses evolved to respond to the surrounding environment (Martins, Carlos & Nepomuceno, 2017). The analysis of vernacular dwellings provide insight into well-adapted popular solutions to deal with the local climatic conditions in promoting responsive passive building technologies which usually are not found in the literature (Martins, Carlos & Nepomuceno, 2017). However, significant gaps exist in the data and understanding of building stocks' composition as most methods to address existing buildings are derived from new construction (Kohler & Hassler, 2012). Sustainable buildings aim to be adapted to local social, economic, cultural and environmental contexts. It should include all factors that may affect the natural environment or human health, having in mind the consequences for future generations (Bragança, Mateus & Koukkari, 2010).

The demand for sustainable buildings with minimal environmental impacts is increasing, leading the construction industry to adopt new technologies for building design [22], (Jrade & Jalaei, 2013; Martins, Carlos & Nepomuceno, 2017).

In the last decade, in Portugal, several research projects about vernacular architecture were funded:

a) the project "*Popular Architecture in Portugal. A critical look*" (PTDC/AUR-AQI/099063; FCOMP-01-0124- FEDER-008832) was set as a research project in late 2008 to be developed between April 2010 and March 2013 (Maia et al., 2012; VV.AA., 2012). According to the researchers involved in this project, its aim was to "undertake a re-reading of the book Popular Architecture in Portugal as a clearly delimited reference basis in order to put to the test two expressive variables in architecture: the transition-space and thickness, the latter understood to give rise to a poetics of thick walls and a poetics of thin walls" (VV.AA., 2013b; Maia et al., 2012)

b) the project, in 2014, "*VerSus - Lessons from Vernacular Heritage to Sustainable Architecture*" was developed within the framework of Culture 2007-2013 Programme of the European Union and had the agreement n° 2012-2792 (Versus, 2014; VV.AA., 2014). The main purpose of this project was to obtain knowledge from the study of the principles of sustainability identified in the vernacular built heritage, and to contribute to their cultural diffusion especially among students and academic audiences (Versus, 2014);

c) the project, in 2015, "*reVer: Modeling the life-cycle performance of Portuguese vernacular buildings – contribution to the sustainability of buildings*" (EXPL/ECM-COM/1801/2013; FCOMP-01-0124-FEDER-041746) funded by the Portuguese national funding agency for science, research and technology (FCT). This was an exploratory research project (reVer, 2015) which main aim was to study the sustainability principles of vernacular architecture in Portugal and to explore innovative ways of integrating this knowledge into contemporary building design. Thus, it was intended to reduce the gap of technical information on the performance vernacular architecture, in Portugal, and of its building techniques, thus supporting building professionals with more detailed information regarding the refurbishment or regeneration of vernacular buildings (reVer, 2015, VV.AA. 2015).

6 PORTUGUESE BUILT VERNACULAR HERITAGE RESEARCH, FURTHER WORK

As in the past, this work intends to specify the general conditions in which vernacular production arose and developed, structure the solutions contained in the identified building systems and to discuss the importance that these examples play today. This review is the first part of a larger work which was an integrated master dissertation in Architecture (Salvado, 2019) at DECA-UBI.

Therefore, after identifying the matters pursued, it was analyzed some of the information collected during 1955/1957. Through several representative techniques, it was possible to bring to debate the changes verified after sixty years, alongside the wider understanding that may be found regarding likely connections between rehabilitation/production, formal or constructive, of objects with historical backgrounds and contemporary ones. Notwithstanding the strong theoretical component achieved in this work, a strong complement was achieved with "in situ" observations, seeking to complement the task which is believed to be that of the architect. With this, it was intended to consolidate the theoretical-practical part linked to the exercise of architecture, through a methodological application (Salvado, 2019).

The literature review was able to discuss the studies within the vernacular scope, launched during the 20th century, highlighting the perceived incompatibilities in the two most familiar approaches on the subject. This comparison allowed deepening questions related to the very nature of traditional architecture. In a second research moment, a quantitative ranking (even if partial) of the constructive sample of the various territorial niches (Salvado, 2019) was set.

In support of the theoretical background, it was discussed the conviction in a so-called Portuguese housing model which systematization was possible to reproduce. At the same time, it was highlighted the inevitable appearance of other perspectives on the subject, which, in a first phase, confirmed the prominence of vernacular contents in architecture, broadening the available interpretations, and later question the patterns in which the idea itself was set (Salvado, 2019). This way, it was interposed an inherited vision by the professionals of the National Union of Architects (SNA - Sindicato Nacional dos Arquitectos), given the categorical generalization gathered by

Raul Lino, considering the almost simultaneity in which both progressed, and that, however, did not invalidate the accentuation of the contrasts pertaining to each frame (Salvado, 2019).

Given the geographic context of this particular research conducted by Salvado (2019) regarding the region of Beira Baixa and the inherent constraints, to the time spent on this one year research work, it was decided to limit the observations to one of the five areas that Zone 3 - Beiras comprises and confined the displacements to the limits of the district of Castelo Branco. As the spatial division conceived between 1955/60 did not conform to the current norms, it was decided to use the "Nomenclature of Territorial Units for Statistics" (NUTS), in favour of an explicit structure of the surveyed areas (Salvado, 2019). The previous procedure was based on the relocation, as much as possible, of the photographed by Keil do Amaral, José Huertas Lobo and João José Malato, in order to reconstruct the vernacular profile of the region, almost sixty years later (Salvado, 2019).

According to a brief spatial context, it was presented the places subject to the observations, namely the regions of "Beiras and Serra da Estrela", "Beira Baixa" and part of "Médio Tejo" (INE, 2015; Salvado, 2019). According to Salvado (2019), these groups include the following locations:

a) Alcaide, Alpedrinha, Barco, Castelo Novo, Covilhã, Erada, Fundão, Paúl, Pêro Viseu and Peso in the region of "Beiras and Serra da Estrela";

b) Freixial do Campo, Lardosa, Malpica do Tejo, Monsanto, Sobral do Campo and Zebreira in the region of "Beira Baixa";

c) Pedrogão Pequeno and Vila de Rei in the region of "Médio Tejo".

Although not inserted in these areas, it was also observed a settlement located near the administrative border of the districts of Castelo Branco and Coimbra, listed in "*Portuguese Popular Architecture*" (VV.AA., 2004) as Catraia das Meãs, currently Meãs, in Pampilhosa da Serra (Salvado, 2019).

7 CONCLUSIONS

Through this research and according to Salvado (2019) it was possible to:

a) determine when the question of traditional architecture emerged, identifying the main studies published on the subject and the circumstances in which they occurred;

b) confront the ideas exposed in the "Movimento da Casa Portuguesa" (Portuguese House Movement) with the collection published in Popular Architecture in Portugal;

c) analyse the paradigms in which Portuguese vernacular production developed;

d) focus on an area of the "Survey", raising the specificities of the observed examples;

e) identify and characterise the constructive processes included on a case-by-case basis and evaluate the purpose they may have in the contemporary world.

More than a hundred years have passed since the first time that the question was raised, and it would not be expected that it continued, so recurrently, to feed the interests of scholars. At a time when natural resources are scarce, in which the achievements of the Industrial Revolution support aspects of an unadjusted lifestyle and where urban societies are clearly more heterogeneous, it is essential to find alternative contributions to sensible management of present and future predispositions (Salvado, 2019). In fact, popular architecture offers an overview of solid formal/constructive practices which appropriate to the reality of each place.

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