



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research
Vol. 15, Issue, 07, pp.25321-25323, July, 2023
DOI: <https://doi.org/10.24941/ijcr.45656.07.2023>

**INTERNATIONAL JOURNAL
OF CURRENT RESEARCH**

RESEARCH ARTICLE

URBAN LAYOUT – (RE) THINKING THE FUTURE

¹Patrícia Diogo* and ²Manuel Diogo

¹Department of Architecture, Universidade Lusfada, CITAD, Portugal
²CEPESE Research Center, Portugal

ARTICLE INFO

Article History:

Received 10th April, 2023
Received in revised form
08th May, 2023
Accepted 20th June, 2023
Published online 26th July, 2023

Key words:

Living-lab, Future, Sustainability,
Vernacular Architecture.

*Corresponding Author:

Patrícia Diogo

ABSTRACT

In the Union of the Parishes of Peratfita, Lavra and Santa Cruz do Bispo, in the Municipality of Matosinhos, Portugal, located in the sea coast of North of Portugal territory, we investigate the different poles of the territorial system exploring interdisciplinary approaches related to the formation of rural settlements and establish the relationship between the most important architectural structures in terms of vernacular heritage and its influence on the identity of the places and their development process. Connecting these main themes our research aims to deepen scientific knowledge about the fishing settlements located on the boarder line provided by the sea line and the rural settlements delimited by the plow wake that once furrowed the land with resilient particularities achieved in an unique and shared ambience because we will support the investigation in this “living lab” and reply the research on similar large-scale environments on Earth.

Copyright©2023, Patrícia Diogo and Manuel Diogo. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Patrícia Diogo and Manuel Diogo. 2023. “Urban layout – (re) thinking the future”. *International Journal of Current Research*, 15, (07) 25321-25323.

INTRODUCTION

Apart from the importance of the relationship between institutions, the synergy developed between the group of researchers who have been conducting more closely research in this scientific area was essential, because, apart of the independent research that holds developed detailed field work that contributed greatly to achieving the goals and objectives set forth. These references to the efforts of researchers and the specific knowledge carries, only makes sense because we are facing a peripheral area that has not received the interest due by those who can most influence the socio-economic development that is strongly affected by traditional agriculture in crisis and the lack of other job opportunities, presenting weaknesses of planning and execution of regional and local development policies, being notorious lack of resources allocated to the safeguarding and protection of architectural heritage until the last eight years. From those days until today the Municipality efforts are mandatory to invert the permanent decrease of the active population in the municipalities that are part of Matosinhos and in the regions that are located on the fringes of the Atlantic Ocean. These exception times allowed that a slight rate of population increasing as a result from the power of attraction they exert on local and cross-border territory that, although penalized, still maintain certain functions that contribute to halting the general trend depopulation and demographic void.

URBAN LAYOUT

We think it is of scientific interest to underline that the emigration process is not only product of our days.

If we get back to the 50's of XX's century to conclude that from these rural areas, emigration had a highly selective character that affected the dynamics and characteristics of population in age to have children and to work, directly influencing the imbalance that the group of older people has increased, with groups of young people and births decreasing, endangering the demographic stability of the territory. This presupposition assumes that, from a technical-scientific point of view, it is essential to develop fieldwork that supports the increasingly fine-grained screening of heritage resources with regional, national and international impact, based on the diversity of cluster forms and the differentiation of conditions of the physical environment, in the multiplicity of combinations that underlie diverse environmental realities. The understanding of habitat morphology, socioeconomic structure, organization of the cluster, its relationship with the territory and with vernacular architecture are expressions that combine environmental characteristics with physical and human structures that our Research Project intends to deepen, anchored in the concepts of social memory, cultural heritage, identity, systems of representation and meaning collectively shared and reproduced in the course of the historical process. The theoretical-practical nature of the proposal intends to associate safeguarding and protection to build spaces and vernacular structures, assuming that despite its regional expression being a product of the application of local materials and construction techniques that cross aspects of cultural heritage transmitted throughout history by generations of anonymous actors, can make valuable contributions to the promotion and dissemination of scientific and technological knowledge with national and international impacts.



Fig. 1 - World Map and Portugal Map with Matosinhos Location

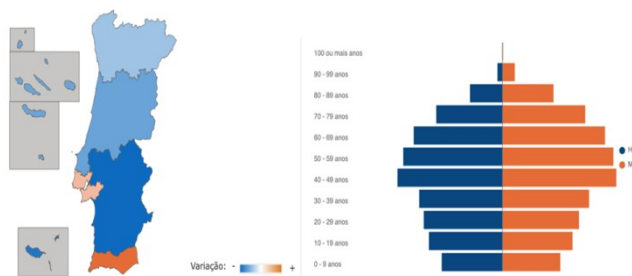


Fig. 2 and 3 – Variation of Resident Population in Portugal in between 2011-2021 and gender and age division. In Portugal Census 2021

Aware that the enumerated aspects require a rigorous scheduling of the field work to be carried out, the methodology to be used is based on the comparative method, although we can resort to deductive and inductive methods if the matters to be treated so require. In this circumstance, we will try to converge the results to a coherent whole, discovering regularities, understanding models and typologies, identifying transformations, spatial continuities and discontinuities, similarities and differences, since this method cannot be confused with an empirical data collection technique; rather, it makes comparison to a fundamental requirement in terms of surveys supported by swot (1) analysis. In this perspective, the comparative method (2) will be used to demonstrate analogies between facts and compare cases in which similarities are simultaneously present or absent, trying to see if the variations they present demonstrate the principle that each effect corresponds to a causal relationship between determining elements and context contrasts that highlight their reciprocal differences and similarities regardless of the functions and symbolism they perform. Therefore, the rigor and scientific experience of researchers on the set of material and immaterial goods that carry intrinsic values in the fields of memory, authenticity, originality and uniqueness with an impact on the fields of vernacular architecture, will contribute to enhancing the knowledge that we can extract and adapt to the requirements of contemporary architecture, promoting principles and strategies for recovering the vernacular heritage, based on the rigorous optimization of models and concepts of site and place. The case study, object of the requalification, will propose the use of low energy consumption materials, recycling and reuse of materials, incorporation of alternative energies as concrete and dynamic supports of the process of environmental sustainability, economic and social, valuing comfort parameters and respect for the respective historical and cultural contexts, helping to consolidate new uses for vernacular architecture and establish new approaches in the context of exercising citizenship and inclusiveness.

(RE) THINKING THE FUTURE

The main objective of the Research Project is to contribute to the application of knowledge, to the development of skills and competences of a multidisciplinary nature oriented towards the protection and safeguarding of Vernacular Architecture and its cultural memory, above all the specificities of rural territories that have a lower population density.

Considering the level of internationalization of the scientific activities to be carried out and the multidisciplinary nature of the subject, the expected results will be the consequence of the alignment of the deepened research on the different poles of the territorial system, contemplating its formation, fixation and evolution with the major goal of developing smart(s) green city(ies). These thematic conditions, while not being exclusive, involve relationships and commitments that contribute to defining the essence of the units to be inventoried and differentiated with a focus on the case studies that shape the identity of the places whose are cultural, economic and social assets that it is important to mobilize in the respective local development processes that sometimes seem to be the result of small opportunities that create conditions to retain and attract people willing to seek independence and professional fulfillment. Focusing in the main goals to achieve in the field of the building of smart green cities, the research proposal specifies that the review, the analysis and the safeguarding of vernacular architectural heritage will require the continued commitment of researchers in the deepening of the thematic with multidisciplinary incidence, the definition of the field of the bibliographic references that leads us to mention that the interest in the architecture of each place comes already connected to theorists such as John Ruskin and William Morris in the mid nineteenth century. Although this anonymous architecture has been referenced in many European countries, initially, the subject does not arouse great interest in Portugal with Ventura Terra(3), Possidónio da Silva, José Luis Monteiro, Marques da Silva(4), or subsequently with Pardal Monteiro(5), Carlos Ramos(6), Cristino da Silva and Cotinelli Telmo, among others of the same formation.

The most obvious characteristics of change arrived us with the current designated “traditional naturalist” which stands Raul Lino, in fact in line with the postulate of the Athens Charter and with the regionalist currents that came from the Nordic countries, now reinforced in Portugal with the realization of the National Congress of Architecture in 1948, which punctuates the generation of architects to which belongs Francisco Keil do Amaral and Fernando Távora that promote the achievement of the Inquiry to the Portuguese Regional Architecture. In additional context, the references on the north of Portugal, allows us to cross references between the works of José Leite de Vasconcelos, *Etnografia Portuguesa; Abade de Baçal. Memórias arqueológicas-históricas of Bragança District of António Maria Mourinho, the Nossa Alma i Nossa Tiêrra; Orlando Ribeiro, Portugal, the Mediterrâneo e o Atlântico; Jorge Dias, Rio de Onor; Fernando Galhano e Ernesto Veiga de Oliveira, Arquitetura Tradicional, Construções Primitivas e Tecnologia Tradicional em Portugal*, all of them knowledgeable of regional and national values. In addition, deserves special mention the link that put together these authors because in their works is the originality and the conviction that “what we are” is irreducibly connected to “what we were” and what we “will come to be”. What we will come to be is the addiction of the knowledge and efforts to understand the growth of the cities with the sustainability current that leads us to Smart Green Cities. These cities, supported in a hub that connects industry, government, researchers and community aims to create an urban environment moved by the meaning of solving problems.

With the knowledge that “The Center for Green Cities” points as the keys to develop a Smart and Sustainable City we must have in mind the topics about Urban Sustainability, Sustainable Development, Artificial Intelligence, Quality of Life, Sustainable Development Goals, Internet-of-things and Citizen’s Participation. At this point of our research the study of Sustainable Urbanism is the most important concept to develop because it is a concept based on cities that are energetic self-sufficient, are equitable, engaged and empowered communities, smart, green and climate neutral cities and that promote a healthy and climate friendly lifestyle. Urban areas should be able to produce their own energy preferably using renewable resources, reducing the amount of pollution generated, thus minimizing their contribution to climate change. There should also be efficient use of land, along with waste-minimization. “Sustainable urbanism is society-based, complexity-led, and landscape-driven, and it closes cycles at the best possible scale, creates places for the unknown,

designs antifragile zones, empowers people to own their environment, uses the landscape as the basis for design, and creates innovative rule-breaking designs”(7). “The Urban Agenda for the EU addresses problems that cities are facing by setting up partnerships between the Commission and EU organisations, national governments, city authorities and other stakeholders like non-governmental organisations. The Urban Agenda's priorities for cities cover a wide range of environmental, social, economic and cultural issues.”(8).

CONCLUSION

The definition of these parameters intends to anchor the sense of affinity between the clusters and the implantation places, with the intention of establishing the degree of correspondence between the factors that characterize the environment and the humanized expressions of occupation of the territory, using the values most relevant morphological elements to reach the proposed objectives and, from them, establish the correspondence between the agglomeration, the vernacular constructions and the use that will still be possible to make of them in terms of economic, social and cultural development. These boundaries will guide us in the process of rethinking the future and may find a balance between the world as we know and the world with artificial intelligence ruling cities, architecture and citizens. This research project will continue to deepen these concepts.

REFERENCES

- SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. A SWOT analysis is a strategy used by businesses for measuring and evaluating their overall performance, and that of competitors, in an objective manner. All these factors help business owners make smarter decisions for their company, such as if a venture should grow into a new field or rebrand itself.
- Comparative methods seek evidence for adaptive evolution by investigating how the characteristics of organisms, such as their size, shape, life histories, and behaviors, evolve together across species.
- M.Pagel, *International Encyclopedia of the Social & Behavioral Sciences*, pp. 2403-2411, 2001.
- Miguel Ventura Terra was a Portuguese Architect with Portuguese and French formation. He worked with Victor Laloux that projected the Museum of Orsay. Ventura Terra carried a set of values that opposed 19th-century romanticism and the formal eclecticism of styles. The structure of his works leads him to create works where the coherence of the compositions predominates over expressive tendencies, subjugating the decoration and accidents of the facades to a severe and elaborate compositional game. Its current residential buildings display an urbanity and an understanding of restraint with which to protect the facades, which rarely explore their volumes or the density of their masses. Despite his premature death, the work of this republican architect brought to Lisbon at the beginning of the century a sign of progress and rationality that would leave its mark on subsequent generations.
- José Marques da Silva was a Portuguese Architect, and one of the most important architects in Oporto, North of Portugal. Marques da Silva returned to Portugal in 1896 to begin an intense professional activity that quickly earned him public recognition. At the Universal Exposition in Paris in 1900 he obtained a silver medal and in the Exposition in Rio de Janeiro in 1908 he was awarded a gold medal. In 1908 he is awarded the Official Degree of the Order of St. James of Scientific, Literary and Artistic Merit. With projects such as the São Bento Station (1896), the São João National Theater (1910), the Quatro Estações Building (1905), the Alexandre Herculano High School (1914), the Lapa Brotherhood House, a building adjacent to the Church (c. 1910-1915), Liceu Rodrigues de Freitas (1919), Armazéns Nascimento (1914), Casa de Serralves (1925-1943) or the Monument to the Heroes of the Peninsular War (1909), shaped the physiognomy of the city of Porto , but his work also extended to other regions in the north of the country, in particular to Guimarães, a city for which he would later design several emblematic buildings such as the headquarters of Sociedade Martins Sarmento, the Municipal Market or the Sanctuary of Penha.
- Porfirio Pardal Monteiro was a Portuguese architect and university professor. He is one of the most important architects of the first half of the 20th century in Portugal.
- Along with a notable group, including Cottinelli Telmo, Carlos Ramos, Luís Cristino da Silva, Cassiano Branco and Jorge Segurado, he was to lead the modernist turn of Portuguese architecture. Pardal Monteiro stands out as "the man who built the most and who became famous as the first modernist. Without concessions, he was able to take the thread of tradition to innovate". His work marked the city of Lisbon, having been responsible for many of the most important architectural achievements between the 1920s and 1950s.
- His work, at a time of change in construction practices, combined the values of the Beaux-Arts tradition with the components of reason, translating into functional projects adapted to the mechanics of modern life and in defense of a very specific way of understanding the city construction.
- Carlos João Chambers de Oliveira Ramos was a Portuguese architect, urban planner and pedagogue.
- He is one of the pioneers of the modern movement in Portuguese architecture, along with Pardal Monteiro, Cottinelli Telmo, Cassiano Branco, Cristino da Silva and Jorge Segurado.
- His initial work reveals his desire to be in tune with the advanced trends of international architecture in the first decades of the 20th century, being the author of emblematic works of that period in Portugal. He would later inflect, approaching the historicist and traditionalist bent of the official style of the Estado Novo.
- The somewhat restricted dimension of his built work is not proportional to the decisive influence he exercised on the following generations as a teacher and director of the Oporto School of Fine Arts, being linked to the origins of the current of the Oporto School.
- Roggema. R. Faculty of Design, Architecture and Building, University of Technology Sydney, Australia. Sustainability 2017.
- European environment agency, 2023. <https://www.eea.europa.eu/en/topics/in-depth/urban-sustainability>.
