

Fishing Settlements and Sustainability – Task I

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Abstract - In the sequence of the research article intitled “Rural Settlements and Smart Green Cities” and our willing to compare this two cases (rural country settlements and rural fishing settlements) we rescued the Leipzig Charter on Sustainable European Cities, since it focuses on the principles of sustainability and urban development framed in the national, regional and local policies of the community countries, following criteria that base high standards of quality of life and functional qualification, on the assumption that they will contribute to attract investment, establish people and knowledge, promote qualified work opportunities and the production of value-added goods. Thus, in the construction of the research project, it is important to look at the relationship between currents of thought that contribute to support concepts related to the issue of sustainability, urban regeneration and the understanding of the morphology of the habitat, exploring bibliographic references of international and national authors associated with the research project.

I. INTRODUCTION

The analytical approach of fishing settlements and diffuse rural cores uses theoretical readings and methodological reference works, reading case studies and contextualization studies, cartographic and iconographic material, to adjust the construction of the problem, the formulation of hypotheses, the definition of the objectives and the theoretical-methodological analysis grid, to the understanding of the morphological and functional characteristics of the habitat, looking for the members of the research team in this task.

II. TASK I

The development of the Task that origin this research article consisted in the following:

- Define the field of analysis, establishing a diachronic and synchronic reading of the evolution of urban tissues, identifying the main conceptual, structural and symbolic

invariants and the modes of evolution of the urban / rural form;

- Understand the morphological and functional characteristics of the habitat, recognizing the types of fishing and rural settlements, the layout and decomposition of the urban fabric, the built mass and the relationship with the activities developed;

- Collect bibliographic, cartographic and iconographic material to support the importance of its rehabilitation in terms of use, historical memory and cultural sense resulting from tradition, while serving as a support to analyze the changes and permanencies that human settlements undergo over time;

- Develop a theoretical study on rural structures considering the level of internationalization of scientific activities to be carried out and the multidisciplinary nature of the theme, deepening the investigation on the different poles of the territorial system - formation, fixation and evolution of morpho-typologies in the formal, spatial

planes and constructive of spaces linked to fishing and agricultural production in the preservation of biodiversity and environmental sustainability in a local, regional, national and international context.



Fig. 1 – World map

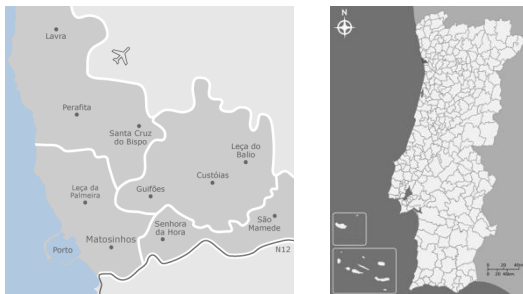


Fig. 2 –Portugal map, Matosinhos Map.

III. PLAN AND METHODS

When tracing the path for the research plan and the methodologies to be used in view of the conceptual framework of the Research Project - Sustainability and Urban Regeneration: Fishing Settlements and Diffuse Rural Centers (Case Study, Angeiras, Pampelido Velho, Antela and Avilhosos belonging to the Village de Lavra) - we seek to establish a diachronic reading of the evolution of urban fabrics, in order to perceive, in a synchronous reading, the singularities of its architecture generated in different periods of history, identifying the main conceptual, structural and symbolic invariants established by the intersection between these same readings diachronic and synchronic, to strengthen the development of relational thinking and establish bridges between different times and modes of the evolution of the urban / rural form.

Considering the level of internationalization of the scientific activities to be carried out and the multidisciplinary nature of the theme, the expected results will be the consequence of the following alignment:

1. Deepen the research on the different poles of the territorial system, contemplating their formation, fixation and evolution;

2. Study the morpho-typologies in the formal, spatial and constructive planes;

IV. INTERNATIONAL REFERENCE SCHOOLS

In our research we take as a major reference the British School “Conzeniana” through Michael Robert Gunther Conzen[1] that establishes the historical stratification of the urban landscape and a hierarchy among its constituent elements; Karl Kropf[2], who bases the different levels of the “Urban Structural Units”, defining a taxonomy for relatively homogeneous areas as to the type, density and layout of the built and non-built area; Paul Osmond[3], who proposes indicators for the evaluation of urban metabolism and urban sustainability, prioritizing a division into USU (Units of the Urban Form).

Italian School “Muratoriana”, with Saverio Muratori[4], focused on the development of urban morphology and the typology of the building; Gianfranco Caniggia[5] aiming at the study of typologies and types using the conceptual separation between space and time; Aldo Rossi[6] with the promotion of the return to traditional types of construction and to historic centers, marking the correspondence between urban morphology and the typology of the building.

French school of “Versailles” heiress to the reflections on the city, in the branches of geography and history, by Antoine-Chrysostome Quatremère de Quincy[7]; from the sociology of Henri Lefebvre[8], Philippe Panerai[9] and Jean-Charles Depaule[10] seeking to consolidate the identification of theoretical models anchored in urban design and the idea that the contemporary does not always represent a complete break with the past.

Deepening scientific knowledge about the morphological and functional characteristics of the cores and places that correspond to the old fishing and rural settlements, means to analyze the organic growth processes of the primitive core to establish a connection between fishing settlements, rural cores, urban and peri urban areas, assuming an instrumental character in the decomposition of the layers that originated the structure of the existing urban form - the genesis of the formation, the road layout, the block, the lot and the building - working with the concepts of mesh type and architectural element in order to provide information related to the structure built and to establish relations with the other elements of the urban system. For this purpose, we consider the general framework of the territory in the local and regional context, the bibliographic collection on morpho-typological analysis and the construction of the respective theoretical framework and the methodological

consolidation and criteria for the analysis and programming of the works.

V. THE TASK DESCRIPTION AND EXPECTATIONS

The analytical approach of fishing settlements and diffuse rural cores uses theoretical readings and methodological reference works, reading case studies and contextualization studies, cartographic and iconographic material, to adjust the construction of the problem, the formulation of hypotheses, the definition of the objectives and the theoretical-methodological analysis grid, to the understanding of the morphological and functional characteristics of the habitat, looking for the members of the research team in this task:

- Define the field of analysis, establishing a diachronic and synchronic reading of the evolution of urban tissues, identifying the main conceptual, structural and symbolic invariants and the modes of evolution of the urban / rural form;
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- Collect bibliographic, cartographic and iconographic material to support the importance of its rehabilitation in terms of use, historical memory and cultural sense resulting from tradition, while serving as a support to analyze the changes and permanencies that human settlements undergo over time;
- Develop a theoretical study on rural structures considering the level of internationalization of scientific activities to be carried out and the multidisciplinary nature of the theme, deepening the investigation on the different poles of the territorial system - formation, fixation and evolution of morpho-typologies in the formal, spatial planes and constructive of spaces linked to fishing and agricultural production in the preservation of biodiversity and environmental sustainability in a local, regional, national and international context.

VI. CONCLUSION

The relevance of the research project with scientific support centered on sustainability and urban regeneration, to be developed around the fishing settlements located in the territory of the Union of the Parishes of Perafita, Lavra and Santa Cruz do Bispo, in the Municipality of Matosinhos, was understood in the dialectical perspective

of an open work, recovering the interaction between formal logic and dialectical logic and between diachronic and synchronous readings that seek to deepen scientific knowledge.

ACKNOWLEDGEMENTS

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REFERENCES

- [1] **Michael Robert Günter Conzen** (Berlin, 21 January 1907 – Newcastle upon Tyne, 4 February 2000) was a geographer, founder of the Anglo-German school of Urban Morphology. Conzen's most influential work is a detailed morphological study of the English market town of Alnwick. His work is noted among others for the micro-scale study of the evolution of plots. https://en.wikipedia.org/wiki/M._R._G._Conzen
- [2] Karl Kropf is Director of urban design consultancy Built Form Resource and Senior Lecturer at Oxford Brookes University. He has more than thirty years of experience in the fields of urban design, landscape architecture, architecture and historic conservation, working in the UK, France and US. He combines academic research in urban morphology and practice in urban design with the aim of using insights from one to improve the other. <https://www.brookes.ac.uk/profiles/staff/karl-kropf>
- [3] Paul Osmond has been engaged with sustainable development since the 1980s, both in practice and more recently, through teaching and research. He joined Built Environment in 2010, from his previous position as manager of the UNSW Environment Unit where he was accountable for development and implementation of the University's Environmental Management Plan. Prior to this role, Paul worked in local government, where he was responsible for the delivery of a variety of pioneering environmental management, landscape and urban design programs and projects. His professional background includes experience in consultancy, forestry, freelance journalism and the metal industry. Paul has qualifications in applied science, environmental management and landscape design. His PhD research focused on methods for evaluation and design of sustainable urban form. Paul is the University's representative to the Green Building Council of Australia, and sits on the editorial boards of the journals *Urban Morphology*, *Urban Planning* and *Architecture*. He is a Certified Environmental Practitioner, Registered Environmental Auditor, Green Star Accredited Professional, Fitwel 'Ambassador' and a member of the International Association for Urban Climate and the International Ecological Engineering Society. <https://research.unsw.edu.au/people/associate-professor-paul-osmond>
- [4] Saverio Muratori ([Modena](#), 1910 – [Rome](#), 1973) was an Italian architect, regarded as one of the pioneers

of typomorphological investigations of urban form. Following the completion of his degree in 1933, Muratori wrote articles in the magazine *Architettura*. After World War II, he was involved in housing projects in Rome, and designed public buildings in Bologna, Pisa and Rome. In 1952 he started teaching at the University of Venice, but in 1954 he moved back to Rome where he became Professor of Architectural Composition.

https://en.wikipedia.org/wiki/Saverio_Muratori

- [5] Gianfranco Caniggia is a pupil of Saverio Muratori. He interprets his teachings with an accentuated attention to the built environment and the reconstruction of the events that marked it, which distinguishes all his interventions in historic centers, starting from the first experimentation carried out in Como (1963) , and in the subsequent works for the recovery of the historic centers of Isernia, Florence, Naples and Benevento. He took part in important competitions and took care of various projects, including those of housing in via Trinità dei Pellegrini in Rome, in collaboration with his father Emanuele (1957), the civic hospital of Isola del Liri (1960-1963), the headquarters of the municipal and judicial offices in Sora (1962), the Palace of Justice in Teramo (1968-1981), various restoration works carried out in Como: the restoration of Borgo Sant'Agostino (1971), Palazzo Volpi (1970) and of the Giovio and Olginati palace (1972). Since 1971 he has continuously held various teaching positions at various universities: Reggio Calabria, Florence, Genoa, Rome; he was also commissioner at the Venice Architecture Biennale.
<https://journal.urbanform.org/index.php/jum/article/view/4278>
- [6] Aldo Rossi was known for his use of pure shapes: cubes, spheres, cones, etc. His main books were: *A Arquitetura da Cidade* and *Autobiografia Científica*. The latter was written practically inside a hospital, where he spent several months, after suffering an accident. To refer to a type of construction, Rossi used the expression *genius loci*, mentioned in *The Architecture of the City*, regarding Roman constructions. The ancient Romans understood that a building should only be built if the place designated for it was under the protection of the *genius loci* - the divinity or spirit of the place. In 1990 he became the first Italian to be awarded the Pritzker Lifetime Achievement Prize.
https://pt.wikipedia.org/wiki/Aldo_Rossi
- [7] Antoine-Chrysostome Quatremère de Quincy studied at the Louis-le-Grand college, and distinguished himself there above all by a keen taste for the arts. Intended for the bar, he preferred to devote himself from his youth to in-depth research on architecture and sculpture. Then he went to Rome in 1776, visited Italy, stayed for some time in Naples, and during this trip collected elements which he used in the writing of his *Dictionary of Architecture*, the first volume of which did not appear until 1788. Linked to the Italian Antonio Canova, the French Percier, Fontaine, Clérisseau and the statuary Pierre Julien, he was laureate, in 1785, of the Academy of Inscriptions and Belles-Lettres for his memoir on this question: "What was the state of architecture among the Egyptians, and what did the Greeks borrow from

it? ". This success prompted Charles-Joseph Panckoucke to entrust him with the writing of the Architecture volume of the *Encyclopédie Méthodique*, which appeared from 1795 to 1825. He had also acquired a solid reputation as an archaeologist. When the Revolution broke out, he adopted its ideas very moderately. Member of the Assembly of Representatives of the Paris Commune, he delivered a speech there on April 2, 1790 in favor of the freedom of the theaters. On July 2, 1791, he was proposed for the post of governor of the Dauphin, a proposal which was not followed up, and, on September 21, 1791, was elected deputy of the department of Paris in the Legislative Assembly. Sitting with the royalists, he defended the constitutional monarchy. He decreed on May 12, 1792, despite strong opposition from the left, that a festival (*Fête de la loi*) would be celebrated to honor the memory of Jacques Guillaume Simonneau, mayor of Étampes, who died in the exercise of his functions , spoke in favor of the ministers Bertrand de Molleville, Duport-Dutertre and Terrier de Montciel, and opposed on July 10 the permanence of the sections as well as the declaration of the homeland in danger, saying that it was there "a means to achieve a new revolution". He also intervened in artistic questions, presented observations on the honors of the Pantheon, and supported the claims of artists on the distribution of prizes, following the Louvre exhibition. His attitude, favorable to the royalists, made him unpopular in the final stages of the session. Thus, on August 8, 1792, he complained of having been seriously insulted by the crowd at the end of the session, where he warmly defended La Fayette, threatened with a decree of accusation. He was imprisoned in 1793, during the Terror for his opposition to the Jacobin Club, then released following 9 Thermidor. Full of zeal for the counter-revolution, he became president of the royalist section of Fontaine-de-Grenelle, and took an active part in the preparations for the royalist insurrection of 13 Vendémiaire year IV. For this reason, the military commission, sitting at the Théâtre-Français, sentenced him to death in absentia, as well as the Count of Vaublanc. But, six months later, he reappeared and was acquitted by a jury which declared that there had been no rebellion in Vendémiaire. Elected on 22 Germinal Year V (April 11, 1797) deputy for the Seine to the Council of Five Hundred, he showed himself more ardent than ever for the royalist cause, fought republican institutions, and was included on the proscription lists with the party Clichy after the coup d'état of 18 Fructidor Year V. He managed to hide, and was recalled after the coup d'état of 18 Brumaire by the consular government which named him secretary general of the general council of the Seine on March 20 1800. He entered the Institute in 1804, and eagerly joined the royal government in 1814. The same year he was appointed royal censor, a position from which he immediately resigned to remain faithful to his opinions of 1790 on the freedom of the theaters, and, in January 1815, intendant of the arts and civil monuments. He received the officer's cross of the Legion of Honor and the cord of Saint-Michel, and occupied from 1816 to 1839 the position of perpetual secretary of the Academy of Fine Arts. In 1818, he was appointed professor

of archeology in the antiques cabinet of the national library. From 1820, he was part of the commission of subscribers for the acquisition of the Château and Domaine de Chambord which was offered to Henri V, grandson of Charles XI. He was again elected, on November 13, 1820, deputy for the Seine to the grand college with 1090 votes out of 1846 voters. He then sat in the center and voted until 1822 with the moderate royalists.
https://fr.wikipedia.org/wiki/Antoine_Chrysostome_Quatre_mère_de_Quincy

- [8] Henri Lefebvre coined the term "Right to the city" with which he argued that the population should have access to urban life and which was developed in the book of the same name published in 1968 in French: "Le droit à la ville". In his books on urban space, such as *Right to the City* (1968) and *The Urban Revolution*, in (1970), in which he analyzes the influence of the capitalist economic system on urban space, based on the need for industrial power to "shape" the city according to its interests, but without excluding the influence of other social agents. Henri Lefebvre's work is quite extensive (he wrote more than 70 books), covering analyzes of Marxism in the 20th century in the light of Marx's own texts, and maintaining an intense debate with great philosophers of the time, such as Sartre. He was opposed to the "empirio-criticist" Marxists who, according to him, immobilized theory, taking discourse as absolute and replacing experience (lived) with knowledge (conceived). He criticized the Althusserians for erasing the action of subjects in the communication process. According to him, important factors such as the experience of the recipients, the "decoding through everyday life", the mediations and the places of the subjects were forgotten. His debates on Marxism led him to separate Marx's texts from the texts produced about Marx. According to Lefebvre, many Marxists killed dialectics, halting the historical movement towards consolidation of the State and pessimism. In his studies, which were very optimistic, he refused to create theoretical models and establish development programs (see *The Urban Revolution*). His theory does not have fixed contours, because, along the lines of Nietzsche's writing, Lefebvre's language has something poetic, in a clear attempt to rediscover the totality of the social, made possible by the work, as opposed to the product (fragmented real-fiction of reality), the result of alienated labor. In Brazil, the philosopher's publications are rare. There are around 1/3 of his works in Portuguese - largely from before the 1970s. From the 2000s onwards, the following were published in Brazil: *The Urban Revolution, Space and Politics and O Vale de Campan*. However, one of his most important works, *The State* (in four volumes) was not translated into Portuguese. In 2020, the work *Lenin's thought* was published by Lavrapalavra Editorial. An important study that clearly demonstrates the breadth and density of this philosopher's work is the book organized by José de Souza Martins: *Henri Lefebvre and the return to dialectics*. Philosopher and sociologist, his studies also contributed to the development of sociology and geography. In sociology, the production of the regressive-progressive method, used

by Sartre in *Critique of Dialectic Reason*, stands out. His contribution to geography was more profound, as the entire current theory of this discipline is due to the thesis that space is social, that is, it is socially produced. Its theoretical triad: lived - perceived - conceived, made possible the studies of David Harvey and Milton Santos, great names in contemporary geography.

https://pt.wikipedia.org/wiki/Henri_Lefebvre

- [9] Philippe Panerai (1940-2023) graduated in Architecture in 1967 from the École Nationale Supérieure des Beaux-Arts in Paris, and in Urban Planning in 1969, from the Institut d'Urbanisme in Paris. His academic career as a teacher was developed, especially, at the École Nationale Supérieure d'Architecture de Versailles, where he founded the research laboratory ADROS-UP3, later LADRHAUS. From the year 2000 he directed, for many years, the Ecole Nationale Supérieure d'Architecture Paris-Malaquais. He worked on different architecture and urban planning projects related to the transformation of the relationship between the city and the rural environment, the integration of infrastructure in cities and urban mutations. In 1999 he won the Grand Prix for Urban Planning (Grand Prix de l'Urbanisme) awarded by the Ministère de la Cohésion des Territoires of France, and in 1989 he became a member of the Académie d'Architecture. He published important books in the area of urbanism, some translated into Portuguese and very present in the bibliography of undergraduate and postgraduate courses in Brazil – such as the books *Formas Urbanas, a Dissolução da Quadra* (*Formes Urbaines, de l'Ilot à la Barre*, 1977) and *Urban Analysis* (*Analyse Urbaine*, 1999). Panerai was very linked to Brazil – and was a particularly important reference for the PPG-AU UFBA, especially for the disciplines, research, theses and dissertations linked to the History of the City and Urbanism line. K. Elissa, "Title of paper if known," unpublished.
https://es.wikipedia.org/wiki/Philippe_Panerai
- [10] Born in Toulon in 1945, lives in Paris. Jean-Charles Depaule taught at the Versailles School of Architecture before continuing his research in urban anthropology on the Arab East at the CNRS (Cairo, Aix-en-Provence, Ivry-sur-Seine). Author of several collections of poetry, he publishes, in addition to his texts, translations (from English and Arabic) and critical essays. He was interested in the formal questions of the composition of the sestina and the writing of the decasyllable as well as the problems of translation. Member of the editorial board of 'Gradhiva', he was editorial manager of social science collections. Was part of the editorial boards of the magazines 'Action Poétique', 'Impressions du Sud' and 'If'. Co-founder, with Jérôme Saint-Loubert Bié and Susanna Shannon, of 'Irrégulomadaire'. He regularly contributes to the 'Cahier critique de poetry'. <https://www.m-e-l.fr/jean-charles-depaule.ec.685>