



International Conference

SURVEYS ON VERNACULAR ARCHITECTURE
Their significance in 20th century architectural culture
Conference Proceedings

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CEAA | Centro de Estudos Arnaldo Araújo (FCT uID 4041)
Escola Superior Artística do Porto

SURVEYS ON VERNACULAR ARCHITECTURE

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Conference Proceedings

Edited by

Alexandra Cardoso, Joana Cunha Leal and Maria Helena Maia

CEAA | Centro de Estudos Arnaldo Araújo (FCT uRD 4041)
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Alexandra Cardoso, Joana Cunha Leal and Maria Helena Maia

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To Pedro Vieira de Almeida

SURVEYS ON VERNACULAR ARCHITECTURE

Their significance in 20th century architectural culture

A survey on vernacular architecture, entitled *Inquérito à Arquitectura Regional Portuguesa* [Survey on Regional Architecture in Portugal] was promoted by the Architects' Union between 1955 and 1960. It benefited from official government support and was conducted by some of the main modern architects. It came out as a two volume book – *Popular Architecture in Portugal*– published in 1961 and reprinted in 1979, 1988 and 2004.

Taken from the outset as being able to provide “the basis for an honest, active and healthy regionalism” (Keil do Amaral, 1947), the Survey, and the book it prompted, had great influence on Portuguese architectural culture. As it was accomplished in an historical turning point, when some of the principles of Modern Movement were being critically reviewed both nationally and internationally, the Survey's outcomes encouraged modern architects to recover national history and tradition.

Moreover, the Portuguese Survey on vernacular architecture constitutes a remarkable register of the ancient rural country at the exact moment it was about to disappear. This fact would also guarantee its importance to other fields of study, such as anthropology, history, and photography.

In association with an ongoing research project *Popular Architecture in Portugal. A critical look*, **this conference aims to discuss the background, conditions, methodologies, published results, effects and the significance of such kind of surveys in the 20th century architecture and architectural thought, and be able to understand the Portuguese case in the international cultural context.**

This conference is co-funded with FEDER funds by the Operational Competitiveness Programme – COMPETE and national funds by FCT – Fundação para a Ciência e Tecnologia within the project *Popular Architecture in Portugal. A critical look* (FCT: PTDC/AUR-AQI/099063; COMPETE: FCOMP-01-0124-FEDER-008832)

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Acknowledgements

KEYNOTE ADRESSES

OUR PROJECT: THE “POPULAR ARCHITECTURE IN PORTUGAL”. A CRITICAL LOOK. INTERCALAR RESULTS OF A RESEARCH PROJECT.

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Abstract

The research project we are developing is centered on the critical study of Popular Architecture in Portugal volume, published in 1961 by the Architects' Union. This subject was chosen not only for the importance of the survey on which it is based for the history of Portuguese architectural culture, but also because we consider that the critical discussion prompted by the survey maintains its relevance unaltered, now that the debates on vernacular and regionalism have re-entered the agenda of professional debates.

Even so, Popular Architecture in Portugal is not being study in isolation, in and for itself. Instead, we chose to study it within a pondered framework, dialoguing with theoretical elements underlying the expressiveness of some modern architectural erudite languages.

Within this framework, Pedro Vieira de Almeida (2010) brought in two complementary key analytical variants of this project. He considered them as “parameters in sordina”:

*Firstly, the notion of the generic importance for architectural expression of greater or lesser degree of **thickness** of the walls, shaping what might be called a poetics of thin walls on the one hand, and a poetics of thick walls on the other.*

*Secondly, the notion of **transition-space's** architectural expressiveness key significance.*

This paper aims to present the current state of our research project, bringing its core working lines and results into discussion.

Keywords: Survey, Vernacular Architecture, Modern Architecture, Portuguese Architecture

The Popular Architecture in Portugal. A Critical Look, which we are now presenting, was set as a research project in late 2008 to be developed between April 2010 and March 2013, under the coordination of Pedro Vieira de Almeida.

The proposal and assumptions on which this project relied, were being equated by Pedro for some time. As the project took form they achieved a wider critical dimension, for concerns were no longer individual, but shared within a team work.

Two distinct yet complementary focus were encompassed by this project (1) the Survey taken as object of study and (2) the Survey used as a pretext for theoretical reflection.

The latter holds all theoretical reflexion on architectural expressiveness which takes as key analytical variants of this project what PVA considers the '*parameters in sordina*':

Firstly, the notion of the generic importance of greater or lesser degree of the **thickness** vector, in the field of architectural expressiveness, and what its degree of incidence on vernacular architecture and erudite architecture, shaping what might be called a *poetics of thin walls* on the one hand, and a *poetics of thick walls* on the other.

Secondly, the real expressive meaning of the notion **space-transition** in structuring the idea of "habitation", understanding space-transition, an in-between space defined as being simultaneously interior and exterior.

This reflection brought by Pedro to the project goes far beyond the aspects directly linked to the *Inquérito à Arquitectura Regional Portuguesa* [Survey on Portuguese Regional Architecture]. Indeed, it is deeply rooted in broader theoretical and critical concerns.

To the date of his death, Pedro was writing *Cadernos 1 e 2* (Almeida, 2011; 2011a), in which he sought to define the theoretical basis of the project. This work was meant to clarify his theoretical position, as he was trying to net in a reasoned discourse various research interests (modernity, modernism/post-

modernism, post-modernity, on the one hand, and identity, vernacular, heritage and globalization, on the other). Pedro was also recovering his early studies on space in architecture.

The richness of this work and the need to respect authorship, led us to choose to limit this first paper to a presentation of intercalary results of the project, leaving the influential contribute of Pedro to a second paper dedicated to his thoughts on the *Survey*¹. It is important to note that, despite not being present, Pedro Vieira de Almeida is also author of the work now being presented.

The Survey as object of study

The study of the Survey covered several aspects, including a new reading and identification of problems associated with it; a critical review of the historiography on the subject (Cardoso, Maia 2010) and an attempt to understand its significance in contemporary architectural culture, both nationally and internationally, which is the genesis of this Conference.

One should begin by noticing that although the publication of the Survey under the title *Arquitectura Popular em Portugal* [Popular Architecture in Portugal] currently achieved its 4th edition, and despite the fact that it is being widely mentioned by all sorts of texts devoted to Portuguese architecture, information on it was relatively scarce.

Available, and commonly referenced information is often concerned with three major issues: 1) identification of the genealogy of the Survey in its articulation with the problem of *Portuguese House* (França 1970); 2) its relation to the 1st National Congress of Architecture promoted in 1948; and 3) its relation to the 'Architecture' journal (Portas 1978). We might add to those matters the attempt to assess its influence, especially in what concerns the so-called *third way* followed by the Portuguese modern architecture (Portas 1978), a subject that is

¹ See in this Conference Proceedings Leal, Maia and Cardoso, *Pedro Vieira de Almeida and the Survey*

attracting most references, perhaps due to the international projection that this architecture has reached today.

The liaison with the political system is part of those aspects. The ambiguous relationship established between architects and the dictatorship of Salazar, was interpreted as an act of resistance (Pereira 2000) supported by subtle ingenious misunderstandings (Portas 1978). This reading needs, as far as we are concerned, to be considered in a wider context: that of general relations between architecture, architects and power during *Estado Novo* (Cardoso, Maia 2011) this being a rather polemical issue in the context of national historiography (see Pereira, Fernandes 1987; Pereira 2000; Almeida, Maia 1986, Almeida 1998).

On the other hand, some authors (Almeida, 2002 Cardoso, 2005; Filgueiras 1986; Mendes 1987) mention the strong cultural influence of geography and anthropology. As is well known contact with Orlando Ribeiro and Jorge Dias' team was especially relevant to the northern teams working in the Survey. This fact, turned out to have international consequences, through the choices made for the study submitted by the Portuguese delegation to the X CIAM Congress in Dubrovnik in 1956, under the title *Plan for a Rural Community in Trás-os-Montes*.

From our point of view, since here one could anticipate the articulation between *critical regionalism and critical internationalism* that Pedro has been building from Carlos Ramos' quotation of Emile Schreiber '(...) *international penetration, national interpretation, this is the whole secret of harmony in the world of tomorrow.*' (1986).

In contrast, Survey's contribution to anthropology through the record of a largely disappearing rural Portugal has been stressed (Pereira, 2000), as well as its importance as a photographic document for the history of Portuguese photography (Sena, 1998).

Conversely, attention was never given to the methodological aspects of the Survey. It is important to stress the historiographical unawareness to this point,

as we believe that it should be thoroughly analyzed. Indeed, one of the biggest problems in reading and interpreting the Survey is that no methodological homogeneity whatsoever bonds the work of the six teams that have done it.

This absence of a common method reflects itself in the total lack of unity of the Survey (Almeida 1986). Moreover, the authors' desire to find the diversity in Portuguese traditional architecture, conditioned their look *'to read what in the country are permanencies, not only in time but also in space'* (Almeida 2008: 110).

As rightly noted by the geographer Orlando Ribeiro (1998, XVI) *'there are two ways to look at the rapid transformations the world goes through. Many see mostly the changes, others try to catch out what, despite them, stays the same'*

A first approach to the Survey's graphic material immediately highlights the non-systematic notation used zone by zone which in itself makes it difficult for a comparative analysis of the findings. In addition, the lack of uniformity in the characterization of the different architectural types, according to individual criteria, makes it impossible to read the global set of maps that have been published.

It was therefore crucial for our study to treat all the existing documentation to be read as a whole, what led us to match in a single map the boundaries of the zones that were surveyed.

Apart from an obvious excess of information, this exercise permitted us to realize that the lack of the typological map of Zone 5, Alentejo, would not allow an information set. To address this gap we decided to make a sketch map, based on a regional chart annotated by this zone team², trying to identify in the territory the location of the examples collected or referred to in the text. In this task, the symbols and the characterization employed for these types were based on similar criteria of approach, which we presume have identified in all the three teams from the south. Note that these teams were particularly sensitive to the constructive and formal aspects of rural housing.

² It is the regional division of the Zone [5], according to Prof. Amorim Girão *Esboço duma Carta Regional de Portugal* published by team's zone 5 (*Arquitectura Popular em Portugal*, 1961:512)

After treating digitally all charts and typological maps associated in an interactive database - an operating tool that allows successive approximations for clearing up information – and recorded the various elements that were considered significant by the six teams of architects, it was possible to account for the 82 symbols employed. The most representative examples of popular architecture in Portugal were then translated in different types of buildings (dwellings, services, markets, collective equipment, chapels,...).

In the first stage of systematization, some elements were excluded, for they did not seem relevant to the critical research being developed. As a result, structures with greater character inducer of collective life **-habitation-** were highlighted. The structures which have only a utility induced of collective life, or without direct architectural value, were removed³. Currently, a set of 53 different types of dwellings is identified.

With these 'cleaner' maps, it was now possible to select areas for first visits of key points, which without excessive detail allowed collecting information in the field, thus validating the choice of those areas to be worked more consistently.

This *in loco* approach in Zone 4 (Estremadura), which is rich in examples provided with *thin walls*, and Zone 3 (Beiras), which is expected to host examples of *thick walls* and *space-transition* has not been particularly useful on this last parameter, because many of the examples registered by the Survey have disappeared. However there are still some cases that allow the crossing with the graphic information, so it is important to check them in the field.

In a second stage of systematization, an attempt was made to group in the same typological classification examples of dwellings separately understood and presented as distinctive by the Survey. For it seemed to us that no analytical advantage was coming from this option. A good example of this is Zone 1, where farmhouses are singled out individually and Zone 2 with several variations of dwellings with balcony.

³ At this stage we decided to keep the pilgrimage chapels (zone 1) and the chapels with porch (zone 2) as a possible hypothesis to study the notion of space-transition..

This approach to examples of vernacular architecture is not intended to be a renewed survey, but an intentional and conscious approach meant to verify the working hypotheses formulated in advance: **thickness** and **space-transition** as expressive values.

Beyond the immediate graphics consequences, this work phase has a component of critical interpretation of those elements, which requires a careful theoretical framework for the options to be taken.

We hope that the release of information, currently being worked on new summary-maps covering the six zones will eventually allow an integrated reading of the entire national territory. From this information, we expect results that enable us to formulate a typological redefinition about the examples held in the 'Survey' and to start a refreshed critical dialogue between erudite and vernacular fields in general architectural language.

Currently, we are in a crucial phase of our research, not only because we are now proceeding to critically oriented recognitions, but also because it simultaneously represents a moment, particularly delicate, that requires attention and disciplined sensitivity to the examples to find. These will support the kind of expressive elements in the architectural language that we propose to analyze, i.e., the importance of '**wall thickness**' in the determination of interior space and the social significance of '**space-transition**' in the socialization of home. (Almeida 2011a)

For the objectivity of this particular reading, it is important to count on a universe of a 'stabilized' work, as is the case of the architectures that the "Survey" specifically refers to. Furthermore, and because they are examples of vernacular architecture, they have in our opinion the additional advantage of holding an architectural expression '*spontaneous, popular, genuine character, in the sense of being culturally candid, and not being dominated by erudite ideas*' (Almeida, 2010: 12).

Finally, it is our intention to pay a tribute, now that 50 years have passed since the Survey was brought forward, to its authors and promoters, since we believe

that to this date the Survey on Portuguese Regional Architecture hasn't been critically studied, as it deserved.

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References

Almeida, Pedro Vieira de (1970), Raul Lino. *Arquitecto Moderno in Raul Lino. Exposição retrospectiva da sua obra*. Lisboa: Fundação Calouste Gulbenkian

Almeida, Pedro Vieira de (1986) *Uma Estratégia de Intervenção in Carlos Ramos. Exposição retrospectiva da sua obra*. Lisboa: Fundação Calouste Gulbenkian, 45-108

Almeida, Pedro Vieira de (1998), *Os Concursos de Sagres. Representação 35. Condicionantes e consequências*. Tese de Doutoramento em Arquitectura, Universidade de Valladolid, 2 vols.

Almeida, Pedro Vieira de (2004), *A Arquitectura No Estado Novo. Uma leitura crítica*. Lisboa, Livros Horizonte

Almeida, Pedro Vieira de (2008) *Apontamentos para uma Teoria da Arquitectura*, Lisboa: Livros Horizonte

Almeida, Pedro Vieira de (2010), *Dois Parâmetros de Arquitectura Postos em Surdina. O propósito de uma investigação*. Porto: CEAA, Edições Caseiras/14

Almeida, Pedro Vieira de (2011) *Dois Parâmetros de Arquitectura Postos em Surdina. Leitura crítica do Inquérito à arquitectura regional. Caderno 1*. Porto: CEAA, no prelo

Almeida, Pedro Vieira de (2011a) *Dois Parâmetros de Arquitectura Postos em Surdina. Leitura crítica do Inquérito à arquitectura regional. Caderno 2*. (texto inédito em fase de edição)

Almeida, Pedro Vieira de; Maia, Maria Helena (1986), *As décadas pós-Congresso. Os anos 50 in História da Arte em Portugal. Arquitectura Moderna*. Direcção de Pedro Vieira de Almeida e José Manuel Fernandes. Lisboa, Alfa, 146-153.

ARQUITECTURA Popular em Portugal (1961), Sindicato Nacional dos Arquitectos, Lisboa, 1ª edição, (2 vol.) 2ª edição; Associação dos Arquitectos Portugueses, 1980 (1 vol.); 3ª

edição: Associação dos Arquitectos Portugueses, 1988 (3vol.); 4ª edição: Centro Editor Livreiro da Ordem dos Arquitectos, 2004 (2 vol.).

Cardoso, Alexandra; Maia, Maria Helena (2010) Tradition and Modernity. The Historiography of the Survey to the Popular Architecture in Portugal in *Approaches to Modernity*. Porto, CEAA, in press

Cardoso, Alexandra; Maia, Maria Helena (2011) Arquitectura e Poder. Para uma historiografia do Movimento Moderno em Portugal in *Apropriações do Movimento Moderno / Apropriaciones del Movimiento Moderno*. Actas do VII Encontro do CEAA. Zamora, Fundacion Rei Afonso Henriques, Junho.

Filgueiras, Octávio Lixa (1986), A Escola do Porto (1940/69) in *Carlos Ramos*. Lisboa, Fundação Calouste Gulbenkian

França, José Augusto (1970), Raul Lino. Arquitecto da Geração de 90 in *Raul Lino*. Lisboa: Fundação Calouste Gulbenkian, 1970, p. 106-08

José Augusto FRANÇA - *A Arte em Portugal no Século XX*. Bertrand, Lisboa, 1974

Mendes, Manuel (1987), Os anos 50 (Entre a autonomia criativa do 'novo' e a crítica ao espaço indiferenciado, ao modelo transferível – os compromissos realistas do 'estilo internacional'), *RA – Revista da Faculdade de Arquitectura da Universidade do Porto*, 0(I) October

Pereira, Nuno Teotónio (1987), Prefácio da 3ª Edição de *A Arquitectura Popular em Portugal*. Lisboa, Associação dos Arquitectos Portugueses

Pereira, Nuno Teotónio (2000), Reflexos Culturais do Inquérito à Arquitectura Regional in *J-A*, 195, Março/Abril

Pereira, Nuno Teotónio; Fernandes, José Manuel (1987), A Arquitectura do Estado Novo de 1926 a 1959 in *O Estado Novo. Das origens ao fim da autarcia 1926-1959*. II. Lisboa, Fragmentos

Portas, Nuno (1961) Arquitecto Fernando Távora: 12 anos de actividade profissional, *Arquitectura*, 71(3)

Portas, Nuno (1978), A Evolução da Arquitectura Moderna em Portugal: uma interpretação in *História da Arquitectura Moderna* of Bruno Zevi, 2nd volume, Lisboa, Editora Arcádia

Ribeiro, Orlando, (1998), Foreword to the 2nd edition (1962) of *Portugal o Mediterrâneo e o Atlântico. Esboço de Relações Geográficas*. Lisboa, Livraria Sá da Costa Editora, 7th edition

Sena, António (1998) *História da Imagem Fotográfica em Portugal. 1839-1997*. Porto, Porto Editora

Tostões, Ana (1997), *Os Verdes Anos na Arquitectura Portuguesa dos Anos 50*. Porto, FAUP

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Joana da Cunha Leal is Assistant Professor of the Department of Art History and Associated Researcher of the Art History Institute of Universidade Nova de Lisboa - FCSH (she is the head of its research group on theory and disciplinary practices of art history and vice-director of the Institute). She teaches courses on art theory, 19th century art history, architecture and urbanism (also as an invited lecturer in the Universitat de Barcelona, Spain). Her research interests have been focusing the relationship between art, politics, and social change in the late 18th and 19th century Europe, with particular emphasis on urban change during these periods. She takes part of the research team for the project *"The "Popular Architecture in Portugal". A Critical Look"*, coordinated by Pedro Vieira de Almeida until 2011 (CEAA, ESAP), while also working on *Early Modernist Painting*. Her research project on *"Other Modernisms? The case of Amadeo Souza Cardoso"* was awarded a Fulbright Research Fellowship (2010). She was a fellow of the Stone Summer Theory Institute twice: *"Beyond the Aesthetic and the Anti-Aesthetic"* and *"Farewell to visual studies"* (Chicago, SAIC July 2010 and 2011). Her recent publications include: *"On the Strange Place of Public Art in Contemporary Art Theory"*, *On The W@terfront* (Barcelona, 2010), 35-52; *"Uma entrada para Entrada. Amadeo, a historiografia e os territórios da pintura"*, *Intervalo* (Lisbon, 2010), 133-153; *"Post-1755 Lisbon: Two and a half portraits"*, *Portrait of the City*, edited Gillian O'Brian (Dublin, 2011).

PEDRO VIEIRA DE ALMEIDA AND THE “SURVEY”

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Portugal

Abstract

The last texts written by PVA, many of which remain unpublished, are specifically devoted to the survey published under the title Portuguese Popular Architecture, or had discussions on it at their outset.

Ever since PVA first mentioned the survey in Raul Lino's catalog (1970) a thorough historical, critical, and theoretical approach to the survey was carried out by him. The presentation of the research project Portuguese Popular Architecture. A critical look, undertaken under his coordination until September 2011, is a direct and rather important outcome of this long-standing work.

This paper aims to bring in to discussion such a pervasive concern with the survey's main questions and deep theoretical and critical implications in PVA's writings.

Keywords: Pedro Vieira de Almeida, Architectural Theory, Surveys, Portuguese Architecture, Vernacular Architecture

Pedro Vieira de Almeida left his main interrogations, motivations, and concerns about the Survey – *Inquérito à Arquitectura Regional Portuguesa* – clearly formulated as he set up our research project presented to FCT in 2009¹.

Pedro designed this project as a theoretical and critical approach to the Survey. It was backed by his longstanding and prolific work as a theorizer, as a critic, as

¹ The project *The “Popular Architecture in Portugal”. A Critical Look* was presented in February 2009 to the call of 2008, opened by FCT to research projects in all scientific areas, began in early March 2010. This project's team consists of Pedro Vieira de Almeida (PI), Alexandra Cardoso, Joana Cunha Leal and Maria Helena Maia, its consultants being Josefina Gonzalez Cubero, Mariann Simon and Miguel Angel de la Iglesia.

a historian and as an architect. The very work that makes Pedro stand as one of the main figures in Portuguese architectural culture from the early 1960s up to the present day.

Pondering over the interaction of a cluster of solid and longstanding interests, problems, orientations, and critical and theoretical positions, Pedro planed this project, and defined its core goals way above intentions of highlighting (1) the tacit motivations that brought the survey forward, or (2) the prospective impact that it would had in Portuguese architectural culture of late 20th century. These issues would be taken into consideration, as we have seen, but only "as long as one can take from them some general conclusions of critical nature" (2010, 16). This happens because Pedro was not looking for an "'internal criticism' [of the Survey], specifically focused in what may seem the greater or lesser coherence of its formulations and conclusions, nor (...) an 'external criticism', committed to the analysis and interpretation of cultural and political conditions of the undertaking." (idem)

As it happens, Pedro's proposal was far more ambitious. He was not exactly seeking to "establish any plan in order to gauge the Survey in itself, but consciously trying to continue the inquiry that prestigiously had the Survey as one of its first steps." In other words, Pedro believed it was necessary to carry on the research launched by the Survey. And he thoroughly explained why, turning this explanation into, as we shall see, a fundamental account for the history of architectural theory (produced in Portugal).

A side note must be added here, in order to highlight that analyzing Pedro's contribution to architectural theory and criticism became a legitimate and paramount issue under the conditions in which our project currently proceeds.

Let us go back to the essential question: why does Pedro Vieira de Almeida engage himself in carrying on the inquiry and the analysis prompted by the Survey? The answer bears on three essential assumptions, closely related to one another, which are:

- Vernacular architecture's key importance
- Major theoretical and critical potential of "wall thickness" and "transition-space" expressive values
- Overcoming the center-periphery unbalanced divide

Potential of "wall thickness" and "transition-space" expressive values

Recognizing the theoretical and critical potential of expressive values as "wall thickness" and "transition-space" is a core question in Pedro's thought, and it must be singled out first as other premises depend on it. The idea is that acknowledging this potential leads us to a thorough reconsideration of architecture, and by extension of its historical accounts. Particularly, Modern Movement's history, as well as that of its overcoming.

Indeed, Portuguese architecture is a necessary, and legitimate basis for this reconsideration. Pedro defined these expressive values, and was assessing them on a local basis even though they are by no means confined to national borders. In fact, he insisted on affirming their scope and consequences as generally valid.

Moreover, "wall thickness" and "transition-space" are never to be taken as some kind of fixed premises for qualitative assessment. Instead, they must be heuristically considered. In so doing, Pedro writes, they will lead to "encouragement of new strategies, of new typological investigations, showing us

from the outset the need of a new definition of 'type'" (2010, 19). Put differently, Pedro aims this research to contribute to a redefinition of "type", one considering not only formal or programmatic aspects, but also the common expressive elements bonding its structure. These values must, thus, be keenly acknowledged and studied.

Let us begin by looking at the hypothesis of "wall thickness" being an expressive element central to architecture, on the grounds of which Pedro distinguishes a "poetics of thick walls" and a "poetics of the thin walls". Pedro envisioned this possibility as he was reading through a suggestion made by the Portuguese architect Raul Lino (*idem*). As it happens, research on this premise has one of Pedro's early works at its outset – the Raul Lino exhibition and the in depth study made for its catalog (Calouste Gulbenkian Foundation, 1970) –, and is severely implicated on the acknowledgement of an idea of architecture (Lino's) that praises tradition, and therefore is alien to the hegemonic assumptions considered in almost every account of the Modern Movement. Here lies also the idea that Raul Lino's sensitivity towards "thickness values may have had unexpected repercussions in his work, since it (...) may have contributed to his misunderstanding of modernist language which [Pedro clarifies] was definitely exploring a radical vision of a poetic of thin walls." (2010, 19)

Concurrently, the attempt to approach expressive values of thin walls that Lino would eventually make might explain the decreased effectiveness of his later architecture, so Pedro sought. In both cases, Lino's position towards this variable conforms an important case-study. It shows us a structural ill-suiteness to the poetic of thin walls modernism was upholding. In the beginning, such ill-suiteness matched a dynamics of resistance supported by Lino's praise of tradition, and his sensitivity to the poetics of thick walls – which Pedro for a brief moment expected Wright to share. Later it conformed itself as straightforward delusion.

Lino's case study gives a decisive contribution to critically ponder the flow of such expressive values in an international scale. The background of Pedro's study on the expressive values of thickness embraces not only Gropius' Bauhaus

and Le Corbusier proposals, but also “opportunistic and commercial languages in architecture” that would later blossom (its exponent would be the global celebration of Las Vegas strip “decorated sheet” – the thinnest wall possible).²

Symmetrically, Pedro insists in elucidating A. Loos’ brilliant conception of the Modern. He recalls us that for Loos Modern was “inextricably linked to its own historical consciousness and traditional values through a creative sense of time,” which for Pedro conformed the “only cultured way of understanding the values of modernity” (2010:14).

(As we can see, Pedro’s critical analysis not only goes far beyond any simplistic notion Modernism, but also distresses the cutting line normally established to its overcoming. In so doing, the complexity of such notion is acknowledged in a rather productive way.)

It was also on the grounds of his early research – this time his pioneering study on space in architecture (CODA, 1961-63), where both a thorough analysis of the notion of space, and a debate on Zevi’s and Bachelard’s approaches to the subject were developed – that Pedro would conclude that thickness’ expressive values have very different consequences in terms of limiting space: “whereas ‘thin walls’ just enclose space, cutting it from general space, ‘thick walls’ structured themselves generating space.” (2010: 22).

So, Pedro adds another axis of analysis that will allow him to move the question on the relation between mass and volume from its normal equation, by arguing “it is not the notion of volume that will allow the treatment of space, but the very notion of mass that will generate it.” (ibid.)

The idea of transition-space’s expressive value shows us the same longstanding affiliation in Pedro’s thought. As a matter of fact, this notion was created by him in the early 1960s in order to designate “a space untied to any specific role, playing as a particularly qualified additional space” (2010, 24). This transition-

² Venturi and Scott-Brown’s text is not directly quoted by Pedro Vieira de Almeida, but the references to *Learning from Las Vegas* (1972) are quite obvious. Pedro writes: “the success of thin walls, even now enduring, come to accept all experiences, presenting itself as a privileged field for all internationalisms, particularly those structured outside any critical conscious and more than suspicious contours” (2010: 21)

space, which can only be defined in a "somewhat ambiguous way", is opened to a variety of use-values, seriously implying the user "in completing a project."

Both from the point of view of its expressive value – able to distress the "crystal clear evidence of formal choices" – and from the point of view of its creative openness to various social modes of appropriation³ – as with an "all purpose room", or with the functional plasticity that Pedro would also attempt to define with the notion of "lost space" -, the acknowledgement of transition-space sets an outlandish idea of architecture if one considers Modernist basic assumptions.

In Pedro's own words: "To Modernist logic, with its challenging but hard social perspective, though fully justified at the time, (...) 'transition-space' inherent freedom seemed naturally inappropriate for it was non-economic. Within that logic preference was given, and indeed in a brilliant way, to promoting flexibility of the internal structure of the plan, the 'free-plan' that in 1929 Le Corbusier referred to as being one of the five fundamental principles of architecture." (ibid.)

So, these are the propositions Pedro believed we should analyze in some examples collected from the Survey, for they would allow us "to structure a proper typological reasoning." However, the main question remains unanswered. Why on earth does Pedro preferred spectrum of analysis rests on vernacular architecture? Why he choses to bring us back to architectural specimens collected by the Survey?

As we shall see, the answer to this question is grounded on a political outlook – i.e. it corresponds to a matured stance on the paradoxical relation between the autonomy of architecture, which Pedro supports with no concessions, and its vocation, or "responsibility" towards society.

³ An openness that will set the basis for the exploration undertaken by Pedro Vieira de Almeida on the notion of "poor architecture". This designation arises from Grotowsky's concept of "poor theater".

Vernacular architecture's key importance

A question like the one N. Leach (2004) asks – “can there ever be a Democratic architecture?” – could never have passed unnoticed to Pedro. The question matches some of his main concerns, and is taken by him as essential. Nevertheless, as far as Pedro is concerned, it is incorrectly formulated. Its overall ambition – taking architecture as a whole – prevents a possible answer: “It is certainly not architecture globally considered that may capture values of democracy” (2011a).

Pedro fully supports Leach's position while stating that architecture is not by itself liberating or repressive. Nevertheless, “architecture can contain *efficient causes* of repression or liberation”, as it is possible to investigate them: what really matters is to know “which elements of the architectural language might take one or other of these tendencies” (ibid.).

Pedro sought that this kind of research is not only possible, but is also urgent, given the fact that “these are some of the factors that can determine the so-called ‘social responsibility of architecture’” (ibid.). Thus, adding to the recognition of a more simple equation of the problem – the social significance of architectural programs – one should consider a second degree question: that which brings us back to “sectors of architectural language, which by themselves lead to what might be called a true ‘encouragement to freedom’ of appropriation, and therefore have major and specific social responsibility.” (2011a)

Transition-space is clearly an example of such encouragement. It was also on the grounds of these queries that Pedro's attention to vernacular architecture was strengthened. For vernacular architecture escapes the guidelines and constraints of erudite architecture⁴. It generates a territory – or reservoir – of freedom while playing with expressive and use values of vital importance to Pedro's thought and research.

Thus, it is not surprising that his definition of the vernacular brushes off from hypertrophy and growing trivialization of the term. Conversely, Pedro is

⁴ “The notion of ‘vernacular’ supposes a reality where expressive maturation was not deviated by any excess of information” (2010: 12)

interested in recovering a “primitive”, authentic value for the concept, one able to remove it from the muddy connotations that the cultural industry had been bestowing it.⁵ Engaging in a dialogue with E. Said (2004) and N. Leach (2005), V. Canizaro (2007) and P. Tournikiotis (2001), Pedro advocates:

“I suppose the idea of ‘vernacular’ in architecture has always meant, a holder of an expression stratified over time, of regional nature, spontaneous, popular, genuine, meaning culturally candid, not dominated by scholarly ideas (...). Thus, contrary to what Vincent Canizaro [2007:20] seems to vindicate, I suppose the vernacular cannot be seen as a simple answer out of sheer necessity, adapted to the conditions of each site. The vernacular also implies cultural choices, even though they do not address to a predetermined cultural aim.” (2010: 12)

Taking vernacular architecture as a preferred area of research is, Pedro believes, the necessary condition to deepen and assess the premises launched on the grounds of his observation of erudite architecture. In other words, vernacular is the territory in which “the analysis of the importance of thickness in architectural expression will become clearer.” This is exactly why “the collection of vernacular architecture corresponding to the so called ‘Survey of the Union’ is precious.” (2011a)

Overcoming the center-periphery unbalanced divide

In addition to re-balancing and debate specific Portuguese architectural trends and constraints – the survey focuses Portuguese popular architecture and therefore opens the equation of a specific situation that draw us back both to the specificity of national architectural culture, and to the registration of a proper Portuguese heritage sentenced to disappear –, we are now in better conditions to realize the overall implications Pedro ascribed to the research project *Popular Architecture in Portugal. A critical look*.

As Pedro makes clear, “if the explanatory potential of the hypotheses risen at the outset of this research project proves worthy, as I expect, one might also try

⁵ One can sense here a clearer condemnation of Venturi and Scott Brown's proposals again.

to address from there questions brought about by some modern architecture as a generic paradigm, and by modernism as a professional movement giving them more structured answers. By the same token, one might also try to give partial answers to questions on what we currently see built and released in the world (...)” (2010: 25-26)

Finally, it is possible to claim that critical regionalism and critical internationalism interdependence, repeatedly cheered by Pedro, has to be extended in order to overwhelm all critical approaches to architecture. In sum, what Pedro sought is the empowerment of this “homemade” attempt, so that it disquiets, and eventually overcomes the common tendency for parroting conclusions imported from foreign cultural centers, while paving the way for these new premises to enter international debates. In other words, Pedro is determined to make us mistrust any straightforward interpretation of problems and values associated with the Modern Movement, as well as to take action for an enhanced critical meaning of Post-Modernity. Pedro committed himself to these tasks with the greatest enthusiasm ever.

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References

Almeida, Pedro Vieira de (1970) Raul Lino. Arquitecto Moderno in *Raul Lino. Exposição retrospectiva da sua obra*. Lisboa: Fundação Calouste Gulbenkian

Almeida, Pedro Vieira de (2010) *Dois Parâmetros de Arquitectura Postos em Surdina. O propósito de uma investigação*. Porto: CEAA, Edições Caseiras/14, 2010

Almeida, Pedro Vieira de (2011) *Dois Parâmetros de Arquitectura Postos em Surdina. Leitura crítica do Inquérito à arquitectura regional. Caderno 1*. Porto: CEAA, no prelo

Almeida, Pedro Vieira de (2011a) *Dois Parâmetros de Arquitectura Postos em Surdina. Leitura crítica do Inquérito à arquitectura regional. Caderno 2*. (texto inédito em fase de edição)

Canizaro, Vicent B. (2007) *Architectural Regionalism. Collected Writings on Place, Identity, Modernity, and Tradition*. New York: Princeton Architectural Press

Leach, Neil (2005) *A Anestésica de Arquitectura*. Lisboa: Antígona

Said, Edward W. (2004) *Orientalismo. Representações ocidentais do Oriente*. Lisboa: Livros Cotovia

Tournikiotis, Panayotis (2001) *La Historiografía de la Arquitectura Moderna*. Madrid: Librería Mairea y Celeste Ediciones

Venturi e Scott Brown (1972)

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THE SURVEY AS A KNOWLEDGE PROCESS AND A CRITIC TOOL. SOME TOPICS TO DEBATE

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Abstract

The mid-1950s were a moment of critical thought and operative action contributing for the affirmation of what one may call in a disciplinary way Portuguese architectural culture. In fact, the search for local references would give rise to a critical regionalist awareness referenced to the revelation of Popular Architecture through the Survey on Regional Architecture in Portugal (1955) research project. If this attitude revealed the conflicts and crisis the Modern Movement was going through in the international context namely within the most recent CIAM discussion platforms, it marked in Portugal a retrieval of the integrating sense that seems to constitute a constant in Portuguese architecture as G. Kubler remarked (1972). Indeed, the questions of building tradition, modernity and regionalism traversed the conscience of diverse architects, raising once more the question of the Casa Portuguesa [Portuguese house] in a somewhat hegemonic way since the beginning of the century.

As a result of his built work, Keil do Amaral (1910-1975) had already highlighted important new elements, divulging the Dutch architecture of Dudock and proposing, in 1947, "Uma iniciativa necessária", that one look into popular architecture in searching for an authentic architecture removed from all eclecticism and styles and identifying with its own roots. Januário Godinho (1910-1990) had also been developing an approximation strongly contextualised on the location and the natural environment and revealed considerable knowledge of the traditional methods and materials. The series of Hostels he designed in the Serra de Gerês for HICA and other industrial or social facilities of his revealed a sensitivity to the rusticalness of the landscape and announced an open process of contextualisation. Without rejecting modernity or the vanguard contributions, Fernando Távora (1923-2005) searched for authenticity putting together history and Project, searching for overcome of the Problem of Casa Portuguesa (1947). Since the late 1940s, also Nuno Teotónio Pereira (1922-) had been carrying out his own innovative conceptual research in line with these questions, working, in the Igreja de Águas, on a process of formal investigation, which, coming out from orthodox functionalism, deliberately searched for a new understanding of the space as a significant social and cultural value.

1. A modern movement Survey on Regional Architecture in Portugal

The conduction of the Survey on Regional Architecture in Portugal was to be of major cultural and political importance in this context of resistance to both the official conservatism and the schematism of the International Style. More than a simple inventory of forms and building techniques, it proposed a closer relationship with the place, the forms of settlement and the forms of life reflected in the appropriation of the space. As a project of investigation and cultural integration, it played a decisive role contributing to face a culturalist architectural language repositioned between faithfulness to the Modern Movement and the compromise with reality.

Following “uma Iniciativa Necessária” the inquiry questions emerged formulated under the scope of the modern movement architecture assumptions namely concerned with:

- 1) Existenzminimum research and spatial organization concept; the popular house is envisaged as a house typologie lab
- 2) Less is more axiom is applied to unveil minimum resources, scarcity and depuration
- 3) The search for platonic and Pure geometries as an inspiring plastic value
- 4) Brutal and rough textures related in order to unveil density connected with the character of craftsmanship materials
- 5) Anthropologic space analyses
- 6) Political ideological Consciousness about the rural way of life poverty and primitivism
- 7) The architecture envisaged as a social condenser following Le Corbusier “architecture and revolution” proposing better living conditions (see CIAM Dubrovnik)

In fact, during the survey period architect's incrementally changing attitude from his earlier rejection of the question of the *Casa Portuguesa* to his subsequent rejection of instrumentalized modernism is mirrored across other countries, whether in the rest of Europe or on the east coast of the USA. While Távora's intellectual transformation might be characterized as a retreat by the younger generation of Portuguese architects, it will no doubt prove in some years to come as a culturally consistent insight into the failures of modernity.

The Survey stands as the basis of a mature cycle of the Portuguese architecture starting during the latest 50's and connecting the identity which individual pieces of architecture were able to establish varied: each piece of architecture may therefore be read in terms of the position it establishes vis-à-vis the notion of physical, immediate context, or vis-à-vis cultural, indeed national context.

As Paradoxically, the aesthetic component of modernism implied the creation of uniform surfaces, the application of few materials and colors, the composition with geometrically pure forms, in other words, a formal discipline that stood in contrast to the desire for the freedom of individual expression.

Thus, while the discussion raged all over Europe at the beginning of the 20th century regarding national identity and how architecture might contribute towards this, the late effects of the modern movement are only now beginning to take their complete toll on the environment everywhere.

2. The setting-out of architectural theory

In 1961 the publication of *Arquitectura Popular em Portugal*, which spread out the *Survey*, fixed the memory of a territory and way of building. It was the hinge between these two worlds, in which abstract rationalism was seen realistically in the vernacular enabling one to overcome the local versus international

dichotomy. It has been the symbolical marking of the process of coming to terms with modernity. It meant the opening up of Portuguese architecture to the future and to the possibility of contemporaneity. At this point, research on architecture practice and theory became an academic subject integrating CODA's project. This was the case of the final architectural education project conducted by the pioneers researchers and professionals Pedro Vieira de Almeida (1933-2011) and Nuno Portas (1934-) at *ESBAP* as it proposed a close interaction between practice and theory, between scholarship and architectural design, therefore aiming to bring up a maturity stage on Portuguese architectural culture.

Pedro Vieira de Almeida analysed the philosophic and existential problematic of the architectonic space, presenting in 1963 an "Essay on Architectural Space" (published in *Arquitectura*, Lisboa, 3ª série, nº79, 80,81, respectively July, December 1963; March 1964.). Pedro Vieira de Almeida also addressed themes relate with the space and architectural output from outside the specific territory of the profession.

Nuno Portas CODA's from 1960: "Social Housing, proposal for its architectural methodology (RA-Revista da Faculdade de Arquitectura da Universidade do Porto, 1992)

Parallel to this, from 1956 onwards a young generation of architects born in the 1930s (Frederico Sant'Ana, Carlos Duarte, Pedro Vieira de Almeida, Hestnes Ferreira, to name but a few), who were joined by the brilliant, knowledgeable and intelligent critic Pedro Vieira de Almeida or Nuno Portas, ushered in a new phase for *Arquitectura*, publishing and exercising criticism and divulging the roots of the Modern Movement in a perspective of culturalist and historical reflection.

The gradual assumption of responsibility on the part of architects as transformers of society was to be reflected in several articles throughout the 60s. Here, due to its critical power and continuity, one must highlight the work of Nuno Portas, which was not limited to *Arquitectura* magazine. He spread his activity to the *Jornal de Letras e Artes*, where he began writing his chronicle (Portas, 1964) “Pioneiros de uma Renovação” (Pioneers of a Renewal). During the 1960s Nuno Portas extended his thoughts to larger-scale works: in *A Arquitectura para Hoje* (1964) and, above all, *A Cidade como Arquitectura* (1969) he distanced himself from the Modern Movement and the tendency to overvalue languages and creatorships, initially proposing a qualified “serial” architecture in democratic city. The veteran Keil do Amaral also reflected somewhat more bitterly on the significance of the new times in *Lisboa, Uma Cidade em Transformação* (1969). In the context of the LNEC (National Civil Engineering Laboratory), investigation also received strong and decisive impulses.

3. A mature architectural production made with pride and without prejudice

One may say that some of the most impressive buildings owe their inceptions to a knowledgeable recourse to a disappearing tradition such as Raul Lino’s *Casa Montsalvat* in Estoril (1902) or his *Casa do Cipreste* in Sintra (1907-13), or to the graduated transition between pre-existing and new orders as in Januário Godinho’s *Edifício da UEP* in Porto (1953), or to the abstracted nostalgia for fragments and ruins such as in Fernando Távora’s design for the *Quinta da Conceição* in Matosinhos (1956), or to the virtuoso marriage of an unsuspecting

townscape with the promise of modern spatial dynamics as in Álvaro Siza's *Banco Pinto & Sotto Mayor* in Oliveira de Azeméis (1971-74).

As Távora argued "those who advocate a return to styles of the past or favor a modern architecture and urbanism for Portugal are on a bad path ... "style" is not of importance; what counts is the relation between the work and life, style is only the consequence of it" (Távora, 1962).

In fact, the reflection imposed by the Survey and the national and international contexts in these years defined a hinge phase integrating a process of adaptation of the national output to international contemporaneity.

Following the "third way" opened by Keil and its generation, Távora in the Market gave an example of modern, abstracted tectonic forms that established a connection to the local traditions by using local materials: roof tiles as in the surrounding houses, slate and marble that had been common for the market stalls, blue and white azuleijos, and a granite base. As Távora put it: "mythified architecture, the untouchable white virgin, turned into a manifestation of life (...) and the myth became undone. And between the masterpiece and the cottage [he saw] that there were relations like those [he knew] existed between the bricklayer (or any other man) and the architect".

A spiritual heir of Távora's, the promising Álvaro Siza (1933-) retrieved the theme of the historic vanguards and relaunched, in a somewhat unexpected way, the use of traditional materials in his desire to reconcile the intellectual with the sensual and sensorial. Concern with the context led to an open design method that valued the potentials of the existing morphology: Houses in Matosinhos, 1954; Boa Nova Tea House, 1958-64; Quinta da Conceição Swimming Pool, 1956. These works announced an intuitively sensitive architect who masterfully established non-conflicting relations between the old site and

the architectural creation, thus renewing the dialogue between the new and the already existing.

In Lisbon, where the Lisbon School continued its academic training, Nuno Teotónio's firm tendentially positioned itself as a counter power. From the late 1950s, already with the presence of Nuno Portas, the firm functioned as the most important space for debate, with irreversible consequences of the later generations passing through it at some stage: Pedro Vieira de Almeida (1933-), Vítor Figueiredo (1929-), Gonçalo Byrne (1941-), Reis Cabrita (1942-) and Pedro Botelho (1948-), to name only a few. Without ever adhering ideologically to functionalism, and rejecting the simplistic codification of the Modern Movement, Teotónio Pereira is an indisputable reference for understanding the paths of modern Portuguese architecture. One only has to call to mind the house in Vila Viçosa (co-designed with Nuno Portas) as a "test/paradigm". The concerns with the urban context, with the use and usufruct of the spaces, with reflection and subversion of the programmes revealed an architect that could work in a team, as confirmed in the admirable Church of the Sacred Heart of Jesus. Expressively heralding in the new decade of the 1960s, it was the opportunity to leave a definitive mark that was more than just a new image in religious building in Portugal, it was a new concept of urban life.

The 1960s were also as period of resistance characterised by an erudite *auteur* architecture concentrating in particular on works of "artisanal" dimension and research. The work of Teotónio Pereira's firm, which included Nuno Portas, remained a reference. It developed a methodology based on problematic encounter of the relations between the civic dimension and the urban scale of the architectural fact, prolonging and confirming a critical practice that originated in the 1950s. The experimental rigour based on an artisanal practice allowed the firm to develop a personal language, which, together with the

cultural activity and open team work, contributed to the consolidation of formal investigation. At this stage, the Church of the Sacred Heart of Jesus, the Sassoeiros Monastery and the Almada Church were being completed. They introduced alterations to the liturgy at the same time as enhancing and integrating the urban space. Indeed, this experience was to be amplified in a commercial/tertiary programme: for example, in the "Franjinhas" building, where the language, using a contoured "skin" assumed as a double façade, broke with the conventionalism of undertakings in this programme. An innovative image in the context of usual anonymous office buildings that transformed Lisbon during the 1960s, it proposed a new understanding of the city, breaking the façade and allowing the street to penetrate the building itself via galleries and stairs rendered urban. The coarseness of the structural elements in face concrete articulated with the more delicate details, demonstrating that investigation can be carried out even in programmes of a more commercial nature.

One may noticed also a craftsman's tradition according to few traditional details giving a hint of a more layered and laden design. Nuno Téotónio Pereira's Parish Church at Águas (1949-57) can be regarded as a recessive building, its configuration is carefully sculpted and detailed to relate to its locations, fitting into the small scale of the village square.

His evidently highly articulated office block "Frajinhas" in Lisbon (1965-69) follows a similar approach, relating to a bustling interchange of the 19th century extension of Lisbon (Tostões, 2004). The visual density of the articulated façade elements serves to provide both sun shading, but more importantly, depth to the façade that relates to the highly articulated 19th century buildings. Here Téotónio Pereira provides an onomatopoeic equivalent to the context, a homage

to the immediate surroundings, a sign of respect for the pre-existing built culture.

The principle of paying respect to place and people therefore finds a variety of design responses in the second half of the 20th century in Portugal that are not subject to the reductive rationalism of modernist architectural principles. Francisco Keil do Amaral's initiative to study the true roots of Portuguese vernacular architecture, culminating in the *Survey on Popular Architecture in Portugal*, as a "third way" united modernist principles with southern European plain architecture. Mediterranean cubism was transformed into an abstracted vernacular. The "third way" thus built a bridge between the radical purism of the more northern Europe and the specific climatic and constructional needs of Portugal.

As W.Wang argues there were of course more literal absorptions of Le Corbusier's *Unité d'Habitation*, of German *Zeilenbau* and of elemental, Scandinavian point blocks, of Italian inspired sculptural figuration in Portuguese architecture of the early 50s to the late 60s.

The prolific production of large housing schemes, villas, schools and minor public buildings during this period demonstrates a remarkable level of demand. Paralleling similar searches in central and northern Europe of the 50s, architects in Portugal were inspired to express the modern spatial syntax using direct construction, the way that the materiality of each tectonic component would be clearly and immediately exposed. The process brought the immediate materiality as the primary source for the creation of an architecture's character to the forefront of design concerns. Unadorned surfaces, which represent nothing but their own constructional essence, compact configurations containing the basic

program, composed in a free plasticity, all this was explored in the course of finding a plausible "third way" in Portugal during the late 50s till the 70s.

All this production became known internationally, significantly later through the writings of Reyner Banham, as "brutalism" (Bahnam, 1966), referring to the rawness of materials. Namely, the Headquarters of the Gulbenkian in Lisbon by Alberto José Pessoa – Pedro Cid – Ruy Jervis d'Athouguia (1959-69) or Viana de Lima's Faculty of Economic Sciences of Porto University (1961-72) were large scale examples of clear configurational compositions creating a sculptural complex that in each case is given depth and gravity through the largely unclad primary construction.

Now, in the 60s and 70s, the horizontal stretches of board-marked concrete beams, slabs and wall surfaces became the raw, immediate, honest, "brutalist" equivalent to the sawn granite blocks of the Salazar era; in their granular appearance not miles away from the granite, but more powerful, structurally more efficacious than the bonded blocks of granite. Gone were also the large surfaces of plaster to be replaced by glass.

The Headquarters of the Gulbenkian Foundation with its museum and auditorium actually combined in-situ concrete, glass and granite on the exterior, on the interior polished granite and various fine woods are used as subdominant infill, permitting the in-situ concrete to clearly read as the main structuring elements. This architectural attitude has once again become current in recent years.

4. A comprehensive and hybrid *Survey on Popular Architecture in Azores*

In the 80's, the so-called *Survey on Popular Architecture in Azores* followed and extended the 50's *Survey* to the islands territories. In a post-modern circumstance, following Kubler's sequences concept and the art history idea of

form classes combined with functional spatial types issued from the 70's architectural culture, during the Azores research an opened insight on vernacular architecture has been envisaged integrating hybrid values, therefore fostering an approach to migration transfers and exchanges, as well as to a large popular domain in which erudite manifestations could be taken into account.

As Kubler states in his *Portuguese Plain Architecture*: "This is less a conventional or rectilinear history of architecture than a collection of studies seeking to determine the nature of Portuguese building during an age when resources were scarce. [...] it is usually about shadowy architects to whom buildings are "attributes" as if they were paintings or statues. (One may enlighten this as a reference to the architecture without architects issue that has been popularized during the 60's Pop times) Today, however, we need to study the continuously changing architectural situation, and to trace the shifting pattern of taste, with more concern for the nature of architectural meaning than the slogans and pigeonholes of encyclopaedic art historical classification will allow."

The period Kubler's studied begins with a major change of Portuguese taste in the 1520's, resulting in the abandonment of *Manueline* decoration. It closes with the surcharged ornament in the decades around 1700. The change of taste from *Manueline* to plain forms coincided with economic changes, in the shift from the still uncommitted "new" resources to fully committed and dwindling "old" ones. The transformation from 1520 to 1580 in Portugal is therefore of the same order as in the present century, when an ornate and eclectic taste surviving from the late 1800's yielded to rationality and economic necessity in the abandonment of the heavily decorated surface.

In fact, "plain Portuguese architecture in Portugal resists and escapes confinement in the usual categories [...]. It differs from *estilo desornamento* of

Spain, by its freedom from academic rule and from Italianate forms. The Portuguese plain style is like a vernacular architecture, related to living dialect traditions more than to the great authors of the remote past....in Portugal there are uncharted elements of an entirely different architectural geography, where clarity, order, proportion, and simplicity mark the countours of another aesthetic." (Kubler, 1972)

In fact, recent historiographies of modern architecture look after the connection between the research on architectural history dealing with erudite and popular architecture in order to contribute for the redefinition of 20th century architectural culture scholarship.

An aesthetics of poverty, as it has been revealed by *Portuguese Plain Architecture* approach, is then critically perceived in order to rescuing deliberately memory and history issues. Discussing the hegemonic *Portuguese plain style* concept as an approach to architectural production in times of scarcity, the research aimed to unveil the nature of Portuguese architecture character. Namely, it has been possible then to enlightened Lucio Costa's research on, his own words, colonial architecture in Brazil (Godwin, 1943) in order to define his strategy to create the sense of a Brazilian modern architecture. The survey he conduct in Portugal searching for the roots launched in Brazil, his acute remarks to Carlos Ramos (1897-1969) or Keil do Amaral and his active role stimulating the *Survey on Regional Architecture in Portugal* are an evidence from this.

"*Documentação necessária*" (1937) was a research program that contained an explicit hypothesis: demonstrating the possibility of constructing a genealogical line between the architecture of the colonial period and modern architecture. Such documentation claimed for an investigation consisting of a systematic

analysis of the spatial devices in the dwelling organization, including its regional variations, concerning systems and construction processes ... and forms of occupation. As André Tavares referred, the purpose of the study, ultimately aiming to reach contemporary, was "to determine the reasons for the abandonment of such adequate rules and the origin of the [current] *mess*".

The plan to restore dignity to the present through the rediscovery and interpretation of a colonial past, which was no more than that lesson of plain architecture, that functional and close to the essence erudite, that architecture meant to serve rather than to please, as Keil said. Lucio Costa strategy is to prove a sort of continuity, namely the sequence of the evolution of windows and facades, presented in schematic drawings, clearly evidences how the "*fenêtre en longueur*" was reached in this process of adaptation to new times.

As Costa states "Our ancient Architecture has not been adequately studied yet [...] popular architecture in Portugal shows, in our view, greater interest than the erudite one". And further on, "it is in their villages, in the virile aspect of their rural constructions, at once rough and warm, that the qualities of the race show better. Without the affected and sometimes pedantic look of refinement interventions, then, at ease, it naturally develops, showing on its justness of proportions and absence of make up, a perfect plastic health."

Lúcio Costa's "founder" text "*Documentação necessária*" rescued some ideas of the 1929 text "*O Aleijadinho e a arquitetura tradicional*" in which Lúcio "looked at his works from the standpoint of pure architecture" trying to understand what he designated the homogeneity of the Portuguese colonization period civil architecture "way to make". "Our architecture is robust, strong, massive, and all he ever did was slim, delicate, and fine. Our architecture is calm and quiet, and everything he did was tortured and nervous. Everything about it is stable,

severe, simple, and never pedantic. As for him, everything is unstable, rich, complicated, and a little precious.”

Coming back to current, contemporary, architectural production i wish to conclude stating that concerns such as direct materiality, excellent crafts, conducive spaces, lapidary forms, awareness of the natural and built context, knowledge indeed of the wider history of architecture appear to be part of the intellectual curiosity that constitute contemporary architects in Portugal. As W.Wang argues, the 20th century has seen what I have described as a see-saw of attitudes in the architecture in Portugal. I believe that a more balanced expression straddling pride and melancholy is achievable. But for that, the objective and unsentimental search and research conducted by the previous generation and the current one into the gestation of built culture and architecture in Portugal needs to be passed on year after year.

References:

AA/VV, *Arquitectura Popular em Portugal*, SNA, 1961.

Amaral, Francisco Keil, “Uma iniciativa Necessária”, *Arquitectura*, nº47, 1947.

A Moderna Arquitectura Holandesa, Lisboa, Cadernos Seara Nova, 1943

O Problema da Habitação, Porto, Livraria Latina, 1945

Banham, Reyner, *The New Brutalism*, London, 1966.

Caldas, João Vieira (ed.) *Arquitectura Popular dos Açores*, OA, 2000. (autoria colectiva de A. Tostões; F.J.Silva, J.M.Fernandes, M.L.Janeiro, N.Barcelos, V. Mestre)

Costa, Lúcio, “Razões da nova arquitectura”, (trabalho publicado na *revista da Directoria de Engenharia da Prefeitura do Distrito Federal*, vol.III, nº1, Janeiro de 1936) in Lúcio Costa: *sôbre Arquitectura*, Alberto Xavier (org.), Centro de Estudantes Universitários de arquitectura, Porto Alegre,1962.

“O Aleijadinho e a arquitectura tradicional”, (trabalho publicado em *O Jornal* do Rio de Janeiro, número especial sobre Minas gerais), in Lúcio Costa: *sôbre Arquitectura*, Alberto Xavier (org.), Centro de Estudantes Universitários de arquitectura, Porto Alegre,1962.

“Documentação necessária”, (trabalho publicado no primeiro número da revista do então “Serviço do Património Histórico e Artístico Nacional”, do Ministério da Educação e

Saúde, in Lúcio Costa: *sôbre Architectura*, Alberto Xavier (org.), Centro de Estudantes Universitários de arquitetura, Porto Alegre, 1962.

Registro de uma Vivência, São Paulo, Empresa das Artes, 1995.

"sôbre Architectura, Alberto Xavier (org.), Centro de Estudantes Universitários de arquitetura, Porto Alegre, 1962.

Fernandez, Sérgio, *Percurso, Architectura Portuguesa 1930-1974*, 2ª ed., Porto, Edições da Faculdade de Architectura da Universidade do Porto, 1988.

Gomes, Paulo Varela Gomes, "Quatre Batailles en Faveur d'une Architecture Portugaise," *Europalia 91: Portugal Points de Repere: Architecture du Portugal*, Brussels: Fondation pour l'Architecture, 1991, pp. 41-42 (translation by Robert Levit)

Kubler, George, *Portuguese Plain Architecture*, 1972.

Lino, Raul, *A Casa Portuguesa*, Lisboa, 1929.

Casas Portuguesas, Lisboa, Cotovia, 1992 [1933]

Pereira, Nuno Teotónio, *Escritos*, Porto, Edições da FAUP, 1996.

Portas, Nuno, "Crónica de Architectura: Pioneiros de uma Renovação", *Jornal de Letras e Artes*, Lisbon, 13 Dec. 1961, 18 Apr. 1962, 30 Jan. 1963, 24 Jan. 1964

A Architectura Para Hoje, Lisboa, Sá da Costa, 1964.

A Cidade como Architectura, Lisboa, Livros Horizonte, 1969.

"A Evolução da Architectura Moderna em Portugal, uma Interpretação", in ZEVI, Bruno, *História da Architectura Moderna*, II vol., Lisboa, Arcádia, 1977.

Funções e Exigências de Áreas de Habitação, Lisboa, LNEC, 1969.

Tavares, André, *Novela Bufa do Ufanismo em Concreto*, Porto, Dafne, 2009

Távora, Fernando, *O Problema da Casa Portuguesa*, Porto, Cadernos de Architectura, 1947.

Da Organização do Espaço, 2ª ed., Porto, Edições do Curso de Architectura da Escola Superior de Belas Artes do Porto, 1982 [1962].

Tostões Ana Tostões, *Os Verdes Anos na Architectura Portuguesa dos Anos 50*, Porto, FAUP publicações, 1997.

Monsanto, *Parque Eduardo VII, Campo Grande. Keil do Amaral, Arquitecto dos Espaços Verdes de Lisboa*, Lisboa, Edições Salamandra, 1992.

Cultura e Tecnologia na arquitetura moderna portuguesa, Lisboa, Doutoramento IST-UTL, 2002.

The Buildings, Lisboa, FCG, 2012

Architectura e Cidadania: Atelier Nuno Teotónio Pereira, Lisbon 2004.

Tostões, A.; Wang, W., *Portugal: Atchitektur im 20.Jahrhundert*, Munchen, Prestel, 1997.

Wang, Wilfried, "Architecture of the 20th century: modernity as the source of pride and melancholy", *IAPXX*, OA, 2006.

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SARDINIA'S HISTORIC DISTRICTS RENOVATION MANUALS

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Abstract

The historical-traditional Sardinian architecture, is an important and interesting example of population settlements and constructions in the Mediterranean area.

At the moment, a significant part of the pre-industrial built-up area is strongly at risk of abandonment and is threatened by renovation interventions which do not conform to the typical techniques and materials of the local building tradition.

The renovation Manuals (5 territorial manuals and 2 thematic manuals) and the construction Atlas of Sardinia, have been recently elaborated, at a local and regional level, under the coordination of the Department of Architecture of the University of Cagliari. They give precious information and are a crucial analysis of the traditional living and building culture in the various areas of the Island, defining a series of ideal interventions on Sardinia's architectural and identity heritage

Even if solely aimed at a Regional scale, the project of the renovation Manuals of Sardinia's historical districts, takes on a) an extra-local value as regards the approaches to the traditional heritage recovery problems at different scales (urban, building and material-constructing) and b) gives some operation guidelines on the built-up area.

Keywords: traditional architecture, renovation manuals, typology, technology

Introduction

The historical-traditional Sardinian architecture, represents an important material heritage of the Mediterranean area, from both a cultural (with specific versions with respect to a more generic one) and “usage” (still being inhabited and underlining the peculiarities which distinguish places and communities) point of view.

However, the historical-traditional Sardinian built-up area seems to be threatened by the deep crisis which is altering the secular balance between society and territory. It is mostly the deeply rooted rural areas that are characterised by the increasing phenomenon of abandonment and ensuing deterioration. All of this, together with the loss of knowledge concerning the traditional building methods, and the difficulty to operate on the consolidated built-up area (according to a maintenance and renewal approach and also taking into account the techniques and the materials typical of a specific area) expose the pre-industrial architecture to inappropriate modifications which alter (often in an irreversible way) its substance and its qualities.

However, the historical districts with their various Sardinian cultural aspects, are the expression of a strong identity underlining a significant correlation and repetition of the region's basic architecture. They are fundamental in understanding the quality of living space and – most of all – they still express an extraordinary usage potential, as well as material heritage of priceless value.

The Renovation Manuals knowledge project - concerning the local culture of building, preservation and renewal of the traditional Sardinian built-up areas – is to be included in such a context. It also represents an important chance for the economic and cultural development of the Regional territory through its own peculiarities.

The Renovation Manuals of Sardinia's historical districts are articulated into: 5 territorial manuals of the sub-regional areas characterized by analogies in the lifestyle and building cultures; 2 thematic manuals aimed at a specific study and analysis of raw-earth houses and stone houses which have a starring role in Sardinian traditional construction; 1 construction culture Atlas. Their objective is to define the geography of the lifestyle and the pre-industrial buildings of Sardinia; they also represent an operating tool in defining some guidelines for the renewal and maintenance of the traditional architectural heritage.

The need to establish a protocol defining good intervention guidelines, to be shared by the technical community, gives the series of Manuals a fundamental role for all strategies concerning urban improvement and renovation. Nowadays,

this is even more important, since the renovation is often financially supported by public institutions (European Community, Regions, Municipalities).

Results expected and Users of the Manuals

The results expected from the manuals, can be tracked down to cultural and usage reasons. The structure of each territorial manual is supported by graphic and descriptive sheets of case studies of some typical elements of traditional building (roofs, intermediate floors, masonry, opening systems etc.). This structure allows a detailed knowledge showing the recurring types of the various building cultures. Moreover, the technical community (focusing on the active protection, maintenance and sustainable modification of the traditional built-up areas) considers the manuals a useful tool for a correct approach, from the knowledge and the methodological point of view.

The natural users of the Manuals are the communities and the world of the experts with its double articulation between thought and practice. The Manuals pay particular attention to the first group of users, since the community owns most of the traditional-historical heritage and is the starting point for any renovation.

Through a representative system at various scales, the Manuals' task is that of clarifying to the "non-expert" world, the cultural, usage and economic values related to the pre-industrial architecture.

For the technicians, the Manuals are a fundamental tool in the knowledge and the transmission of the methodological intervention approaches which conform to the traditional construction culture and codify most of the historical building procedures which previously were passed on by mere word of mouth and therefore lacked a proper building code.

Structure and contents of the Manuals

From the beginning of the twentieth century, settlement cultures developed in the regional territory creating a homogeneous area, and have been the object of study in the territorial manuals and in the Atlas of construction cultures.

The material-construction datum is one criteria of the homogeneous territorial areas. It allows to distinguish between areas with raw earth buildings (basically the plains of Campidano, Cixerri and Sarrabus) and those with stone buildings, even if some built-up areas are an interesting mixture of the two.

The cultural and geographical areas are another element of definition and individuation of the territorial areas under analysis. In fact, a distinction among the settlement areas of the central-southern hills, the northern hills, and the farthest habitats of south-western Sardinia has been made.

The territorial Manuals are articulated into the following thematic sections:

- Knowledge of the settlement and pre-modern buildings;
- Analysis of the recurring deterioration problems;
- Definition of a methodological approach and the subsequent guidelines for the renovation interventions according to various critical and invasiveness scales.

The traditional architectural heritage has been investigated at the morpho-typological and technology scales with the help of synoptic diagrams, typological schedules and detailed sheets, in order to associate the systemic nature of the traditional heritage and the really strong relationship among urban shapes, building types and construction cultures.

Figure 1. Urban structures of raw hearth areas.

With these helpful elements, the following items have been investigated:

At an urban scale, the settlement rules, such as the position of the iso-oriented residential buildings, the relation between public and private spaces, which may be full or empty;

- At a typological scale, the main parameters have been defined in order to obtain a typology of the built-up heritage. This has been done by identifying the reference types at a regional scale (such as the courtyard houses and the elementary wall box) and there are specific interpretations in which each of them are articulated at a local level and the processes of space implementation and division.

- In the construction and building material scale, the main elements of the traditional building, such as masonry, roofs, intermediate floors, vaults,

openings, stairs are all considered as both individual elements and as overall components of the most complex system of the building organism.

For each territorial-cultural aspect, the following documents have been elaborated:

- Interpretations of the urban shapes based on some cadastral maps of the first years of the 20th century, in order to reinterpret the settlements before the changes brought on by the technical development of the project, from post world war 2;
- Typological schedules highlighting the basic building types, the sub-types, the dynamics and the processes of space development and implementation;
- A collection of hundreds of houses with records that highlight and summarize the distribution, structural and constructing aspects;
- An axonometric analysis of the houses that put in relation the typological characters with the building ones;
- A Summary of the schedules and specific technological sheets to have a more detailed picture of the main building elements.

The analysis of the recurring deterioration and pathologies essentially refers to the study of the technological deterioration from two points of view:

- that of the deterioration of the structural systems as a whole;
- that of the deterioration of the manufacturing elements in their individual components.

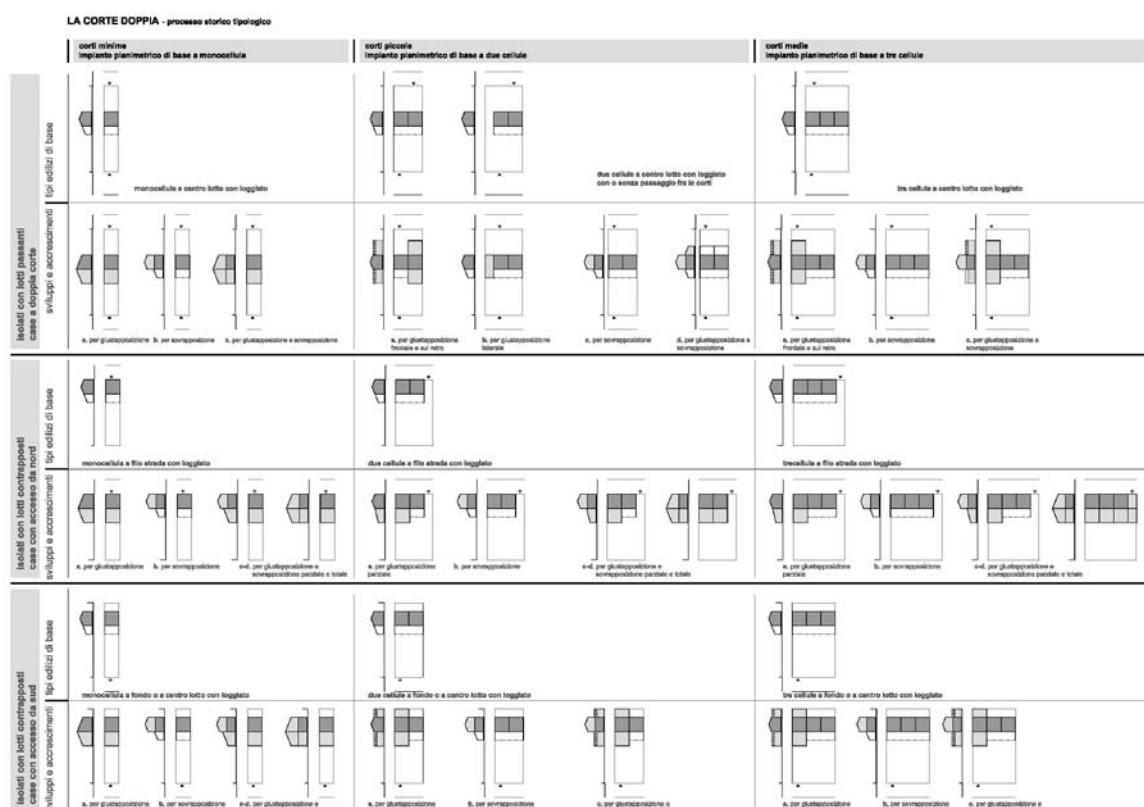


Figure 2. typology sinoptic table of court houses of Marmilla region.

Figure 3. Axonometric representation of Cauli's house in Pau
- Marmilla region.

Figure 4. technological table of raw heart houses in Uras –
central Campidano region.

The recurring pathologies such as the degree of mutual connection among the walls composing the overall wall box, the consistency and the monolithicity of the walls as a whole, the relation between the structures that push against the wall (e.g arches, vaults etc) and the wall cells, have been investigated since they are at the basis of the more relevant deteriorations of the traditional construction and they also represent the most difficult renovation problems.

Each deterioration category of the structures has been shown, highlighted and analysed with the help of specific grid and interpretation layouts.

In addition to the deterioration, the main approaches to renovation – relating to the above mentioned pathologies – have been pointed out. The proposed intervention guidelines are inspired by the principles of the minimum sustainable intervention and maintenance, recognizing the nature of the traditional buildings as a sole structure.

The analyzed techniques propose that the original material is preserved whenever it is possible, and the elements damaged in an irreversible way have to be replaced with the least invasive methods thus not altering the original construction.

The intervention techniques for the consolidation of the wall boxes, are investigated. The goal is also to eliminate the the “push” originating from the roof structures, to strengthen and consolidate the wooden horizontal beams which have deteriorated and/or are structurally undersized, to consolidate openings, to create a technological roofing system for the ventilated roof that combine the necessary and required contemporary performance and the need to maintain and protect the building heritage.

Figure 5. exemple of restauration tables

Conclusion

The summarizing sheets and schedules have been integrated and give a complete picture of each manufacturing element, from the original construction point of view and its form of deterioration, and the various methods of intervention, leading to a more immediate and aware renovation approach.

The sheets describing the methodological intervention lines do not want to solve all the problems relating to the renovation of the historical heritage. They propose some operational and direct approaches and techniques concerning the recurring deterioration cases.

References

AA.VV. (2008-2009). *Manuali del Recupero dei centri storici della Sardegna*, vol. 0, I, II, III, IV,V, Roma: DEI Tipografia del Genio Civile.

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PAPERS

VERNACULAR, CONSERVATIVE, MODERNIST: The uncomfortable 'Zone 6' (Algarve) of the Portuguese folk architecture survey (1955-1961)

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Abstract

To this day, part of the aura surrounding the 1955-1961 'Inquérito à Arquitectura Regional Portuguesa' in Portuguese architectural culture stems from the resistance narrative constructed around it: countering perceived official stereotypes for regional architecture, the authors of this survey on vernacular building traditions would have set out to prove that 'folk architecture was, like all "true architecture", functionality,' and designed the project to fit their own post-war modernist agendas. Dismantling preconceptions on regional features, demonstrating diversity and integrating modern architecture with the long-span lineage of vernacular tradition were essential aims of the survey, shared by all its teams. Yet, these goals were not always easy to pursue. By looking at the work of the 'Zone 6' team in Algarve, the southernmost region of Portugal, my paper will discuss the challenges placed by a specific building identity, historically charged and visually enticing, on the survey's stated and unstated purposes. With its idiosyncrasies, Algarve seems to have been valuable in rendering national diversity more dramatic and enabling a clearer contrast between extremes, thus countering claims to homogeneity; an instrumental view that echoed other, politically disparate initiatives, earlier in the century. Furthermore, its 'vernacular' features were uniquely tempting to both conservative and modernist eyes, and the survey placed them under the aestheticised look that, as much as the authors attempted to downplay it, permeated the entire work – and, in the case of Algarve, was often not so far from the superficial, stereotyped views those authors condemned as trite vulgarisations. Finally, there was the embarrassing matter of external decoration: an inextricable part of Algarvian building tradition that hardly fitted modernist tenets, it was sensed as problematic and framed in terms that echo those with which, twenty years before, other Mediterranean vernaculars were recorded.

Keywords: Vernacular, Folk Architecture, Survey, Algarve, Olhão

Introduction

When Artur Pires Martins (1914-2000), Celestino de Castro (1920-2007) and Fernando Torres (1922-2010) set out in 1955 to record the folk buildings of Algarve (in 'Zone 6') for the nationwide survey 'Inquérito à Arquitectura Regional Portuguesa,' they faced a delicate task. In its stated purposes, the project included redressing Portugal's reputedly false regional stereotypes. The turn-of-the-century 'Casa Portuguesa' program, which sought an antidote to Beaux Arts eclecticism in original traits of *Portugueseness*, had been popularised by both architects and non-architects in formulas that came to embody, in the 1940s, a key axis of Portuguese national identity: regional diversity (Branco 1999, Leal 2000, Melo 2001). The southernmost province of Portugal, with extant traces (real and imagined) of a remote, exotic Moorish past and markedly Mediterranean physical and cultural characteristics, had an essential part to play in this kaleidoscopic construct of Portuguese diversity/unity. As such, it had been duly typified in public and private building initiatives throughout the first half of the last century, before being taken by the tourism phenomenon to other purposes and scale. The Zone 6 team scooted through Algarve imbued with a clear impression of the region's stereotype, and their part in the survey was devoted to dismantling it.

However, Algarve had not been a straightforward case of built identity construct, simply based on stereotypes issued from metropolitan centres towards peripheral contexts, but rather an intricate process of negotiation and exchange, in which local and regional agency actively took part, and whose strength underlay other, more transient trends. Among other reasons, this was because the basis for such construct – the extant built environment – had engaged both the modernist sensibility towards Mediterranean vernacular rationality, and the conservative, pastoral interest in the picturesque; in fact, the Algarve case is one where the boundaries between the two sensibilities, often seen as opposed, most visibly collapsed. When the Zone 6 team attempted to dismantle Algarve's stereotype, they eventually found themselves enmeshed in some of its original

misgivings and had to deal with features that, other than part of the stereotype, were part of the reality around them. To their modernist eyes, and within a project aimed at exposing superficial regionalism, dealing with Algarvian vernacular was an unexpected challenge.

Debunking stereotypes, or the value of diversity

Portugal lacks unity in what concerns Architecture. There is not, absolutely not, one 'Portuguese Architecture' or one 'casa portuguesa'. (...) Between the houses of Fuseta and those of Lamas de Olo, there are barely any links... ([Amaral], 1988 [1961])

For the authors of *Arquitectura Popular em Portugal* (1961) and of the 'Inquérito' that supported it, the country's folk architecture was essentially diverse, as varied as the many different geographic, climatic, topographic, material, technical, social and economic circumstances that had produced; an architecture 'that was no longer properly Portuguese but existed, in multiple and diverse expressions, in Portugal.' (Leal, 2003, 176) Survey and book should, furthermore, allow them to demonstrate that folk architecture was in fact modern. This, a key point for post-war architects who claimed the right to follow their time with a contemporary stance and against perceived official conservatism, was present since the project's inception. As one of its proponents wrote, folk dwellings were 'the most functional and less subject to fantasy' and those 'which best suit the new intentions.' (Távora, 1947 [1945], 11) With hindsight, participants admitted to being 'necessarily tendentious' by merely looking to confirm what they had set out to demonstrate: a cause-and-effect link with the environment, the rationality of building techniques and the 'authenticity' of materials, proving that 'folk architecture was, like all "true architecture," functionality.' (Pereira, 1984, 29) The surveyors' view of vernacular architecture was therefore filtered through their specific agendas, leaving aside a number of other aspects; they focused on regional diversity and the vernacular lineage of modernism as two essential arguments against superficial stereotypes.

Algarve suited both arguments perfectly. In my opening quote, a village in the north of Portugal (Lamas de Olo) is presented as virtually incomparable to the Algarvian village of Fuseta, suggesting that, as before, Algarve played an instrumental role in reinforcing the diversity of Portugal's folk architecture, in enabling a clearer contrast between extremes. Furthermore, it was not only different from the rest of the country but also internally heterogeneous. The Zone 6 team referred to recent Human Geography scholarship (Lautensach 1932-1937, Gouveia 1938, Ribeiro 1945) to support their account of the coincidence between Algarve's diverse geographic regions (the mountains, the hilly midland Barrocal and the seaside), the rural economy, the types of settlement, and the house-types of each of those regions.

In the discussion of the 'urban structure' in Algarve, Martins's team introduced one point that emerged consistently thereafter: to stress how the fishing centres of Olhão and Fuseta were non-representative of the region, and their houses, 'exceptions in the entire Algarvian coast.' (Martins et al, 1988 [1961], 146) The two 'unique' settlements with their predominantly flat-roofed houses were briefly described using well-known sources; the team borrowed existing explanations for the flat-roof solution and shared long-lasting perplexities at the fact that other villages in similar conditions had different roofing devices.

They made their point clear shortly after. The section on 'Climate' showed how locals ingeniously looked for the best orientation for their settlement, opening windows according to the sun and winds, using elements like porches, terraces, patios and vine pergolas to control sunlight and achieve 'perfect conditions of dwelling' in winter and summer. The impact of climate on traditional building solutions prompted them to address the subject of the terrace roof (locally called açoteia) as representative of Algarve:

Widely popularised conceptions on the defining features of a regional Architecture, anxiously sought and light-heartedly understood, do not always correspond exactly to what one can find in a careful, judicious observation. The role of the terrace roof in 'Algarvian Architecture' has been much invoked; however, to the exception of the rural area

geographically defined as 'Limestone Algarve' (...) and of the settlements of Olhão and Fuseta, it is fair to say that the terrace roof is not frequent in most of the province. (Martins et al, 1988 [1961], 166)

The authors associated the composite roofing solutions (part terrace, part tiled) of 'Limestone Algarve' to climate and local economy requirements; and again stressed how special the 'cases' of Olhão and Fuseta were, where 'frequent contact with North African people and traditions, as well as climate affinities,' would explain the assimilation of both the terrace-roof house type and the corresponding organic urban fabric.

However, they noted, in the region as a whole the tiled roof solution had more currency than the terrace roof: in one village 'no flat roofs may be seen, and the tiled roof is widespread,' and in other, 'there is no roofing type other than the tiled one.' (Martins et al, 1988 [1961], 138-41) In the 'Construction materials and techniques' section they gathered further evidence: within the range of roofing techniques used, the double- or single-pitch tiled roof dominated. At the same time, another building feature related to climate, the pátio – not the Andalusian courtyard but the front (or side) yard – was noted as being as common as the mythical açoteia, and as rationally justified: 'Nothing is improvised, nothing is arbitrary, and on the contrary, everything is properly justified and verified through experience.' (Martins et al, 1988 [1961], 171)

The terrace roof issue was central to one of the declared purposes of the 'Inquérito' – to dismantle the myths regarding Portuguese regional architecture – since it was an essential part of the strongest stereotype of Algarve architecture in the first half of the century. This feature had been adopted by conservative spheres as typical and used to symbolise the entire region, as well as exerted a clear fascination over modernist designers for its proximity to rationalist forms. Olhão, in particular, underwent a process of 'discovery' by scholars, writers, journalists and architects that mirrored contemporary developments in Spain (Balearics), Italy (Capri) or Greece.



Figure 1. Olhão, 2009 (© Ricardo Agarez)

Portuguese authors hailed its 'dices of lime' (Barreira 1909), the box-like buildings that, as if 'projected from Picasso's canvas, (...) intertwine, overlap, cover each other, dismember themselves, the laws of perspective and volume annulled by whiteness and mirage.' (Ribeiro, 1927, 75) English travellers raved about Olhão, whose architecture 'could give points to many a modern young architect priding himself on the functional use of materials.' (Gordon, 1934, 212) It was in fact systematically associated with modernism, not least by metropolitan Portuguese architects such as Segurado (1926), Ramos (1931) and Cottinelli Telmo (1933). Concurrently, national and foreign scholars debated the terrace-roof house's origin and evolution, and Olhão became a favourite topic of Human Geography studies (Giese 1932-1935, Girão 1935, Feio 1949, Ferro 1956, Stanislavsky 1960, Ribeiro 1961) that interpreted its special 'pyramidal' growth pattern closely following local, non-scholar views (Machado 1934, Lopes 1948). The pictorial analogy of Olhão as the country's 'Cubist' town (Ferro 1922) was well established across all fields of knowledge and this particular townscape was later popularised as a surrogate for Algarve as a whole, namely in representations of the region in national and international expositions (Paris

1937, New York and San Francisco 1939, Lisbon 1940) and in tourism propaganda.

Therefore, by confining the terrace roof to a precise geography the 'Inquérito' authors meant to expose the fallacy embraced by both conservatives and modernists, and to replace it with a new, 'scientific' approach to vernacular tradition.

Unsurprisingly, in the 'Housing Types' section the architects could not identify one single Algarvian house type, but rather referred to the 'diverse aspects of housing in Algarve', illustrated with cottages from the inland hills, the plains and the villages. The general features of the Algarvian house were limited to its external simplicity, 'very pure in forms and surfaces,' and some layout idiosyncrasies such as the 'importance and significance' of reception spaces over private and service areas.

The discussion of the central or 'Limestone Algarve' type, essential in demonstrating the variety of Algarvian house types, was clearly inspired by previous descriptions made by geographers (Feio 1949, Ferro 1956). In this as in other respects, the architects' work seems to have been closely influenced by the approach of their non-architect predecessors; intentionally or not, in many points the 'Inquérito' seemed content to complete and illustrate those sources for the benefit of an architectural audience, highlighting whichever points could help reinforce its specific message.

The ambivalent Algarvian vernacular

For the Zone 6 team, the house-type of Olhão and Fuseta was first and foremost a case of its own, 'different and unmatched in the Algarve province.' Yet the choice of examples to characterise this type as specifically local and not regional suggests the difficulties that their object of study posed to architects who, as they themselves admitted, were driven both by a precise agenda and by the 'plastic quality' of what they found (Martins 1999 in Neves, 2001).

The description of a set of terraced houses in Fuseta invoked a case that would perhaps not qualify as the best instance of vernacular. The exact repetition of the same design and the standardised construction and decoration elements configured a set that did not seem to have grown spontaneously or organically, or to have been built by its inhabitants; rather, it had all the features of a multifamily housing unit, designed and built in one stretch to form one whole street front.

Plans and photographs depicted an example of proto-industrial low-budget housing, serially produced, possibly designed and built by professionals for the fishermen or the canning industry workers. Studying the building practice in Algarve in the early decades of the century, I identified a moment when vernacular building customs were codified into bureaucracy for planning permission purposes and integrated with the sphere of formal design. In the 1910s and 1920s, a number of examples comparable to those presented by the Zone 6 team were built in both Olhão and Fuseta to approved designs, configuring an intermediate layer between the vernacular tradition proper, spontaneous and informal, and the rules and requirements of the construction industry, by which learned architects operate. Designed, standardised and regulated, this invisible layer misled everyone – geographers and ethnographers, picturesque-driven authors, pre- and post-war modernist architects, and the Zone 6 team – into encompassing object of very different extraction under the same category of 'folk architecture'. If these houses proved that vernacular was modern and rational, it was because they were modern and rational.



Figure 2. Viegas Pires house, Rua Sacadura Cabral 6 (Cerca do Júdice), Olhão, 2009 (© Ricardo Agarez). Unidentified designer. Planning permission obtained 21st May 1917.

This was part of a wider issue raised, albeit occasionally, by the study and appropriation of so-called ‘folk’ buildings by architects in the first half of the century: the issue of ‘fetishisation’ of vernacular features. In Italy, a discussion on the origins of the Tuscan *casa colonica* raised concerns that the anonymous builders were being fetishised, and that many of the examples cited by Pagano, for instance, were actually ‘designed’ by architects (Soffici 1943, in Sabatino 2010a). In Spain, it went by unnoticed that the famous 1931 opening issue of *A.C.*, the journal initiated by the GATEPAC group of Mercadal and Sert, featured an example of folk architecture as unclear as the Fuseta one: the row of houses in a coastal village near Barcelona that epitomised a vernacular precursor of ‘the standard’ – of which ‘all aesthetic concern’ was absent – was chosen by its rationality and seriality, but its origins cannot be said to be clearly spontaneous.

Yet in Algarve as in Italy or Spain, this doubt was seldom raised. The authors-architects appeared to be in awe at the formal and functional qualities of the set:

the elaborate layout, the cooking area underneath the arched stairway, and the elevated backyard as a terrace over a basement storage room. The back prospect was singled-out and described in enthusiastic terms:

The advantage taken from the existing slope and the movement of building masses give the ensemble's back elevation, facing south, a very special character. (Martins et al, 1988 [1961], 205)

These terms, commonly employed at the time to describe a piece of formal architecture, applied here to a work of reputedly vernacular building practice. The team's fascination with the houses of Olhão led it even to set aside characteristic modern concerns with domestic salubrity: the interior bedrooms had 'a very pleasant atmosphere by way of their natural light, which they get from a minute skylight, a squared glass inset in the vault.' As in Fuseta, the Olhão backyards with their arched stairways leading to the açoteias and the characteristic 'balloon' chimneys in full view, were considered much more interesting than the street fronts: these did not 'stand out from the banality of the neighbouring buildings, and lack the plastic quality of their back sides.' (207)



Figure 3. Stairways and chimneys in Olhão, 2009 (© Ricardo Agarez)

The plastic interest of some vernacular features was highlighted against the general 'banality' of street fronts. This was a selective view of extant building traditions, deformed by the authors' starting point: they wanted to find seriality and repetition (as they did in Fuseta) and richly contrasted juxtapositions of pure volumes (as in Olhão), because these were features that architects with modernist backgrounds were looking for as a means to associate vernacular traditions and modern architecture – to enable them to say that there was modernity in vernacular, and not conservative, bucolic, retrograde picturesque. All the descriptions and illustrations were of the more recent part of Olhão (of the late-nineteenth and early-twentieth centuries); the original, reportedly spontaneous settlement of fishermen's huts perpetuated in masonry in the eighteenth century was not shown or described. Even the pyramidal growth pattern of house extension through consecutive turrets (mirante and contra-mirante) was described only in the modern grid, not in the older fabric of Olhão.

The Olhão and Fuseta house-type was one of the few cases in Zone 6 whose examples were not unequivocally vernacular, but blended features of engrained building tradition with clear signs of formal building practices. With this choice, the team fell, to some extent, in the trap of an 'aesthetic view' on vernacular, the very same mistake it criticised the romantic, Casa Portuguesa-school approach for having fomented. Although diverging in the focus (picturesque settings for a romantic sensibility, pure volumes for a modernist one), both approaches were, to a lesser or greater extent, aesthetically driven and superficial.

The uncomfortable decoration

The *offence* of giving in to the aesthetic appeal of traditional features was conscious and problematic for the Algarve surveyors. Introducing a section entitled 'Improvement Elements' ('Elementos de Valorização'), the team's words expressed the discomfort of having to present, under a euphemistic title, features that were essentially Algarvian *and* decorative, and did not quite fit the functionalist grid according to which many other features were selected:

It was not without doubts as to the valid contribution of these loose elements to the study of Algarvian regional Architecture, that we have decided to include them in this chapter (...) Considering that vernacular buildings deliberately convey practical concerns (...) or that, at least, *aesthetical attitudes do not exist openly*, we nevertheless find that very high plastic levels are reached, by employing as formulas nothing but a precise knowledge of materials and a simple and intuitive technique. It seems, therefore, that emotional factors are present naturally (...). (Martins et al, 1988 [1961], 229. My italics)

This confusing disclaimer seems to suggest a previous understanding of vernacular building practice as purely functional, modified through the survey process by a broader comprehension of this human activity. The ornament in folk buildings was, in fact, a catch in the modernist appropriation of vernacular, aimed as it was at looking for the primary sources of modern architecture in vernacular buildings while highlighting their 'human' qualities (scale, material, technique, site-sensitiveness) as antidotes to the perceived excesses of modernism's mechanical analogies. This *critique within a defence*, of modernism through vernacular traditions, originated a few paradoxical arguments, and the inescapable use of ornament and decoration was among them; it was common to the Portuguese 'Inquérito' and to its Mediterranean predecessors.

In his pioneering studies of Spanish rural dwellings, Fernando García Mercadal (1896-1985) introduced a distinction that allowed him to elude the paradox: one of the lessons in the vernacular Mediterranean house, for contemporary architects, was that its decoration was based not on stylistic knowledge but on spontaneous taste, stemming from the structure – not juxtaposed to it. In his description of the traditional houses of Menorca (Balearics), he appeared to steer from the functionalist condemnation of ornament when he regretted they had 'exceedingly uniform lines, lacking in expression, deprived of all decoration (...). They are something dead or too strange.' (Mercadal, 1930, 54) For Mercadal, decoration expressed the villagers' 'naturally inventive fantasy' and was part and parcel of Mediterranean folk traditions. As such, it was likely to prompt contradictions in strictly modernist readings, and called for more elaborate

interpretations: to accept it as 'derived from construction', visible expression of its underlying 'rational basis'. In an issue of A.C. entirely dedicated to Mediterranean folk architecture, a number of Andalusian villages supported this alternative reading. The buildings and their simple patios 'without style' were shown as inspiration for urban architecture *because* they were decorated: city life had killed 'all dwelling spiritualisation' and deprived the individual of the 'prime-necessity elements of life.' The villages' measured, 'rational' ornamentation evinced the resistance of individuals to let go of their dwellings' 'lyric elements', and was an example to follow. By showing examples of simple, structural decoration, Mercadal seemed to seek a compromise between the anti-decoration modernist tenets and the allegedly false experiments of academic regionalism; that is, to illustrate a middle ground between the two extremes, where there was place for individual, 'lyric' elements as natural components of human habitat.



Figure 4. Chimney top in Santa Luzia (Tavira), 2010 (© Ricardo Agarez)

Decoration appeared 'naturally' in the Portuguese survey, as it had in Mercadal's or Pagano's works, and needed to be somehow framed without undermining the project's aims. The Zone 6 team called those elements 'the links of close kinship': the systematic use of whitewash over a variety of materials as a 'way to model and provide continuity of surfaces,' and 'a certain taste and concern for exterior ornament and ostentation in house building' that transpired in the 'exquisite treatment' of parapets, chimneys and patios. In elaborate posts supporting a pergola, they saw 'a tradition grounded on erudite architecture,' finding links between the two spheres. Parapets and chimneys were illustrated and considered 'true motifs of folk art': strongly marked frames brought 'an important play of chiaroscuro' and their decoration was attributed to 'the ostentation that the Algarvian dweller expresses in his house.' (Martins et al, 1988 [1961], 230) It should be noted how the structural quality and essentiality of these instances of restrained ostentation were effectively conveyed in black-and-white photography; in reality, the reputed Algarvian decorative instinct was much more exuberant, and fully explored colours and textures (namely in the parapet, the building's 'face', cf. Dias & Brissos 1994) in a way that the survey did not communicate.



Figure 5. Parapet detail in Cerca do Ferro, Olhão, 2009 (© Ricardo Agarez)

Another motif of 'captivating expressiveness' was shown in a house in the inland hills (Alcoutim): a parapet with a ceramic zigzagging grid was considered 'a curious example,' albeit not typical, in which 'common elements of the Algarvian buildings are grouped in an original way,' providing a synthetic image of 'architectural unity' and 'almost scenographic plastic interest.' Raul Lino and other Casa Portuguesa supporters used this same motif in their syntheses of the Algarve type and would have described it in similar terms. Here, the team's discourse was dangerously close to the very stereotype they were set to dismantle, giving reason to the disclaimers with which they fenced this problematic section of the text. In comparison the lace-like chimney top, the quintessential Algarvian stereotypical element, was more cautiously described as an adulteration of the pure, 'balloon' chimney, and illustrated only summarily. Finally, the team suggested that the wood-lattice shutters, a failing tradition that could be found but occasionally in Algarve, should be developed and applied in new ways; in this point, they concurred not only with their conservative predecessors, who employed such shutters extensively, but also and most importantly with their Brazilian contemporaries, who were then giving this Moorish-Portuguese inheritance a most exciting overhaul.

The 'Inquérito' has been signalled as the 'birth of a "modern view" of vernacular architecture' in Portugal (Leal, 2003, 185). Yet in the Algarve section, this 'modern view' had some points in common with other, previous views. Determined to dismantle the stereotype of the Algarve house, this section's authors seem nevertheless to have fallen for that model's aesthetic appeal and to have lost some of their intended objectivity. The Algarvian traditions of building decoration, seen as an embarrassment in a modernist's mind-set, were provided with an alternative frame, not without its problems. Such difficulties exposed the tensions and challenges presented specifically by the Algarve built environment: pared-down, elemental and whitewashed for modernists, intricate, exuberant and picturesque for conservatives, but equally seductive for all. More than merely reinforcing the survey's claim as offering covert resistance to state conservatism, and despite those tensions, I see the Algarve section as evidence

of the wider attempt to reconcile modernist values with an appreciation of *picturesqueness* – in other words, to explore the middle ground that Spanish and Italian were pointing to: the possibility of an understanding, in Portugal, between the pressure of tradition and the eagerness for contemporaneity.

The risks posed by this proposition were many, for metropolitan architects, and sensed even before the book's publication: as one of the authors put it in 1959, 'we may find ourselves enmeshed in an era of neoprovincialism in architecture, retrograde and sickening, comparable to other neoprovincialisms.' (Freitas, 1959, 37) The ghost of a fetishisation of vernacular forms hovered over the 'Inquérito', and was later proved by its lasting popularity with generations of architects. It was their perceived interest, and the new uncontrolled possibilities offered by this showcase of regional and local diversity, endorsed by the country's architectural avant-garde, that raised the critics' concern of 'a re-enactment of recent absurdities, this time by the respectable hands of modern architects.' (Duarte, 1959, 40) This fear, and the responses it provoked, has dominated Portuguese architectural culture in the past fifty years.

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References

Agarez, R. (2010). Olhão, Modern Vernacular and Vernacular Modernism. In *First International Meeting EAHN - European Architectural History Network* (pp. 128-35). Guimarães (Portugal): European Architectural History Network and Universidade do Minho - Escola de Arquitectura.

[Amaral, F. Keil do] (1988 [1961]). Introdução. In *Arquitectura Popular em Portugal*. Lisboa: Associação dos Arquitectos Portugueses.

Branco, J. F. (1995). Lugares para o povo: uma periodização da cultura popular em Portugal. *Revista Lusitana*, 13-14, 168-69.

Caldas, J. V. (2010). Verdade e ficção acerca da casa rural vernácula do Baixo Algarve." In *Cidade e mundos rurais. Tavira e as sociedades agrárias* (pp. 49-63). Tavira: Câmara Municipal de Tavira.

Dias, J. P. & Brissos, J. (1994). O Algarve Revisitado. Lisboa: Lisboa 94 - Festa do Livro.

Duarte, C. S. (1959). Breves notas sobre a arquitectura espontânea. *Arquitectura*, 66, 38-43.

(1931). Elementos 'Standard' en la construcción. A.C. *Documentos de Actividad Contemporánea*, 1, 23-25.

Freitas, A. P. (1959). Tradicionalismo e Evolução. *Arquitectura*, 66, 31-37.

Gordon, J. & C. (1934). *Portuguese Somersault*. London: Harrap.

(1935). La arquitectura popular mediterránea. A.C. *Documentos de Actividad Contemporánea*, 18, 15-39.

Leal, J. (2000). *Etnografias Portuguesas, 1870-1970: Cultura Popular e Identidade Nacional*, Portugal de Perto. Lisboa: Publicações Dom Quixote.

Leal, J. (2011). Entre o Vernáculo e o Híbrido: a partir do Inquérito à Arquitectura Popular em Portugal. *Joelho. Revista de Cultura Arquitectónica*, 2, 68-83.

Lejeune, J. F. (2010). The Modern and the Mediterranean in Spain. Sert, Coderch, Bohigas, de la Sota, del Amo. In M. Sabatino (Ed.) & J. F. Lejeune (Ed.), *Modern Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities* (pp. 64-93). London: Routledge.

Martins, A. P., Castro, C. de, & Torres, F. (1988 [1961]). "Zona 6." In *Arquitectura Popular em Portugal*, vol. 3 (pp. 121-239). Lisboa: Associação dos Arquitectos Portugueses.

Melo, D.S. (2001). *Salazarismo e Cultura Popular (1933-1958)*. Lisboa: Universidade de Lisboa. Instituto de Ciências Sociais.

García Mercadal, F. (1930). *La Casa Popular en España*. Madrid: Espasa-Calpe.

Neves, R.O. (2001). 'Letter to Raul Lino': Cultural Identity in Portuguese Architecture. Manchester: University of Salford.

Pereira, N.T. (1984). Architettura Popolare, dall'Inchiesta al Progetto. *Domus*, 655, 28-30.

Ribeiro, A. (1927). Olhão. In R. Proença, *Guia de Portugal: Estremadura, Alentejo, Algarve* (pp. 75-78). Lisboa: Biblioteca Nacional de Portugal.

Romba, S. (2008). Evolução urbana de Olhão. Faro: Universidade do Algarve.

Sabatino, M. (2010a). The Politics of *Mediterraneità* in Italian Modernist Architecture. In M. Sabatino (Ed.) & J.F. Lejeune (Ed.), *Modern Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities* (pp. 40-63). London: Routledge.

Sabatino, M. (2010b). *Pride in Modesty: Modernist Architecture and the Vernacular Tradition in Italy*. Toronto, Buffalo, London: University of Toronto Press.

Távora, F. (1947). *O Problema da Casa Portuguesa*. Lisboa: Tip. Imp. Libânio da Silva.

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FROM SEA TO STONE

Cradle of Avant-Garde

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Abstract

The idea of modernity and its formalization is deeply rooted into Mediterranean culture, not only in terms of formal or material configuration but also concerning the human approach of architecture to the site and culture. Long in history, popular Mediterranean architecture has been mainly developed just by their users or by artisans, in a perfect example of understanding buildings as an extension of human life, habits and sensibility to landscape and climate. This point of view of the popular has commonly been seen by early modern and avant-garde architects as the departure landmark or prelude for a new and international architecture, in a perfect example of integration of popular culture into the most orthodox and theoretical discourses and theories. Josep Lluís Sert –one of the most relevant Spanish architects in early years of modernism– and the Austrian Bernard Rudofsky –who visited many times the Spanish mediterranean area looking for vernacular references– worked with this principles to settle the theoretical arguments to get to modernity trough history.

Keywords: Sert, Modernism, Spain, Ibiza

Man's physical freedom manifests itself no doubt in his ability to choose the place on earth where he wants to live. Whereas immature reflection tends to judge by usefulness alone, a discriminating mind may ask its share of beauty. Neither privations nor danger will deter man from selecting a spot that provides him with the exhilaration generated by superb landscape. [1]

Traditionally, both history and theory or architecture have focused on studying the work of the outstanding but only a few times their field of research have

been the regular and non-relevant. It means that an important part of the true and history has been left aside, as the work of the designers represents just a small part, sometimes ridiculously insignificant, on the building activity of any epoch. [2]

If we choose a complete view of the terrestrial space, we could see that the physical environment, specially the one that has been built, has been only controlled by designers or architects just in a very small part. This is why the number of buildings and works of architecture whose source is vernacular or folk is really outstanding, and at the same time, has been also usually removed from history and theory of art and architecture.

There are only a few examples, as The Greek works close to the Acropolis, ancient roman dwellings, the buildings around the Pyramids or the medieval cathedrals or some others. These have been considered because of their direct relationship to more unique pieces of architecture. Usually, historians have selected for their research the more brilliant solutions or special typologies, as temples, palaces, graves or theatres, but non-singular dwelling or small constructions have been just erased from their studies. Nevertheless, these works are, precisely, the symbol of culture and tradition, and the spaces where the human-being shares the most intimate: its own life and being.

In first instance, we should consider as relevant buildings the ones that outstand for their singularity. Therefore, cottages, huts and many other minor constructions are always in second place. But modernity, thanks to social changes and the arise of new technological revolutions and philosophical approaches has always considered, in some way or another, the value of all this second-class architecture, that outstands for having, in their selves, in their materiality and configuration, the identity and cultural essence of different societies and cultures. This is pure and clean architecture, free of design freaks. Buildings that respond to technical necessities and whose last mean is to serve and to become function. Is here, in all this not outstanding architecture, where modernity found a real source of inspiration.

But, the everlasting question is, what is vernacular architecture? What is the real interest of it in the world of architectural form and composition? What are their main characteristics for becoming a reference in the XXth century?

From a general point of view, we should consider that we could classify buildings in two large groups: the ones that consider tradition on design and the ones that consider tradition as folk. [3]

The first group, that assumes tradition as design, includes all architecture work that has its origin to impress their population. In the opposite, the folk traditional buildings are a direct and unconscious translation of cultural formalizations, and by extension, of their cultural values and necessities, as desires or dreams of the epoch. Is here, in this last group, where we shall distinguish among primitives and vernacular. [4]

Considering that we are interested in vernacular architecture, we should focus on the construction and design process. [5] Every vernacular design process is based on models, that get adapted and transformed attending to different necessities, and generating different solutions of a single type. 'When a professional builds a barn for a farmer, they both know the type, the form or materials to be used. There is only left the specific, as the personal needs of the client attending their own circumstances: size, relationship to the environment, and climate'. [6]

This is a pattern that gets adapted through the process. It begins with the first sketches, the general features, and then come the details, that are adjusted as the construction advances. So, vernacular architecture can fit, at the same time, in many different situations, and re-create a new place for any of them. Also, one of its main characteristics is the capacity and even necessity of addition. Its open nature, as opposed as the closed ecosystem of design, allows changes and additions that could destroy the original image of the work but that will generate a new and second conception of it. Considering the context, Mediterranean architecture is just the addition of very simple volumes, the more rational the better. First is the addition of one or two bedrooms, then a porch, then a barn to refurbish... [7]

This is why the relationship and solution among different elements is really important. The model is the result of the cooperation of many different people through many generations, as the cooperation among the builders and the users of the buildings, giving place to what is known as tradition. Without style, nor school and practised by agents that have no any other master than constructive tradition. [8]

This architecture has the strength of being created by collective consensus. Its point of approach will work as long as tradition is alive. If tradition dies, the context will radically change. Without tradition there is no confidence in the accepted forms and types, and then we should accept architectural, temporary and institutional styles.

Mediterranean: Source of Civilizations

The Mediterranean area, origin of many civilizations, is the geographical context where African, Asian and European cultures get together, and has been a basic reference for the origin and growth of modernity. Through their terrestrial limits, and promoted by the cultures that settle in its margins, it is possible to find a great spectrum of architectural works that inspired the most forerunners architects from early XXth century. All these are architecture examples that, far from trying to become brilliant, hide in their thick brick and stone walls, the weight of history and tradition.

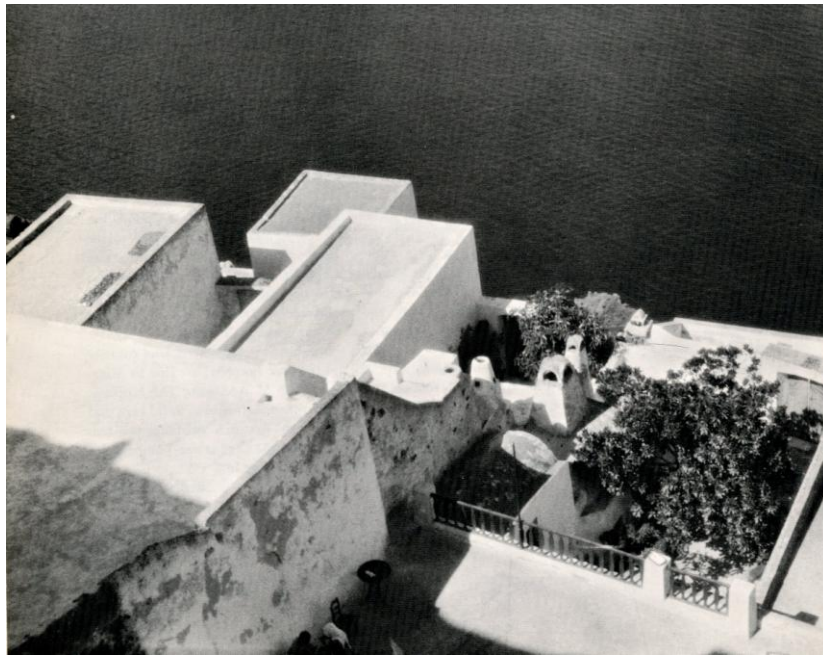


Figure 1. Houses typical of Mediterranean Area, Rudofsky, B. Architecture Without Architects: A Short Introduction to Non-pedigreed Architecture, MOMA, New York, 1964, p. 1

The singularity of the Mediterranean and its context is essential for the understanding of evolution and history of all the countries around it, and also for many other whose geographical does not even touch its waters. This is why it is necessary to understand its role as an essential departure point for latter developments of western civilization and modernity in general. Its vocation, first as a transportation path till the arrival of railway and plane, allowed the communion of cultures of very different root and nature. This geographical context has inherited a very strong cultural and heterodox character, that reflects the interaction among very different societies that, free to chose their own identity, share some of their features. This is why it is not strange at all that one of the main spotlights of modernity was precisely this great space: the Mediterranean.

Vernacular as Avant-Garde

It seems important to think about how and why avant-garde architecture was born, at the early XXth century, just at the same place where tradition was stronger. Until the 1900s, man had built his environment with local materials, in a very easy and non-sophisticated natural way. The human being was constantly relating its architecture to the sun, wind, rain and land, and basically trying to solve the inconveniences of daily life. Society had developed techniques to protect itself from discomfort. Pioneers and forerunners of avant-garde stated that research on the most essential, the root, of antique communitarian architecture could bring many clues to formalization to new modern postulates. They assimilated the shape and formalization of vernacular Mediterranean, allowing more rationalist proposals to directly link to tradition, as the white constructions developed in the Weissenhofsiedlung in Stuttgart in 1927. This was a perception that will settled even more deeply just a decade later, when it was criticised by the Nazi propaganda and caricaturized as an Arab setting.

In these first steps to the understanding of the human work, there were many that tried to rescue and re-use antique classicisms. But, by contrast, the avant-garde was able to bring references that alternate from unimaginable future utopias with the essential deep view of the past and origin of humanity.

This bidirectional strategy configured a round trip that allowed the free coexistence of the modernism visual art and the more sophisticated technical advances. Different intellectual positions merged in a common ground, allowing architecture to be considered the pure discipline were both art and technique lived together. It was a real experimentation field that will originate the most revolutionary statements of modernity.

From this point of view, we dare say that historians have focused on modern architecture from a purposeful point of view, not meditated. We can found research about built work in places with a really low scientific or technological development, especially in many specialized magazines from the 1920s and 1930s. For example, the 1927 issue of *The Western Architect* published articles as 'Aboriginal American Architectural Types', that analyzed pre-Columbian culture as the only source of the pure-original American. That issue included

many drawings that showed also skyscrapers as the symbolic myth of new and emerging American culture. It presents a sort of contradictory relationship, very similar to the ones showed in the pages of *Cortijos and Rascacielos* in Spain.

In the other hand, the proposals of Gio Ponti and Bernard Rudofsky for a hostel in Capri were published on the Italian magazine *Architettura* in 1940. A year later, in 1941, that magazine will recover the topic on the popular focusing on the research done by the Italian troops after the invasion of some of the islands in the Aegean Sea. In both cases, architecture related to tradition was presented as an argument of pure modernity. We will talk about it later.

In the Iberian context, given its main role in the Mediterranean world, these topics were really popular among their magazines and architects. The derivation of first modernist architects was to revalue the concepts of form and space, removing any kind of superfluous decoration, and distancing from new materials and architectural techniques. Some decided to break from the past, focusing exclusively on these new statements, but many others decided to take part on the battle that was trying to fuse tradition and modernity. There were several groups of young architects that including these paradigms among their creed. From all them, we should name the well known group GATEPAC, that even close to the influence of the central-european and Corbuserian postulates, created very interesting interpretations of what new architecture should be in terms of relationship to the past.

Their magazine, entitled *AC, Documentos de Actividad Contemporánea*, published in 1935, an special issue, nº18, to Mediterranean architecture, and some months later, in the issue 21st published in 1936, in a very special article focused on the Ibiza island, started the recovering of the vernacular references as a key to configure the new modern principles.

In the first of them, *AC* published minimum patios in Tarifa, Cortijos in Cadiz, roofs in Almeria and, of course, they talked in extense about Ibiza. The magazine showed pictures of buildings that had been built in high density, looking for the sun and community dwellings that shared entrances and corridors. They highlighted the pure and primary volumes that were built at both

sides of very narrow streets, protected from direct sunlight. Also, in the issue tributed to Mediterranean architecture, the editors wrote:

Popular Mediterranean architecture has some commonalities that are constantly repeated in all these countries. Egypt, the Greek Islands, Italy, nort coast of Africa, Spain, Mallorca, Ibiza, etc... All of them show popular constructions that follow very similar types, founded in rationalism. From all this kind of similar way of life, civilizations, and weather conditions was obvious that the results should be necessarily similar through the ages. All of them of pure forms, as a result of human necessities. [9]

Examples as this one contributed to the creation of the myth of the Mediterranean, refering to buildings located in ideal spaces, where the sun is brighter and shadows deeper. It was supposed to be an essential architecture, and original and humble at the same time. Historians launched explorations that crossed the sea and went through Africa, studying the structure typed of popular buildings, surprinsignly similar to the ones that the master Le Corbusier was proclaiming to the western world. [10]

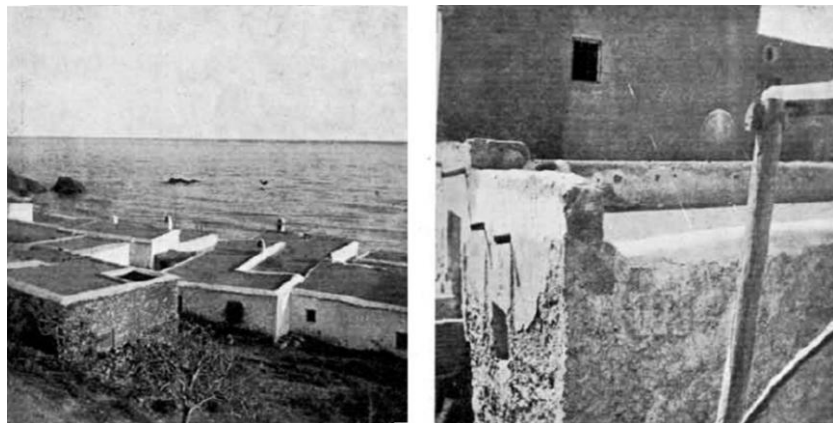


Figure 2. Pictures of buildings in Almeria (Spain), VV. AA. *La arquitectura popular mediterránea*. AC: *Documentos de Actividad Contemporánea*, nº 18 (1935), p.25

This is why we should consider again the definition of modernity, as it has usually deny the influence of the popular and tradition. The relationship between

new and old was seen by modernists as a departure point that had to be overcome but whose developments should necessarily deal with more than thousand ages of history and welfare. Modern historians have depreciated the influence of the old in the avant-garde, but a quick view to the more modern magazines of the early XXth century show that architects were impressed to re-discover the traditional and also happy to be able to watch at the tradition with modern eyes.

From Mediterranean to Mediterranean

The interest on vernacular architecture was demonstrated by the publications and by the travel that the own architects made through the world, and the more essential and anonymous architectures were visited and studied in extense. These visits were documented in photographic albums and sketch note-books, as a sort of magic box full of personal experiences that will define the way of working of every architect.

In this context, there are two architects that were essential to understand the approach of modernity to the vernacular: Josep Lluís Sert and Bernard Rudofsky.

Sert was a key architect in the Spanish scene due to his membership to the GATEPAC group, one of the outstanding centers of modernity in Europe. In the other hand, Rudofsky, an austrian born architect, linked to spanish architecture because of his many trips to the country and his intriguing works in the Iberian country. Both architects are shown as the synthesis of Mediterranean culture into modernity.

Sert lived for many years in Barcelona, just leaving the Mediterranean for setting up in the United States. In the other hand, Rudofsky, travelled first from Austria and then from the States to definitely establishing in the Mediterranean, as a result of a personal and even spiritual search. These are two different approaches to and from the Mediterranean that would contribute to support and secure the vernacular origins of modernism.

Both, the work of Josep Lluís Sert and their own writings, define a clear manifesto that comprehends its own legacy and, by extension, the one of the modernists more interested on the popular and vernacular. We could consider maybe the houses he built in El Garraf, in collaboration with his partner J. Torres Clave and published in the 19th issue of AC magazine as a standard to extract some essential references to his approach to vernacular [11]. The houses in El Garraf are just weekend dwellings with a very clear formal links to the popular Mediterranean. He defined this work in these terms:

The proposal has as a very ultimate reference the architecture from Ibiza, specially its sustained tradition with construction through the ages. This minimal dwellings are a response to the very spread types in central Europe and the United States. The modern way of life promotes the desire to leave the city, even for just a few hours, to rest and relax. This study considered many claims that seek to push forward a new and universal extended way of life, eased by technological advances as the automobile. [12]

This kind of architecture could be seen as a good example of integrating architecture into natural landscape. The project was conceived as small volumes that were randomly spread, looking for the best orientation, but allowing the natural surroundings to qualify the space in between.

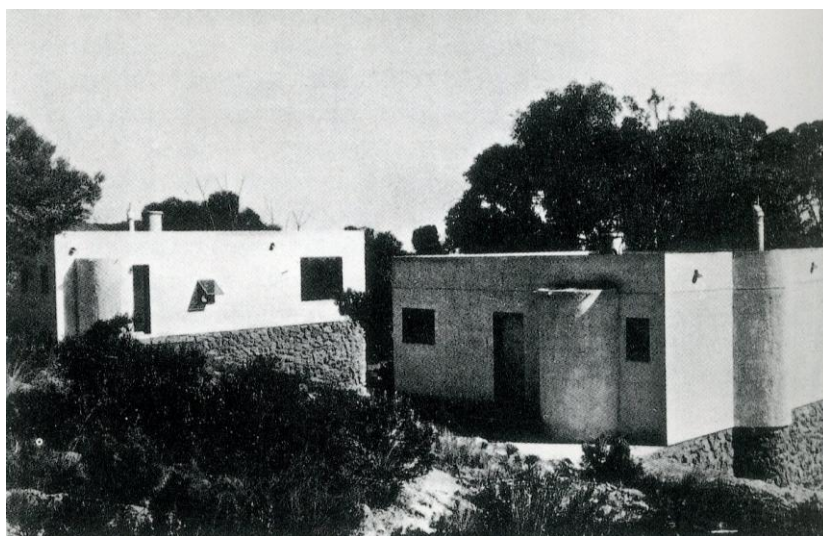


Figure 3. Josep Lluís Sert. Houses in El Garraf.

The thick walls were erected on local stone foundations. The windows of the different spaces and bedrooms were small, but a really big window opening was allowed as the only luxury. The entry was done sculpting some steps on the ground, as if they were already there for centuries. The construction was supposed to be just a direct translation of the weather and location needs, and selecting local materials optimized by the more modern technologies. The inner spaces were designed with austerity, looking for enhance the small and domestic spaces, with naive but very polyvalent furniture. There were five different types designed, attending to those rules, that directly manifest the vernacular origin: selecting a type that has to be adapted concerning the needs of function and life. [13]

In the other hand, Bernard Rudofsky defined a new way of looking to tradition, including some of the principles, that he had been studying for all his life, into his definition of modernity.

'The mediterranean was Rudofsky's first great love. Its warmth, and the truth of its way of life attracted him when, as a student, he began the ceaseless and curious travels that furthered his exploration of the art of living.'" [14]

In 1923, just before becoming architect, Rudofsky visited the Bauhaus exhibition, travelled down the Donau to Istanbul and also to Asia. In 1926 went to France and in 1927 traveled through the whole Italy. All this roundtrips made him a lover of history and tradition but, at the same time, a visionary that searched for modernity in every stone he sketched. In 1929, Rudofsky went to Greece, spending his summer time in Santorini, where he studied and photographed in-depth popular architecture. As a matter of fact, in his doctoral thesis, analyzed the logic and its technical application to the use of concrete in popular greek buildings, and compared them with the more modern advances. His interest to vernacular, specially to those architecture that were strongly marked by its adequation to the climate and site, was highlighted in on the most famous architecture exhibitions of its time: Architecture without Architects.

The exhibition, which roamed for several years, was a mixture of non-specific buildings, all with the commonality of being just erected by non-architects, and

located around the world. Of course, all the works on the exhibition were anonymous but, at the same time, claiming for a universal authorship.

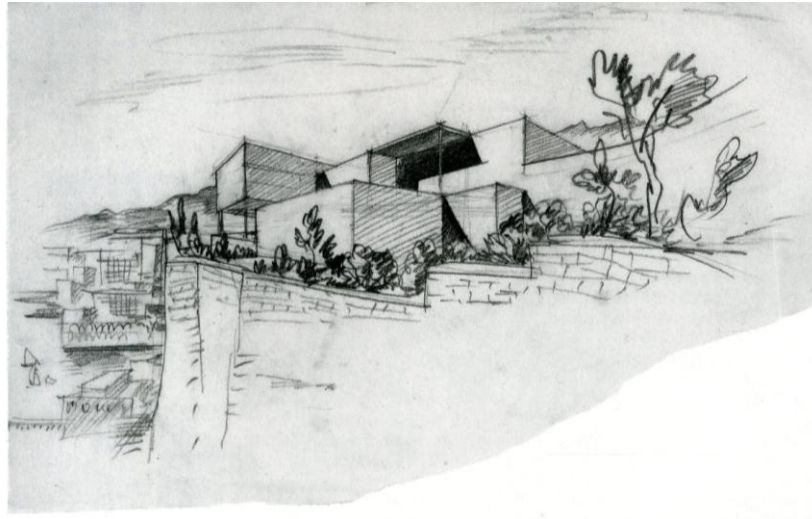


Figure 4. Benard Rudofsky. Preliminary perspective sketch of Oro house, 1935.

Concerning his own work, it is interesting to quote his Casa Oro in Napoli, designed in 1935 in collaboration with Luigi Cosenza, that had invited Rudofsky to cooperate in the design of the Palazzo del Littorio in Rome. A year later, they both designed Villa Campanella in Salerno. And even later, in collaboration with Gio Ponti, Rudofsky designed his famous hostel in Capri, published in *Architettura* magazine.



Figure 5. Bernard Rudofsky and Luigi Cosenza, Casa Oro, 1935-37, View of the house. (The Getty Research Institute.)

We could consider Casa Oro, one of his first works, as a precedent, that perfectly adapts to the difficulty of inserting a building into the urban plot. The building is located in a very pronounced slope, and Rudofsky recovered it to locate gardens and terraces, some of them hidden, despite of the urban context and the exposed of the intervention. The outdoor areas enjoy privacy, and the house holds compacity and very nice composition, that gets emphasized with the Mediterranean sunshine. At the same time, every bedroom is a unique volume, a characteristic that remains from the study of vernacular dwellings.

The final formalization is a very audacious composition of volumes that, in its construction, were built attending to techniques settled in the more orthodox modernity. Pure and white cubes, without any cornices. Columns, light boxes and folding screens are made in iron, reducing its materiality to the minimum. The structure was made of concrete with stone foundations.

Some years later, Gio Ponti commented on that house:

The plan is interesting from the conceptual point of view, in its structure and also in its way of living. Also because of the perfection of the public spaces, despite of the non-existing corridors. The clarity and beauty of its

construction principles and the great election of the site are lovely and ostensible attributes. Probably, it is the more beautiful of our modern houses. [15]

In a similar way as Sert, Rufosky will continue with the incorporation and development of his ideas around the vernacular in many of his designs till the end of his life, concluding that he played a very important and influencing role through the entire XXth century. The direct contact of the masterpieces with the vernacular and tradition in this geographical context allowed the recovery of the values and principles more directly lined to human necessities. Also, they all understood that the more essential constructions are not made just of stone, but of the immaterial relationship of human being with its environment through site and climate.

References

- [1] Rudofsky, B. *Architecture without architects. An introduction to Non-Pedigreed Architecture*, The Museum of Modern Art, New York, 1964, p.32
- [2] VV. AA. *Actas del Congreso Internacional: Viajes en la transición de la arquitectura española hacia la modernidad*, T6 Ediciones, Pamplona, 2010
- [3] Rapoport, A. *Vivienda y cultura*, Gustavo Gili, Barcelona, 1972, p.11
- [4] This Basic distinction is located in many texts, as: Macdonald, D. Masscult and Mildcult, *Against the American grain*, Random House Inc., NY, 1962; Redfield, R. *The primitive world and its transformations*, Cornell University Press, Ithaca, 1953; Redfield, R. *Peasant society and sculpture*, Chicago University Press, Chicago, 1965
- [5] Rapoport, A. Op.cit. p.11
- [6] Redfield, R. *Peasant society and ...*, Op. cit.
- [7] VV. AA. La arquitectura popular mediterránea. *AC: Documentos de Actividad Contemporánea*, nº 18 (1935), p.15
- [8] VV. AA. La arquitectura popular mediterránea, Op. cit.
- [9] Ibid.
- [10] Goldfinder, M. *Arquitectura popular mediterránea*, Gustavo Gili, 1992, p.18
- [11] Rovira, J. M. *José Luis Sert, 1901-1983*, Electa, Milano, p.231-232

- [12] VV. AA. La arquitectura popular mediterránea. *AC: Documentos de Actividad Contemporánea*, nº 19 (1935), p.33
- [13] Borrás, M. L. Op. cit. pp.22-24
- [14] Bocco Guarneri, A. Bernard Rudofsky. *A Humane Designer*. Springer Wien New York, NY, 2003, p.9
- [15] VV. AA. *Bernard Rudofsky: life as a voyage*. Architekturzentrum Wien in association with the Getty Research Institute, Los Angeles, p. 266

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REVIEW ON VERNACULAR ARCHITECTURE OF SAFRANBOLU HOUSES AND THEIR SOCIAL AND SPATIAL REFLECTION OVER THE 20TH CENTURY ARCHITECTURAL CULTURE, TURKEY

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Abstract

Traditional Ottoman city Safranbolu encloses vernacular houses and mansions, which reflect a rich urban composition with several religious monuments. While Ottoman Empire faced with hard times economically and politically it was seen that Safranbolu on opposed to the Empire, experienced its golden epoch during the 17th, 18th and the early 19th centuries as it occupied vital position in caravan trading. There was a parallelism between wealth condition and formation of Safranbolu houses. In addition to the economic realities geographical and social circumstances made their major impact on settings organization and building houses as well. The first setting, called 'Çarşı/Bazaar or Çukur/Hole', used for the winter sessions, Turkish population lived there, and the houses were located in a narrow valley setting. The second section, 'Kıranköy' was mainly housed by Rum population until their total deportation from Safranbolu in the 20th centuries; this section has developed as a business area until nowadays. The third section 'Bağlar Region/ the Vineyard' was a summer residence area for two distinct social group of people; Turks and Rums. However, this urban formulation in the beginning of the 20th century was dramatically changed because Industrial Zone Karabük was founded by the new ideology and occupied the central position in the area. This study firstly aims to investigate Safranbolu's urban policy; it will demonstrate how three historical settings of Safranbolu have evolved in time and affected its vernaculars. Then the research will claim that although Çarşı has preserved its statue, Bağlar and Kıranköy have lost their original formation by the effect of political and social agendas where primarily unconscious later conscious protection of Çarşı, and unconscious decay of Bağlar and Kıranköy region were experienced. By this study it is expected to contribute future building performances of Safranbolu while showing both examples, the historical houses logic, which was rational and the recent architectural blunder that away from rationality and introduced 'kitsch' reality to Safranbolu.

Keywords: Safranbolu, Vernacular Architecture, Bağlar Region, Kıranköy District

Introduction

Traditional Safranbolu House patterns of both Muslim and non-Muslim groups shed light on Safranbolu's rich history, which are located in the Black Sea Region. Mansions and houses constructed in large dimensions and their sheer numbers with multi quantified window arrangement all demonstrate the prosperity of the city whose numbers were increased as social and economic life enriched due to the caravan trading opportunities (Bakırer, 2001). The issue sometimes even creates arguments on vernacular identity of Safranbolu¹. Although, craftsmen were responsible for these constrictions it must be underlined that the Empire charged architects for the Ottoman cities to manage building mechanism. The issue became influential on Safranbolu's vernacular identity to be high, which topic will be dealt in the future studies.

In Safranbolu the economic condition was not the only determinant factor, but geographic, and social issues as well made its major impact on the urban arrangement where there urban nucleus appeared, Çarşı, Kıranköy and Bağlar Sections (Günay,2003). Houses of the there urban site reveals the fact that different social and practical applications formed the houses, and they obtained physically individualistic features. Spatial usage and a source of materials differed from each other. In this regard, it was possible to classify Muslim Turks houses from the Rums (Romans) and Christian Turks who were living in Kıranköy.

Affluent situation of Safranbolu was changed at the 19th century due to tax regulations of the Empire that arranged on favor of foreigner traders, which supplied liberties for them and the issue degenerated the local economy. Finally, as the city was not able to combat with the cheap and abundant European products lost its power. Economic recession of Safranbolu could not prevented by construction of railroad station and Karabük Iron Steel Factories near to the town in the early 20th century. Contrary, the industrial setting became effective

¹ Vernacular entity of Safranbolu Houses is questioned in academic discussions made between Dr.H.Maia, A.Cardoso and M.Özkan Altınöz. I acknowledge my colleagues for bringing intriguing questions to the field.

on creation of urban and socio-economic dilemmas among traditional Ottoman city Safranbolu and Republican modern city Karabük.

When UNESCO determined Safranbolu as a prosperous architectural heritage site, and approved its statue in 1994, these houses had already suffered from unconscious spatial formulations that changed urban composition where kitsch architectural productions and restorations accompanied to it. Besides, replications of Safranbolu Houses contributed to kitsch reproduction process. With this study it is aimed to develop total approach to Safranbolu House conception. Furthermore, Safranbolu Houses' setting and their reproduction process in the 20th century will be shown as a result of changing economical, political dynamics of the region where finally unconscious protection of Çarşı and kitsch architectural patterns are came out in Kıranköy and Bağlar areas.

Development of Safranbolu Setting and its Vernaculars' Characteristics

Although, Safranbolu was settled by diverse cultures during the history, its remarkable periods experienced in Ottoman era when the city members had a close relationship with the Palace². They constructed monumental buildings, which became effective creation of central point in the city (Zeybek; Kara, 2005, p.123). In addition to Safranbolu originated officials' contribution to the city formation, the actual development achieved by trading caravans especially advanced in the 17 and 18th centuries that based on leatherworking; timber and saffron buy and sell. Trading was so determinant for the city economy that while the Ottoman Empire economically experienced hard times in the 19th century, on contrary Safranbolu was in prosperous condition whose network enclosed European countries also. The wealth state of the city in the 18th and 19th centuries could be followed from tax records where Safranbolu appears as the second big tax giving town of the empire after İnebolu in the region (Emiroğlu, 1981, p.46).

² In Byzantine times the site was known as Teodoropoli. Following it was named as "Dadybra" and "Zalifre", "Borglu", "Zalifre Borglu", "Taraklı Borglu", "Zağfiran Borlu". *Safranbolu Culture and Tourism Association catalogue*

This economic power mirrored on Safranbolu urban setting where three main living areas developed. The first setting, called 'Çarşı/Bazaar', used for the winter sessions, Turkish population lived there, and the houses were located in a narrow valley whose history goes back until the 10th century. The second important section of Safranbolu was 'Bağlar Region/ the Vineyard', which place served as summer residence area for two distinct social group of people; Turks and Rums, it was formed in the 18th century (Akpınar Kasap, 2011, p.148). The third part, 'Kıranköy' was housed by Rum (Roman) population until their total deportation from Safranbolu in the 20th centuries³; this section has developed as a business area until nowadays. This wealthy situation let to have two houses both in Çarşı and Bağlar Region. Safranbolu inhabitants were living in Çarşı in the winter sessions than they were moving towards Bağlar, which was supplying better living conditions for hot sessions. Rum population accompanied to same mobilization, both lived in Kıranköy and Bağlar Region up to session. However, this urban formulation in the beginning of the 20th century, would be dramatically changed and the newly established Industrial Zone Karabük, 8km to Safranbolu, would be representing the new ideology and occupy the central position. The issue will be discussed in the following parts of the paper.

Another important factor influenced the setting of traditional Safranbolu houses was its valley configuration. Although, Bağlar topography was large in dimension the Çarşı did not have same chance where development in a narrow valley brought space problem together. The houses built close to each other and created narrow streets. Sometimes these streets were too narrow even pack animal could hardly move. Narrow setting did not prevent pay respect to neighbors, thus hoses carefully located in order to not cease the neighbour's sight that created rich visual appearances on urban scale. In order to diminish the inclination, more bends were created in the streets and cobble stone pavement/*arnavut kaldırımı* were constructed to prevent wash floors. Therefore, sometimes there are blind alleys occurred (Emiroğlu, 1981, p.50). (figure 1)

³ Sources states that there were Christian Turkish population were living with Christian Rums in Kıranköy section (Yalçın, 2006)



Figure 1. Safranbolu Çarşı Houses (taken by the author)

Sources for construction materials of the houses were stone, adobe and timber. In the construction of the houses mainly timber structure is preferred. Timber was not only used in the structural frame but also in the floors, ceilings, cupboards, door, windows and roofs with other construction materials. Durability of timber got importance while constructing a house. Therefore trees were cut down on October and November before the sap withdraws into the trunk. In decoration also the same material was preferred. However timber varied in characteristic in regard to the usage of it. The mostly preferred trees were fir, yellow pine and larch, together some poplar, walnut and hornbeam but oak was never used. Construction process was firstly started by laying down the foundations. Then ground floor wall was constructed. Following, timber frame was erected and filled with several materials according to desires. After that, floor joists, roof and eaves, roof covering, daraba (wooden partitions), floors, ceilings, plaster and whitewash were completed (Günay, 2004).

Another factor that affected structures of the Safranbolu houses was the social life. Çarşı Houses and Bağlar Houses which were dwelled by Muslim Turks, did not have window in the basement floors for secrecy of family life and gardens served to same aim where door opened gardens instead of street. Secrecy was supplied by screening the windows by lattice works. This social agenda

separated the planning of houses, but this type of usage was common for rich mansions. For instance, some mansions divided into two functions "haremlık", and "selamlık". *Haremlık* was used by female members and *selamlık* served to male members who were hosting their guests in this part. The main importance was given to the interior in order to protect family life. Every room organized according to daily needs of single family. We should bear in mind that according to the Turkish traditions couple of families used to live together in a same house. For that reason every room was arranged according to needs of particular families such that they can sit, eat and sleep within the same room. Even they were able to take a shower inside of the rooms (Günay, 1999). Therefore, it can be said that these houses were not only reflecting construction culture of architectural environment of this geographies but also traditional Muslim-Christian Turkish and Christian Rums living conditions of the 18th and the 19th centuries.

Muslim Turkish customs differentiated from Rum and Christian Turkish population. For example, Kıranköy houses contained wine cellar at the basement floor, and windows did not have wooden lattice work, which was screening the windows in order to supply privacy for women. In addition, timber did not occupy the central position in Kıranköy Rum House. Instead they mainly preferred stone as a construction material. On opposed to Muslim patterns, doors opened to garden, Rum houses directly opened to street. Another difference was at least one store place found in Kıranköy houses (Emiroğlu, 1981, p.34) Bağlar Region of Safranbolu both contained Rum and Muslim-Christian Turkish Population where mainly gardens located. In this section of the area, Safranbolu houses constructed in big gardens. Here, Cultivation of grape vines carried out by Christian Rum population. (figures 2-3)



Figure. 2 Kiranköy House example (taken by the author)



Figure 3. Bağlar House in a garden (taken by the author)

Endurance of Traditional Safranbolu Setting in the early 20th Century

By the early 20th century Ottoman Empire had already lost its strength and was suffering from economical problems. As a solution the Empire indebted its economy to European loans, since they were in survival process could not catch its counterparts and neither paid back the loans. Reflection of the Ottoman

policy was not offering promising situation in Safranbolu at the end of the 19th century, as trading was decreased after the Tanzimat (New Order) period, when European traders obtained capitulations from the Ottoman Empire. The issue cut down the local traders actions since European products were cheaper and abundant by the effect of industrialization and capitulations.

After the Ottoman Empire collapsed, new political agenda-the Turkish Republic did not change Safranbolu's position and left the city alone, thus the city turned out to be an economically ruined area. Affects of political agenda discomposed the spatial arrangement of the city as well. Because of economic recession, the wealthiest population of Safranbolu left their region at the end of the 19th century. People who stayed in the province moved towards Bağlar Region. As a result while Çarşı lost its central position, Bağlar and Kıranköy became new populated areas. (Kıray,1998, p.43, 54). This social movement would change the destiny of vernacular architecture of Safranbolu houses in Çarşı, Kıranköy and Bağlar.

Safranbolu's alone existence started to change when a railway station was built its nearby. This railway project also took attention of the period's newspapers. They asserted that having a railroad network in close proximity to Safranbolu would create a sunrise effect and will economically upheaval the city. Another important step were taken by the Republic who established Iron-Steel Factories 8 km to Safranbolu. As we learn from the newspapers Iron Steel Factories created some economic expectations at Safranbolu side, it was believed that this investment would contribute to Safranbolu economically; however it was seen a compact-self adequate city model of Karabük minimized the all needs to outside. On opposed to beneficial expectations Karabük limited Safranbolu's hinterland. Located in a close proximity these two settings, one is an Ottoman historic city with its affluent Ottoman past, and the other a newly formed Republic city are introduced old-new, modern-traditional arguments to the region. This dilemma pushed Safranbolu to search for revitalizing its economy therefore old known lethal work tired to be activated, however since job structure was already changed and knowledge of lethal work was forgotten because of industrialization

the aim could not realized (Zonguldak Newspaper, June 6, 1936, Yeni Karabük Newspaper, January 11, 1952; Kiray,1998).

Rapidly growing Iron-Steel Factories evoked immigration from villages to Karabük and finally effects of this over population problem reached to Safranbolu. (Kiray,1998, p.42). Inhabitants of Çarşı sold their homes to villager people, and new population groups –Factory workers population- emerged in Çarşı section. Thus, %80 percentage of population shifted on favor of villagers’ population in Safranbolu. Although Çarşı stayed intact due to this condition, Bağlar and Kıranköy influenced from the fast urbanization where destruction occurred (Emiroğlu, 1981, p.37,39,). This over population problem took attention of both municipalities of Safranbolu and Karabük and they took steps to revision of urban plans. In this regard, Cities Regulation Association (İller Bankası) was invited to do analytical studies on Safranbolu and Karabük. Finally, experts determined Safranbolu as protection area, which until that time naturally protected due to housed by factory workers who could not demolish and rebuilt modern houses because of their poor economic conditions. (Demokrat Karabük Newspaper, Agust 27, 1956; Hacısalıhoğlu, 2009). In my opinion, if social factors wouldn’t force to move Safranbolu original inhabitant towards Kıranköy and Bağlar, possibly they would activate destruction process of houses in order to built modern houses in Çarşı.

Learning From Safranbolu Houses and the Recent Building Performances

Preservation of Safranbolu houses has under process since 1968. First of all Cities Regulation Association prepared a project for Karabük in where Safranbolu is also cited as a place that should be preserved. Following, it was declared as “urbanized site” and protected site by Ministry of Culture in 1976. (Akpınar Kasap, 2011)Having such a unique cultural and historical heritage, it took attention of UNESCO with its urban design, architectural elements, and folkloric richness then the city accepted being one of the world heritage cities in 1994. However, before these dates deformation of Safranbolu had already started. Due

to major interest of public opinion protections in Çarşı seems like particularly achieved, but for Bağlar and Kıranköy the same cannot be said.

Aforementioned, in the 20th century on wards, rich Safranbolu inhabitants moved to cities such Istanbul and others moved to Bağlar and left their houses to factories workers who came from different sites of Turkey to work in Iron-Steel industry and Bağlar started to be populated it became a valued site of Safranbolu where several houses were destroyed and replaced with apartment like constructions. Life conditions were changed, compact family structure shifted to nuclear family and modern apartment like buildings were preferred whose plan signaled to changing social habits in the name of modernism.

After 1980's postmodern trend whispered liberation in architecture. Transformation of West is combined with regional cares which turned out to be pluralism. However, the situation was distinct in Turkish example since Turkish architecture was already in "national/regional", "international/contemporary" dilemmas, the issue caused to creating superficially traditional and regional applications, which means that this multi expectations and conditions produced kitsch applications (Didem Kiliçkiran , 1996) In Safranbolu case, kitsch developed in all areas as a outcome of massive immigrations from rural areas to cities where job opportunities were promising and it became trendy especially in Kıranköy and Bağlar Region. On the one hand, Safranbolu is a tourism destination area demonstrated marketing cares, so habitants started to make up buildings, which contributed to kitsch formation inevitably. On the other, this marketing conscience emerged the creation of exotic Safranbolu house image thus residential areas joined to reflecting Safranbolu House notion in Kıranköy and Bağlar. (figure 4-5)



Figure.4 Kitsch examples in Kiranköy (taken by the author)



Figure.5 Kitsch examples in Bağlar (taken by the author)

CONCLUSION

Starting from 1930 until 1960, not only in Safranbolu -Karabük but also in Turkey social changes happened; however, these social and spatial changes towards modernity did not have uniform character. The issue could be traced in relation between Safranbolu and Karabük where modern and traditional dilemma

appeared because of the new ideas that the Republic introduced to the society. The Republic wanted to stay away from Ottoman reminiscences that found its ground in construction of Industrial city Karabük with modern monuments that aimed to reflect modern life style, which was also telling that the Republic decided to stay away from both traditional Ottoman life and building style.

Alternatively, unchanging character of Çarşı, and the changing characteristics of Kıranköy and Bağlar took its formation from establishment of the industrial zone of Karabük. Çarşı Region rescued itself from people's damages, but by the same formation let to mobilization towards Kıranköy and Bağlar. Thus these settings lost its originality because of over population, and changing social habits and living conditions from traditional family structure to nucleus family, which was a result of modernization progress. As Karabük provoked Safranbolu to find economic remedies, finally, tourism reality introduced to the area and restoration, reconstructions, and other kitsch architectural examples served to production of exotic and finding out pseudo-traditional images from the past that stifle built environment.

It can be said that Bağlar and Kıranköy region have already lost its former function and features. Today, Bağlar represent a few traditional house examples, but its unique structure distorted by kitsch examples. From these patterns useful lessons could be drawn. Functional and rational logic of traditional Safranbolu houses in the three settings needed to be re-analyzed.

References

Akpınar Kasap, S. (2011) The Impact of Economic and Social Development in Safranbolu, Ph.D Dissertation, The Graduate School of Natural and Applied Sciences, Middle East Technical University, Ankara

Bakırer, Ö. (2001) 'Window Glass in Ottoman Vernacular Architecture', EJOS IV (M.Kiel, N.Landman&H.Theunissen (eds.), *Proceedings of the 11th International Congress of Turkish Art*, Utrecht-The Netherlands, August 23-28, 1999), No.9, 1-29

Emiroğlu, M. (1981) Korunması Gereken Örnek Bir Kentimiz Safranbolu, Ankara Üniversitesi, Dil ve Tarih-Coğrafya Fakültesi Yayınları, no.297, Ankara

Günay, R. (1999) *Türk Ev Geleneği ve Safranbolu Evleri*, Yem Yayınları, İstanbul

Günay, R. (2003) *Safranbolu Evleri*, YapıYayınları, İstanbul

Hacisalihoğlu, İ.Y (1995) *Şehir Coğrafyası Açısından Safranbolu Karabük İkilemi*, İ.Ü. Sosyal Bilimler Enst. Beşeri ve iktisadi Coğrafya Anabilimdalı, Ph.D. Dissertation, İstanbul

Kılıçkiran , D. (1996) *Kitsch and Architecture: The Production of Kitsch in the Architecture of Turkey in 1980's and 1990's*, The Graduate School of Natural and Applied Sciences, Middle East Technical University, Ankara

Kıray, B.M. (1998) *Değişen Toplum Yapısı*, Bağlam Yayınları, İstanbul

Zeybek.N; Kara, K. (2005) *Osmahlı Tarihi*, Boyut Yayınları, İstanbul

Safranbolu Culture and Tourism Association Catalogue/ SCTAC

Yalçın, K. (2006) *Emanet Çeyiz Mübadele İnsanları*, İstanbul

Yeni Karabük Newspaper, January 11, 1952

Zonguldak Newspaper, June 6, 1936

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SURVEYS, TRAVELS AND DISCLOSURE OF VERNACULAR ARCHITECTURE IN THE PORTUGUESE AND EUROPEAN CONTEXT.

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Abstract

The paper, Surveys, travels and disclosure of vernacular architecture in the Portuguese and European context intends to characterize the antecedents of Portuguese Regional/Popular Architecture survey (1955-61), in the first half of the 20th century, in the context of the Portuguese territory, focusing on Lucio Costa (Tradição Local, 1929; Documentação necessária, 1937); Orlando Ribeiro (Inquérito à Geografia Regional, 1938; Inquérito à habitação Rural, 1939); E. A. Lima Basto and Henrique de Barros (Inquérito à Habitação Rural, 1943-47); Francisco Castro Rodrigues (account of Aesthetic Missions by Alentejo, holiday, 1945). In the European context the focus is centered on Leopoldo Torres Balbás (La vivienda popular en España, 1934); Fernando Garcia Mercadal (La casa popular en España, 1930), Josep Lluís Sert (Arquitectura sin "estilo" y sin "arquitecto", 1934); Giuseppe Pagano and Guarniero Daniel (Architettura Rurale Italiana, 1936); Roberto Pane (Architettura Rurale Campana, 1936); Le Corbusier (travels in Espagne, Maroc, Algérie, 1931). In the German context will cover the confrontation between modern architecture and vernacular/traditional architecture, analyzing what the contemporary press called "war of roofs", through three exhibitions of architecture (Ausstellung Bauhaus, Weimar, 1923; Die Wohnung, Stuttgart, 1927; Bau-Ausstellung Deutsches Holz, Stuttgart, 1933) and the respective responsible architects: Walter Gropius; Mies van der Rohe and Paul Schmitthenner. We will return to the Portuguese context confronting the watercolour Farmhouse in Capri (1804) of Karl Friedrich Schinkel with the core of Algarve Portuguese villages of Portuguese World Exhibition (1940), seeking to reveal the complexities and contradictions of modern versus traditional versus vernacular. Reveal the vernacular architecture as a continuum for timeless architecture, translated into constructive search for truth, in which Climate and Mediterranean appear as keywords. The end point is images of architecture of the North of Portugal, held by Portuguese Regional Architecture survey, presented at the exhibition Architecture Without Architects (1964-65), held at MOMA in New York.

Keywords: Surveys, Travels, Vernacular Architecture, Climate, Mediterranean

In the first half of the 20th century, the importance of studying geography, the appraisal of popular arts, and discovering the constructive logic of vernacular architecture were the pre-founders of the *Inquérito à Arquitectura Regional Portuguesa* (Survey on Regional Portuguese Architecture). Within this context, i.e., the first part of the 20th century, a vernacular architecture that was looked into and disseminated as an alternative to the academic route, brought with it the need for (re)appreciation journeys and *in situ* contact. These trips in search for vernacular architecture provided a new learning process and also created a new awareness of the local and national architectonic identity.

Venturing into these travels through the eyes of architect Lúcio Costa, we can perceive and be aware of the evolution of his knowledge and his contact with the roots of Portuguese architecture in the confrontation between what is erudite and vernacular. And, through a radiographic eye, he reveals the constructive and expressive logic that allows one to uncover the bases of Portuguese architectonic culture. In his *Tradição Local* (Local Tradition) (1929), Lúcio Costa says that the roots of authentic regional architecture are where it comes from ('as raízes na terra', Costa, 1929, p.33), believing that above all it is important to get to know 'regional Portuguese architecture in its own birthplace'. According to Lúcio Costa, it was 'in the popular construction, with a virile and kind of rugged but welcoming look of its villages that the qualities of the race are best shown. From the start, one can perceive a perfect artistic knowledge in the balance of proportions and lack of artefacts' (Costa, 1929, p.33,34). And in *Documentação necessária* (Necessary documentation) (1937), Lúcio Costa believed that, in Portugal, popular architecture was of 'greater interest than the erudite'. According to this architect, 'fair proportions' could be found in Portuguese villages, in rural constructions, and he mentioned that when architecture travelled to Brazil and was implemented and adapted to the environment by the 'old masters and unlearned bricklayers', such architecture gradually lost 'a little of that typically Portuguese *carrure*', which, on the other hand, was compensated within a Brazilian context by reducing, or even eliminating, 'certain precious and somewhat animated mannerisms' found in the metropolis (Costa, 1937, 86,87). According to Lúcio Costa, studying popular

Portuguese architecture would enable modern Brazilian architects to use it 'as material from new research' and as a lesson of 'over three hundred year-old experience' (Costa, 1937, p.86, 87). That study, which we believe is an appeal to a survey into Portuguese architecture, makes us relate Lúcio Costa's warning to the need to carry out a study that would document popular Portuguese architecture, called *Documentação necessária*, with the article *Uma iniciativa necessária* (A needed initiative) by the architect Keil do Amaral, published in 1947, in the magazine *Arquitectura*, appealing to a scientific survey on regional Portuguese architecture, highlighting the need to 'collect and classify elements pertaining to Portuguese architecture in the different regions of the country, aimed at being published in a widely and discerningly documented book' (Amaral, 1947, p.12,13). In 1955, Keil do Amaral was responsible for coordinating the *Inquérito à Arquitectura Regional Portuguesa* (Survey on Regional Portuguese Architecture)(*Arquitectura*, 1980, p.XX). Lúcio Costa considered that in that research into popular Portuguese architecture, as well as the systems and construction methods, the 'different project solutions' should also be studied, including 'how they varied from one region to another' (Costa, 1937,p.90), thus seeking the constructive logic subjacent to each region.

In 1936, during his scholarship for the National Education Council, the geographer Orlando Ribeiro began a series of journeys in Portugal which proved to be determinant. In 1938, at the *Congrès International de Géographie* in Amsterdam, he presented his *Habitat Rural au Portugal*, and prepared a draft for the *Survey on Rural Habitat*, considering that a study of the household comes hand in hand with a study of the populations. He upheld that the survey should be based on 'personally looking into and observing the populations directly, and examining maps, statistics and historical documents' with the aim of preparing a charter with the types of *rural habitats* in Portugal, studied from the shape and origin perspective. Orlando Ribeiro stressed that 'the result of numerous excursions to all the provinces' allowed him to 'establish some general guidelines' which would help him in his work, and highlighted the wide range of different 'rural habitats' from the Minho to the Algarve (Ribeiro, 1938, p.6-8). In that same year, he also prepared a *Survey on the Regional Geography* draft

aimed at gathering elements for the geographical study of the Beira Baixa and surrounding regions.

Agronomy engineers Lima Basto and Henrique Barros published the *Survey on Rural Dwelling* ordered by the Universidade Técnica in Lisbon and funded by the National Federation of Wheat Producers, corresponding to the Minho, Douro, Trás-os-Montes and Alto-Douro regions (1943) and the volume corresponding to the Beira Litoral, Beira Alta and Beira Baixa regions (1947). In the introduction of the first volume, Lima Basto says that 'in recent years, there has been a growing interest in rural dwellings in nearly every country' (Basto, 1943, p.7). After mentioning a series of studies on rural dwellings carried out in England, Germany, France, Italy, Denmark, and Sweden, he hopes that his survey will 'awaken the interest of engineers and architects to the problem of rural dwellings', enabling what he believes are 'the key elements for projects adapted to the different regions, of convenient and cheap rural houses that could be adopted or advised by the authorities or the institutions responsible for ensuring the defence and well-being of the rural population' (Basto, 1943, p.26). He also mentions that the aim of the survey was to show what existed and that he made every effort to ensure that the photographs showed exactly what the 'predominant rural dwelling' was. In order to do this, he prepared a *Guide Questionnaire*, which was an indissociable part of the survey, regarding the house, a detailed description of its exterior, its orientation, whether it has a patio or not, a garden or annexes, construction materials, and overlay and roofing, size and openings, among other features.

In 1945, while still a student at the *Lisbon School of Fine Arts*, Francisco Castro Rodrigues participated in the *IX Missão Estética de Férias* (9th Aesthetic Mission on Holiday), which took place in Évora. He remembers that he 'carried out a survey on the different construction periods of the Évora See, a survey on the poor, middle-class and upper-class dwellings in the Alentejo', and also visited several villages and a farming estate in Reguengos de Monsaraz (Dionísio, 2009, p.115). When the newspaper *Democracia do Sul* asked Castro Rodrigues what had been more important for an architecture student, he said that it had been to

meet the bricklayer. Referring to the mason building the vaults for the dwellings, he said:

I would stay at the bottom watching the worker laying and fixing the bricks to the wall and, from there he would follow the curve drawn on the wall. They would build it with no scaffolding. There was a point when they would move onto the built structure, with a "spire", a minimum height of about 50 centimetres or less for 4 or 5 metre voids, or sometimes more. When they reached the last hole, the worker at the top would sometimes put a whole brick, others just a piece, a broken bit that would close the vault. Once the vault was closed off, a hodman would be sent up to jump up and down, with the contractor, the bricklayer, the savant, watching from down below to see where it joined or not. Then he'd tell him to press down on the "kidneys", as they used to call those voids, filling the empty spaces adjoining the dome with detritus until it was all balanced, according to their idea, their art. It was interesting to watch. I haven't seen anyone do it since. Now, you can do everything with reinforced concrete...With more, or less, concrete...But then, they didn't use any. Just brick, the "lambaz", I think that was the name of that type of brick. (...) At the time we used to get on really well with the National Monuments' guys, directed by Júlio, and Saul Dias, Régio's brother. I later asked him: "How's this done? What is the maths formula?" He didn't know. "This is empirical. It's the workers who know". There are some experts that know the possibilities of lowering the void, the "spire", as it's called (Dionísio, 2009, p.115).

In Spain, during his architectonic excursions into the outskirts of Madrid, promoted and organized by his professors Teodoro de Anasagasti and Torres de Balbás of the *Escuela de Arquitectura de Madrid*, architect Fernando Garcia Mercadal discovered and revealed the simple and functional character of popular architecture, through quick sketches that established the essence of that architecture. Torres de Balbás, interested in a modernized regionalism, mindful

of the influences of the climate and the materials of the regions, recorded the constructions he studied on his trips through photographs, pictures and drawings which, in 1919, would be published in the magazine *Arquitectura* under the title *Rincones inéditos de la antigua arquitectura española*. Torres Balbás took on the artistic form of popular architecture as a *standard* of the people's need and advocated the normalization and rationalization of the vernaculum dissociated from the shape and dependent on the constructive logic (Torres Balbás, 1933, p.155). Torres Balbás sought the collective soul of the nation in vernacular culture, denouncing the superficial character of architecture's historical elements. In 1925, in his speech to enter the *Real Academia de Bellas Artes de San Fernando*, architect Luis Bellido showed his position against the constructive dishonesty responsible for the decadence of architecture, warning about the need to look for the constructive honesty in the gestures of past architecture, of seeking "rule and structural logic", the need to "carefully serve the climatological demands and the traditional use of materials and construction systems" (Bellido González, 1925, p.15). In 1929, also in his speech to enter the same *Academia*, Teodoro de Anasagasti stressed that the main characteristics of popular architecture were simplicity, adapting to the environment in which it is found, rationality in using elements, honesty, timelessness, and its anonymous character. On the other hand, his disciple, Fernando García Mercadal, in *La Casa Popular en España* (1930), highlights the 'internal plan' of the popular dwelling as a synthesis of the everyday experience and, through the study of popular constructions, he presents a new context for the debate on traditionalism (García Mercadal, 1930). The journeys made to see popular architecture provided a new learning process, which in turn also created a new awareness of national architectonic culture. Studying vernacular architecture comes about as an alternative to the culturist academic path, finding the fundamentals for the new constructions in those popular forms, in particular with regard to affordable dwellings. Josep Lluís Sert, participant in the *II CIAM* and founding member of the *GATCPAC* (*Grupo de Arquitectos Catalanes para el Progreso de la Arquitectura Contemporânea*), upholder of the Mediterranean roots of modern Spanish architecture, in his text *Arquitectura sin "estilo" y sin "arquitecto"* says that:

In every country there is an architecture for every period of time that is usually called popular – not popular in the sense understood at schools of architecture, as in regional, but popular as in coming from a smaller class, classifying it for its economic means. This architecture eliminated the whole ornamental element and its interest derives from the combination of simple and clean shapes, from a very free and sensible composition, and from great variety, from correct human proportion and an absolute lack of ostentation judgements and false concepts created in academic environments and architecture schools. This architecture, much older than any school or academy, reached standard forms, forms dictated by the climate and by racial characteristics at the same time imposed by the materials that the builder had available in each particular case! (Sert, 1934).

In Italy, architects Edoardo Persico and Giuseppe Pagano, upholders of a true Italian rationalism and heedful of the history of local architecture, made parallelisms between the rural construction and modern architecture (Fusco, 1984, p.204-206). In 1936, they organized the *VI Triennale* in Milan, with the title *Continuità-modernità: esposizione internazionale delle arti decorative e industriali e dell'architettura moderna*. In order to be able to hold the exhibition and publish the book *Architettura Rurale Italiana*, Giuseppe Pagano went on a long journey throughout Italy, taking a large number of photographs of rural constructions in every region, there finding the primary sources of functional architecture. Through these pictures you could find the source of modernity in a rural and anonymous architecture which Giuseppe Pagano called 'the truly autochthone tradition of architecture: clear, logical, linear, morally and even formally, very close to contemporary taste' (Talamona, 1997, 134-136). It was a supra-historical architecture that responded to its geographical location, to the climate, to local materials and to economic conditioning factors in an absolutely efficient and functional manner. According to G. Pagano, that rural architecture taught the contemporary architect that 'moral habit of submitting his/her personal imagination to the laws of usefulness, to the economy technique without having to give up the aesthetic aim of his/her work' (Talamona, 1997,

134-136). In the same year in which Pagano publishes the catalogue of Italian rural architecture with pictures of vernacular architecture, the architect and historian Roberto Pane, from Naples, published his *Architettura Rurale Campana*. In his prologue he defends the relevance of studying rural constructions and argues that the “farmer architect” has a lot to teach the contemporary architect (Sabatino, 2010, p.135).

In the period under analysis, the educational visits by architects, particularly to Italy, and Greece, and extending to the whole of the Mediterranean, were not only determinant, but fundamental. In this travelling realm, Le Corbusier always sought to find the principles applicable to contemporary reality since, in truth, he never really refused history and even less so, tradition; on the contrary, he used them. Distant is the journey revealed the other, the lesson surpassed regarding the ruin of the archaeological tours, the Mediterranean journey is set in the *Gran Tour* of the 18th century, where a series of architects became interested in popular architecture. Architects K. F. Schinkel, G. Semper. J. M. Olbrich, J. Hoffmann and Adolf Loos were active agents of ‘a latent fascination that Mediterranean architecture exercised on the adventure of modern times’ (Gravagnuolo, 1994, p.8,9). Le Corbusier’s journeys are fundamental in understanding his options and his deep relationship and admiration for popular architecture and, in particular, the popular architecture of the Mediterranean. After his first contact with the Aegean islands, when he was working for Algeria he had the opportunity to visit the people of the valley of M’Zab, where his drawings revealed his fascination for the geometry of those buildings and their terraces. In France, the *Exposition La Maison Rurale en France* (June-September, 1937) was integrated in the *Exposition Internationale de Paris* of 1937 in one of the Palais de Tokyo rooms overseen by geographer Albert Demangeon. The *l’Enquête d’Architecture Rurale* (L’EAR 1425) took place in 1941, which came about based on an idea by Urbain Cassan and held until 1948 by a team of young architects directed by Georges Henri Rivière, while director of the *Musée National des Arts et Traditions Populaires*, and the material of which is partially used once more in the *Corpus d’Architecture Rurale* conceived by Jean Cuisenier (Chiva, 1985, p.76-83).

In the summer of 1923, the Bauhaus Week takes place in Germany, where Walter Gropius speaks at the *Art and Technique: a new unit*, the title of which became the slogan for the first Bauhaus Exhibition in Weimar. The exhibition showed the *new architecture* marked by flat roofed buildings, and which included works from professors and students, models and photographs of works by a number of international architects. In 1927, the *Deutscher Werkbund* organized the *Die Wohnung / Weissenhofsiedlung* exhibition in Stuttgart, overseen by Mies van der Rohe, which dealt with the construction of the Weissenhof neighbourhood, paradigm of the *new architecture*, showing 21 models of flat-roofed houses for the modern man of the big cities. The Weissenhof neighbourhood, criticised by the Nazis, considered to be a “disgrace”, a “suburb of Jerusalem” or a “village of the Arabs”, would be considered by the traditionalist mainstream in the *Bau-ausstellung Deutsches Holz* exhibition/neighbourhood, which took place in 1933, also in Stuttgart, aimed at the construction of the *Kochenhof* neighbourhood. The projects for this neighbourhood were drawn up by architects Paul Bonatz and Paul Schmitthenner, who used traditional rooftops, considering that the constructions should represent the urban wooden house, extending the house of Goethe’s good tradition, built in the 18th century in Weimar, and the bourgeois houses in the German small towns before the war in 1870. In this way, they provided an alternative to international architecture which was without roots and foreign-looking.

Architect Friedrich Schinkel did not limit himself to drawing the ruins of Rome; he also became interested in the anonymous vernacular architecture of the Mediterranean, looking into its logic and constructive system (Gravagnuolo, 2010, p.18). Confronting his watercolour *Farm in Capri* (1804) with a picture of the Algarve centre of *Aldeias Portuguesas* (Portuguese Villages) of the *Portuguese World Exhibition* (1940), reveals the complexities and contradictions of the modern versus the vernacular versus the traditional. In this exhibition, the Metropolitan Ethnographic Pavilion of the Popular Life Section was transformed into the *Museum of Popular Art*, whereby it was expected that it

would 'exhibit the construction materials used' in popular architecture, as well as 'plans and projects, photographs of the houses' exterior', and also the 'topographic plans of clusters of rustic dwellings' (Alves, 2007, p.158). The Museum also showed 'curious, life-size details of the regional architecture of the houses, patios and interiors' (Feyo, 1944) and a 'photographic showcase of typical rows of houses' (Guia, MCMXL).

Within a context where a national style is sought, each nation renews its perspective, focusing on the rural world and on vernacular architecture, as an answer to the search for the national character and soul, and as an alternative to historic styles. According to Carlos Sambricio, that which is national is replaced by the vernacular:

If tradition is the reference of those longing for the lost dream, the myth of nostalgia for the past – an architecture directly linked to triumphant moments of the past, - the same voice is immediately claimed, both by a prior nationalism (*folklore* being identified with regionalism) as well as by those who later identify it with popular knowledge, with the vernacular. And this last option is the one that more clearly criticizes and fails the two previous ones because of their lack of honesty, their manipulation of history (Sambricio, 2000, p.21-44).

We understand vernacular architecture as architecture's atemporal *continuum* in the search for the constructive truth, where Climate and Mediterranean are the key words, bringing attention to the suitability of the territory's physical environment, to the topographic nature, to the materials, and particularly, to the climate. Being adequate in terms of climate was the argument used by both the modern as well as the traditional mainstream. Recourse to this argument had long been effected, and was a relevant variable which focused on the culture of the people within a historic philosophy based on determinism. Think of Winckelmann and Goethe, for example, who associated the value of Greek art to the Greek climate. The popular architecture of the Mediterranean was widely divulged in the pages of the magazine *A.C. (Documentos de Actividad Contemporánea)*. Right in its first edition (1931), a group of fishermen's houses

in San Pol de Mar, a province of Barcelona, was compared to J. J.'s terraced houses, P. Oud to Weissenhof in Stuttgart, 1927, both cases being considered standardized architecture, freed of the architectonic styles of the past. And in 1935, an edition is published dedicated entirely to the Mediterranean popular architecture, where it sought and revealed the roots of modern architecture.

The exhibition *Architecture Without Architects*, for which architect Bernard Rudofsky was responsible, was inaugurated in 1964, at the MOMA in New York, showing photographs of the Corn-Lofts of Lindoso, put together by the *Inquérito à Arquitectura Regional Portuguesa (Survey on Regional Portuguese Architecture)*, which impressed so Oliveira Salazar, in 1958 (Leal, 2000, p.173,174).

The modernity journey provided a lesson into the founding rationality of vernacular architecture, the illusion of becoming effectively free of academic tradition, and the (re)construction of an identity. To what point can we not consider modern architecture to be an architectonic variation of vernacular architecture?

References

- Alves, V. M. (2007). «Camponeses Estetas» no Estado Novo: Arte Popular e Nação na Política Folclorista do Secretariado da Propaganda Nacional. Lisboa: ISCTE.
- Amaral, K. (1947). Uma iniciativa necessária. *Arquitectura: Revista de Arte e Construção*. Lisboa. Ano XX, 2ª série, nº14, 12,13.
- Arquitectura Popular em Portugal* (1980). Lisboa: Associação dos Arquitectos Portugueses.
- Basto, E. A. L.; Barros, H. (1943). *Inquérito à Habitação Rural*. Lisboa: Universidade Técnica de Lisboa.
- Bellido González, Luis (1925). Recepción del sr. Bellido. *ABC*.Madrid, n.6886.
- Chiva, I. (1985). George Henri Rivière: un demi-siècle d'ethnologie de la France. *Terrain. Revue d'Ethnologie de l'Europe*, 5 Octobre.
- Ciucci, G.; Dal Co, F. (1990). *Architettura italiana nel novecento*. Milão: Electa.
- Costa, L. (1929). Tradição Local. In Costa, Lúcio (2002). *Arquitetura*. Rio de Janeiro: José Olympo.

Costa, L. (1937). Documentação necessária. In Xavier, A.; Canez, A. P. (Ed.) (2007). *Lúcio Costa: sobre arquitectura*. Porto Alegre: UniRitter.

Democracia do Sul. (21-09-1945).

Dionísio, E. (Ed.) (2009). *Um cesto de cerejas. Conversas, memórias, uma vida*. Lisboa: Casa da Achada.

Discurso de D. Teodoro de Anasagasti [1880-1930], Arquitectura Popular, Real Academia de Bellas Artes de San Fernando (1929). Madrid: Tipografía de la Revista de Archivos, Bibliotecas y Museos, 14-16,21.

Feyo, B. (1944). O Futuro Museu da Arte e da Vida do Povo Português. *Panorama*. Lisboa, 20.

Fusco, R. (1984). *A ideia de arquitectura*. Lisboa: ed. 70.

García Mercadal, F. (1930). *La Casa Popular en España*. Madrid: Espasa-Calpe, S.A.

Gravagnuolo, B. (1994). *Il mito Mediterraneo nell'architettura europea*. Nápoles: Electa.

Gravagnuolo, B. (2010). From Schinkel to Le Corbusier. The Myth of the Mediterranean in Modern Architecture. In Lejeune, J. F.; Sabatino, M. *Modern Architecture and the Mediterranean vernacular dialogues and contested identities*. London: Routledge.

Guia da Exposição do Mundo Português. Lisboa, MCMXL.

Lampérez y Romea, V. (1911). La arquitectura española contemporánea. Tradicionalismos y exotismos. *Arquitectura y construcción*. Barcelona, 194-199.

Lampérez y Romea, V. (1918). Leonardo Rucabado. *Arquitectura*. Madrid, 220.

Leal, J. (2000). *Etnografias Portuguesas (1870-1970), Cultura Popular e Identidade Nacional*. Lisboa: D. Quixote.

Ribeiro, Orlando (1938). *Inquérito do Habitat Rural*. Lisboa: Ministério da Educação Nacional, Instituto para a Alta Cultura; Coimbra: Tipografia da "Coimbra Editora".

Rudofsky, B. (2003). *Architecture without Architects. A Short Introduction to Non-Pedigreed Architecture*. Albuquerque: University of New Mexico Press.

Sabatino, M. (2010). *Pride in modesty. Modernist architecture and the vernacular tradition in Italy*. Toronto: University of Toronto Press.

Sambricio, C. (2000). La normalización de la arquitectura vernácula. Un debate en la España de los veinte. *Revista de Occidente*. Madrid, n.235, 21-44.

Sert, J. L. (1934). *Arquitectura sin "estilo" y sin "arquitecto"*. D'Ací i d'Allà, n. 179, in, Garrido, G.; Cánovas, A. (Ed.) (2003). *Textos de Crítica de Arquitectura comentados 1*. Madrid: ETSAM, 125.

Talamona, M. (1997). Modernité et Fascisme: illusions croisées. In Cohen, J. L. (Ed.) *Les Années 30. l'Architecture et les Arts de l'Espace entre Industrie et Nostalgie*. Paris: Patrimoine, p.134-136.

Torres Balbás, L. (1933). La vivienda popular en España. In *Folklore y costumbres de España*. Barcelona: Casa editorial Alberto Martín, tomo III, p.143-151.

Umbach, M.; Huppauf, B. (Ed.) (2005). *Vernacular Modernism. Heimat, Globalization, and the Built Environment*. Stanford: Stanford University Press.

Vázquez Astorga, Mónica (2007). Aranda Barnal, A .M. (Ed.) *La arquitectura vernácula como laboratorio de experimentación y vía de modernización para la arquitectura moderna*. Actas del congreso internacional sobre arquitectura vernácula: Arquitectura vernácula en el mundo ibérico. Sevilla: Universidad Pablo de Olavide, p.86-92.

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AFRICA'S VERNACULAR ARCHITECTURE

The Primitive in the 1960/70's Architectural Production

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Abstract

In the 1960/70's there's a new interest in architecture, the intense study and effort to acknowledge vernacular buildings. One of the best examples, and the least studied, are in the African countries. Many of the architects working in Africa studied traditional buildings as a source of information for their projects, adaptation to the climate and to its inhabitants.

Most of the examples belong to the decades of 1960-70. But some previous projects are prove of a interest in local architecture that overcomes the limits of a static time movement.

The transformation of the conception of the primitive, or archaic, and studies of the social sciences have opened doors to a new world of forms, strongly represented in the former Portuguese colonies in Africa, like Guiné-Bissau, Angola and Moçambique.

In this context, the work of Fernão Lopes Simões de Carvalho, Francisco Castro Rodrigues e Pacheco Guedes, are exemplary. The project for fishermen's houses in Ilha de Luanda, the Alto do Liro's houses, projected by Fernão Lopes and Castro Rodrigues respectively, are, for the first time, studied.

These architects based their projects on a personal collection of information from traditional construction, with the same spirit as his colleagues in Portugal. The importance of the traditions of construction and organization of space are present in the choice of technical solutions, materials and in the design of the plan and sections. The social environment observation contributes to the organization of the small urban projects. Through them work, the designers defined an Africa's Vernacular Architecture.

Keywords: Vernacular, Modern Architecture, Primitive Africa

The startpoint

In Portugal is published in 1961 *Arquitetura Popular em Portugal*, due to the Portuguese Regional Architecture Survey, conducted since 1955. The architects were fascinated with the economy of form, materiality and the ingenuity of the

forms. The survey confirmed the ideas that architects have envisioned. By way of confirmation of those ideas, architectural culture came under the influence of vernacular architecture.

The book *Arquitectura Popular*, is pioneer in the architectural culture worldwide. During the 1960s and 1970s interest in traditional architecture becomes global. Architecture Without Architects is the subject of an exhibition held in 1964 at MoMA, Museum of Modern Art in New York, where hundreds of images of traditional buildings from all over the world ,are presented, including images of the portuguese survey.

Africa, the continent of the most archaic place is where the most interesting case studies. The original name of this paper is *Arquitectura Popular Africana*, a wordplay with the name of the 1961 book and the kind of architecture that's linked, with a place apparently unconnected.

Why Africa

By comparing the various stages of civilization among races known to history, with the help of archaeological studies of findings from prehistoric tribes, it seems possible to conclude, in a sense, a man's general condition before that from our point of view can be regarded as primitive. (The United Nations E. S.C., p.535-536)

Different events make different cultures. The influence of the Roman Catholic civilization in the European and Mediterranean area created a culture that has developed and expanded, featuring Western culture. The influence of dominant cultures and societies exposure make the differences between African tribes and European countries. Thus, North Africa came under the influence of Greek, Roman and Islamic civilization. Southern Africa was dominated by Islamic culture, and occasionally had contact with other cultures, and sub-Saharan Africa had only the most important influences recently. 1460, the date of discovery by Diogo Gomes in the archipelago of Cabo Verde can be considered the beginning of those modern time.

So, a large production of architecture can be traced until the most remote times, that happen to in Europe. For example, about Italian farm buildings, Bernard Rudofsky says that "especially in the 'exotic' places of Italy," he believed to be "descended from a primary type of architecture that had not changed materially in the course of history." (Architetezentrum, p.129). The same can be said about sub-Saharan Africa. It remained, without the influence of modern civilizations, seemingly untouched, hence it is called Primitive or Archaic.

The Architecture of Modern Africa

Udo Kultermann, an architect and art historian, publishes in 1963 the book *Modern Architecture in Africa*, in 1965 by *African architecture African* (this is a short article) and in 1969 *New Ways of African architecture*. In these works Kultermann publishes photographs and drawings of buildings newly constructed throughout Africa, in order to "document the development experienced so far, but also to draw the guidelines for future development."

In 1963 Kultermann collects examples of almost all African countries, in the exceptions are included the Portuguese colonies, referring only Amancio Guedes de Alpoim (Pancho Guedes), from Mozambique.

In 1969, the selection of architects Kultermann focuses on African and Western integrated into the logic of the new African architecture, to the detriment of the influence of former colonizers. Pancho is presented and identified as engaging in a new direction in African architecture. Altogether 14 architects are mentioned in more than 50 African countries. Unlike what happens in the first book, most of the works published in 1969 are African architects.

Note that these architects studied in Europe, in the metropolis, and therefore apply in their works a European thinking, with a deep local knowledge. To Kultermann, there is no doubt that there is a new architecture in Africa, which requires first of all African architects, since the problems require an "African experience". Because "most architects working in the tropics are not able to overcome a mechanical purely utilitarian."

Kultermann proposes various characteristics of this new architecture, and adapting the physical elements through the use of local source and sun protection devices and ventilation.

The innovative feature is the way to solve these problems, the new plastic forms give continuity to the vernacular in Africa.

The portuguese state begin a program of construction to the inhabitants in the Portuguese colonies, during the 1950s and 1960s. During the 1950s, 'the Estado Novo proposed to cover the cost of creating infrastructure that they would make feasible the presence of settlers' in areas with favorable climates, especially in Angola. The aim was to strengthen the presence of settlers in the overseas provinces. This effort did not yield good results, and in the 1960s, a second phase of this project included black settlers. These projects were in charge of teams of architects of the Juntas de Fomento. These planed neighborhoods, expansion of cities and homes for settlers and indigenous, often with the purpose of establishing populations in the frontiers or to protected natural resources.

A factor of the greatest importance, in political action, was the approval of Law No. 43893 of September 6, 1961, which puts an end to the status of native people. This created a legal form of the autochthonous colonies, except in Cabo Verde, Portuguese India and Macau, whose inhabitants were already considered portuguese citizens. Other laws protect the same year the manners and habits, i.e., culture and religion, in the overseas provinces. These laws raise all native to citizens, in purpose to the myth of multiracial impire, advocated by the Estado Novo that decade. This set of laws leads to the creation of the Juntas de Fomento and Brigades de Povoamento, which have the aim of providing housing to people or regions, according to the needs of the Empire. This law is the official act of a new era of thinking.

Pancho Guedes

Pancho Guedes born of Alpoim Amancio Guedes, to May 13, 1925, in Lisbon. Entered the University of Witwatersrand in South Africa in 1945. In 1952-53 makes a tour of southern Europe. Just visit Portugal in 1953, for the Faculty of Fine Arts in Oporto the degree of equivalence of the course in architecture. It is active since that decade in Lourenço Marques, now Maputo and Lisbon. After the decolonization process takes up residence in Johannesburg and Lisbon. Pancho's work is multifaceted, architecture, painting, sculpture and writing are produced in "personal styles 25 + 2, is deeply multicultural, a dimension that goes beyond the application of devices 'tropical' modern architecture" (MILHEIRO (2007) p.6).

Kultermann said initially that the work of Pancho Guedes can be considered "as a burlesque done in Africa of European modernism" and that these forms "are nothing more than artistic visions that follow the tradition of modernism." (KULTERMANN (1963), p. XXXIX) This view of the formation of decries 1963 Pancho in South Africa Other colleagues Pancho also take forms more expressive in their projects. In the Witwatersrand, Pancho, was a student of Matienssen disciples, who lived with Corbusier. Visit the Unité de Marseille (1953), La Tourette (1961) and Rochamp (1994), and reproduces the paintings of the period purist Corbusier. There is a strong connection to Corbusier, present in his works through piloti and plastic forms for concrete, rather than the influence of architecture in Brazil, which is not the place of formation of Pancho.

Instead, the school of South Africa is akin to the Anglo-Saxon architectural culture. There is this culture, a space for imagination and logic different from Europe, which, like the tales of Lewis Carroll, not looking for a reason. Your logic is the closest site, the forms are African, that is, the architecture of Pancho is consistent with the architecture, sculpture and painting traditional African.

In 1969 Kultermann says that Pancho projects are a synthesis of spiritual climate and geographical Mozambique. Pancho himself identifies his influence, his muse is Africa, which appears represented in paintings. This is not the adoption of regional expressions, though sometimes just happen, but the "motives of universal primitive."

A Escola Clandestine no Caniço, in Lourenço Marques, built in 1968, follows the order of "some ladies who wanted to help workers" who lived in the reeds, where the buildings that had the roof and the structure completed on weekend, could remain. The project consists of huts made of reeds, sticks and thatched roofs, arranged on an organic plant, forming several churchyards that connect. The school was done in self - construction assisted by the architect.

The school plan has similarities with the project for the Amsterdam Orphanage by Aldo van Eyck. This project belongs to a modern architecture, which is expressed in local materials.

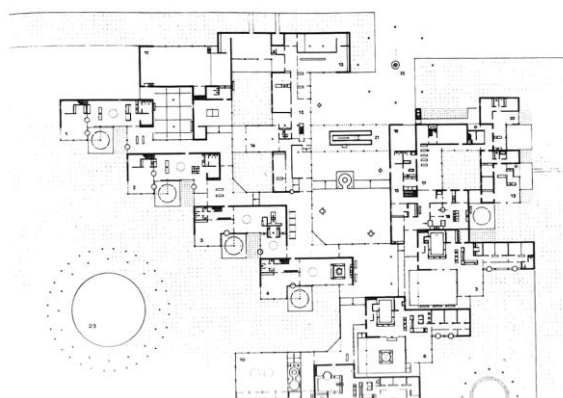
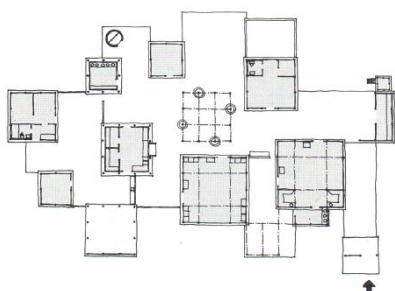


Figure 1. The Caniço School, at left, compared with the Amsterdam Orfanate of Aldo Van Eyck, 1957-62. In GUEDES, Pedro (2009). Pancho Guedes: Vitruvius Mozambicanus. Lisboa: Museu Colecção Berardo; CURTIS, William (1982).pp.548.

In the 1960's and 70 Pancho numerous photographs of Reed doors. In the reed port is the only place ornate. The patterns and colors that are registered in the

photos are then visible in the work of the architect, elements like wall of the building multifamily housing The Smiling Lion, with its intricate geometric patterns, the black line drawn and then painted the inside of drawn shapes. Or the wall of the ground floor of the House of the Dragon, a space shadowed by an upper gallery, which is an extension of the street, where morale is said to represent the dragon in a mosaic of black and white stones, represented with peaks along the coasts as if it were a monster Africa.

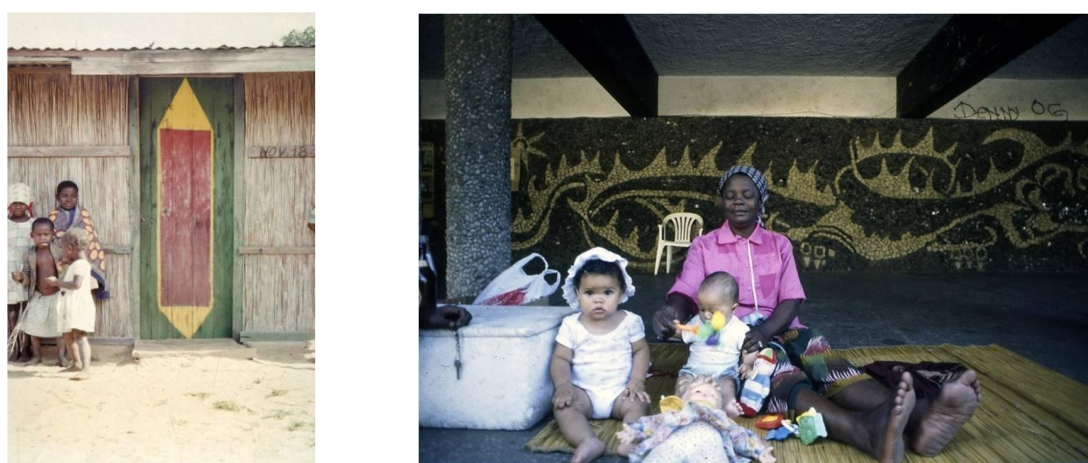


Figure 2. An example of the hundreds of reed doors photography's. In GUEDES(2010). The wall of the Dragon House, AVM archive.

Thus we see two ways that link the work of the popular African Pancho: the use of technology and traditional materials, and the introduction of works of art in nature in African architecture. That is, by means of artistry in which a work is included in another work (architecture), which space is modern. So Pancho "returns the 'primitivism' the avant-garde modern devoured and exposed as his."(Jorge Figueira, coated by Milheiro (2009), p.71.)

Simões Lopes de Carvalho

Architect Fernão Lopes Simões de Carvalho was born in Luanda in 1929, coming in 1943 to the metropolis in order to make the high school and study

architecture in ESBAL, which concludes in 1955. Grieved with the poor quality of the workshops where the internship begins to present the final proof of the course, decides to go to Paris, working with Le Corbusier. Thus, between 1956 and 59 in the atelier of Wogensky matures, the right arm of Le Corbusier, beside which sometimes appears in several works.

In 1960 he returned to Luanda, where he created the Office of the Urban Municipality of Luanda.

The District Fishermen on the island of Luanda was commissioned by the Administrative Fund of Popular Neighborhoods of Angola, 500 dwelling units to be built. The project was done in the private studio, which had assembled for the Master Plan of Luanda, with the collaboration of the architect Pinto da Cunha. The setting of inhabitants on the island dates back to his discovery, marked by the construction of the Church of Our Lady of the Cape, in the fifteenth century, founded by merchants. The population in 1960 was composed of Africans and Europeans (a minority). At the site existed, and the township, fields for sports and some support structures to the beach.

The plan for homes for the "economically disadvantaged". It is a plan of organization of the slums, with the aim to correct the major problems without removing the variety and specificity of the slums. The neighborhood of Luanda Island Fishermen initially had a similar organization.

He was made a "thorough investigation" to the fishermen of the three areas of the island: the Ass, the tip and Twill. The survey looked demographic indices and physical factors, among others. The architects conducted a photographic survey of the exterior and interior of houses, materials, photographs of the day to day fishermen (as did the nets, their boats, etc..), Films and recordings of a survey of plants and elevations of several homes.

The houses were raised rectangular, with a larger room in which you enter, which served as living room, and giving way to two smaller rooms, the rooms. The kitchen was the site of the fire in the courtyard. The building materials were

reeds, sticks, wood and sheet, which was found and serve the purpose. All had division windows.

The neighborhoods occupy the strip of land between the canal and the road that runs through the island, the strip between the road and the ocean was reserved for the beaches, which would be the "tourist center of Luanda" and is protected by jetties erosion. The organization of the three quarters following the direction of prevailing winds, by the will of Pinto da Cunha, Simões de Carvalho preferred because the plan was more organic. The architect complains about the difficulty they encountered when speaking of urbanism with architects, whose lack of learning in the area do not permit understanding your objectives.

The houses were rectangular, with a patio to occupy a portion of the rectangle. Only the room had a window, the rooms had ventilation arrows as Simões de Carvalho learned to do when working with Le Corbusier, cheaper to make a window, and because "only want to sleep in the bedrooms, just needs to be dark." The walls were of adobe blocks (blocks of earth and cement). The doors could be painted by the inhabitants. Fishermen were asked what type of coverage wanted for houses - preferred zinc. But the architect opted for cement, so to not transmit solar radiation, and could then be covered with palm leaves, as the Indians used to do. The houses were built on a self-assisted construction.

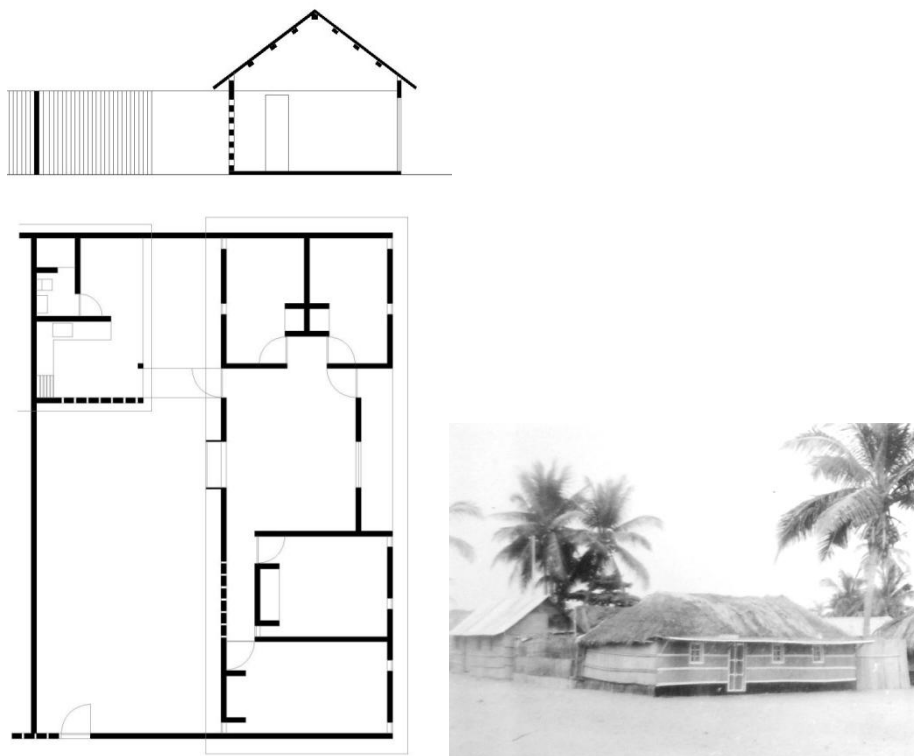


Figure 3. Plan and section of the D type, the largest one. At right a photography taken by Simões de Carvalho during the research for the project. The similarities are remarkable.

We made several model homes for future residents to approve the bill. Simões de Carvalho says he liked it a lot, and shows a photograph of the model home, now with white kids and black front of the house as evidence of the success of the neighborhood. In the houses were not only made the wardrobes to the wall, because fishermen would rather have more unoccupied area.

The project incorporated a neighborhood health center, shopping center, school and cultural center, but only the houses were built. Residents pay a small income by building materials, "maybe that's why everything was destroyed."

The architect confirmed that Lopes appealed much to the constructions of the indigenous by saying "and this was very much based on what I saw (in slums)."

Francisco Castro Rodrigues

Francisco José Rodrigues Pereira born in Lisbon, Grace, 21 October 1920, where he will live until 1954, when, at age 33 leaves for Angola. Did the course in architecture at the Faculty of Fine Arts in Lisbon, having been a student of Mining Engineering at Instituto Superior Técnico. Growing up he lived with "anarcho-syndicalist, Freemasons and Republicans of various classes" and came to belong to the Communist Party.

The first project in Angola was the expansion of the Municipality of Lobito, in 1955. The one-storey building was expanded to three, and was added to a program hall. The project is not entirely lost the appearance beaux-arts, but because of the colonnade that overshadows the facades won a tropical air. The materials used, wood and stones, were all of Angolan origin, location.

The District of Liro sits atop the escarpment bordering the east the city of Lobito, a plateau with a marked topography of large furrows, caused by water erosion in the sandy soil. The Overseas War (1961-1974) brought the warlords to use the seaport of Lobito as access to the interior of Angola. This access was guaranteed by the construction of a road that acceded to the plateau. Due to the construction of this road Francisco Rodriguez Castro was able to propose the expansion of the city to the plateau.

The Lobito lies between wetlands and a ravine, so it is not wholesome; the plateau, due to the altitude, it is healthier. The Master Plan of Lobito, made by Francisco Castro Rodrigues, located in the Bairro Alto Liro and the Bela Vista neighborhood of this plateau. Today, both areas are joined by new construction. The project was marked out, as well as its construction during the 1960s.

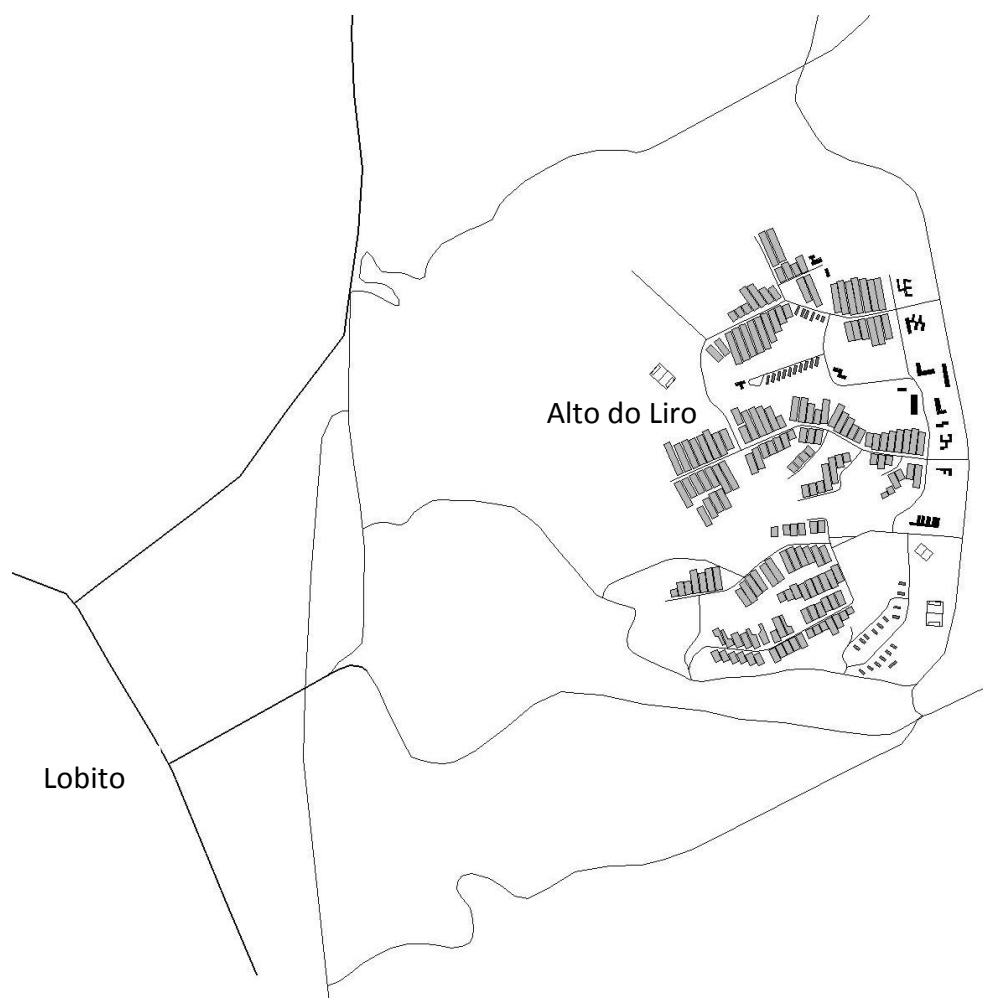


Figure 4.: Plan of the Barrio Alto Liro, and relationship with the city.

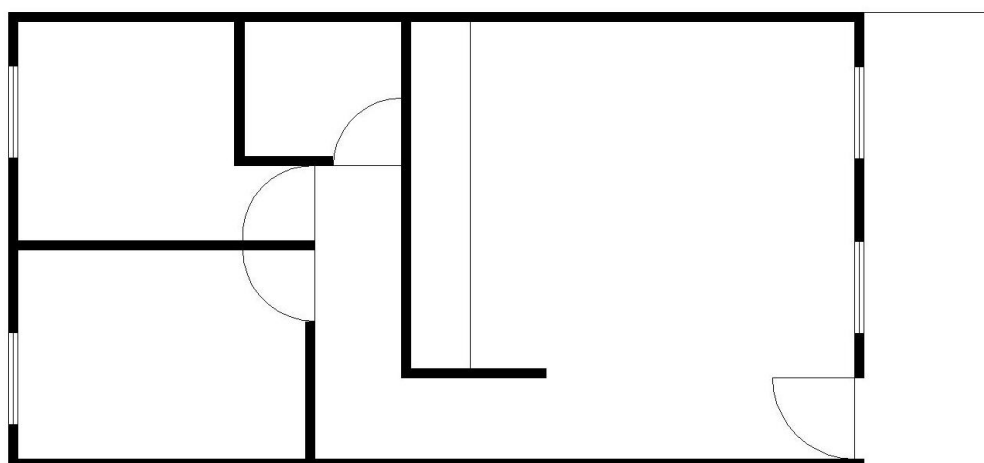


Figure 5. Reconstitution, according to the architect's memories, of a house. Entering theres the living room and kitchen, two bedrms and a bathroom.

The Bairro Alto's Liro is designed for the economically disadvantaged, especially Europeans, since the natives did not have high enough incomes to buy or rent the housing.

The process of level based on the ridge lines, which are arranged perpendicularly to the plots of land. These plots are divided into lots for the construction of single family homes. The plan also incorporates apartment buildings. The equipment is at the hinge between the district and the route of connection to the city.

The detached houses were built under the assisted self. During construction of the neighborhood, a Bureau consisting of a technician and a master-builder, gave the necessary assistance. The project kind of house had to be followed by the owners, but some have asked the architect who projectasse specifically to your home.

In the plateau not exist trees or reeds, so that the construction material had to be provided - brick or concrete blocks. A large yard with machinery to make cement blocks, carpentry workshops and materials could be used by the inhabitants. It was also admitted to the adobe, under the condition of the technical monitor the process. The roofs were of tile. There were pottery factories close in Catumbela, so most of the buildings in Lobito were covered with this material.

About the plan of the houses there is only the description given by the architect. The dwellings are compartmentalized in the kitchen and living room and toilet rooms. The kitchen and living room, both compartments are united, are the most important place in the house, the fire place, where the family gathers. Some homes have porch. The project provided for future expansion by the owners.

Conclusion

The architects studied in this paper looked to the past, not a classical past, but the most ancient past, they've looked to other common men eyes'. There's the difference and most crucial acknowledge to us, today. When regarding their buildings one questions, how could they do such form? Where is the origin of that shape? Not in academic books, but in the direct learning from the people, their hereditary knowledge.

These generation of architects were promptly asking and inquiring, sometimes through great effort, everything around them. The vernacular architecture opened minds, such like those mentioned above: improvement of techniques, creation of shapes, help in the organization of buildings and life. Let us do the same.

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References

AAVV (1961, 2004). *Arquitectura Popular Portuguesa*. Lisboa: Edição da Ordem dos Arquitectos.

Architetektuerzentrum Wien (2007) – *Lessons from Bernard Rudofsky, Life as a Voyage*. Basel: Birkäuser.

KULTERMANN, U (1963). *Arquitectura Moderna em Africa*. Barcelona: Gustavo Gili.

KULTERMANN, U. (1966)- *Architettura di africani per africani in Casabella*. nº306.

KULTERMANN, U. (1968, 1970) – *Nuevos Caminos de la Arquitectura Africana*. Barcelona: Editorial Blume.

GUÉDES, P. (2007). *Manifestos Ensaios Falas Publicações*. Lisboa: Edição da Ordem dos Arquitectos.

GUEDES, P. (2010). *1001 Portas do Caniço, Maputo, Moçambique* in J.A. Jornal dos Arquitectos, nº240. Lisboa: Ordem dos Arquitectos.

GUEDES, Pedro (2009). *Pancho Guedes: Vitruvius Mozambicanus*. Lisboa: Museu Colecção Berardo.

Ministério do Ultramar (1961). *Decreto nº43 895, de 6 de setembro de 1961*. Lisboa: Imprensa Nacional, 1961.

MILHEIRO, A. (Novembro 2008) – *As Coisas Não São o Que Parecem Que São* in Ópusculo, nº 15. Porto: Dafne.

MILHEIRO, Ana Vaz (2007)– *O Fim Do Mundo* in GUEDES, Pancho – *Manifestos Ensaio Falas* Publicações. Lisboa: Edição da Ordem dos Arquitectos.

RUDOSFKY, B. (1987) - *Architecture without Architects: A short introduction to non-pedigreed architecture*. Albuquerque: University of New Mexico Press.

The United Nations Educational Society and Cultural Organization (1964) – *A Dictionary of the Social Sciences*. London: The Free Press of Glencoe.

Interview with Francisco Castro Rodrigues, held at August 30th 2011, in his home, in Azenhas do Mar, Sintra.

Interview with Fernão Lopes Simões de Carvalho, held at July 15th 2011, in his home, in Queijas, Oeiras.

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Marcos Anselmo, born in 6/2/1988, studied art in the Art School António Arroio and architecture in ISCTE-Instituto Universitário de Lisboa. Some of his works and projects have been exposed in IUL and other architecture schools. He collaborated in exhibition's organization. Since young does volunteering work, now he's working mostly with deaf people. Currently works in a construction company in Lisbon, as an intern architect.

LOCAL BUILDING CULTURES AND PERCEPTIONS OF WALL BUILDING MATERIALS:

Influences on vernacular architecture in rural areas of central South Africa

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Abstract

The architectural heritage of southern Africa reflects a diverse morphological pallet. The traditional building techniques used by indigenous groups and early European settlers are well documented, but little research has investigated perceptions of these building materials and techniques in contemporary applications. The use of earth construction techniques in southern Africa is declining, with a subsequent negative effect on the vernacular architectural legacy.

The study draws on data obtained from a household survey investigating respondents' perceptions and attitudes toward traditional earth construction. The survey results were used to identify variables that influence the utilisation and preference of different building materials in nine different locations in central South Africa. The findings show that most respondents think poorly of traditional earth building materials due to the perceived weak structural performance of unbaked earth materials in wet conditions and the difficulty of maintenance. Personal characteristics like the profile of the respondents, tenure, participation and exposure to self-help earth building were not significant factors. Further analysis was then performed to explore possible reasons for the negative perceptions associated with earth constructed houses. The current investigation (n=1086) attempts to ascertain why certain wall building materials are more favoured in some areas than others. The findings suggest that there is an association between building materials and construction techniques that dominate the local building culture and perceptions of wall building materials. It has been shown that positive behavioural beliefs can lead to favourable attitudes towards performing the behaviour. Therefore, it is of critical importance that earth-construction advocates understand possible reasons for the preference of certain wall-building materials over others. They can then be equipped to educate the public about the importance of preserving existing forms and methods of earth construction in vernacular architecture as well as useful applications in contemporary architecture.

Keywords: local building culture, perceptions, walls, earth construction

1. Introduction

The usage of earth as a building material worldwide is well known (Oliver, 1969; Fathy, 1973; Seth, 1988; Houben & Guilaud, 1994). In southern Africa, both native groups and European settlers adapted to the local situation by constructing earth dwellings in the past, but the recent decline in this earthen heritage is well documented (Fransen & Cook, 1965; Greig, 1971; Frescura, 1985). This change in vernacular building practices can be ascribed to the desire to participate in the modern global economy, which in some developing countries has led to a decreased use of traditional building methods (Oliver, 2003, pp. 236-241).

Gerneke (1992) describes how South African earth construction in the first half of the 20th century was practiced mainly in rural areas but then made a comeback in cities and towns after the Second World War. During the mid-1970s, the energy crisis resulted in new research and publications about passive solar building, sustainable resource use and alternative energy systems. However, much of this knowledge was disregarded (Kennedy, Smith & Wanek, 2002) due to government and public apathy during the 1980s. Because the low use of earth construction may be as much due to the lack of community involvement as to problems with the building technique itself, Hamdi and Goethert (1997) have suggested that action planning be used to address the social and behavioural dimensions

In order to study the human and perceptual domains related to earth construction, Ajzen and Fishbein's theory of reasoned action is a helpful starting point (1980: 4-6). Based on the assumption that humans utilise available information in a rational and systematic way, this theory argues that people consider the implications of their actions before they decide to engage or not engage in a given behaviour. The theory of reasoned action therefore proposes that one can understand and predict an individual's behaviour.

This paper explores the relative importance of attitudinal and normative factors as determinants of people's intentions. The first factor is an individual's attitudes, for example whether a person considers the structural performance of

traditional earth construction to be good or bad. The second determinant of intention is societal pressure, which influences whether a person will perform certain behaviours. This factor is termed the 'subjective norm' and is at play when people consider what others would think of them if they lived in an earth constructed house. The perception that earth constructed houses is old-fashioned and signifies poverty will form the starting point of this paper (Stejn, 2009, pp. 62).

Ajzen and Fishbein (1980, pp. 5-6) explain the difference between behavioural and normative beliefs. Generally speaking, a person who believes that performing a given behaviour will lead to mostly positive outcomes will hold a favourable attitude towards performing the behaviour, while a person who believes that performing the behaviour will lead to mostly negative outcomes will hold an unfavourable attitude. These beliefs that underlay a person's attitude towards the behaviour are termed behavioural beliefs. On the other hand, a person's belief that individuals or groups think that he should or should not perform the behaviour is termed a normative belief.

By investigating behavioural beliefs regarding wall-building materials, we can begin to understand the reasons for people's attitudes and know how to influence them to be more favourable towards contemporary earth construction applications.

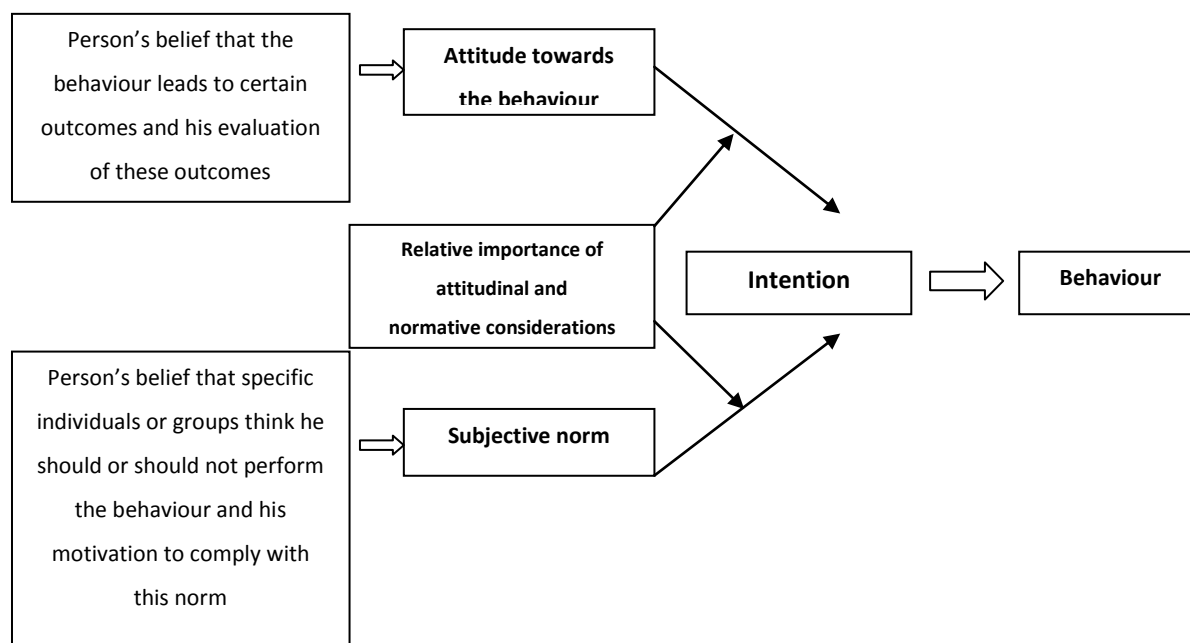


Figure 1. Factors determining a person's behaviour (Ajzen and Fishbein, 1980, pp.5-6).

The original SANPAD analysis found that the acceptability of traditional earth houses was low. The most commonly provided reasons for this dislike of earth construction were (a) structural problems such as the houses collapsing or not being strong and stable and (b) erosion problems such as rain and penetrating moisture. This may indicate that the proper skills for building with *adobe* blocks are absent and that proper training and information about this construction method might help improve the negative perceptions (Steyn, 2009). In addition, traditional earth constructed housing in South Africa is often associated with no electricity, no running water and no street infrastructure, and is thought of as only for the poor.

2. Hypothesis

Understanding the attitudes of rural home dwellers in central South Africa towards earth constructed housing will help to formulate a contemporary earth construction approach that respects and embraces the area's heritage and modern-day needs. The current investigation (n=1086) attempts to understand why certain wall building materials are more favoured in some areas than

others. The hypothesis is that there is an association between building materials and construction techniques that dominate the local building culture and people's preferences in wall building materials.

3. Methods

The analysis in this paper draws upon data from the SANPAD ¹ research project entitled "A South African Building Renaissance - Acceptability of high quality, earth constructed, public and private buildings to support sustainable local economic development".

In collaboration with Dutch partners, the research team visited 16 towns in rural parts of central South Africa. Only five locations were used for the current analysis, namely:

- Botshabelo near Bloemfontein in the Free State Province
- Bulfontein near Thaba N'chu in the Free State Province
- Bankhara Budolong near Kuruman in the Northern Cape Province
- Magolokweng near Harrismith in the Free State Province
- Mapoteng near Kuruman in the Northern Cape Province

These locations were chosen on the basis of (a) the presence of earth constructed buildings and/or (b) the presence of small brickyards, (c) the willingness of communities or groups to take part in the project and (d) the different earth-building techniques demonstrated. These areas were further divided into formal and informal urban areas and rural areas. In each location, the houses were counted and mapped.

¹ This project was funded by SANPAD (South Africa – Netherlands Research Programme on Alternatives in Development) and conducted from 2004 to 2007 by the University of the Free State in South Africa in collaboration with The Technische Universiteit Eindhoven in The Netherlands.

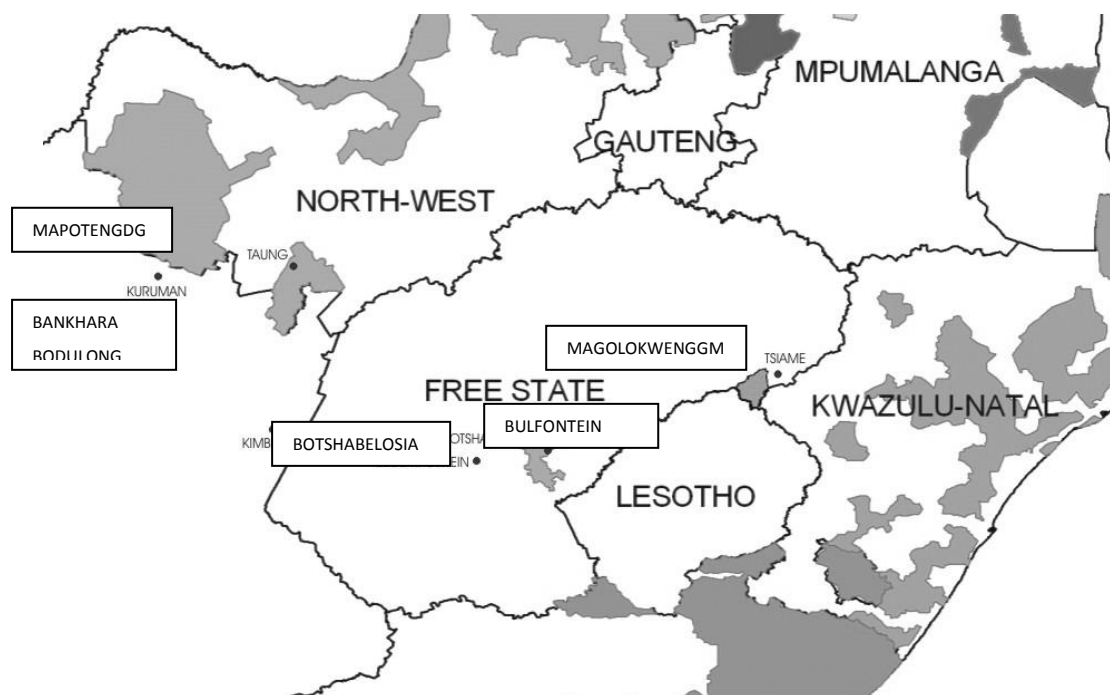


Figure 2. The five locations selected for the current analysis (author)

The sample size ($n=1086$ total) was calculated according to Stoker's (1981:13) method. It was decided that a systematic sample would be used rather than a stratified random sample, as maps for some of the areas were not available. Each location was homogeneous in terms of housing type, and every fourth house was selected for the survey. Trained masters' students were contracted as interviewers (Steyn, 2009, p. 62).

The next phase involved data collection from the sampling locations. Questions were formulated to gather information pertaining to demographics, income, present housing conditions, services available, and preferences in respect of building materials and earth construction. The questionnaires were translated into Tswana, English and Afrikaans, the three main languages of the locations.

The SANPAD Survey I data set will be used in this paper to analyse the relationship between the predominant building material / building culture and the preferred material for new dwellings. The current study ($n=1086$) examines responses to selected questions from respondents in Botshabelo ($n=383$),

Bulfontein (n=185), Bankhara Bodulong (n=228), Magolokweng (n=129) and Mapoteng (n=161).

Botshabelo and Bulfontein are characterised as formal and informal urban areas. Some hardware stores within a 5–10 km radius and many local small-scale brick yards where burnt bricks can be purchased were observed during the survey.



Figure 3. The use of adobe (sun-dried mud bricks) in Botshabelo (author)

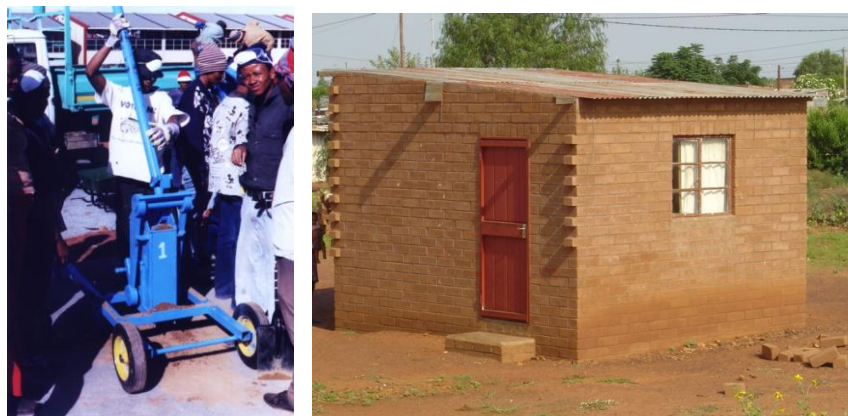


Figure 4. The use of cement stabilised blocks in Bankhara Bodulong (author)

Bankhara Bodulong is in between a formal and informal semi-rural area. Some hardware stores within a 15-25 km radius and many local small-scale cement block yards where wall building materials can be obtained were observed during the survey.



Figure 5. The use of wattle en daub (timber and straw clay) in Magolokweng (author)

Magolokweng is in a rural area. No hardware stores within a 25-35 km radius and very few small-scale concrete block yards where wall building materials can be bought were observed during the survey.

Mapoteng is in a rural area. Some hardware stores within a 25-35 km radius and several small-scale concrete block yards where wall building materials can be purchased were observed during the survey.

4. Findings

The SANPAD project (n=1790) concluded that traditional adobe blocks were disliked mainly due to the perception of poor structural performance. The wall building materials preferred in the survey were burnt bricks and cement stabilized blocks (Steyn, 2009, p. 70).

Question 13 of survey 1 asked respondents about the current wall building material of the house in which they resided. 33.8% of the houses were made of corrugated iron, 23.9% with earth walls, 18.6% of cement stabilised blocks or bricks, 15.8% of burnt bricks, and 7.9% of a combination of materials.

Also in survey 1, question 17a asked respondents which wall building material they would prefer in a house that they would like to live in. The large majority (69.9%) preferred a burnt brick house, 28.4% preferred cement or compressed earth blocks or bricks and only 1.6% preferred traditional *adobe* or sundried

blocks. The researchers expected this result after working in the field of earth construction in central South Africa since 1996.

		Frequency	Valid Percentage
Valid Responses	Burned bricks	1 233	69,9
	Cement stabilized	502	28,4
	Earth	29	1,6
	Total	1 764	100,0
Missing		26	
Total		1 790	

Table 1. Preferred material for walls in the nine locations (Steyn, 2009, p. 70)

A follow up question (Question 17b) explored why particular materials were preferred. Respondents were allowed to provide multiple answers, which were then grouped into the following categories: (a) Aesthetics; (b) Strong & safe; (c) Fewer problems; (d) Climate; (e) Quick building process; (f) Finances; and (g) Other. Table 2 shows the scores in each category, grouped according to wall material preference.

The results show that respondents preferring burned bricks or cement blocks most often provided strength and safety as the reason. Those who preferred earth or adobe materials most often cited aesthetic qualities as the reason (Steyn, 2009, p. 70).

	Burned bricks n-1233		Compressed earth blocks n-438		Earth n-29		Cement blocks n-64	
	[-]	[%]	[-]	[%]	[-]	[%]	[-]	[%]
Aesthetics	475	39.5	239	55.8	13	46.4	18	28.6
Strong & safe	730	60.6	180	42.1	8	28.6	29	46.0
Fewer problems	61	5.1	8	1.9	-	-	4	6.3
Climate	84	7.0	11	2.6	5	17.9	-	-
Quick building process	8	0.7	13	3.0	1	3.6	5	7.9
Finances	17	1.4	36	8.4	4	14.3	11	7.5
Other	71	5.9	14	3.3	-	-	5	7.9

Table 2. Motivations for material choices in the nine locations (Steyn, 2009)

Respondents were then asked in question 18 to choose the two materials that they preferred most for building walls. The interviewers showed the respondents photos of stabilized adobe (similar to cement blocks but with half the cement stabilisation) and cement stabilized compressed earth blocks (similar to cement blocks but compacted and with half the cement stabilisation).

It was anticipated that there would be a socio-economic progression from living in a corrugated iron shack or traditional earth constructed house (the traditional vernacular) to a cement stabilized block or brick house, and finally to a burnt brick (plastered or face brick) house. This hypothesis was tested by comparing the current wall material of the respondents side by side with their preferred wall building material (see Table 3).

Wall material of houses	Botshabelo		Bulfontein		Bankara Bodulong		Magolokwe		Mapoteng	
	(n=383)		(n=185)		(n=228)		(n=129)		(n=161)	
	Current material	Preferred material	Current material	Preferred material	Current material	Preferred material	Current material	Preferred material	Current material	Preferred material
earth walls	12.8	1.3	21.0	0	13.4	1.7	62.3	3.1	41.8	3.6
brick walls	19.5	75.6	41.9	77.4	5.6	64.9	1.5	63.8	15.8	61.2
cement block walls	15.9	21.3	26.9	22.0	9.5	32.0	5.4	32.3	26.7	32.7
corrugated iron walls	49.2	0	8.6	0	66.2	0	28.5	0	7.9	0
other	2.1	0	0.5	0	4.8	0	2.3	0	7.9	0
Total	99.5	98.2	98.9	99.4	99.5	98.6	100.0	99.2	100.1	97.5
Missing	0.5	1.8	1.1	0.6	0.5	1.4		0.8		2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0		100.0		100.0

Table 3. Current and preferred wall building materials in the five locations (author)

In Botshabelo, the majority of the respondents (49.2%) lived in informal shacks with corrugated iron walls. Most of them (75.6%) preferred burnt bricks walls and 21.3% preferred to live within cement stabilised walls. Only a small percentage of respondents (1.3%) preferred to live within earth walls. During the survey it was observed that respondents lived next to an area where burnt brick dwellings existed and there were multiple local burnt brick yards that sell directly to the public. The residents of Botshabelo therefore aspire towards a local building culture that is burnt brick dominant.

In Bulfontein, few respondents (8.6%) lived in informal shacks with corrugated iron walls, some respondents (26.9%) lived within cement stabilised block walls and a relatively high percentage (41.9%) of respondents live within burnt bricks wall. Most respondents (77.4%) preferred burnt bricks wall, while 22% preferred cement stabilised walls. No respondents preferred earth walls. Similar to Botshabelo, the survey location was near an area with many burnt brick dwellings, and the local burnt brick yards also sell directly to the public.

Bulfontein respondents can thus also be described as aspiring towards a local building culture dominated by burnt bricks.

In Bankhara Bodulong, the majority of the respondents (66.2%) lived in informal shacks with corrugated iron walls. Most of them preferred burnt bricks wall (64.9%), while 32.0% preferred to live within cement stabilised walls. Only a small percentage of respondents (1.7%) preferred to live within earth walls. This semi-rural informal location has no burnt brick yard but does have several local businesses that sell stabilised cement blocks and compressed earth blocks to the public. The local building culture of Bankhara Bodulong is therefore perhaps influenced by the lucrative manual cement block industry but residents still aspire towards houses built with burnt bricks.

In Magolokweng, the majority of the respondents (62.3%) lived in traditional earth dwellings, and 28.5% lived in shacks with corrugated iron walls. Similar to the other areas, most respondents preferred burnt bricks wall (63.8%), with 32.3% preferring to live within cement stabilised walls. A bigger percentage of respondents (3.1%) stated a preference for living within earth walls (the dominant building material) than in the previous three areas discussed. This rural location has no burnt brick yards and very few cement stabilised brick yards that sell to the public. The local building culture of Magolokweng can be described as earth brick dominant with the potential for a manual cement block or burnt brick industry.

In Mapoteng, the highest number of respondents (41.8%) lived in traditional earth constructed dwellings, and only 7.9% lived in shacks with corrugated iron walls. Most preferred burnt bricks walls (61.2%), while 32.7% preferred to live within cement stabilised walls. Compared to the other areas, Mapoteng had the largest percentage of respondents (3.6%) that preferred to live within earth walls (the dominant building material). This semi-rural location has no burnt brick yards and very few cement stabilised brick yards that sell to the public. The local building culture of Mapoteng can thus be described as earth brick dominant with the potential for a manual cement block or burnt brick industry.

It is interesting to note that both Mapoteng and Mologokweng have yards that sell cement blocks, and these two locations have a higher percentage of respondents who stated a preference for cement block walls. Not a single respondent in any of the five survey locations wanted to live within corrugated iron walls. The vast majority of respondents (from 61.2% to 77.4%) aspired to live in dwellings with brick walls.

5. Discussion and conclusion

The measurable factors that seem to play a role in the preference of wall building material are (a) the current wall building material of the respondents' houses, (b) the desire to progress from informal to formal dwellings, (c) the dominant material (most commonly used) in the location and surrounding areas, and (d) the material that is most readily available. Other factors that may play a role in the preference of wall building material are (f) the overall quality of the built environment and (g) the quality of local craftsmanship.

The notion of "living up to the Joneses" appears to be alive and well in the study locations. The vast majority of respondents expressed a desire to live in a burnt brick dwelling like middle and upper class citizens, and they also see local brick yards supplying the bricks for these dwellings. Others look around and express a preference for cement block dwellings. Although a tiny minority, there are even a few people who state a preference for earth construction, possibly because it remains the dominant construction method in some of the areas.

Good house construction depends upon the quality of the building materials and the proper building skills and techniques. Home dwellers do not always have knowledge of the best building practices, and there is a wide range of skill levels, from self-help home builders to the most skilled workmen. Materials should also be used in the proper manner in order to achieve the best possible performance. Training related to the different building trades in all types of built environments is vital for both suppliers and end users. The housing sector overall would benefit from further training, evaluation, and control. South Africa

requires a variety of skills, from the basic to the specialized, and from the historical vernacular methods to more modern techniques.

If the commitment towards sustainable development is to be taken seriously, the importance of earth construction must not be overlooked. Earth construction can be as effective and versatile as other forms of wall construction, if not more so. It has the added advantages of making use of readily available resources, consuming very little energy and producing very little waste products.

Several case studies in southern Africa have documented sustainable and acceptable earth constructed buildings (Steyn, 2009: 96). The public needs to be educated in the importance of preserving existing forms and methods of earth construction in vernacular architecture and its useful applications in contemporary architecture. If this does not happen, our cultural heritage may soon be lost. It is time to turn earth construction from an 'old fashioned' building method 'for the poor' to an innovative, sustainable and contemporary practice in modern day South Africa.

References

- Ajzen, I & Fishbein, M (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. Correa, C. (2000). *Housing and urbanisation*. New York: Thomas and Hudson.
- Fathy, H. C. (1973). *Architecture for the poor: An experiment in rural Egypt*. Chicago: University of Chicago Press.
- Fransen, H. & Cook, MA. (1965). *The old houses of the Cape: A survey of the existing buildings in the traditional style of architecture of the Dutch-settled regions of the Cape of Good Hope*. Cape Town: Balkema.
- Frescura, F. (1985). *Major developments in the rural indigenous architecture of Southern Africa of the post-difaqane period*. Johannesburg: University of the Witwatersrand.
- Frescura, F. (1985). *Rural shelter in Southern Africa*. Johannesburg: University of the Witwatersrand.
- Gerneke, G. (1992). "The return to Earth." *Architecture SA*, March + April 1992 (part 1); May + June 1992 (part 2); July + August 1992 (part 3), pp. 40-44.
- Greig, D. (1971). *A guide to architecture in South Africa*. Cape Town: Timmins.

Hamdi, N. (1985). "Low-income housing: Changing approaches." *The Architectural Review*, vol. CLXXVIII, no.1062, pp. 42-47.

Hamdi, N. & Goethert, R. (1997). *Action planning for cities: A guide to community practice*. New York: John Wiley. Houben, H. & Guillaud, H. (1994). *Earth construction – A comprehensive guide*. London: Intermediate Technology Publications.

Kennedy, J.F., Smith, M.G. & Wanek, C. (eds.). (2002). *The art of natural building – design, construction, resources*. Gabriola Island: New Society Publishers.

Oliver, P. (ed.). (1969). *Shelter and society*. London: Barrie & Rockliff: The Cresset Press.

Oliver, P. (2003). *Dwellings: The Vernacular Houses World Wide*. London: Phaidon.

Papanek, V. (1995). *The green imperative*. London: Thames and Hudson.

Seth, S. (1988). *Adobe! Homes and interiors of Taos, Santa Fe and the Southwest*. Stamford, Connecticut: Architectural Book Publishing Company.

Steyn, J.J. (ed.) (2009). *Research Report – A South African Renaissance: acceptability of sustainable, high quality, earth constructed, public and private buildings to support local sustainable economic development*. Bloemfontein, South Africa: Department of Urban and Regional Planning at the University Free State.

Stoker, D.J. (1981). *Steekproefneming in praktyk*. Universiteit van Pretoria: Pretoria.

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THE IRISH SESSIONS HOUSE
A survey of a standard plan in Munster
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Abstract

The vast number of courthouses scattered throughout Ireland, dating from the early nineteenth century, comprise a distinctive and indigenous type amongst Irish vernacular buildings. They are public buildings well represented throughout the country and dominant features in provincial towns and villages. The courthouse of the smaller size or 'sessions house' is the focus of this paper. Due to present day changes in the provision of court services, the threat of vacancy and subsequent neglect is imminent for a number of them.

Eight case study courthouses were surveyed as a means to examine the Irish sessions house. All eight are located in Munster, the courthouses of which have received little attention to date in the way of research. They comprise all built examples of a single standard design by the Pain brothers. Their standard plan required an ability to design with stringent economy and adaptability in mind. All eight of the original group of buildings survive. Local variances from the standard plan were noted in the survey. Alongside this, primary research on maps, drawings and letters relating to the planning, procurement and construction of the courthouses was undertaken.

Almost two hundred years after their construction they are now representative of the varying physical states and usage of courthouse buildings throughout the country. The survey illustrates trends and differing approaches in each case while remaining mutually comparable due to their shared original design.

This paper concentrates on defining the character of the Irish sessions house and aims to contribute to our understanding of the courthouse typology within Ireland's vernacular buildings in order to enable informed architectural decisions regarding their future.

Keywords: courthouse, standard, Munster, bridewell, courtroom

Introduction

The vast number of courthouses scattered throughout Ireland, dating from the mid-eighteenth century until the Great Famine, comprise a distinctive and indigenous type. They are public buildings well represented throughout the

country and dominant features in provincial towns and villages. The courthouse of the smaller size or 'sessions house' is the focus of this paper.

Due to present day changes in the provision of court services, the threat of vacancy and subsequent neglect is imminent. Eight case study courthouses have been selected as a means to examine the Irish sessions house. All eight are located in Munster, the courthouses of which have received little attention to date in the way of research. They comprise all built examples of a single standard design by the Pain brothers, architects of note working in the Munster region. Designed with stringent economy and adaptability in mind they displayed a stark contrast to the 'one-off' nature of so many of their projects. All eight of the original group of buildings survive and almost two hundred years after their construction they are now representative of the varying physical states and usage of courthouse buildings throughout the country,¹ illustrating trends and differing approaches while remaining mutually comparable due to their shared original design. The aim of the survey is to contribute to our understanding of the courthouse typology in Ireland. Architectural historian Maurice Craig summarised their significance (1989, p.266) *'...the old oligarchical system had made its last, and perhaps its finest contribution in the sphere of public buildings: the majestic series of court houses which adorn the provincial towns.'*

Development of the courthouse

Prior to the establishment of County Councils in 1898 the construction and maintenance of courthouses, as well as gaols and roads, were the responsibility of the grand juries. They were a group of at least twelve and up to twenty three men *'selected on the presumption of possessing a certain degree of opulence'* (Bentham, 1973, p.15), men of wealth, social status and political influence, sometimes agents for landowners, normally of the Protestant upper class minority (Garnham, 1999, p.630). A grand jury seat was often hereditary (Garnham, p.640). The grand jury was the main or sometimes only

¹ As confirmed in discussion with John Mahon, head of Courts Service Estates and Buildings Department 04.01.2011.

governmental presence throughout the provinces. The courthouse, as the seat of the grand jury, therefore did not just represent justice but also local government. Grand juries in Ireland had more power than their English counterparts.

An increase in population and agrarian violence at the turn of the nineteenth century lead to law reforms accompanied by a number of acts of parliament prompting a building program of purpose-built courthouses throughout Ireland with a peak in the period from 1820-1850. An Act of Parliament was passed in 1795 for the erection of the Four Courts and Green Street Courthouse.² This was followed in 1813 by 'an Act to make further regulations for the building and repairing of courthouses and session houses in Ireland'.³

The later act gave grand juries increased powers in relation to the provision of courthouses: *'it shall and may be lawful for the grand jury to fell or dispose ... of any old court house or sessions house'*.⁴ This coupled with the common wish of grand jurors to promote themselves through the implementation of their vision of grand new public buildings in a fashionable architectural expression even where courthouses already existed all explain the boom in courthouse buildings, often one of the few *'decent buildings'* (T.C. Foster, 1846, p.402) to be found in an Irish town. They were evenly distributed to provide an accessible justice system. The aim was to ensure that nobody was more than a day's journey (by donkey) from a courthouse. There are approximately 165 courthouses remaining in Ireland today.

The grand jury system had an identifiable influence on the plan that is distinctly Irish and attributed to the fact that their local government duties extended longer in Ireland than in England. The financial and administrative powers of the grand jury in England had declined by the seventeenth century when such functions became the responsibility of parishes (Brett, 1973, p.15).

² 35 Geo III c.25 - Courts of Justice (Dublin) Act 1795.

³ 53 Geo III c.131, 12 July 1813.

⁴ 53 Geo III c.131, IX

Case Studies

The eight courthouses selected as case studies each have their own unique history of adaptation and are currently in varying degrees of repair. Built in 1826 in the County Cork towns of Bantry, Clonakilty, Macroom, Mallow, Midleton, Kanturk, Skibbereen and in 1828 in Killarney, County Kerry (fig. 1 and 2). As a collection they are representative of the wide reaching state of our historic courthouses today.⁵ Few will continue their life as courthouses while the others are likely to adapt to a new use. They all have a significant presence within their respective towns and present questions of both urban and building conservation.

⁵ As confirmed by John Mahon, head of Courts Service Estates and Buildings Department, in discussion 04.01.11.

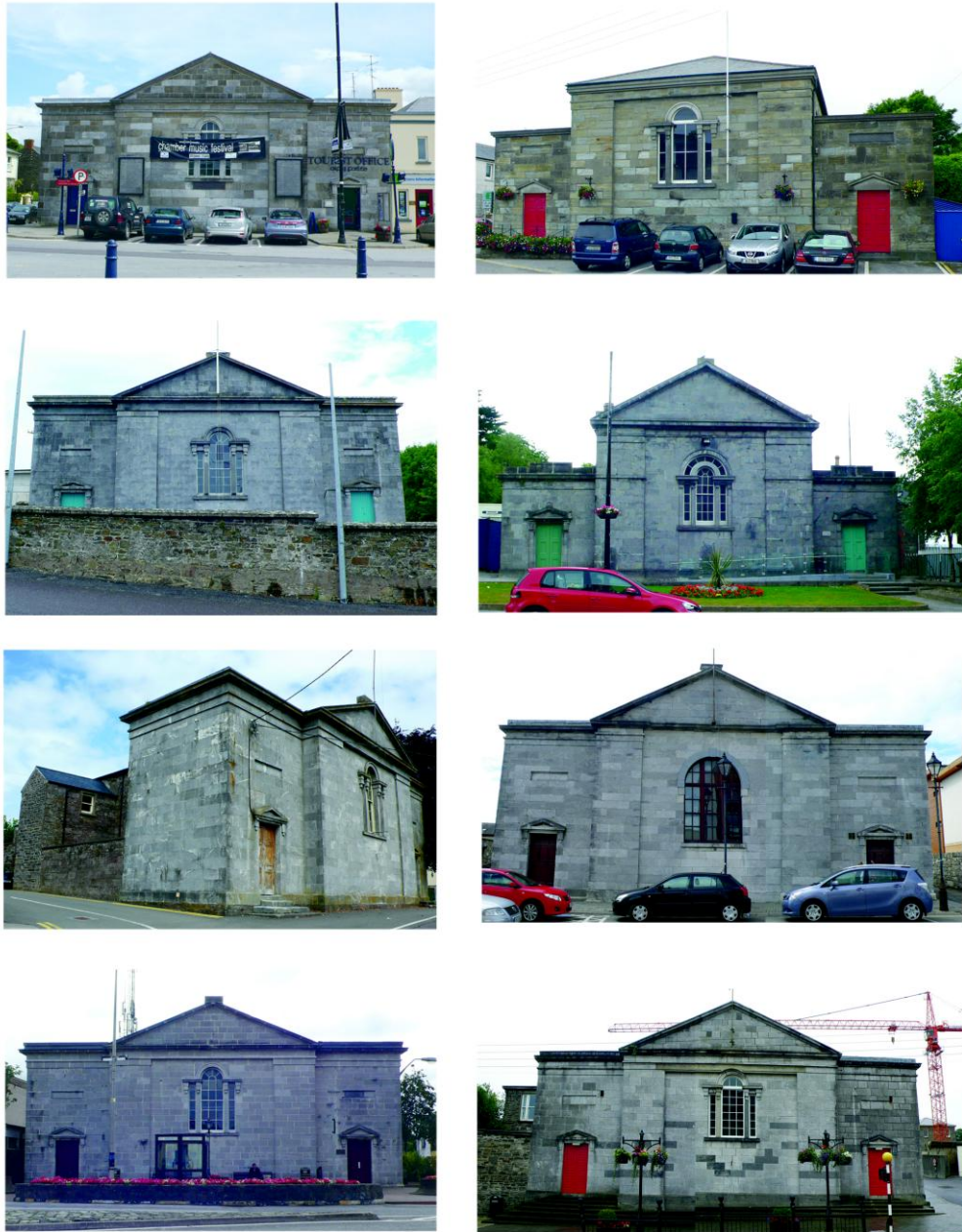


Figure 1. Front elevation of the eight case study session houses. From top, left to right: Bantry, Clonakilty, Kanturk, Killarney, Macroom, Mallow, Middleton, Skibbereen. Photographs by the author.

Procurement

A design for a courthouse and bridewell to be built in a number of County Cork towns was commissioned by the grand jury of County Cork and won, by competition, by the Pain brothers in 1824. The design includes a sessions house, a bridewell and a keeper's cottage all encompassed within tall boundary walls approximately five metres high.

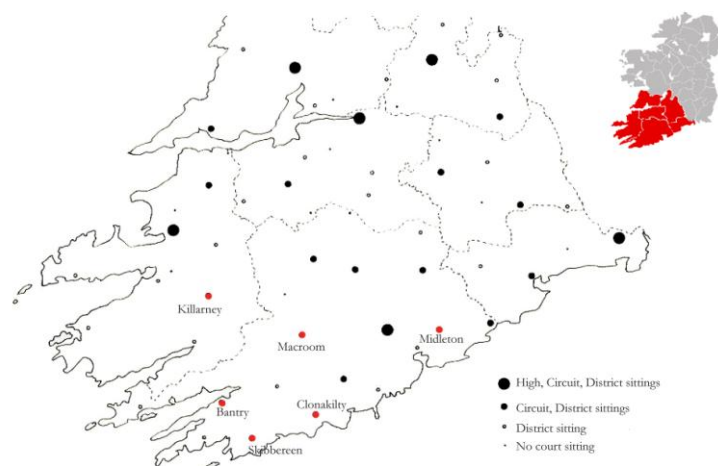


Figure 2. Map of Munster showing courthouse locations with case study session houses highlighted in red. Drawing by the author.

The plan is divided into three constituent elements: the courthouse, the bridewell and the keeper's cottage. A bridewell was a small local prison designed to hold those charged with petty offences or those awaiting trial. The courtroom, to the centre front, is flanked on either-side by entrance vestibules providing separate entrances for legal practitioners and the public. Behind the entrances are two open courtyards. These enable the provision of ample daylighting and cross ventilation to the courtroom while maintaining privacy. They also act as a buffer zone between the public front of house and the private back of house. The bridewell has six cells, four male and two female, separate living rooms and exercise yards. The keeper's cottage has basic living quarters with services and storage to the rear and a view from the living room into both exercise yards. The

Bridewell can only be entered through the courthouse entrances and through what are referred to on the original plan as 'insulated passages' – they ensure control and create an intimidating sequence of spaces for someone awaiting trial.

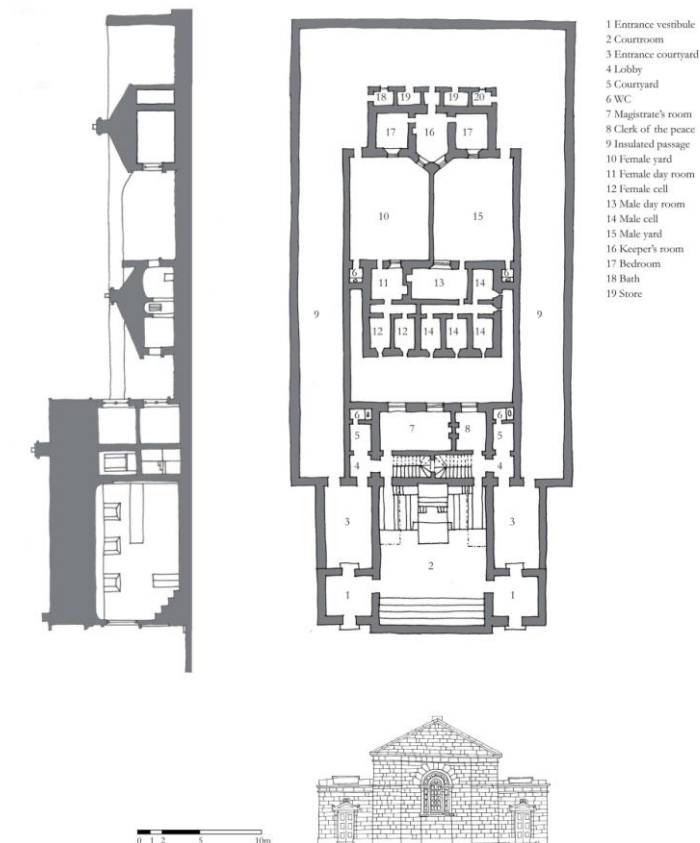


Figure 3. Typical plan, section and elevation. Drawing by the author.

The courtroom

There are six means of entering the courtroom ensuring all participants were kept separate prior to the trial, this is still a functional requirement of courtrooms today. Two back to back staircases serve the jury rooms to the rear. Each participant has a designated space within the courtroom – the judges bench at a height with steps leading up, a dock for the accused, benches for legal practitioners, juries and tiered public seating. Other than the jury who sit

on the galleries, the Judge has the highest position in the room, the accused is also raised to a height just below the judge's eye- level. A glaring omission in the standard plan is that of the witness box, an element present in all of the eight courtrooms today. The following account from an English traveller in 1805 reveals the practice of the time:

'I was surprised to find, considering how infinitely superior the arrangement of their courts were, that they had no witness box. The witness is hoisted upon the table, where the counsel within the bar sit, with all the mud and filth adhering to his shoes, where he is seated upon a chair; and a lady is exposed in the same manner.' (Carr, 1806, p.272)

Mounting the table was facilitated by the series of steps indicated on the standard plan. It's probable that each town would have adapted the plan either due to inadequacies or shortcomings of the layout or down to liberties taken by local joiners. Kanturk is said to have its original fittings (Dunne & Phillips, 1999, p.176). Its layout is very similar to Mallow's with benches curving around the counsel's table. Both courthouses were constructed by the same contractor and within twenty kilometres of one another indicating that the same joiner may well have been responsible for both. Killarney has all new furniture since its refurbishment in 2008. Many of the courthouses, as symbols of colonial power, were subjected to arson attacks during the Irish War of Independence and the Irish Civil War leading to the destruction of many of the original timber fittings. A timber panelled ceiling to aid acoustics was incorporated in the original design and still exists in Kanturk, Middleton and Macroom courthouses.

Two narrow galleries extend into the double height courtroom space at first floor level, supported by two cast-iron columns or, in the case of Mallow, just one column. Their direct access to the rear circulation would afford an observer an easy opportunity to come and go from the court without disruption. Their access

via the rear of the courthouse, the private section of the plan, tells us that they were only used by those attending the court in an official capacity i.e. as a jury member or those in a privileged position. The galleries only remain in three courthouses to this day: Kanturk, Mallow and Killarney. In Killarney they have been adapted to extend the full length of the courtroom and join up with the tiered public seating area at the rear of the courtroom thereby confusing what was once a strict division between public and private. The Kanturk galleries have an area of panelling above the balustrade height at the end of the gallery and for a short section near the gallery door. This provides a degree of screening of the gallery occupants from the view of the public below. There are a number of possible reasons why the galleries no longer exist in five of the eight case studies. They may have been omitted in the courtroom reconstruction following the war of independence and their removal may also have been one of the first steps taken to create a slightly less hierarchical and intimidating courtroom layout. The galleries, as well as the grand jury stairs, are noted as a distinctive feature of an Irish sessions house, a consequence of the longevity of the grand jury system. John Carr, visiting Ireland in the early nineteenth century noted *'These galleries are ascended to by stairs from the courts, and lead to the jury rooms by which the juries are prevented from having any communication with the public; a very necessary caution which is not practiced in England'* (Carr, 1806, p.296).

Elevation

The sessions house elevation is designed in a restrained classical style of ashlar stonework. A central pedimented bay is flanked by two symmetrical, slightly recessed, entrance bays. A continuous plinth, cornice and platband tie these three vertical elements of the façade together. The proposed elevation shows a venetian window at first floor level at the centre of the breakfront and flanked on both sides by recessed niches and a continuous projecting cill shared between the three elements. The central section of the venetian window is headed by an archivolt while the adjoining side lights are square-headed with cornice detailing

above. At the centre of the two entrance bays are double leaf square-headed doors with stone brackets and pediment detail over. The two separate entrances allow segregated access for the legal practitioners and the public however they are symmetrical in design displaying none of the hierarchical distinctions evident within the courtroom itself. While ashlar stonework was common for public buildings it is in the stonework of the County Cork session houses that subtle difference from location to location appear, both in detailing and type of stone. Decoration is kept to a minimum with little or no carved stonework or ornamentation *'partly because of the hardness of Irish limestone, and partly because they can never have had much money to spend in decoration'* (*The Builder*, 1911, p.772).

The design of a sessions house façade, particularly where the courtroom itself is adjoining the street, has many functional demands. Privacy and acoustic separation from the street and ample daylight are achieved with high-level windows. Its somewhat stern presence, as the public face of justice, is achieved with ashlar stonework and the use of rigorously symmetrical design for the segregated entrance vestibules, displaying a fitting abstraction of the balances of justice. The classical style was of the utmost suitability, embodying ideals of rationale and order. Even the small 'petty session houses' often consisting of not more than a single room exert their presence with a strong classical façade.

The executed buildings follow the standard elevation shown with a couple of exceptions; the niches to the central bay were omitted in all cases and a more economical means of breaking up the central bay was introduced by recessing the central section. Similarly, recessed panels were introduced above the entrance doors on the side bays. Each of the eight built courthouses have dealt with their individual site levels with a varying number of steps to each entrance. Killarney courthouse front elevation is the most ornate. This could be attributed to its early status as a tourist destination and the fact that it was procured two years later than the county cork session houses and by a different grand jury.

The Bridewell

The rubble walls surrounding the bridewell are subsumed into the local vernacular. In-line with a major shift in the implementation of punishment that occurred throughout Europe and the US in the early nineteenth century the bridewell itself is hidden from public view. The system moved from public spectacle of execution to imprisonment. Publicity became centred on the trial and sentence rather than the physical act of punishment.

'The body according to this penalty, is caught up in a system of constraints and privations, obligations and prohibitions. Physical pain, the pain of the body itself, is no longer the constituent element of the penalty. From being an art of unbearable sensations punishment has become an economy of suspended rights.' (Foucault, 1977, p.11)

Sites

The session houses were built after urban settlements had been established therefore their sites were dictated by available land close to a town centre such as fair greens as was the case in Midleton and Mallow or in some instances by the donation of land by the local landowner as was the case in Kanturk.⁶ Courthouses played a significant part in urban improvement which took place in provincial Ireland in the eighteenth century and early nineteenth century as described by Proudfoot and Graham. The sites of the case study courthouses can be categorised in three ways: those that form an edge to an urban square, an elevated fringe site and those situated right on the street line and raised on a podium to give prominence. It is worth noting that six of the eight case study courthouse façades are orientated in the direction of their local principle town (Cork & Tralee).

⁶ Kanturk courthouse is located on land donated by Lord Egmont.

The session houses today

All eight courthouses are included in the record of protected structures (RPS) however this alone does not offer an absolute safeguard from negative human interference. Unfortunately the RPS does not clearly define the extent of a structure's curtilage, this allows for a wide variety of interpretations. As seen in figure 4 the entire courthouse and bridewell complex has survived to varying degrees with Kanturk being the most intact. The disintegration of the courthouse curtilage now makes it more difficult for the Court Service to prolong the life of the buildings by extension to meet growing demands for space. Both Killarney and Clonakilty are facing this particular problem.



Figure 4. Plans of the case study session houses as surveyed in summer 2010. Drawing by the author.

International charters recommend that for successful conservation a building should remain in its original use so far as is possible. In this regard the court service is faced with many challenges such as: the lack of congregation space, accessibility, the lack of consultation rooms, prisoner accommodation, courtroom furniture with regard to universal access and the fair treatment of the accused and the integration of information technology.

A major contributing factor to the deterioration of many of these buildings has been the lack of maintenance, a consequence of their intermittent use. Typically, a provincial court sitting might only take place as little as once a month. Intensifying the use of our under-used courthouses is a most sustainable solution that can help to safeguard the historic fabric of the building through better maintenance and more frequent use as well as opening the building up for use by a wider section of society while reviving the eighteenth century tradition of multi-functional public buildings.

In 2006 , twenty one years after the courts ceased to sit in Lismore courthouse, it was reopened following. It is also located in Munster and a similar size to the case study session houses. A heritage centre is accommodated on the ground floor and the local theatre group on the first floor, twice a month the theatre stage is replaced with a judge's bench and witness box. One of the changing rooms is designed for use as a judge's chambers and has separate external access and direct access to the judge's bench. The public seating is retractable allowing a level space for workshops and functions. The success of the project lies in its reinstating the original function of the building supported by adaptive reuse.

In March of this year my practice, Carson and Crushell Architects, were involved in enabling a local community to appropriate their abandoned courthouse as a theatre venue for their Arts Festival. An architectural approach of minimal intervention was employed, taking advantage of the inherent theatrical qualities of the original courtroom layout and furniture. A critically acclaimed performance of Samuel Beckett's 'First Love' took centre stage opening the courtroom to a new audience. The event proved very popular and the local community and ourselves are energised to continue the project to ensure this important building, the most intact of its group, regains a place in the daily life of the town.



Figure 5. Kanturk Arts Festival March 2012. Image by the author.

References

- Craig, Maurice, *The Architecture of Ireland from the Earliest Times to 1880*, (Dublin, 1989).
- Brett, C.E.B., *Court Houses and Market Houses of the Province of Ulster*, (Ulster, 1973).
- Jeremy Bentham in C.E.B. Brett, *Court Houses and Market Houses of the Province of Ulster*, (1973), p.15.
- Garnham, Neal, 'Local Elite Creation in Early Hanoverian Ireland: The Case of the County Grand Jury' in *The Historical Journal*, Vol. 42, No. 3 (Sep. 1999), p. 623 – 643.
- Foster, Thomas Campbell, *Letters on the Condition of the People of Ireland*, (London, 1846)
- Carr, John, *A Stranger in Ireland*, (Hatford, 1806).
- Dunne, Mildred, & Brian Phillips, *The Courthouses of Ireland*, (Kilkenny, 1999).
- The *Builder*, June 23, 1911, p. 772. The author is anonymous however James Pain's nephew Benjamin is mentioned as having assisted the author.
- Foucault, Michel, *Discipline and Punish, the Birth of the Prison*, trans. Alan Sheridan, (London, 1977).
- Proudfoot & Graham, *Urban Improvement in Provincial Ireland 1692-1760*.
- Graham, Brian, & Lindsay Proudfoot, *Urban Improvement in Provincial Ireland 1700-1840*, (Athlone, 1994).

Author Identification

Rosaleen Crushell, is a registered architect in Ireland and Britain with a particular interest in the reuse of existing buildings. She worked for a number of years in London for RIBA Gold Medalist Edward Cullinan Architects before establishing Carson and Crushell Architects in Ireland in 2009 with partner Douglas Carson. Since then they have received a number of accolades including a special mention in the prestigious Architectural Association of Ireland Awards 2011. She was awarded a masters of urban and building conservation (MUBC) from University College Dublin in 2011. She continues her research of historic buildings with support from the Irish Georgian Society and the Arts Council of Ireland.

A CRITICAL INTERPRETATION OF THE PORTUGUESE SURVEY IN THE EARLY SIXTIES: NUNO PORTAS AND PEDRO VIEIRA DE ALMEIDA.

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Abstract

This paper proposes to highlight how the Survey to Popular Architecture in Portugal was interpreted by a young generation who were, in the early sixties, searching for a theoretical framework able to overcome the agony of modern architecture. Although not directly addressed to the results of the Survey, the texts from Nuno Portas and Pedro Vieira de Almeida selected for this argument reveal, however, methodological strategies that made possible a wider debate. In doing so, the Survey may appear filtered in each of them, considering that it is analyzed under the lens of a larger and deeper body of knowledge. This approach certainly prevents a superficial interpretation of its documents (and subsequent contradictions and misunderstandings) and avoids both the circumstantial and the incidental. Moreover, this effort defines a strategy suitable to resist over time, beyond populist or political pressures, as well as fashion trends, that makes its recovery, nowadays, absolutely necessary.

Keywords: tradition, integration, Mediterranean, *transition-space*, ambiguity

I.

By the time the Survey to Popular Architecture in Portugal was published, in 1961, the magazine *Arquitectura* had already made the call for debate on the results of its fieldwork, concluded some years earlier. In 1959, *Arquitectura*'s issue number sixty-six presented two articles, signed by António Freitas, member of one of the six teams that went through the continental territory, and Carlos Duarte, from the editorial board, that shared a similar concern: the time spent since the beginning of the survey (1955) was postponing the necessary discussion that a responsible professional class could not avoid. Photographs

taken during the fieldwork were illustrating not only both articles but also the cover of that issue, showing yards and terraces in a southern village in Algarve.

By 1959, Nuno Portas and Pedro Vieira de Almeida were finishing their degree in architecture. Both were working, along with António Freitas, in the same studio in Lisbon, led by Nuno Teotónio Pereira, an experienced architect who was Freitas' team leader in the Survey. The *Rua da Alegria's* studio would prove to be a center of debate in the late fifties and early sixties particularly concerned with the real possibilities of a modern architecture in Portugal.

Portas, who also shared with Carlos Duarte *Arquitectura's* editorial board, would be the first to deepen the questions advanced by his colleagues in non-specialized press, which meant opening the debate to a broader public. He published two important essays in cultural magazines such as *O Tempo e o Modo*, headed by an anti-regime group of catholic intellectuals, and *Jornal de Letras e Artes*, a higher print run publication for which he had been writing the chronicles about pioneers of Portuguese modernism. Vieira de Almeida, in turn, had the courage to demand in his degree thesis the need to clarify basic concepts related with architectural spatial structure as preliminary condition for debate.

The main guidelines from "Traditionalism and evolution" (Freitas, 1959) and "Notes on spontaneous architecture" (Duarte, 1959) highlighted a contradiction: could all that information gathered in the fieldwork be presented as an opportunity to overcome the architectural impasse with which Portuguese architects were struggling during the fifties and help them getting rid of abstract models imported from European rationalist architecture without compromising the development of a largely rural country that had barely begun its industrialization? Does the awareness of such dilemma explains why both Portas and Vieira de Almeida refer to the Survey as extremely useful material yet extremely dangerous?

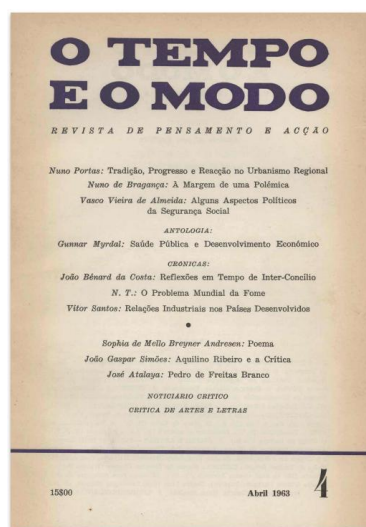


Figure 1. *O Tempo e o Modo*, nº4, April 1963. The issue included, besides Portas' article, a chronicle written by João Bénard da Costa, literary criticism by Arnaldo Saraiva and poetry by Sophia de Mello Breyner.

II.

In April 1963, Nuno Portas publishes "Tradition, progress and reaction in regional urbanism" and, only a month later, "Integrated architecture?", when he's already a very well-known critic and has signed dozens of articles for *Arquitectura*. Even though they cannot be read as a specific critique to the Survey, we can trace in both texts a clear and pragmatic position on some of its key points.

Taking as case study regional planning in a "*land stuck for centuries*", the first article focuses on the problematic relations between traditional culture and progress increasingly changing demands. Observing that, in Alentejo, large-scale operations related with industries, real state or tourism have not taken place so far –avoiding either massive destruction of the vernacular or its scenographic preservation– he defends this situation as an opportunity for an accurate planning, beyond speculative pressures. Something that would require a "*realistic point of view, whether for necessary transformations or possible permanences*" (p.2) in order to reach a new balance. This middle point can only

be reached pondering the real needs of a specific community, using valid and realistic working principles:

"[Take also in consideration] the growing interest for a possible cultural continuity –generated within the post-war modern architecture movement– willing to understand and absorb the content of tradition into a methodology clearly facing a social and technical widespread progress to modern society. Willingness that stands on the basis, for example, of the Survey to Popular Architecture in Portugal" (p.2).

To be realist, therefore, does not mean being conformist. Which means that it is not enough to understand how a particular population lives, and to respond to its occasional requests; the architect or the urban planner must work with *"the evolving needs of the population that will emerge"* (p.5), must foresee possibilities for a better society without utopian pretensions. In order to do so, he has to intervene patiently and pedagogically, dialoguing – a hard task when facing *"apathetic, inert population"* or, even worse, a *"conservative deep nostalgia"* atmosphere hostile to any notion of progress.

Nostalgia that is quiet often translated into a scenographic pastiche, an illusory repetition of forms devoid of meaning, once they represent ways of life that don't exist anymore. As Portas insists, even if Alentejo is rich in good examples of popular architecture, it is important to distinguish between forms of spontaneous life and certain stereotypes, nourished by the population itself. One of the stereotypes more vulnerable to misunderstandings refers to the term "tradition". What is then evident, in his opinion, is that *"the values of traditional culture are already affected in its stability [mobility, popular culture spread by newspapers, magazines or television, new construction materials...] but still unable to be marked by new perspectives"* (p.4). However, "stability" shouldn't be taken as something immutable:

"It must be stressed that spaces (from landscape to urban environment, from architecture to decoration objects) are the result of an accumulation of secular contributions: from the popular effort to adapt to environment and its needs, on one hand; to the higher-level cultures successively

imported through exceptional works also known as scholarly contributions, on the other” (p.3).

These ideas will be summarized in his complementary article “Integrated architecture?”. In the first lines, Portas asks: if tradition is an intertwined relationship between the popular and the erudite, if it is also the acculturation or adaptation of those scholarly contributions, if after all, *“the sources, or reference points, may be different in their historical roots but find themselves spatially juxtaposed”* (p.25), how then to distinguish the valid references to be taken into consideration from those that should be called into question?

This doubt is raised by Portas’ distrust with a certain recovery of “regional” or “local” expression in recent works by a young generation of architects – a trend that he had also observed some months earlier in an exhibition held at Porto’s College of Fine Arts (ESBAP). Immediately recalls that the interest for “integration” started first as a way out for the exhaustion caused by the international style limiting and imposing vocabulary; but the interesting work that was being developed in post-war Italy, United Kingdom or the Nordic countries could be useful to the portuguese context only as methodological approach – otherwise, without this filter, it would mean nothing but a replacement of a rational formalism by a regional one.

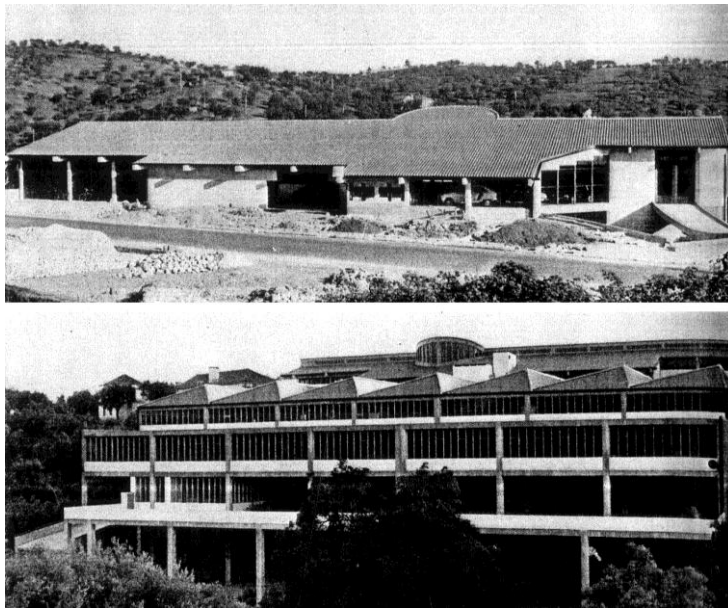


Figure 2. Stand and garage in Coimbra, by J. Pulido Valente and L. Álvares Ribeiro. Portas analyses this work as a collage, prevailing in the main facade, facing the highway, the scale and the materials (roof tile) of popular architecture (In: *Arquitectura*, nº98, p.160).

Given such mislead, Portas is apprehensive with superficial interpretations that might convert the Survey's "*remarkable database*" into a "*dangerous catalogue*" full of recipes ready to be used, empowering "*a mistaken and regressive notion of tradition*" (p.26): a notion in which the *accumulation* and *acculturation* of contributions would be replaced by a repetition of a suspended time. Quite the opposite, he sees "tradition" as an open process and "integration" a delusion – unless if it's critically, dialectically understood, that is to say, if a new modern piece of architecture frankly calls into question the preexisting environment's sociocultural data. Something that, in Portugal in the early sixties, architecture could not do by its own:

"(...) *we lack a program of civic adventure, a culture arisen from a popular democratic intervention, therefore able to fully characterize an architecture in Portugal*" (p.30).

III.

Pedro Vieira de Almeida was writing his degree thesis by the time the Survey was officially published. In July 1963, *Arquitectura*, by Portas' own initiative, launched the first part of a set of three articles reproducing it almost entirely, with the same title: "Essay on architectural space". The interest in this text goes far beyond the debate on the Survey – the very author declares that its reasoned critique won't possible take place along those lines. However, Vieira de Almeida, considering that one of the symptoms of the deep crisis that hits architectural practise in the late fifties was the deterioration of the word "space", and following the attempt of clarification already intuited by Bruno Zevi, proposes the study of the processes of determining space regardless the particular or circumstantial spaces that might result from it. This is the key point that we should have in mind for these brief notes.

Thinking on how this crisis –a cultural crisis, reflected in the gap between a mature formal language and its social premises– echoes in Portugal, by then a peripheral and mostly agrarian country, writes:

"In our particular case, it seems to me, taking in consideration previous experiments, that we run two diametrically opposed risks: to follow with mediocre servility trends that do not matter to us, or to restrict our attitude to a isolationist provincial culture" (Essay..., p.21).

The second risk is disclosed by "a certain tendency to think in terms of «Portuguese contemporary space»" (*Essay...*, p.22), a concept used by Fernando Távora, leader of the Survey's northwest team, in his 1962 dissertation for a teaching position in ESBAP. Vieira de Almeida argues that the lack of its conceptual distinction from *architectural-space* might lead to misunderstandings or to an awakening of a "folklorist trend".

He proposes then to introduce, among the primary categories of space (internal and external) an intermediate yet crucial category, for its "«*experimental tension*» understood by Giancarlo de Carlo as a basic condition for a renewal of architecture in crisis" (*Essay...(II)*, p.10): the *transition-space*, to which is

related the problem of continuity between inside and outside. The *transition-space* intends to overcome the misinterpretation of space as negative or mold of visible forms; furthermore, it proposes an open-ended use, unlike the *nuclear* space, which is naturally destined to accommodate specific functions:

"Admitting the existence and the need for nucleus defining areas of action, is exactly where this action results undefined, where it is not oriented, that automatically emerges a sense of ambiguity; this would be necessarily and fundamentally an ambiguity of action" (Essay...(II), p.13).

The conception of this new category of space, inherited from organic concerns, explains Vieira de Almeida's suspicions about a *genuine* Portuguese space, and it will shape his Survey's critical view. What interests him is the determination of some spatial characteristics related not to borders but to cultural aspects of the inhabiting: a Mediterranean way of living, characterized by a social life occurring in a *semi-open* space, with a harmonious balance of light and shadow where the exterior and interior have no clear bounds:

"(...) it is not about outdoor life, but living in a space that is neither exterior nor interior: it is a transition-space, and this way of inhabiting is still today entirely valid" (Essay...(III), p.36).

The prevalence of everyday life spent at the *semi-open* air is exactly what he observes in some of the Survey's documents. Considering Portugal's central zone, Beiras, it is for him evident that the elemental, almost rudimentary interior of this spontaneous architecture is counterbalanced by a much more careful *semi-open* spaces like patios or enclosures attached to the house ("*authentic open-air rooms*"), balconies, loggias or arcades built often with perennial materials like stone.

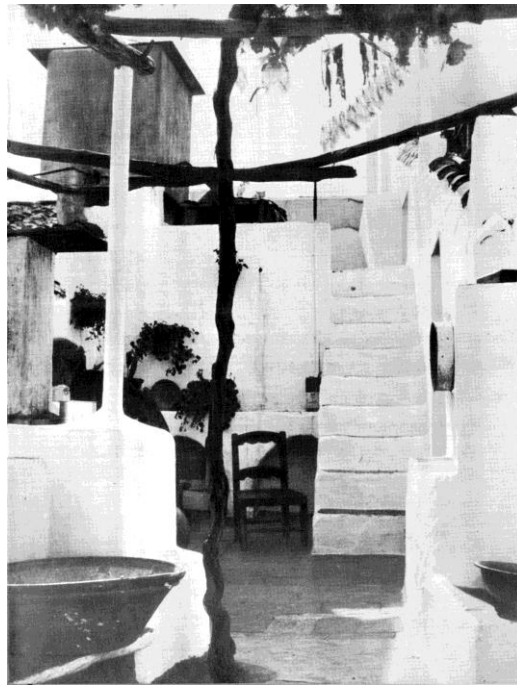


Figure 3. Courtyard in Vila Viçosa, Alentejo. A transition-space in a spontaneous environment (In: *Survey to Popular Architecture in Portugal*, 1961).

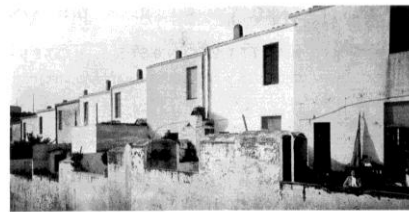
In the south, where the climate is milder, there are many examples of *transition-spaces* like the "*marvellous document*" of a patio in Alentejo, with a group of tools and household objects occupying different niches at different levels. But, despite of an area of greater Mediterranean influence and other of greater Atlantic influence, what seems clear to Vieira de Almeida, and generalizable to the whole territory, is "*the permanence and richness of life proposals at the semi-open*" (*Essay...(III)*, p.36).

IV.

As previously said, the "Essay on architectural space" was not meant to be presented as a critic interpretation on the results of the Survey, nor its purpose or methodology. In subsequent texts, such issue would be analyzed, as well as the idea of a housing typology with Mediterranean characteristics. Vieira de Almeida understood the duality of Portuguese geography – "*Mediterranean by its*

nature, Atlantic by its location", according to Pequita Rebelo– but his idea of "Mediterranean" was closer to the sense we now ascribe to Fernand Braudel: a thousand things at once. However, in this land marked by *an accumulation of secular contributions* (Celtic in the north, Roman in the center and Arabian in the south) the *transition-space*, a conceptual device studied in his degree thesis, would represent the possibility to analyse the *permanence* rather than the *diversity*.

By mid-twenties, a sudden interest on the Mediterranean aroused. An interest that grew over the next decade, judging by the number of publications devoted to it. We should have in mind that some Mediterranean islands became by then a haven for many European artists considered "degenerated" by the Nazis, as well as Anglo-Saxon writers who were looking for their personal paradise. With honorable exceptions, as evidenced by Rex Martienssen book that started with a visit to the ruins of Delfos in 1933 (main reference to Vieira de Almeida), the Mediterranean represented a psychological and historical situation of ancient origins that modern architects were unable to embrace without artificiality, as Zevi said introducing Eglo Benincasa's chronicle "The art of living in the South" (1955, p.4).



.....Aparece el Standard. Ausencia de toda preocupación estética: fantasía, originalidad, estilos históricos, «cultura escolástica», individualismo...

Las mismas necesidades, las mismas características, aprovechando las ventajas de la moderna técnica constructiva.

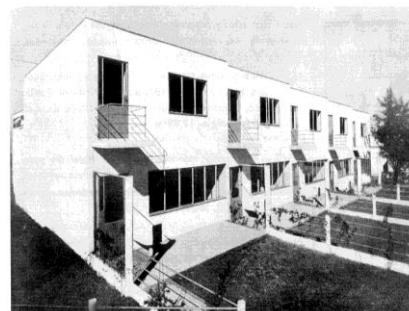


Figure 4. Fishermen's cottages in Sant Pol de Mar and J.P.Oud project in Stuttgart Weissenhof. AC's editorial team found both buildings similar, although its geography and cultural traditions were in opposite poles (In: AC, nº1, 1931, p.25).

Zevi had probably in mind the manipulation of Mediterranean tradition carried out by A.C – *Documentos de Actividad Contemporanea* (a magazine run by some G.A.T.E.P.A.C. members as Josep Lluís Sert, Torres Clavé or García Mercadal, amongst others) between 1931 and 1937, where the simplicity of popular spontaneous architecture, under the lens of modern slogans, was formally analyzed as "masterly, correct and magnificent play of masses brought together in light". This operative –and distorting– criticism, "seeking ways to support the present work with everything that belongs to the past and, consequently, to legitimise a resolute continuity" (Pizza, p.35) settling the roots of modern architecture in the Mediterranean, couldn't be further from Portas and Vieira de Almeida's *modus operandi*.

Their interest focused, on the contrary, in the vitality of communal life and its ability to constantly reinvent itself; in the "porous architecture", as designated by Walter Benjamin, where "building and action interpenetrate in the courtyards,

arcades, and stairways" and its spaces preserve "*the scope to become a theater of new, unforeseen constellations*", avoiding the "*stamp of the definitive*" (1925, pp.165-166); eventually, in a certain capacity for self-regulation. Ultimately, these issues on spontaneous architecture interested to both as much as they could be tested in an urban context, and not as a romantic evasion.

The *transition-space*, that Portas would also consider –in an early seventies symposium organized around structuralist concerns– as an "*essential component at the deep structure level*" (Llorens, p.234) should be interpreted as a possibility of introducing a margin of flexibility in highly controlled programs (such as affordable housing) or even as its generative element. These were the main research guidelines that both architects would follow throughout the sixties and the seventies.



Figure 5. Life in southern Italy, at the semi-open. Photographs illustrating Eglo Benincasa's article, referred by V. de Almeida in his thesis, showed several forms of appropriation of "ambiguous" spaces (In: *L'Architettura*, nº1, 1955, p.243).

References

- Freitas, A. (1959). *Traditionalism and evolution*. In *Arquitectura*, nº 66 (pp. 31-37). Lisbon, December 1959.
- Duarte, C. (1959). *Notes on spontaneous architecture*. In *Arquitectura*, nº 66 (pp. 38-43). Lisbon, December 1959.
- Portas, N. (1963). *Tradition, progress and reaction in regional urbanism*. In *O Tempo e o Modo*, nº4 (pp. 1-16). Lisbon, April 1963.
- Portas, N. (1963). *Integrated architecture?* In *Arquitectura(s). História e Crítica, Ensino e Profissão* (pp. 25-31). Porto, Faup Publicações, 2005.
- Portas, N. (1963). *Teaching architecture. A pedagogical experience at Porto's College of Fine Arts (ESBAP)*. In *Arquitectura(s). História e Crítica, Ensino e Profissão* (pp. 402-405). Porto, Faup Publicações, 2005.
- Almeida, P.V. (1962?). *Essay on architectural space*. Porto, Faup, Centro de Documentação.
- Almeida, P.V. (1962?). *Essay on architectural space (II)*. In *Arquitectura*, nº 80 (pp. 3-13). Lisbon, December 1963.
- Almeida, P.V. (1962?). *Essay on architectural space (III)*. In *Arquitectura*, nº 81 (pp. 29-38). Lisbon, March 1964.
- Zevi, B. (1955). *Colloquio aperto*. In *L'Architettura*, nº1 (pp. 3-5). Roma, Maggio 1955.
- Pizza, A. (1996). *The Mediterranean: creation and development of a myth*. In Pizza, A. (Ed.), *J. LL. Sert and Mediterranean culture* (pp. 12-45). Barcelona, Col·legi d'Arquitectes de Catalunya.
- Benjamin, W. (1925). *Naples*. In *Reflections* (pp. 163-173). New York / London, Harcourt Brace Jovanovich Publishers.
- Llorens, T. (1972). *Arquitectura, historia y teoria de los signos. El symposium de Castelldefels* (Ed.). Barcelona, La Gaya Ciencia, 1974.

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ARCHITECTURAL KOINÈ: ARCHITECTURAL CULTURE AND THE VERNACULAR IN 20TH CENTURY SPAIN

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Abstract

The derive of the vernacular concept in Spain is closely related to the 'architectural koinè', and therefore one of the main characteristics of Spanish architecture. Its interesting development and its evolution throughout the 20th century, closely related to that of the Modern Movement, constitute the 'Spanish peculiarity', in architectural terms. Therefore, an architectural language can be said to exist as a product of the culture embracing it, which is represented by 'architectural koinè'. The vernacular is a central aspect of the whole. Its origins and evolution are the subject matters of the present article.

Keywords: Spanish vernacular architecture, modern architecture, 'architectural koinè', architectural language and discourse

The architectural language

Hauser (1953) took the lead to describe the artistic expression as a language and thus state that popular language was different from the language of modern artists. Those different speeches explained popular lacking comprehension of modern art. Such a description originated in the fact that languages are the earliest materialisation of any culture. Therefore, the fact that architecture is an expression of culture makes Hauser's argument valid for architectural culture, which has a language her own within which different discourses cohabit and take place.

A distinctive language of that kind has characterised Spanish architecture for over one century as part of 'architectural koinè' (Diez-Pastor, 2012). This

concept refers to the corpus of principles which are culturally characteristic of modern societies, as much as the classical ones. Though it is apparently similar to 'critical regionalism' (Tzonis & Lefaivre, 1986), both concepts differ. First, *koinè* (from Greek, κοινή) refers in Spanish to culture, a term explicitly holding criticism within its meaning. Second, it is timeless, having dominated Spanish architectural practice for over 130 years. Third, its appeal to culture involves concepts like place, region or environment, and even individual personalities and social features are there implicit. Fourth, it deals with architecture and architectural thought. And last of all, *koinè* assembles each particular element or emotion that a language bears to originate culture and represent it. Therefore architecture constitutes a 'language' in its own right.

These ideas were collected (Diez-Pastor, 2008) as an attempt to express openness and flexibility. However, they relate to Leopoldo Torres Balbás' (1918) writings and theory, in spite of the fact that they had been in practice since the 1800's in their primitive spirit. Their subsistence for more than one century denotes the coherence between practice and the lines and principles of the architectural thought those ideas represented. In fact, these ideas reacted to general impositions through quiet, peaceful, undismayed understanding of local and social aspects, over which cultures and civilizations stand (Bourdieu, 1973). And they did so until they blended with the innermost purposes of architecture.

However 'architectural *koinè*' focuses the cultural component of identity as an architectural challenge (Storm, 2003) with roots in a common shared culture and civilization to which one cannot renounce, unless human condition is also despised (Hauser, 1964).

The origins of architectural language, and thus those of 'architectural *koinè*', bear a necessary link with, and influence from the local and vernacular traditions. Theorists (Rapoport, 1969; Lefebvre, 1974) have long speculated with this idea, often claiming their having discovered it for the world. Rapoport (1969) went as far as to say: *'In architecture...such an interest [towards the vernacular] is only now starting, and it has not yet gone very far nor beyond the purely visual. It is therefore a topic which has been rather neglected'*.

Interesting and revealing as his studies might be for many, his statements lack in knowledge of timeless practice and theories of architecture, a fact for which, however, he is not to be blamed. Moreover, some of these were in fact little known outside the architectural sphere, if known at all, even in the places that bred them. What is most interesting from Rapoport's ideas now is his implicit claim for a greater social sensibility from the side of the architects. Such a claim was in spirit similar to that of Lefebvre's (1974), in spite that he expressed it in a different way. In his study about the origins of space, Lefebvre explained how space is a social product from which meanings derive, based upon values, hence making it central to the evolution of societies and their structures. Interestingly, these ideas had integrated the sphere of Spanish architecture – and thus its discourse – long before Lefebvre and Rapoport formulated theirs.

The architectural discourse in Spain: respect for the vernacular

In the late 1800's – when Spain's last colonies were lost – architecture seemed to split in a way parallel to other aspects of life and thought. One end materialized in the modern, cultivated dynamic trend, context dependent that tried to preserve the little optimism left. The other one, of a non-critical 'folkloric-regionalist' kind, topic-based (Zavala, 1941) represented a look backwards towards a better life lost. While the former was dynamic, future oriented, critical and selective, the latter remained blind, unable to move, keen to accept anything that prevented its promoters from thinking – that painful activity! The second trend opened the door to any foreign movements as much as the past, all of which started to be blindly adopted while it coexisted with the first one, represented by a much richer, democratic and critical attitude.

Starting from Krause's (1811) theory of beauty,¹ since 1875 the first, critical trend promoted the environmental and natural values of an architecture which

¹ Karl C.F. Krause's *Das Urbild der Menschheit* (1811) was translated into Spanish in 1883 by one of the founders of the Spanish Krausist school, Francisco Giner, also leading founder of the ILE in 1875. [Spanish version: Karl C.F. Krause, *Compendio de Estética*, Madrid: V. Suárez, 1883.] His ideas, in spite of being of little relevance in Germany were to completely change thought and education in Spain. Through a new concept of aesthetics affecting every order of sensitiveness and understanding, they had an only natural reflection in architecture. See Díez-Pastor, 2005, 33-39.

was context-dependent, proud of the peculiarities of the culture to which it belonged, yet not renouncing its time. For the people who defended it, architecture was a compound of disciplines, beyond the mere, simple 'design'. It included the environment, whether built or not, of which social and cultural aspects were a central part, but also nature and landscape and anything dealing with, or affecting human life. This interest originated the great respect ever since demonstrated by Spanish architects towards the essence of our culture and the vernacular. Such a respect showed in all the works of Spanish architecture for over one century, throughout the 20th century (Salvador, 1929).

Foremost promoters of this line of thought were the fathers of Spain architectural avant-garde, some of which started teaching at Madrid School of Architecture around 1900. By the end of the 1910's a new generation emerged that had been educated by them. Leading these new faculty members Leopoldo Torres Balbás was a young modern, not yet thirty years old, fond of history and heritage who did not take long to start the biggest revolt ever in Spanish architecture. His father, a revolutionary geographer, had travelled the country with him as a child. As a young professor, and co-founder in 1918 of the first architectural journal in Spain, *Arquitectura*, Torres Balbás toured Spain with his students, applying the learning method within which he had been bred. The prospect was to give his students live lessons of History and Architecture on site from our vast, and then little known and despised heritage. The pieces, he explained to them, were relevant indeed, but not less were the historic, natural and social environments from which a whole cultural scenario had to be deduced.

Experience was to change those future architects' view and perspectives, but also to give them the biggest lessons through the construction of close personal ties with a past otherwise left unknown. Students were to experience heritage as much as site and people. All of these lessons were evident in their school works, some of which were published in *Arquitectura* – i.e. the project of Carlos Arniches and other students for the Urban Planning class, where some of his later principles on this respect were stated to accomplish new dwellings in a then

typically village near Alicante.² Later, these same features were to reflect on his avant-garde '1925 Generation' mates' architecture, hence building bridges between the sign of their times, the past and their culture. Examples of such sensitive practice can be found in the works of all of these architects – i.e. Carlos Arniches and Martín Domínguez's 1927 'Albergues de Carretera' (Díez-Pastor, 2010) and "'La Zarzuela" Racecourse' in 1935 (Díez-Pastor, 2005); or García Mercadal's "'Los Remedios" Social Dwellings' in Seville (1931). In his article on the latter work (García Mercadal, 1931),³ the author made an interesting remark:

"Los Remedios, S.A." has started the construction of a low cost dwelling, having tried to preserve in them the traditional character of the popular houses in Triana, modernizing them and displaying the latest hygienic conditions in them so that they meet the minimum conditions required today for the working classes'. (García Mercadal, 1931, p. 154)

Torres Balbás' studies on the relations between history and the future of architecture materialized in one of the widest corpuses ever, focused towards the protection of Spanish heritage under any sensible perspective that existed.⁴ His visionary mind was aware that heritage preservation only made sense if the whole environment was preserved in a sensitive way (Torres Balbás, 1996). His appreciation for such kind of knowledge as useful for any future-oriented architectural perspective, which he encouraged enthusiastically, started to be evident in his asking his former students to contribute articles to the journal.⁵ Under his direction of *Arquitectura*, García Mercadal, Arniches and their '1925 Generation'⁶ colleagues started to publish a first series of studies on Spanish

² Los trabajos realizados en Elche por los alumnos de Urbanización' [The work done on Elche by the students of Urban Planning]. *Arquitectura*, no 38, 1922, 156-264.

³ F. García Mercadal (1931), p. 154.

⁴ Unfortunately his work is too vast to be referred here, and his complete works have never been published as a whole. A collection of selected articles appeared fifteen years ago, edited by the Madrid Association of Architects, COAM. See Torres Balbás, 1996.

⁵ After his opening with the strong words of the article 'Mientras labran los sillares' [While the stones are cut] for the first issue of *Arquitectura* (Torres Balbás, 1918), thus making it very clear that he would be critical with any kind of architectural practice – past, present and future – Torres Balbás made his critical position explicit with his article 'Las nuevas formas de la arquitectura' [The new forms in architecture] (Torres Balbás, 1919). His critical spirit never decayed.

⁶ Díez-Pastor, 2005, pp. 33-60. From this point on, G25 whose members were: Fernando García Mercadal, Juan de Zavala, Manuel Sánchez Arcas, Luis Lacasa, Rafael Bergamín, Luis Blanco Soler,

vernacular architecture.⁷ Still Torres Balbás' idea went beyond the purely architectural vision, and rather searched for a wider intellectual view. Leading intellectuals of his times, like Elías Tormo (1930), José Moreno Villa (1931), Manuel Gómez Moreno (1928), José Ortega y Gasset (1920 and 1923), Ramón Menéndez Pidal, 'Azorín' (1922), Ramón Pérez de Ayala (1920) and many more, could often be read in the journal in which they published more than fifty articles until the outbreak of the Civil War in 1936. No matter the main topic studied, these were taken as opportunities to study theme from a wider perspective. The issues touched ranged from the historical and compositional, to the constructive and topographical aspects. Sketches and drawings were often accompanied by photographs and plans. Thorough descriptions of every aspect, including anthropological and ethnographic among them, constituted the essence of those writings. All subjects blended in taking literary pieces, all of which were understood as part of the same world of interests that architects of every kind share: architecture. However, the idea that architecture was not the beginning and the end of the world was deeply rooted within this generation; rather it belonged to the wider, richer world of social activity, and only within it did their practice make sense.

Such a work, however, was not restricted to the architectural world and its agents, nor could it be considered the sole responsibility of a single person, be it an architect. On the contrary, it was thought of as a collective task in which many different instances were involved. Pioneer institutions like the Tourism Board, the Royal Academy of Geography or the sports and excursions societies then arising, but also some older ones like the agricultural colonization took similar directions. These often promoted studies on the culture, the vernacular and social and cultural uses for the benefit of their own strategies (Diez-Pastor, 2010). In fact, the Tourism Board organised a whole series of lectures by

Miguel de los Santos, Agustín Aguirre, Casto Fernández Shaw, Eduardo Figueroa, Carlos Arniches, Martín Domínguez. Carlos Flores compiled a longer list in 1967.

⁷ As an example, García Mercadal's first article in *Arquitectura* was published in 1920. The author signed it 'F. García Mercadal. Student of the School of Architecture'. F. García Mercadal, 1920. from then on, and throughout the coming years, he contributed two articles on Mediterranean architecture (García Mercadal, 1926; and García Mercadal, 1927) among many others in which he touched these topics – i.e. García Mercadal, 1931; and García Mercadal, 1998.

relevant figures and intellectuals on the topic 'Spain's Beauties',⁸ where the essence of our art was explained region by region, always starting from the vernacular. Social uses and traditions, anthropological manifestations of every kind, 'natural beauties' and landscapes were all accounted for with the ethnographer's eye. After decades of intensive work, all kinds of selections from that fabulous field-work took place in order to plan modern new strategies – from the national highway plan to the tourism strategy or the heritage catalogues.

While the critical architectural current showed its eagerness to study the material found for the sake of a better future, the non-critical trend proved not to have understood it or its purpose, thus remaining unable to do much more than, at best, copy or appropriate those ways, falling into absurd topics nearing the 'aboriginal' (Mumford, 1924). Another one of Torres Balbás' modern pupils, Juan de Zavala (1945) called them 'folkloric' for the first time in Spain. Lefaivre and Tzonis (2003, 18-20) also use the term borrowed from Mumford (1924), though in a refined version. However, in Spain that trend represented a kind opposed to *Volkgeist* in that it did by no means represent individualistic, nor excluding novelties or other such principles, nor did it criticize refinement or high-class culture. The process here was top-down and therefore it did not compare to *Heimat* either. Hence the Spanish avant-garde, no matter how 'Germanophile' it might appear in some aspects, marked its territory with respect to Ditt's definition of 'avant-garde culture' (Storm 2003: 254). It was rather architectural than ideological. The architectural avant-garde in Spain was more of an experiment or an intellectual rebellion of the cultivated against the preceding generations than a popular rebellion against the powerful – as was the case in central Europe. Therefore, all it bore from the vernacular tradition was not aimed at producing a division in Rapoport's (1969, 1-2) terms, between 'high style architecture' producing 'buildings of the grand design tradition', and 'vernacular (or folk, or popular) architecture' responsible of 'unimportant buildings'. On the contrary, the Spanish critical concept of architecture was integrative and inclusive rather than exclusive. It defended that everything had

⁸ Díez-Pastor (2010), 2-4.

its place and deserved great respect, yet architects had big lessons to learn from those traditions.

Respect for the vernacular not only showed in the writings of those architects, but also in their works and in the way the new modernist trends were regarded. As part of their own culture, it ran through the veins of the Spanish G25 avant-garde architects as it had occurred to the critical generations preceding them, in the form of '*architectural koinè*'. The works of their predecessors had started the line – Salvador, Zuazo, Anasagasti and Fernández Balbuena being among the most influential. However, despite some sounding attempts, it was never studied in a systematic way. Those architects of the 1920's and 1930's seemed to think that their knowing every feature and aspect of it, their showing real interest for all it represented as much as for its materialization should suffice. Unfortunately, as they did in many other relevant aspects they did never carry out a deep study. Hence they failed to materialize their real consideration for the vernacular in its own merits.

Later generations of architects along the 20th century, particularly those of the least critical, pro-modern trends bred during the Francoist period (1939-1975) – often eager to start a revolt against the Spanish topics imposed from 'above' – read the G25 masters' attitude distinctively often misinterpreting as much their works as their intentions. The reactions were varied. A few, courageous ones openly defended their elders' fight and conquests whereas those more eager to take a notorious lead would unfairly condemn them as 'folklorists' in an attitude lacking criticism, as Zavala (1941) masterly explained. Again, the critical ones were to continue enlarging the principles that had fed the best of Spanish practice, with an eye on the vernacular as the representation of their culture and their society. The whole concept could be neatly summarized in the anecdote Fernando Chueca Goitia explained when asked about one of his masters, and great friend of the G25 preceding him. When asked about Carlos Arcniches' concept of architecture, he said:

'Once we were taking a walk up the hill in El Escorial when, all of a sudden, Carlos saw a little house between the trees. It looked like a

refined version of a cottage of the kind country men build to keep their tools, or for temporary shelter. Looking at it he exclaimed: "Look, Fernando, take a look up there! Do you see that little house? It is marvellous, isn't it? It does not look as if planned by an architect!" And he said it with such an air of satisfaction!⁹

The architectural concept and the study of the vernacular

Torres Balbás' work produced numberless articles and books on the origins of urban planning and architecture, as much as on the particular characteristics they took in the different areas of the country. Not just its history, but also its building techniques, the materials used and the compositional evolution and types were subject to his scrutiny. It was hence of little surprise that those studies of his were followed by his first authored pioneer studies on the Spanish vernacular. The first of these was *La vivienda popular en España* (1934), though amongst his most sounding ones were the posthumous *Ciudades hispano-musulmanas* (1971) and the compilations *Crónica de la España musulmana* (1981) and *Obra dispersa – Al-Andalus* (1981). All of these contain exhaustive descriptions and analysis of the heritage he found, but also of the reasons why cities, dwellings, houses and constructions of every kind materialized the way they did in Spain, and even throughout the Iberian peninsula. As he often said (Torres Balbás, 1918a), things are the way we see them for reasons we architects must be able to know and explain.

His influence later gave way to articles and studies by Torres Balbás' G25 pupils, as much to focus on certain aspects of the vernacular as to connect it with their modern times – the most remarkable and sounding disciple being García Mercadal's. Both master and pupil proved central to explain the Spain's early modernist derive through the interesting debate they held which notwithstanding its depth was never made explicit. In fact, it was Torres Balbás who fiercely criticised as 'alien' the modern trends and writings of some architects later to

⁹ Anecdote explained by Fernando Chueca Goitia when interviewed by the author on 9th May, 2000.

become 'modernist masters', whereas García Mercadal opened their curiosity for our vernacular with tours across Spain – the most sounding example being Le Corbusier's.¹⁰ García Mercadal's feelings towards 'architectural *koinè*', particularly its social and cultural connections with the new times, became evident even in his studies and writings on the then contemporary European trends (García Mercadal, 1998). In spite of the natural differences, his were representative of those of most of his colleagues. García Mercadal becoming a sort of speaker of the G25, his comments on foreign architecture were punctually reported to *Arquitectura* during the four years' grant he enjoyed at the Academy of Spain in Rome. A few years later Josep Lluís Sert joined him from a less critical stance,¹¹ though much more argumentative and revolutionary, strictly focused towards the Catalan vernacular. Both García Mercadal and Sert had dissented from Torres Balbás' criticism. However, in spite of their opposition the master's view determined the evolution of Spanish critical modernist architecture. Sert had adopted an almost non-critical attitude of submission in the terms defined by Lefaivre and Tzonis (2003, 18-20) when he opened his arms to the slogans launched by the then modernist gurus. His articles on the vernacular published in *A.C.*, the journal founded by him and his Catalan modernist mates, so indicate.

Chueca Goitia, a student of the next generation of Torres Balbás' school continued the mastery studying the origins of Spanish architecture throughout the 1950's and 40's, but also from his inherited chair. He did not accomplish the study of the vernacular, yet his studies on Spanish heritage set the frame for later systematic catalogues of the vernacular. As his master had done before, Chueca toured Spain with his students who were charged with the study of one historic building each. Their work included descriptions and drawings that were to constitute relevant parts of his *History of Spanish Architecture* (vol. I, 1964). However, it was his critical study of Spanish architectural peculiarities, *Invariantes castizos de la arquitectura española* (1981) that earned him a place

¹⁰ Díez-Pastor, 2012. A new book awaits publication on this topic.

¹¹ Lefaivre and Tzonis, 2003, 18-20. The authors call non critical not just the purest regionalist and folkloric trends of architecture which generally oppose modernisation of any kind, but also apply the term to the blind acceptance of modern terms regardless of the impositions it might bring along.

within the critical researchers and theorists. For the first time his master's theoretical schemes were continued in a critical study of the architectural evolution that had taken place in Spain throughout history – from the vernacular to the classical, within the Western context. Chueca's single volume accomplished the task to place architecture in context with the whole 'architectural koinè'. Other followers of Torres Balbás', like Carlos de Miguel and José Luis Fernández del Amo became remarkably critic, yet promoting and respecting the vernacular in Torres Balbás' terms. Their works for the National Office for Colonization, to which most of the sounding figures of their generation contributed (Monclús and Oyón, 1988) provided clear examples of the vernacular concept as borne by the modernist architects' generation – first bred after the war. Meanwhile Francoist *folklorism* adopted the most topical (Zavala, 1941) vernacular for its identity, massively imposing it through censorship. The times of non critical trends had arrived for those who had remained on the border of the G25.

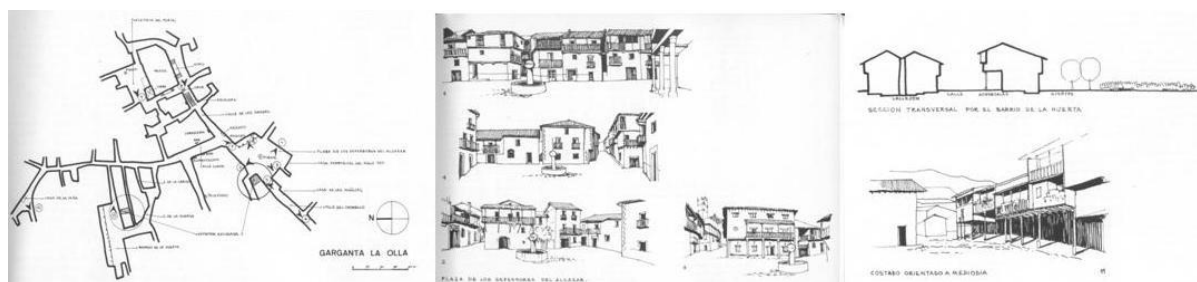


Figure 1. Garganta La Olla. Three of the eleven pages devoted to the village, from Chanes and Vicente's research on 'La Vera'. Photograph by the author.

Impositions produced mixed sentiments towards the vernacular, rejection being one of the strongest reactions. While the youngest ones opposed it even defying the system unless serious criticism went along with it, the pre-war non-critical architects remaining sought in the vernacular a method to regain the leadership they had enjoyed after the Civil War (Díez-Pastor, 2005). The reconstruction of the country, the lack of means and the professional deactivation of the most brilliant professionals for ideological reasons had cleared the way after 1939 to the second and third lines of architects, massive promoters of the non-critical

folklorist trends.¹² Hence, these same reasons were generally understood as justifying the imposition of *folklorism*.

In spite of the benefices their non-criticism had produced them, those architects never thought of carrying a systematic or intensive study of the vernacular. They sufficed to use it for their own benefit and purposes, as a creative source. Hence a complete catalogue did not appear until 1974, when the lack of other orientations in the theoretical field proved the impossibility of bringing other themes forward. Luis Martínez-Feduchi's *Itinerarios de arquitectura popular española* then appeared as the first volume of a series of five. It was a big study, though it was lacking in intensity, exhaustiveness and system. It produced plans and drawings of the buildings and villages, that was true, but not of all of them, not always for the same identifiable purposes, and at times these were substituted by photographs. The methods used to select what was reported, and exclude villages and buildings were not made explicit. Only a poor justification that to have reported all of them would have been too much seemed to be enough to act at will: the criteria were diffuse. Even the general explanations at the beginning of each chapter/region were not enough to clarify purposes or focus. Although the study resented big influence from Torres Balbás' (1934) work and even praised it (Feduchi, 1974, 6 and 10-12), as well as it showed knowledge of Chueca Goitia's (1981) critical study, Feduchi's five volumes lack a method as clear as theirs, one always systematic and explicit with the criteria adopted. However, it was a study of certain Spanish places, and it also provided an extensive dictionary of construction methods, techniques and materials nowadays almost completely lost. Yet, Torres Balbás' and Chueca Goitia's were not the only influences, nor probably the biggest. Feduchi's five volumes, however, borrowed the structure and organisation of a much more concentrated study by two young and almost unknown Rafael Chanes and Ximena Vicente – *Arquitectura popular de 'La Vera' de Cáceres* (1973). Their intense and exhaustive work was the result of a serious, two-year research on the villages of 'La Vera', a picturesque area within one of Spain's poorest provinces. The authors' aims could be summarized in the intention to carry out a

¹² The process is known as 'Professional Depuration'. The case of the architects was studied in Díez-Pastor, 2005.

scientific research on the vernacular, avoiding any considerations of architecture as isolated from the world. The book divided the study into three parts, the first of which explained the theoretical frame and the history and evolution of the area selected. The second part was focused towards the ethnographic aspects and the social structures, whereas the third part was entirely devoted to the data collected and its analysis. The whole structure of the study is indeed scientific, their focus, intentions and objectives profusely explained, the method made clear, the analysis is serious and methodological, the data clearly explained and masterly drawn by the authors – there were no photographs (Figure 1) – and the conclusions speak for the process evolution, the true findings and the lack of previous assumptions by the authors. Finally, a series of annexes explain the peculiarities of the climatic conditions, the nature and the environment hence closing the circle of a study sensibly focused and carried out. One by one, they drew plans of the villages and houses, showing not just certain curious features but also how did they assembled organizing squares and streets. These drawings systematically illustrated the social, cultural, topographical or climatic explanations given by the authors and the studies completing their work. On-site drawings were presented in combination with urban plans and other data. Its later influence showed in the fact that 'La Vera' started to be known, thus having undergone a sensible preservation strategy with great benefit for an area has revived as a consequence, turning into the richest area in Extremadura.

However, a few aspects require further attention, as the undeniable keys to the sudden interest towards the vernacular in Spain. The authors explain it clearly when it come to establish their theoretical frame: it all started with Rudofsky's 1964 exhibition on vernacular architecture in the MoMA. They do not cite Rapoport (1964) at any point despite of which most of his concepts can be read in Chanes and Vicente's (1973) study. Rapoport's (1964, 2) idea of 'cultivated architecture' as opposed to an 'illiterate architecture', the idea that the world had turned its back on the architecture produced by non-architects, or the connection between vernacular architecture and the social need to express their feelings are all features borrowed from his work. Interestingly, among their few,

selected references they do cite a study that has had much bigger influence in Spain that it has been admitted: the study '*Arquitectura Popular en Portugal*, edición del Sindicato Nacional de Arquitectos' (Chanes and Vicente, 1973, 267) – that is, the book *Popular Architecture in Portugal* (1961) derived from the *Inquérito à Arquitectura Regional Portuguesa* promoted by the Architects' Union in Portugal. Among other relevant influences were García Mercadal's (1930) *La casa popular en España*, and as could be expected from a sensitive research, Torres Balbás' (1934) *La vivienda popular en España*. Among the then young architects, they referred several of José Luis Fernández del Amo's articles and works by theorists like Zevi, Rasmussen and Lynch.



Figure 2. Garganta La Olla. The only two pages in Feduchi's fifth volume dedicated to this village. Photograph by the author.

Feduchi, then director of the ETSAM, took a similar structure and pace in his book. However, its commercial presentation with each volume in a different, single colour, and the profusion of photographs (Figure 2) let it sell well and gain much greater repercussion. As Torres Balbás and Chueca Goitia had done, he travelled with his students from whose work he profited to build his five volume publication. Distinctly from the latter, however, Feduchi did not acknowledge

their specific contributions in the form of the drawings published. A general note at the beginning sufficed for each volume. The list of references, on the other hand kept growing volume after volume, and having started with only eight in the first volume the last two had grown to eighty and forty each. However, as the first volume issued established the frame of the whole work, we will centre our comments in this one, particularly the theoretical frame. After stating that Torres Balbás' (1934) will be the guide he will use, Feduchi clearly refers to Rudofsky (1964) and Rapoport (1969). What is most surprising of the references used in some one whose age should have placed him in the core of the G25 is his acceptance of their thesis. Hence Feduchi (1973, I, 8-12) states that there is in fact a division between a 'high style architecture' and an architecture of the 'folk tradition'; he believes that the vernacular has long been neglected; and yet he explains how architects have disregarded 'the desires, dreams and passions of a people' (Rapoport, 1969, 2) by turning their back to the environment.

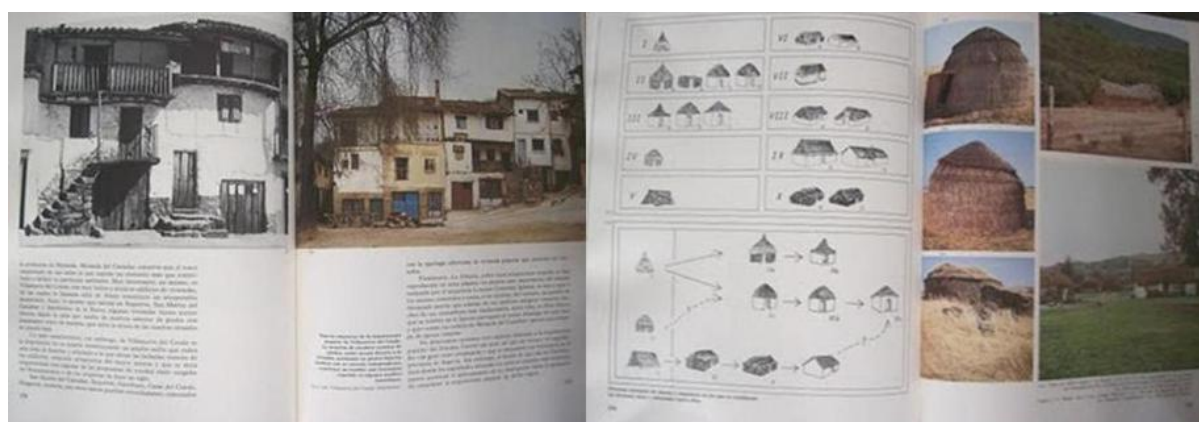


Figure 3. Appearance of the pages in Flores' five volume work. Diagrams, drawings and photographs are much bigger and have an explanatory purpose.

After Franco's death, in 1978, another relevant five volume work appeared by Carlos Flores, *Arquitectura popular en España*. Flores, the founder of the critical journal *Hogar y Arquitectura*, rivalled with Feduchi as the most intensive and extensive works on vernacular architecture. Feduchi's maturity gave great contrast to Flores' youth, which undoubtedly connected better with the times.

While the former was sought to represent the 'old' line, the latter aimed to be taken for the freer, open one of times to come after Franco's death. However, both were qualitatively different. Feduchi's was technically oriented. It aimed to explain constructive habits, region by region though carefully selecting the data, whereas his rival's (Flores, 1973) focused on certain relevant features he explained within his theoretical discourse. While Feduchi included some drawings, hundreds of photographs and a certain analysis of the constructive systems, whereas Flores' theoretically oriented, mainly criticised and at times photographed the broad areas studied in a series of volumes 'to read'. (Figure 3) While the former was a technical study, the latter was anthropologically focused, hence open to a wider audience which made it more popular.

Interestingly, Flores' study aimed at concentrating most of the previous sounding studies on the matter - Torres Balbás' (1934) and García Mercadal's (1930) included. However, the weight of Chanes and Vicente's (1973) research, and the fact that they had stated their knowledge of the Portuguese *Inquérito...* were too big and relevant a clue to let them escape. Apparently, Flores' work looked similar to Feduchi's with the difference that the former had mostly included colour photographs and combined drawings and photographs of a bigger size with the explanatory texts. (Figure 4) Flores' scheme was to explain the reasons of the existence of the vernacular, its meanings and its techniques and its differences with other kinds of architecture. These should return to vernacular architecture the value that it should have never lost. In the end, the vernacular was valuable per se, regardless of the value conferred to it by 'high style' architects - paraphrasing Rapoport's (1969, 2). No other was the spirit of the *Inquérito...* Flores was not very explicit on his sources, but this one is evident. Moreover, the time and effort he takes in build a scheme against Rapoport's and Rudofky's theories is precisely the main interest of his work.

Flores' followers were, however, familiar with Rapoport's theories, so the governmental actions towards the vernacular were highly conditioned by them. Under Manuel Casas' office as General Director of Architecture and Urban Planning a special issue of the Ministry journal *MOPU* appeared, entirely devoted to the vernacular, under the form of a guide. In his foreword Casas, rather than

stating what his actions were, made a bit of a manifesto in Rapoport's terms. Carlos Flores was in charge of the main study with an article entitled 'The way we used to be'. It was 1986 and the decline of the Spanish vernacular had gained full speed by then.

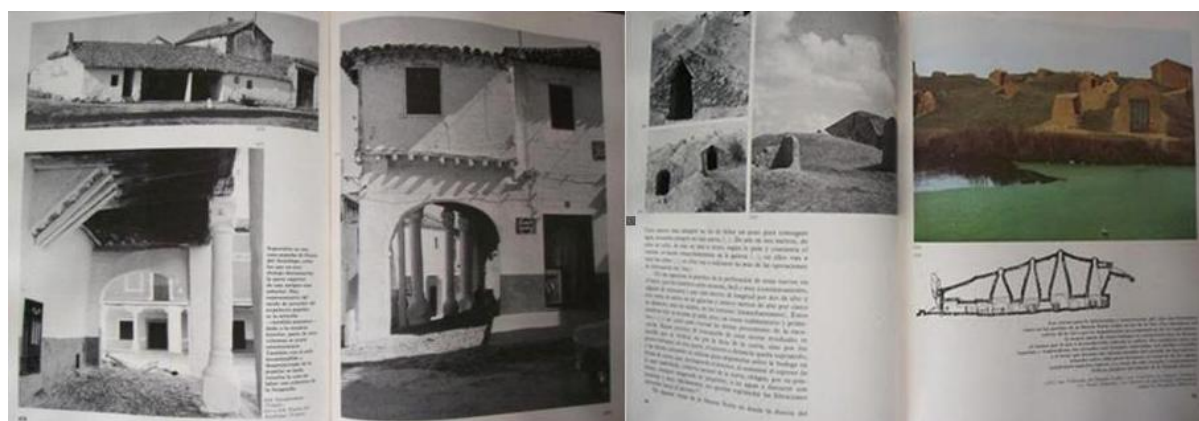


Figure 4. The aspect of the pages in Flores' work. The text is combined with the drawings and photographs all of which have an explanatory purpose.

References

- 'Azorín'. (1922). Un jardín castellano. *Arquitectura*, no39.
- Casas, M. (1986). Más allá de lo pintoresco. *M.O.P.U.*, nº 334.
- Chanes, R. and Vicente, X. (1973). *Arquitectura popular de 'La Vera' de Cáceres*. Madrid: Ministerio de la Vivienda.
- Chueca Goitia, F. (1964). *Historia de la arquitectura española*. Vol. I, Madrid: Dossat.
- Chueca Goitia, F. (1981). *Invariantes castizos de la arquitectura española*. Madrid: Dossat.
- Diez-Pastor, C. (2010). 'Albergues de carretera' (Highway inns): a key step in the evolution of Spanish tourism and modernist architecture. *Journal of Tourism History*, 2: 1, 1 — 22.
- Diez-Pastor, C. (2012). Architectural Koinè and Trans-National Spanish Architecture. In R. Queck and D. Deane (eds.), *Nationalism and Architecture*. London: Ashgate.
- Diez-Pastor, C. (2005). *Carlos Arniches and Martin Dominguez, arquitectos de la Generación del 25*. Madrid: Mairera.

Diez-Pastor, C. (2008). Transits into Landscape. *Cultural Landscape-EURAU '08*. Madrid: Universidad Politécnica de Madrid, 1-7.

Feduchi, L. (1974). *Itinerarios de arquitectura popular española*. 5 volumes. Madrid: Herman Blume.

Flores, C. (1978). *Arquitectura popular en España*. Madrid: Aguilar.

Flores, C. (1986). El carácter de la arquitectura popular. Tal como éramos. [The character of popular architecture. The way we used to be] *M.O.P.U.*, nº 334.

García Mercadal, F. (1926). Arquitectura mediterránea (I) [Mediterranean architecture]. *Arquitectura*, nº 85, 192-197.

García Mercadal, F. (1927). Arquitectura mediterránea (II) [Mediterranean architecture]. *Arquitectura*, nº 97, 190-193.

García Mercadal, F. (1931). Casas baratas en Sevilla [Cheap houses in Seville]. *Arquitectura*, nº 142, 48-50.

García Mercadal, F. (1930). *La casa popular en España* [The popular house in Spain]. Madrid: Espasa-Calpe.

García Mercadal, F. (1998). *La vivienda en Europa y otras cuestiones. 1926* [The house in Europe and other questions]. Zaragoza: Institución "Fernando El Católico" - CSIC.

García Mercadal, F. (1920). Ruskin y la policromía de los edificios [Ruskin and colorful buildings]. *Arquitectura*, nº 26, 163-165.

Gómez Moreno, M. (1928). Dos iglesias románicas en Benavente. [Two romanesque churches in Benavente]. *Arquitectura*, no 110.

Hauser, A. (1953). *Sozialgesichte der Kunst und Literatur*. Munich: Beck. [English version: (1968) *Social History of Art*. London: Routledge; Spanish version: (1964) *Historia social de la literatura y el arte*, Madrid: Guadarrama. The latter is the version here cited.]

Krause, K. C. F. (1883). *Compendio de Estética* [Compendium of Aesthetics]. Madrid: V. Suárez. [Original German version: (1811) *Das Urbild der Menschheit*.]

Lacasa, I. (1930). Arquitectura impopular [Impopular architecture]. *Arquitectura*, no 129.

Lefaivre, L. and Tzonis, A. (2003). *Critical Regionalism. Architecture and Identity in a Globalized World*. London: Prestel.

Lefebvre, H. (1974). *La production de l'espace* [The production of space]. Paris: Anthropos.

Monclús, F. J and Oyón, J. L. (1988). *Historia y evolución de la colonización agraria en España* [History and evolution of the agrarian colonization in Spain]. 4 volumes. Madrid: MAPA-MAP-MOPU.

Moreno Villa, J. (1931a). Sobre arquitectura popular [On popular architecture]. *Arquitectura*, no 146.

- Moreno Villa, J. (1931a). Sobre arquitectura extremeña [On the architecture of Extremadura]. *Arquitectura*, no 151.
- Moreno Villa, J. (1932). Jardines malagueños [Malaga's gardens]. *Arquitectura*, no 159.
- Mumford, L. (1924). *Sticks and Stones*. New York: Dover.
- Ortega y Gasset, J. (1923). El monasterio [The monastery]. *Arquitectura*, no 1923.
- Ortega y Gasset, J. (1923). El Barroco y el barroquismo [Baroque and 'baroqueism']. *Arquitectura*, no 23, 1920.
- Pérez de Ayala, R. (1920). Las Viejas rúas y las calles modernas [The old walks and the modern streets]. *Arquitectura*, no 30.
- Rapoport, A. (1969). *House, Form and Culture*. Englewood Cliffs-N.J.: Prentice Hall.
- Salvador, A. (1929). Sobre la vivienda mínima [On the minimum size dwelling]. *Arquitectura*, no 129.
- Storm, E. (2003). Regionalism in History 1890-1945: The cultural approach. *European History Quarterly*, Vol. 33(2), 251-265.
- Tormo, E. (1930). Madrid artístico y monumental [Artistic and monumental Madrid]. *Arquitectura*, nos 133 and 134.
- Torres Balbás, L. (1971). *Ciudades hispano-musulmanas* [Hispanic-muslim Cities]. 2 volumes Madrid: Ministerio de Asuntos Exteriores-Instituto Hispano-árabe de Cultura.
- Torres Balbás, L. (1981). *Crónica de la España musulmana* [Chronicle of Muslim Spain]. 12 volumes. Madrid: Instituto de España.
- Torres Balbás, L. (1918b). El tradicionalismo en la arquitectura española [Traditionalism in Spanish architecture]. *Arquitectura*, no 6, October.
- Torres Balbás, L. (1932). Las nuevas formas de la arquitectura [The new forms in architecture]. *Arquitectura*, no 13.
- Torres Balbás, L. (1932). Las villas castellanas [Castilian 'villas']. *Arquitectura*, no 57.
- Torres Balbás, L. (1934) *La vivienda popular en España* [Popular dwellings in Spain]. *Folklore y costumbres de España* [Folklore and ways of Spain]. Volume 3. Barcelona: Ed. Alberto Martín.
- Torres Balbás, L. (1918a). Mientras labran los sillares [While stones are cut]. *Arquitectura*, no 2.
- Torres Balbás, L. (1971). *Obra dispersa – Al-Andalus* [Disperse Works – Al Andalus]. 3 volumes. Madrid: Instituto de España.
- Torres Balbás, L. (1996). *Sobre monumentos y otros escritos* [On Monuments and Other Writings]. Madrid: COAM.
- Tzonis, A. and Lefaivre, L. (1986) *Classical Architecture. The Poetics of Order*. Cambridge-Mass.: MIT Press.
- Zavala, J. (1941). *La arquitectura* [Architecture]. Madrid: Pegaso.

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ISSUES ON ARCHITECTURAL SURVEYS

'The Inquérito à Arquitectura Regional Portuguesa'

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Abstract

A number of challenges facing Surveys on Regional Architecture are examined. Several of these relate to the multidisciplinary character that needs to be assured by such surveys and the tendency for relevant disciplines as architecture, geography and sociology to be poorly connected. The issues discussed, a number of which are prominent more widely within the social sciences, arts and humanities; include poor communication between different disciplines; underrepresentation of methodological frameworks; the tendency for studies to neglect experiences of previous surveys from different disciplines; and the poor relationship between research and practice.

By exposing a comparative analysis of five examples of international morphological methodological approaches, explored as tools of regional architectural surveys, this presentation aims to contribute to the success of a leading attempt to meet the challenges of a review on the 'Inquérito à Arquitectura Regional em Portugal'

Finally, this presentation aims to examine the contributions of the urban and architectural morphological analyses as proposed in particular examples of vernacular architecture surveys as explored in Germany, France, Italy, England, and Greece in order to evaluate and counterpart the methodological background that has contributed to shape the Portuguese Survey on Vernacular Architecture. With that we aim to expose i) the significance of a morphological framework for a an architectural survey; ii) the Portuguese tradition on architectural surveys prior to the 'Popular Architecture in Portugal'; iii) the significance of the divulgation of such kind of surveys to the contemporary century architecture and architectural thought; iv) the contribution of the divulgation of the surveys, but also of the conclusions of the methodological approaches applied in such work; in order to v) better inform technicians but also the population in general; and therefore vi) contribute to a real policy of cultural program for future generations.

Keywords: Architectural Surveys, Urban Morphology, Portugal, Greece, Twentieth Century

Introduction

This paper aims to contribute to the success of a leading attempt to review the '*Inquérito à Arquitectura Regional em Portugal*'. It calls for the integration of morphological methodological frameworks on Architectural Surveys on Traditional Architecture or Urban Settlements, but also the contribution of such frameworks to assess urban form while prompting further technical guidance or inform the public in general.

This paper is organised in three parts. First, it compares three international examples of approaching the study of urban form, or 'urban morphology' as more commonly identified, while revealing the (i) significance of the morphological methodological frameworks to the study of urban settlement forms on architectural surveys, and (ii) their pertinence to deliver communication between the different disciplines.

Secondly, it exhibits a comparative analysis of two European experiences of Surveys on Vernacular Architecture, in Greece and in Portugal, during 1950's and 1960'. Their similarities and differences, but also their former experience on architectural surveys and morphological methodological practices will be identified.

Finally, this paper confronts the results of a comparative analysis provided by the Greek and Portuguese practice on Surveys on Vernacular Architecture, while responding to the six main points exposed in the last paragraph of the abstract.

Urban Morphology

The study of urban form, or 'urban morphology', was internationally recognized as a scientific area of knowledge, through the foundation of ISUF, the International Seminar on Urban Form, in 1994. It was at ISUF's first meeting, in Switzerland, in presence of 23 urban morphologists (mainly architects and geographers) from five countries, that attention was focused on three main approaches: the British, the French and the Italian (Moudon, 1997).

Corresponded respectively to three Schools of Urban Morphology: (i) The M. R. G. Conzen School; (ii) The Versailles School, with J. Castex, P. Panerai and J.C. Depaule whom constituted its original core; and (iii) the Saverio Muratori School.

Moudon (1994) describes the legacies of the three identified Schools of Urban Morphology as:

The most important contribution of the Muratorian School lies in its attempt to build a theory of design based on traditional processes of city building. It reads city form as a historic settlement process, a territorial conquest to control space with materials and building techniques. (...) It recognizes the socio-political forces to shape the design and production of cities and act as a framework within which architects and planners must work (Moudon, 1994, p. 296).

Conzen's methodological contribution lies in the strength of the town-plan analysis and definition of its elements and plan units. It confirms and clarifies the work of French and Italian typomorphologists. Their methods and findings being similar, they begin to define a systematic way to describe the built landscape (Moudon, 1994, p.298).

The Versailles School of Architecture favours a separate discipline for studying the built landscape that serves to evaluate design theory. The novel aspect of this stands forces the School to discuss methods and philosophy in a multidisciplinary context, which neither the Conzenean nor the Muratori Schools had to do. (...)Typological and morphological investigations are fully integrated into the growing discourse on the built landscape and its design (Moudon, 1994, p. 307).

In addition to the three identified Schools of urban morphology it is possible to verify an international recognition of these schools by other schools of thought on urban morphology. However, these schools of thought were never labelled as Schools of Urban Morphology¹.

¹ Despite the recognition of only three Schools of Urban morphology, the ISUF journal 'Urban Morphology' has already published several papers on the Study of Urban Form in several

The promotion of such field of knowledge occurred however since the first decades of twentieth century. According to Whitehand (1997) it was based on early manifestations of morphology as perceived by different disciplines and language areas, such as urban history, urban sociology, urban geography, architecture and planning.

These early manifestations of morphology, as describe by Whitehand (1997), were according to Marat-Mendes and Cabrita (2012) fundamental to the formation of an international common interest that aimed to study of urban form while: (i) investigating the territory and architecture based on geographic but also on a historic and contemporary compass; and (ii) its consequent acquainting of morphological frameworks to read the of urban form settlements in a systematic and scientific manner. Thus, providing a proactive approach for the study of urban form, whose results could inform professionals to take profit of such urban morphological analysis, including on surveys of architecture and urban settlements.

It is argued by this paper that the Portuguese geographer Orlando Ribeiro, through his investigations on the Portuguese Country (Ribeiro, 1945) has inspired an entire generation of Portuguese architects, urban historians and geographers, likewise M. R. G. Conzen, and S. Muratori have inspired an entire generation of followers². Yet, in Portugal, it was not produced a Portuguese

countries, which attest the interest of other nationalities to the study of urban form, or urban morphology, as a line of scientific thought. Such papers on of the Study of Urban Form in different countries include: Spain (Vilagrà Ibraç, 1998), France (Darin, 1998), United States (Conzen, 2001), Italy (Marzot, 2002), Germany (Hofmeister, 2004), Canada (Gilliland & Gauthier, 2006), Australia (Siksna, 2006), Ireland (Kealy & Simms; 2008), Sweden (Abarkan, 2009), Turkey (Kubat, 2010), Poland (Koter & Kulesza, 2010) and Portugal (Oliveira & Barbosa & Pinho, 2011).

² Orlando Ribeiro, a Portuguese geographer but also an historian, was well aware of the international reality regarding scientific surveys and methodological and theory practices in Geography. As for example developed in France, where he obtained his doctoral degree in the Sorbonne University. The scientific and systematic procedure that guided Ribeiro work contributed to renovate the Portuguese Geography Science. Although there are valid manifestations of architectural studies and also of urban analysis guided by scientific and systematic approaches, as those produced at the Architecture and Urbanism group at the National Laboratory of Civil Engineer, which was founded by Nuno Portas in 1962; it is not possible to identify in Portugal, the existence of a School of Portuguese Urban Morphology. A School that has been formed by an individual and his followers who's specific Morphological Methodological Framework have contributed to a well-recognised Portuguese Study of Urban Form, as for example the MRG Conzen, the Muratori and Versailles Schools. Nevertheless, it is possible to identify in Portugal, throughout history, many significant contributions to the study urban form, yet most of them

School of Urban Morphology, as the Conzen and Muratori Schools of Urban Morphology that are internationally recognized by their Schools legacies.

Portuguese professionals, including academics, architects, planners, landscape architects and geographers, circulated worldwide during the first decades of twentieth century, obtaining their specializations in England, France, Germany, Italy, United States, Switzerland or Sweden. Moreover, in the second half of the twentieth century, some Portuguese professionals had already contact: (i) the Muratori School, as Nuno Portas (2005); (ii) the laboratory on studies on urban form developed by Solà-Morales at the Universitat Polytechnica de Catalunya, in Barcelona, Spain, as Nuno Portas (Font, Corominas & Sábaté, 2005); (iii) the LUBFS³ Centre at Cambridge, UK, including Portas and Mário Krüger (1999); but also the studies on Urban morphology developed at the University of Lund, in Sweden, as geographer Jorge Gaspar (1977); and at the German University Friedrich-Whielmschool, where the landscape architect Francisco Caldeira Cabral obtained is diploma in 1940.

Greek Surveys on Traditional Architecture

In Greece, interest on the vernacular architecture did begin during the 1930s. The same happened with the other arts, whose aim was to rediscover the Greek national heritage background.

Urban Morphology included on surveys on traditional architecture has been practiced in Greece since, at least before the Second World War. Young architects under the supervision of Prof Dimitris Pikionis worked several documents, including elevations of houses from Northern Greece. It would be in 1950s, that Prof P. Michelis, at the National Technical University of Athens (NTUA) founded the Archives for Vernacular Architecture, which included students but also professors and researchers studies on Greek Traditional Architecture. In 1960, Prof. P. Michelis published a book with students' works,

apparently intuitive, without a scientific and systematic divulgation of their methodological approaches (Marat-Mendes & Cabrita, 2012).

³ LUBFS - Centre for Land Use and Built Form Studies, founded at the University of Cambridge.

'The Greek traditional house'. Another professor at the University of Thessaloniki, Moutsopoulos (1967, 1972), between 1960 and 1995 published similar studies for the area of Verria or the town of Kastoria.

The Archives for Vernacular Architecture from the NTUA constitutes an important and recognized fund regarding Greek Traditional Architecture. Founded on morphological methodological frameworks (Dimitsantou-Kremesi, 2008), it comprises a systematized compilation of students and staff work that can be reached by the public in general for further investigation.

The Greek Ministry of the Interior organized the first official Governmental Survey of the Greek Traditional Architecture in 1972-1974. According to this program, the Greek territory was divided in 6 parts: Northern Greece, Central Greece, Peloponnesus and Ionian Islands, Cyclades Islands, Dodecanese islands and Epirus. Several groups of architects and some historians have scanned all regions, villages and small towns, included in the Survey. They took photos and described the situation of each region. The result was a long list of urban settlements, selected according to their architectural image and, in some cases, the quality of their surrounding landscape, grouped in three categories (according to the well-known three degree of protection). Thus, 411 settlements and sites were listed - under protection – and for many of them there are special rules for the new buildings.

One of the groups involved in such program was called "Arcadia II". It integrated four people, three architects and one historian. Their object of analysis was the territory of Peloponnesus and the Ionian Islands, which included about 2719 settlements (small towns, villages, monasteries and sites) (Petronotis & all, 1972-74). From the selected traditional settlements, 527 were proposed for protection: (i) 100 in the first degree; (ii) 143 in the second degree; and finally (iii) 284 in the third degree.

The Ministry of Aegean ordered two similar research programs for the recognition of the architectural character of Aegean islands. The first, guided by the Department of Architectural Morphology, NTUA, started in 1997 and included 7 islands (Dimitsantou-Kremezi et al, 1997-1998). The second, included a wider

group of architects and other researchers of both the Department of Architectural Morphology, NTUA, and of the Architectural Department of the University of Ratras, and included a greater number of islands (Katzourakis, D. & all, 2000).

The scope and the methodology adopted in those two programs were similar. It comprised the identification of the elements and factors that have determined the structures and forms of the overall settlement composition and their general image. Attention was focused on a special issue: on the will to integrate new architectural creation in a traditional settlement characterized by morphological homogeneity. The methodology for such analysis was to (i) investigate in situ, in order to identify the individual character of the settlement as a whole, and (ii) to investigate the determining character of the urban elements: structures, dominant forms, the relation between open and closed space, etc (Dimitsantou-Kremesi, 2008).

The above mentioned research programs outcomes contributed to declare from a total of 1215 settlements, (i) 263 under protection and (ii) 51 subject to special rules concerning the construction of buildings and the protection of landscape.

Another research program, conducted in 1995, and coordinated by C. Dimitsantou-Kremesi, concerned an architectural survey of Gortynia (Arcadia - Peloponnesus) (Konstantinidou et al, 2002). In addition to the above, similar studies were conducted especially by the Ministry of Culture to other parts of the country.

Currently, since 2011, a survey is being launched, focusing on all Greek regions. Its main scope is to establish special rules for construction for each territory that has its own architectural character. The Ministry gave patterns to ensure the integration of new buildings in the special built environment.



Figure 1. Hermioni, Greece. Example of an urban settlement studied at the NTUA Department of Architectural Morphology (picture by Catherine Dimitsantou-Kremesi).



Figure 2. Kithira-arodianika, 1973. Another case study in Greece (picture by Catherine Dimitsantou-Kremesi).

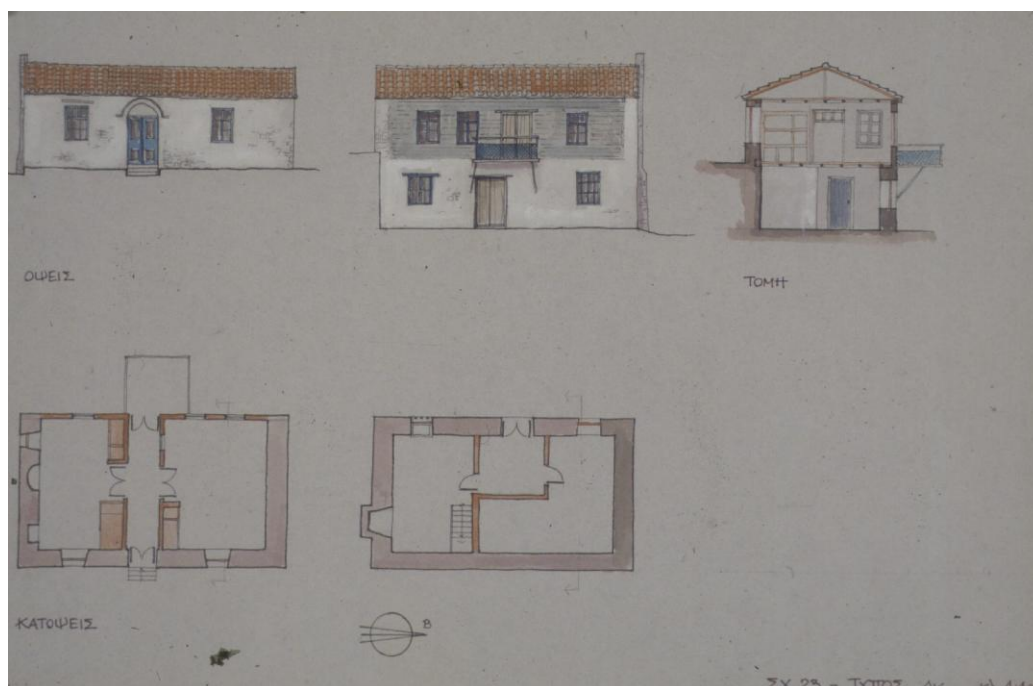


Figure 3. Example of a NTUA Student's sketches on Traditional Architecture while adopting a morphological analysis framework (source: NTUA Archives for Vernacular Architecture).

Portuguese Surveys on Traditional Architecture

The Portuguese interest on Vernacular Architecture started during the 1930s. That interest was also shared by disciplines as history and geography.

The idea to recognize a Portuguese National identity, later associated to an idea of 'Portuguese House', as introduced by dictator Salazar, would be contested by several architects, during 1940s. Keil do Amaral (1947) contested such idea of a Portuguese House and requested for a serious study of the Portuguese Regional Architecture. In 1948, at the First National Congress of the Syndicate of Portuguese Architects, Keil do Amaral would designation its main theme as 'The Housing Problem' (Tostões, 2008).

Financed by the Portuguese state, supervised by the Ministry of Public Works, and conducted by the National Syndicate of Architects⁴, the Survey on

⁴ Francisco Keil do Amaral directed the works of the Survey. He was the leader of the Portuguese National Syndicate of Architects.

Vernacular Architecture was decreed by Law 40349, in 19th October 1955. A selection of its results was published in 1961 (Fernandes, 1980).

In Portugal, during 1940's, a preceding survey the '*Inquérito à Habitação Rural*' was promoted by the *Senado Universitário* of the *Instituto Superior de Agronomia* and also ordered by the Portuguese Government. Conducted by Professor L. Basto and published by the *Universidade Técnica de Lisboa*, with a first volume in 1943 and second one in 1947, it testifies a Portuguese example of Survey experience on traditional housing with contributions from a morphological analysis.

This Survey on Rural Housing, conducted by Economists and Agronomy Engineers, was inspired on German, Italian and English studies on Rural Economy. Respectively, by the works of (i) the 'Institut für Landbaupolitik' in Betriebslehre and the 'Institut für Konjunkturforschung'; (ii) the 'Istituto Nazionale di Economia Agraria'; and (iii) the 'Agricultural Economics Research Institute' in Oxford, the 'Agricultural Economics Department' in Reading, the Agricultural Economics Department of the University of Leeds, the Agricultural Economics Department of the University of Bristol and eleven other recognized research centers (Basto, 1943, p. v-vi).

This Survey aimed to study the problematic of the Portuguese Rural Housing, and divided Portugal in 12 regions, to analysis in detail each region. The Survey was planned to be published in three volumes: (i) Volume 1 included *Minho, Douro Litoral, Trás-os Montes* and *Alto Douro* regions; (ii) Volume 2 included *Beira Alta, Beira Baixa* and *Beira Litoral* regions; and (iii) the third volume, that was never published, would be dedicate to the *Ribatejo, Estremadura, Alto Alentejo, Baixo Alentejo* and *Algarve* provinces (Basto, 1943, p. xi).

This survey included valuable graphic and statistic information about: (i) the rural inhabitant's conditions of life, but also about (ii) the construction techniques and (iii) housing urban form, in a systematized manner.

In what concerns to Survey on Regional Architecture, produced in 1955, by the Syndicate of Portuguese Architects, this seems to have focused its main aim

exclusively at the architectural scientific area, neglecting the morphological methodological approach explored at the Survey on Rural House, or the integration of other scientific areas of knowledge.

Nevertheless the Survey on Regional Architecture represents a valuable source of Portuguese Popular Architecture, exhibiting a reality that was prompting to be vanished. Yet, this work reveals also a systematic procedure, while dividing the country in 6 zones: *Minho, Trás-os-Montes, Beiras, Estremadura, Alentejo* and *Algarve*⁵, and describing each zone and its respective popular architecture.

Even so, this Survey does not provide a scientific methodological approach while investigating its typologies and forms of evolution. Such investigation could have contributed to inform future architects and technicians on how to intervene in the rehabilitation of such urban structures, as proposed in the Greek Surveys.

While focusing in a territory within the vicinity of Lisbon, the 'Saloia' Region, recent research, developed at the Instituto Universitário de Lisboa ISCTE-IUL, has adopted a morphological approach, as proposed by the Muratori School, throughout Caniggia and Maffei (1995). This research aimed to analyze and evaluate the urban morphology of the Traditional 'Saloia' Region urban settlements. By focusing its analysis in the municipality of Cascais (Cabrita, 2009), such research has allowed to identify the typological features of the vernacular architecture of 'Saloia' Region house (Marat-Mendes & Cabrita 2008), but also of the overall character of the urban settlements and their disposition within the territory. Moreover, it also validated the morphological framework in a distinct territorial context from that originally proposed.

⁵ The six zones represent a greater concentration of realities when compared to the proposal of 12 regions proposed by the Survey on Rural Housing.



Figure 4. Traditional 'Salóia' Traditional Houses in Barcarena located in the environs of Lisbon, Portugal, 2009. An example of the popular architecture surveyed at the 'Inquérito à Arquitectura Regional Portuguesa'. This is an example of a preserved situation, but many other cases are almost destroyed. It is urgent a systematic and scientific analysis of the Traditional Architecture, in terms of morphological analysis (picture by Teresa Marat Mendes).

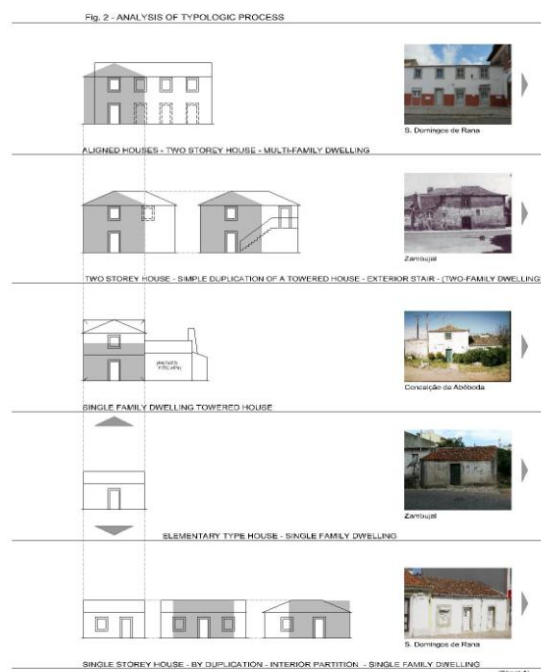


Figure 5. Typological Analysis of 'Saloia' Houses in the environs of Lisbon, while applying the morphological methodological approach as proposed by Gianfranco Caniggia of the Muratori School of Urban Morphology. It allows one to identify the elementary urban form but also its successive duplications, inherited from processes of change and adaptation (source: Marat Mendes & Cabrita, 2008).

Conclusions

This paper has concluded that a morphological framework on the study of urban form can be essential to surveys on traditional architecture.

The comparative analysis of the Greek and Portuguese experience on Traditional Architecture Surveys has revealed distinct methodological procedures and outputs.

In Greece, the application of a morphological framework inspired a generation of academics and students curricula; and gave confidence to governmental authorities to contract Universities to conduct Greek Surveys on traditional architecture.

In Portugal, the absence of a School of Urban Morphology inhibited the articulation of distinct scientific areas, such as geography and architecture, while failing to apply possible common methodological frameworks and conceptual thoughts.

In Greece the Faculties of Architecture conducted the Surveys on Traditional Architecture, while in Portugal this work was carried by the Portuguese Architects association, separately from the academia.

The separation of the Portuguese future professionals (students) from the Survey work inhibited a pedagogic dimension, which could have offered a methodological framework for future generations of architects, and form a line of thought on urban morphology.

Finally, Surveys need to be divulgated, likewise their methodological frameworks. It would be recommended to a future revision of the Portuguese Survey on Traditional Architecture to enquire about its methodological frameworks in order to: (i) identify it; (ii) divulgate it; and (iii) inform technicians and the public in general, to better understand and acknowledge the Portuguese territory and its traditional architecture. The systematization of such contribution would also benefit a real policy of cultural program to inform future generations throughout academic and pedagogic curricula.

References

Abarkan, A. (2009). The study of urban form in Sweden, *Urban Morphology*, 13(2), p. 121-127.

Amaral, F. P. K. (1947). Uma iniciativa necessária. *Arquitectura: Revista de Arte e Construção*. Lisboa, Ano XX, 2ª série, nº 14 (Abril, 1947), p.12-13.

BASTO, E. A. L., BARROS, H. (1943). *Inquérito à habitação rural*, 1.º volume, Lisboa: Universidade Técnica de Lisboa.

Cabrita, M. A. (2009). *Território e Identidade: Aspectos morfológicos da construção do território e a Identidade Cultural Saloia no concelho de Cascais*. Unpublished PhD Thesis. Lisboa: Instituto Universitário de Lisboa ISCTE-IUL.

Conzen, M. P. (2001). The study of urban form in the United States, *Urban Morphology*, 5(1), p. 3-14.

Caniggia, G. & Maffei, G. L. (1995). *Tipologia de La Edificación: Estructura del Espacio Antropico*. Madrid: Celestes Ediciones.

Darin, M. (1998). The study of urban form in France, *Urban Morphology*, 2(2), p. 63-76.

Dimitsantou-Kremezi, C. (2008). Methodology for surveying and evaluating traditional housing historic settlements. In Babalis, D (Ed.) *Chronocity. The Scale of Sustainable Change. Heritage value and future opportunities and challenges*. Firenze: Alinea Editrice.

Dimitsantou-Kremezi, C., Apostolou-Filippa, M., Christides, B. (1998-1999). *Architectural Character of settlements in the islands of Limnos, Serifos, Sifnos, Folegandros, Antiparos, Sikinos and Kassos*. Athens: N.T.U.A, Ministry of Aegean.

[Fernandes, I. P. et al.] (1980). *Arquitectura Popular em Portugal*. Lisboa: Associação dos Arquitectos Portugueses (First edition from 1961).

Font, A., Corominas, M. & Sábate, J (2005). *Los Territorios del Urbanista*. Barcelona: Edicions UPC.

Gaspar, J. (1977). A Evolução da Morfologia Urbana na Suécia, *Finisterra*, XII(23), 56-76.

Gilliland, J. & Gauthier, P. (2006). The study of urban form in Canada, *Urban Morphology*, 10(1), p. 51-66.

Hofmeister, B. (2004). The study of urban form in Germany, *Urban Morphology*, 8(1), p. 3-12.

Katzourakis, D. Dimitsantou-Kremezi, C., Apostolou-Filippa, M., Daskalakis, K. (2000). Second program report for Aegean. NTUA, University of Patras, Ministry of Aegean 2000

Kealy, L. & Simms, A. (2008). The study of urban form in Ireland, *Urban Morphology*, 12(1), p. 37-45.

Konstantinidou, E., Dimitsantou-Kremezi, C. (1998-1999) *Architectura Character of settlements in Gortinia (Arcadia- Peloponnesus)*. Athens: N.T.U.A..

Koter, M. & Kulesza, M. (2010). The study of urban form in Poland, *Urban Morphology*, 14(2). P.111-120.

Kubat, A. S. (2010). The study of urban form in Turkey, *Urban Morphology*, 14(1), p. 31-48.

Kruger, M. (2005). *Leslie Martin e a Escola de Cambridge*. Porto: Edarq.

Marat-Mendes, T. & Cabrita, M. A. (2012). Urban Morphology in Portugal: a review. In Proceedings of *PNUM 2012 Morfologia Urbana nos Países Lusófonos*. Lisboa: PNUM, DINAMIA'CET-IUL, ISCTE-IUL.

Marat-Mendes, T. & Cabrita, M. A. (2008) The Morphological aspects of the construction of the territory: Urban Form vs. Cultural Identity in the county of Cascais, in *Proceedings of the 15th International Seminar on Urban Form - ISUF 2008: Landscape and Urban Form*, 21-23 November 2008, Artimino, Italy.

- Marzot, N. (2002). The study of urban form in Italy, *Urban Morphology*, 6(2), p.59-73.
- Moudon, A. V. (1994). Getting to know the built landscape: typomorphology. In Franck, K. A & Schneekloth, L. H., (Ed.), *Ordering Space: types in architecture and design* (p.289-311). New York: Van Nostrand Reinhold.
- Moudon, A. V. (1997). Urban Morphology as an emerging interdisciplinary field. *Urban Morphology*, 1(1), 3-10.
- Moutsopoulos, N.(1967). The popular architecture of Verria. Athens. Technical Society Publications.
- Oliveira, V., Barbosa, M., Pinho, P. (2011). The study of urban form in Portugal. *Urban Morphology*, 15(1), p.55-66.
- Portas, N., (2005). *Os Tempos das Formas. Vol.1 A cidade Feita e Refeita*. Guimarães: Departamento Autónomo de Arquitectura da Universidade do Minho.
- Petronotis, A., Dimitisantou-Kremezi, C., Kavaya, M., Galanaki, R. (1972-74). *Peloponnesus and South Ionian Islands. Listing and evaluation of their traditional settlements*. Athens: Ministry of Internal Affairs.
- Ribeiro, O. (1945). *Portugal, o Mediterrâneo e o Atlântico*. Coimbra: Coimbra Editora.
- Siksna, A. (2006). The study of urban form in Australia, *Urban Morphology*, 10(2), p. 89-100.
- [Tostões], A. (2008). 1º Congresso Nacional de Arquitectura. Maio/Junho 1948, promovido pelo sindicato nacional dos arquitectos com o patrocínio do governo. Relatório da Comissão Executiva. Teses. Conclusões e Votos do Congresso. Lisboa: Ordem dos Arquitectos.
- Villagrasa Ibarz, J. (1998). The study of urban form in Spain, *Urban Morphology*, 2(1), 35-44.
- Whitehand, J. W. R. (1997). Why Urban Morphology?. *Urban Morphology*, 1(1), 1-2.

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SIGNS OF THE "SURVEY" INFLUENCE IN THE CODA PROJECTS PRESENTED IN EBAP

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Abstract

The collection of documents archived at the Documentation Centre of the Faculty of Architecture of the University of Porto, concerning the Contests for Obtaining the Diploma of Architect (CODA) represents a very important image of the work of Porto architects as a result of the teaching in the School of Fine Arts of Porto (EBAP), being the moment of transition between academic training and the beginning of professional work. The analysis of the CODA presented in the 40s shows an evolution from the first nationalist projects to more hybrid proposals (hesitating between the use of traditional materials and modern languages) and, after 1948, a general trend displaying the influence of the 'International Style'. But as early as 1955, we can notice in the CODA the appearance of a new theoretical consciousness that clearly shows the influence of the 'Survey on Vernacular Architecture'.

The enthusiastic adherence to the modern movement after the 1948 Congress is justified by the reaction against censorship and the consciousness of the ideological misconceptions underlying Raul Lino's 'Doctrine of the Portuguese House'. However, the cooling of this enthusiasm showed a certain ideological vacuum, because the discourse that dominated the members of ODAM (Organization of Modern Architects) and ICAT (Cultural Initiatives of Art and Technique) was directly imported from an internationalist discourse that revealed inadequate to the realities of our country. The perception of this vacuum (and the will to fill this void) can justify the enthusiastic adoption of the methodology implicit in the 'Survey' (and in the early works of Fernando Távora) as a new paradigm, after 1955. But, likewise, this reference lost strength over the years, after the publication of 'Popular Architecture in Portugal' (in 1961), as it was becoming clear that the country portrayed there was disappearing and that the 'Survey' influenced languages were turning into a widespread style that no longer made sense as a reflection of contemporary Portuguese culture.

Keywords: Survey, Vernacular, CODA, EBAP

In Portugal, after the end of the Second World War, there was a paradigm shift in the public works; when Prime Minister Salazar loses two of his major architectural external references (Hitler and Mussolini), the conditions to the emergence of a critical position against the official languages of the fascist government begin to appear.

In 1945, in the weekly journal *Alêo* (and again, in 1947, in *Cadernos de Arquitectura*), a young student from EBAP named Fernando Távora published a text called '*The Problem of the Portuguese House*', which presented a devastating criticism of the nationalist ideas of Raul Lino. Távora claimed that the study of Portuguese architecture (classical and popular) was still undone, arguing that this study was vital and should be an '*element of the new architecture*'. Therefore, he believed that Portuguese architects should study the relationship of vernacular architecture with all the conditions that had created and developed it, whether they were '*conditions related with the Man*', or '*conditions related with the Land*'. Claiming that '*the vernacular house will give us great lessons because it is truer, more functional and less fanciful*' (Távora, 1945, p. 10), Távora stated the necessity of studying vernacular architecture two years before the appeal of Keil do Amaral (1947) in '*Uma iniciativa necessária*' (*A necessary initiative*) and ten years prior to the beginning of the field work of the '*Surveys on Vernacular Architecture*'.

The audacity and lucidity of this text, written by a 22-year-old student, clearly reveals the results of the teaching of Carlos Ramos in the School of Fine Arts of Porto (EBAP). The freedom and the acceptance of multiple languages and multiple ways of understanding the issues of traditionalism and contemporaneity that characterized EBAP after 1940 was vital in the emergence of a true modern consciousness in the students, which became evident in the first generations formed after his arrival. Távora wasn't the only example; in the mid-40s, one begins to notice the appearance of a group of architects that did not have a direct modern training, but had the conditions (information and freedom) to search it.

There was a clear difference between the characteristics of the so-called first modern generation (the generation of Cristino da Silva, Cassiano Branco, Rogério de Azevedo, Carlos Ramos and many others) and the features of their young disciples,¹ who were able to organize themselves in two associations that aspired to promote modern architecture: the ICAT (Cultural Initiatives of Art and Technique) was formed in Lisbon in 1946 and ODAM (Organization of Modern Architects) appeared in Porto in 1947. The members of these two organizations were the protagonists of the 1st National Congress of Architecture in 1948, the first major public confrontation between those who supported the stagnation of architectural languages and the young architects who demanded a change: it was the unexpected revolutionary tone of the theses presented by members of ODAM and ICAT that made this event an historic moment in Portuguese architectural history.

The overall work presented in the Contests for Obtaining the Diploma of Architect (CODA)² represents a very important testimony of the production of Porto architects as a result of the teaching in the EBAP, being the moment of transition between academic training and the beginning of professional work.

The analysis of the CODA presented in the 40s (but prior to 1948) shows an evolution from the first nationalist projects³ to more hybrid proposals, hesitating between the use of traditional materials (and techniques) and modern languages. Paradigmatic of the dilemma that disturbs Portuguese architects at this time is the CODA of Delfim Amorim (1947) '*A Minha Casa*' (My House), who presents two projects (with different languages) for the same program, showing his indecision between a modern design with vernacular roots (solution A) and a

¹ This difference is mainly in the conviction of their ideas and the coherence of their work, rather than in a critical judgment of foreign theoretical models, that the first generation cannot show due to their lack of information and the second cannot have, because of their excess of enthusiasm...

² This paper summarizes some of the conclusions from an analysis of 369 processes of CODA presented in EBAP between 1935 and 1979; this study was carried out at the Documentation Centre of Urban Planning and Architecture of the Faculty of Architecture of the University of Porto between October 2007 and December 2008, for the PhD thesis *The Choice of Oporto: contributions to update the idea of a School* (Fernandes, 2011).

³ In the CODA projects presented in the first half of the 40s, the nationalist trend can be divided into three groups with different languages: a monumental design influenced by the Fascist architecture of Italy and Germany, a urban nationalist design (influenced by Portuguese architecture of the eighteenth century) whose main reference is the design of Cristino da Silva for the Areeiro Square (Lisbon, 1940) or a design that seeks a revival of the traditional 'Portuguese house', influenced by the drawings and writings of Raul Lino.

language in which we can clearly see the literal application of the '*five points of the new architecture*', as Corbusier presented them in the twenties (solution B). This dual response (the unique case, in all the CODA analyzed) is paradigmatic of the difficulties of the EBAP students (patent in many other works) in reconciling the will to respect tradition and the desire for avant-garde design.

After 1948 everything was different. In the CODA presented after the '*Congress*' (but prior to the beginning of the fieldwork for the '*Survey*', in 1955), there are few proposals influenced by nationalist doctrine or seeking the difficult synthesis between traditional architecture and modernist language, and the general trend seems to be a growing and enthusiastic adherence to the '*international style*': the Oliveira Martins (1949) design of a *house for a middle class family* (António Rocha's house) is a good example of this trend, presenting all the typical repertoire of quotes from Le Corbusier.



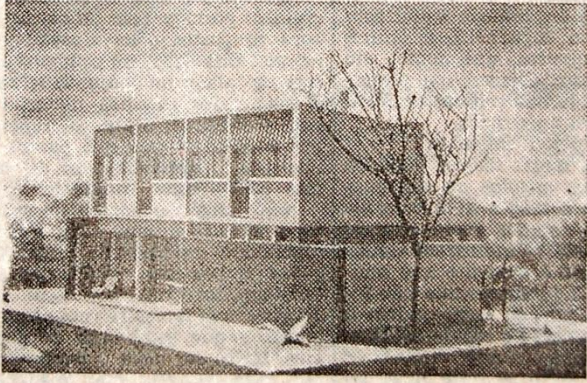
Figure 1. António Rocha's house, in Guimarães. Design by Oliveira Martins and Delfim Amorim in 1947 and presented as CODA work by the first in 31 Dez. 1949 (photographed by the author).

Exemplary of this tendency is the first prize of the Christmas contest promoted by the magazine '*Eva*', that offered a house design by the Architects Vitor Palla

and Bento de Almeida, and was announced in the press (*Comércio do Porto*, 11 Dec. 1955) in these terms: '*Decorated with great taste and comfort (...) and built where the winner wants*'. The idea of offering a modern design house as a prize on a contest in a non-specialized magazine clearly shows that the acceptance of the modern language was widespread in Portugal, seven years after the '*Congress*'. But, on the other hand, the idea of providing an architectural design that can be built *where the winner wants*, implies a particular understanding of architecture: a house is like a piece of furniture, which can be placed anywhere and does not have to establish relations with the place where it is built.

eva
do Natal de 1955
300 PRÉMIOS

Automóveis «Peugeot», máquinas de costura «Oliva», de escrever «Olivetti — Lettera 22», rádios «Graetz», «Paillard» e «Ultra», com gira-discos, aspiradores «Electrix-Silent», encerradores «Electrix-Alcyon», panelas de pressão «Velox», radiadores eléctricos, ferros automáticos «Morphy-Richards» e «Injecta», candeeiros, aparelhos fotográficos, canetas «Aurora» ouro e prata, esferográficas «Truxa», perfumarias Nally, cintas «Pompadour», conservas, louças, bijouterias, meias Nylon, artigos de ménage, livros, etc.



ESTA MORADIA

Projecto dos architectos Vitor Palla e Bento de Almeida
Decorada com o maior bom-gosto e conforto, sem lhe faltar nada, desde as cortinas ao aspirador, frigorífico, rádio, etc., construída onde o premiado quizer, com dois pisos, nove espaçosas divisões, 2 quartos de banho, etc., no grande

PRIMEIRO PRÉMIO

Preço : 16 ESCUDOS ————— Pelo Correio 17\$50
NÃO SE MANDA A COBRANÇA

Figure 2. Announcement in the journal *Comércio do Porto* (11 Dec. 1955) of the Christmas contest promoted by the magazine 'Eva', in which the first prize was a house design by the Architects Vitor Palla and Bento de Almeida (photographed by the author).

This background is important to understand the direct reflections that the remarkable experience of the 'Survey' had on the new generations of students from EBAP, causing the emergence of a new theoretical awareness. However,

the enthusiasm with which the methodology implicit in the '*Survey*' is received in the second half of the fifties has to be justified with a certain ideological vacuum that existed before. The pedagogy of Carlos Ramos was based on the empowerment of the students, who could choose their own ideological or linguistic paths, within a Vitruvian philosophy in which, however, *Venustas* should be the result of *Firmitas* and (especially) of *Utilitas*: more important than any justification (aesthetic, theoretical or conceptual) was the way the proposal responded to the functional needs of the program. This was mostly an attitude of common sense, evident in the texts of the few CODA presented before 1955 that showed some concern with the justification of the so called 'aesthetic party':⁴

(...) the plan is not the result of any architectural preconceived idea, but it arises naturally from the function and the development of all factors considered, and other provisions imposed by the regulations. The architectural expression of the elevations is intended to reflect the order of the plan (Faria, 1951, p. 1).

This work, developed without formal preconceived concerns, resulted in an architectural solution that translates the concept of the inside in the outside, corresponding to its function (Insured, 1954, p.1).

It is evident in this type of discourses (as in the drawings of the correspondent CODA, regardless of the language they adopted) the idea that *a good plan always leads to a good elevation*, a notion that we can find in EBAP since the teaching of Marques da Silva.⁵ This design philosophy is reinforced during the teaching of Carlos Ramos, applied as a truly functionalist ideology (especially after 1948), that gains direct influence from the writings of Le Corbusier.

This philosophy can be updated from 1951, when the teaching in EBAP is enhanced with four new members that provide, voluntarily, an unofficial and unpaid collaboration (Filgueiras, 1986): Fernando Távora, Mário Bonito, José

⁴ In most of the CODA presented before 1955 the text only described functional and constructive aspects.

⁵ Marques da Silva was professor of Architecture in the School of Fine Arts of Porto from 1906 to 1939.

Carlos Loureiro and Agostinho Ricca. Consequently, as early as 1953, we can find some differences in the works of CODA, both in the drawings (more closely influenced by external models) and in the writings (which show new concerns, in addition to the prior strictly functional speech); to express the intention to '*organize a sculpture of architectural space*' (Ribeiro, 1955, p. 2) or a '*composition of brightly colored volumes*' (Quintanilha, 1953), to seek '*contrast between volumes and planes*' (Ramos, 1954, p. 1) and to reference the design to '*principles of architecture that value the harmony of the whole: NATURE + WORK OF MAN*' (Fonseca, 1953) are new concerns that we can only find in the CODA after 1953. They do not collide with the prior focus on functional organization, construction technique, economy and constraints of the site, but add other values that change the priorities in the options of design.

We can also find the reasons for this paradigm shift in other aspects of the context that precede the work of the 'Survey' in EBAP. The book *Brazil Builds*, with wide circulation among students, emphasizes the relationship between modern architecture and territory: it defines the modern Brazilian architecture as a movement that results '*of the country itself and the artists that launched it*' and '*fits the climate and the materials available*' (Goodwin, 1943, p. 103). Implied in the contents of this book is also the idea that the modern movement in Brazil reflects the same attitude that characterizes its traditional architecture: the adaptation to the conditions of the territory according to the needs of the present. At the same time there is a growing interest among EBAP students in the writings of Bruno Zevi and, therefore, in the organic architecture of Wright and Aalto. Triggered by the influence of these new theoretical references, the 'Survey' begins ahead of time, in EBAP.

It seems clear that the interest in vernacular architecture (and, therefore, in *the Man and the Land* of rural Portugal) that is rising in the School of Porto results from the pedagogical action of Távora, who already in 1953 guided a survey on the Portuguese traditional expressions and techniques. In the report that Carlos Ramos presents in May 1954, he refers the interest that this work of research and fieldwork (that took place in the north of the country and in the Centre of Studies of Peninsular Ethnology) had aroused among the students (Filgueiras,

1986), presenting the CODA work of Octávio Lixa Filgueiras, '*Urbanismo – Um Tema Rural*' (Urbanism - a Rural theme), as an example of this interest. This is the first theoretical thesis presented as CODA in EBAP, based on a critical review of the CIAM Grid; its contents are close to the fields of geography, sociology and ethnology, with a very ambitious effort of local inquiries (Filgueiras, 1953).⁶

Following the path of Filgueiras a second theoretical CODA appeared in 1957: '*Formas do Habitat Rural-Norte de Bragança, contribuições para a estrutura da Comunidade*' (Forms of Rural Habitat in the North of Bragança, contributions to the structure of the Community), by Arnaldo Araújo. It presents the work done by the Porto team in CIAM X, justifying their proposal with the study of vernacular constructions from the north of Bragança and of the living conditions of their populations. Araújo proposes the creation of a 'national plan for the habitat', assumes the will to 'raise awareness of this region' to 'improve the living conditions of its people' and suggests that this kind of work can be taught in the schools of architecture 'as an indispensable part of the education of an architect'. We can relate directly this CODA with the fieldwork of the 'Survey', as Araújo integrated the group of '*Zone II*' since 1955.

Later, in the 60s, we can find other CODA students working on habitat types of the rural areas of the region of Bragança: José Joaquim Dias and Sergio Fernandez. In the '*Ensaio de Recuperação de um Conjunto na Aldeia de Espinhosela - Contribuição Metodológica para Planos de Recuperação*' (Methodological Contribution to Recovery Plans in the village of Espinhosela), José Joaquim Dias (1963) states that the rural aesthetics 'is now in fashion' (he speaks of a '*mass hysteria for the new rustic*'), but points out that we can still find in the small villages 'values that the cities lose everyday' (p. 73). In the next year, Sergio Fernandez presents his CODA: '*Recuperação de Aldeias - equipamento colectivo. Rio de Onor, Bragança*' (Recovery of villages and collective equipment in Rio de Onor, Bragança); this thesis presents both a detailed survey of the existing constructions and a set of proposals for action. In the conclusions, there are some recommendations applicable in future

⁶ As a result of this work, Filgueiras is chosen to lead the team of the "Zone II" of the "Survey", and has the opportunity to participate in the delegation of Porto for the CIAM X; in 1958, Filgueiras and Arnaldo Araújo are invited by Carlos Ramos to teach in EBAP.

interventions on rural areas: they should be based on the '*knowledge of the habits and possibilities of the rural cluster*' and performed according to special concerns with location, knowledge of the people, simplification, economy, versatility of use and the effective participation of the population (Fernandez, 1964).

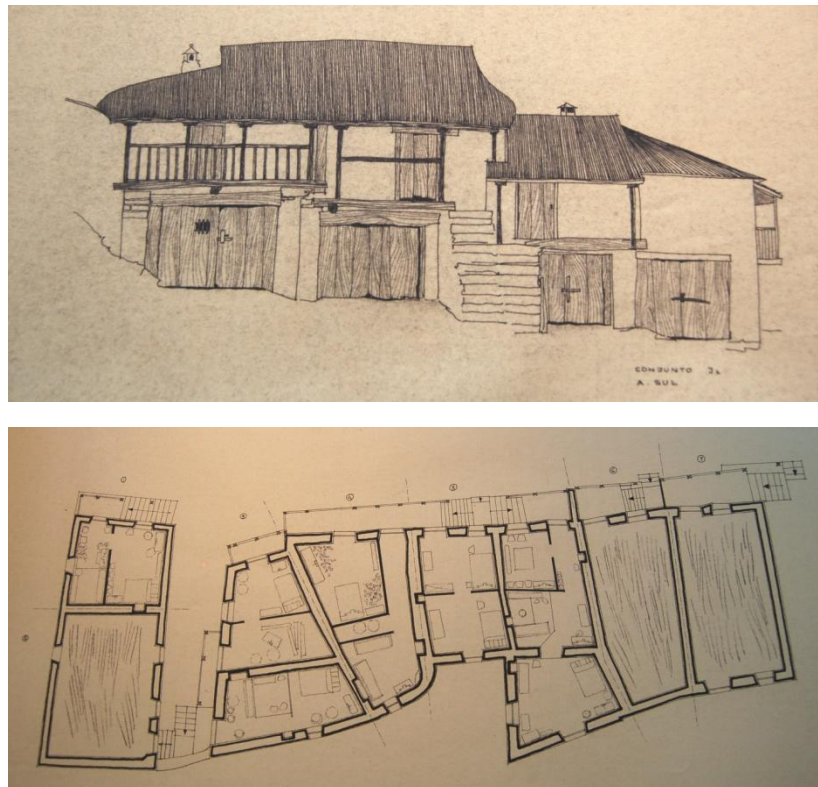


Figure 3. Plan and elevation of houses in Rio de Onor (photographed by the author from Sergio Fernandez CODA).

These experiments seek ('*with a certain romanticism*') to achieve concrete results through a disciplinary action taken '*in an adverse political environment and without the necessary scientific accuracy*' (Fernandez, 1988, p. 143), placing the technicians involved in the service of the population, living (and working) on the site and seeking effective participation of the population. This line of work represents a change of attitude of the architect as a professional but also implies a new strategy in his education: an approach to the knowledge of the social

realities of the country, highlighting the field work, the research and the survey as instruments to gather information that can inform the design.

These exceptional examples of CODA work represent the emergency of a new collective theoretical consciousness, clearly showing that the influence of the 'Survey' in EBAP begins before the publication of *Popular Architecture in Portugal* (Sindicato Nacional dos Arquitectos, 1961). In other CODA presented at this time, we can find drawings and texts embodied in this methodological proposal, that leads to new formal demands: in the design for a house in 'Serra da Estrela', Luis Baptista (1955) claims to '*express "functional", constructive and plastically new aesthetic ideas with a perfect integration into the environment*', and states that '*the roughness obtained by the choice of materials, the frankness and simplicity provided by the sobriety were the basic factors that influenced the aesthetic program*'. In other cases with similar ideas, the theoretical influence of Távora is evident (mainly the aforementioned text *O Problema da Casa Portuguesa*):

Because of the way it meets the conditions of the region's climate, due to the simple form and the materials used, inspired in the local constructions, this work can be classified both as "regional" and "national". (...) A national and regional 'style' cannot be produced insisting on the arbitrary mixture of decorative elements, materials and construction methods that were most commonly used in the ages that preceded us (Castro, 1955).

The connection between the examples of the past and future can and should occur in the houses for today's Man. This connection cannot represent an obligation to repeat, (...) in repetition there is no evolution. It must consist, therefore, not only in the interpretation of traditional techniques and materials, but also (...) in the economic and social evolution of man. It must therefore be assumed that traditional architecture is evolutionary (Brito, 1957).

Similarly, we can trace obvious influences of Távora in the *family house in Amorim* that Alfredo Matos presents as a CODA work, both in the written discourse and in the drawings (where it is also noticeable the influence of Alvar Aalto). In the text, it is evident how the discourse of Távora can intersect with the experience of the 'Survey', that Matos presents as '*one of the positive aspects of the arduous road traveled so far by modern architecture in Portugal*', because it led to '*the determination of the specific values of the various regional expressions of popular architecture*' and to the recognition '*of an architectural "tone", able to express the purest virtues of (...) national spirit*'. Therefore, it has corrected '*the pseudo-national expressions of current official architecture*' and can also '*provide a basis for (...) overcoming the symptoms of crystallization that functionalist have already revealed between us*'.



Figure 4. House in Amorim, presented by Alfredo Matos as CODA in 31 Dez. 1958 (photographed by the author).

This text (like the corresponding drawings of the CODA) summarizes how a student could, in 1958, synthesize the main contemporary influences: an organicist doctrine (with influences of Wright, Aalto and Zevi) mixed with an

interpretation of the results of the 'Survey' and influenced by the pedagogical discourse of Távora.

These are just some examples, among many possible, of the changes of language occurring in the CODA, after 1955: the influence from the nationalist doctrine of Raul Lino almost disappears, the pure influence of the international style (uncontaminated by any regionalist or organicist element) becomes rare and the majority of the drawings and texts show a clear influence of the results from the 'Survey'. This is a trend that lasts throughout the 60s and replaces (especially in single family dwelling) the opposition between *national* and *international* (typical of the 40s) with the new paradigm of the *relationship with the local environment*, that can be materialized in a more rural approach (tiling roof, timber beams, stone walls, wooden shutters, etc...) or in a brutalist trend.⁷ Apart from the obvious changes in design, we can also find in the CODA a new attitude at a conceptual level: a major concern in relating to the context and a new approach to the functional paradigm, replacing the prior abstract ideas of functionalism (obsessed with ideal modes of functioning) with an intent to find actual useful spaces (of vernacular influence) inspired by the knowledge of local uses and specific clients.

However, this attitude may or may not embody a reflection on the new theoretical paradigm; in many cases, it only represents the adoption of a trendy style. Two years before the publication of *Popular Architecture in Portugal*, António Freitas (1959, p. 37) alerted to the dangers of '*being caught in an era that can be defined as a neo parochialism, retrospective and unhealthy*', although he considers that '*the elements contained in the "Survey" may contribute decisively to the revitalization of our architecture*'. Likewise, Nuno Portas (1963, p. 16-18) states that the recent '*attention to rural areas and popular arts and crafts*' can be extremely fruitful '*to feed an anthropological reflection on the content of those "spontaneous" forms*', if it's done '*without the incantatory character that leads to forgetting the irreversibility of the radical changes*' it has suffered.

⁷ In which we can find the influence of the most vernacular houses of Le Corbusier (Errazuris, Celle-Saint-Cloud, Les Mathes and Jaoul).

It is in this context that, in 1965, Álvaro Siza presents his CODA: a preliminary study for a group of four single family houses in Moledo do Minho. The text begins by explaining the delicacy of the intervention, given the growing real estate speculation in the North Coast (*'the construction of a single dwelling in Moledo do Minho broke the prudent attitude adopted by the Preliminary Plan'* of the Municipal Council) to justify his choice of design: *'ground floor houses, on platforms that include transition spaces (indoor-outdoor)'*. Siza points out that he did not intend 'a mimetic integration or a transposition of artificial effects', but attempted to follow *'the example of old local construction built in similar terrain, to the south, as a criterion for the relationship with the landscape'* (p. 6). We can also find on his speech the report of another problem that could be seen in Moledo, but coexisted in the whole of the Portuguese territory: *'The relatively recent flow of emigration'* leads to a situation in which the hand-labour is *'expensive and generally of low quality'*, because experienced workmen are scarce and costly and the constructions tend to be made by incompetent personnel (p. 3).

This work appears as one of the few exceptions, in the context of the CODA from EBAP, to the dominant trend of its time: to transform the findings of the *'Survey'* in a *style* directly applicable to single-family housing projects conducted in rural areas, as a formal set of rules, using the themes of popular architecture as a model, either directly or reusing solutions learned in the earlier works of renowned authors (Távora and Siza himself). In this design, Siza presents an aesthetics inspired by the heroic period of the modern movement (a neoplastic approach, with the emphasis on horizontality), in reaction to an already evident erosion of the formal influences of the *'Survey'*. This was an important step in the path of Siza, clarifying his relationship with the cultural heritage of vernacular architecture (in a clear inflection in respect to previous projects) and stating a new path to the architecture of Porto, that will gain increasing importance henceforth, while the influence of the *'Survey'* loses strength.

In conclusion, it is clear that the language of most of the CODA from EBAP reveals a rapid adherence to the ideology that characterizes each time, from the nationalist projects (before 1948) to the internationalists (after the *'Congress'*)

and to the neo-vernaculars (after 1955): the *national* paradigm is replaced by the *international* paradigm, which is also replaced by the *local* paradigm that gradually, from 1961 on, will also lose strength and meaning. However, the focus on the relationship between architecture and site will prevail in the future work of Porto architects.

Acknowledgments

This paper summarizes some of the conclusions of the work developed in the PhD thesis presented by the author at the School of Architecture of the University of Minho in February 2011; for further development of the topics covered here see Eduardo Fernandes, *The Choice of Oporto: contributions to update the idea of a School* at <https://repositorium.sdum.uminho.pt>.

References

- Amaral, K. (1947). Uma iniciativa necessária. In *Arquitectura*, ano XX, 2ª série, nº 14, Abril. Lisboa.
- Amorim, D. (1947). *A Minha Casa*. In *ra*, n.º 0, Out. 1987. Porto: FAUP (p. 11).
- Araújo, A. (1957). *Formas do Habitat Rural-Norte de Bragança, contribuições para a estrutura da Comunidade* (FAUP/CDUA/AE/CODA/158). Porto: EBAP.
- Baptista, L. V. A. T. (1955). *Uma habitação na Serra da Estrela* (FAUP/CDUA/AE/CODA/144). Porto: EBAP.
- Brito, E. J. P. C. (1957). *Uma habitação em Guimarães* (FAUP/CDUA/AE/CODA/160). Porto: EBAP.
- Castro, A. V. (1955). *Um posto rodoviário em Lagos* (FAUP/CDUA/AE/CODA/146). Porto: EBAP.
- CIAM PORTO (1959). X Congresso CIAM. In *Arquitectura* nº 64, Jan./Fev. (pág. 21-28). Lisboa.
- Costa, A. A. (1982). *Dissertação*. Porto: ESBAP.
- Dias, J. J. (1963) *Recuperação de Aldeias em Espinhosela* (FAUP/CDUA/AE/CODA/270). Porto: EBAP.
- E.S.B.A.P. (1958). *Catálogo da Exposição Magna VII*. Porto: ESBAP.

- Faria, F. M. L. L. (1951). *Uma casa de habitação* (FAUP/CDUA/AE/CODA/106). Porto: EBAP.
- Fernandes, E. (2011) *The Choice of Oporto: contributions to update the idea of a School* (PhD thesis). Guimarães: Escola de Arquitectura da Universidade do Minho.
- Fernandez, S. (1964). *Recuperação de Aldeias - equipamento colectivo. Rio de Onor, Bragança* (FAUP/CDUA/AE/CODA/284). Porto: EBAP.
- Fernandez, S. (1988). *Percurso, Arquitectura Portuguesa 1930/1974*. Porto: F.A.U.P.
- Filgueiras, O. L. (1953). *Urbanismo: um tema rural* (FAUP/CDUA/AE/CODA/125). Porto: EBAP.
- Filgueiras, O. L. (1986). *A Escola do Porto (1940/69)*. In *Carlos Ramos, exposição retrospectiva da sua obra*. Lisboa: Fundação Calouste Gulbenkian.
- Fonseca, B. H. B. (1953). *Habitação na serra do Marão* (FAUP/CDUA/AE/CODA/126). Porto: EBAP.
- Freitas, A. (1959). *Tradicionalismo e Evolução*. In *Arquitectura*, nº 66, Nov./Dez. Lisboa.
- Goodwin, P. (1943). *Brazil Builds*. New York: Museum of Modern Art.
- Matos, A. B. C. (1958). *Habitação unifamiliar em Amorim* (FAUP/CDUA/AE/CODA/186). Porto: EBAP.
- Melo, F. J. V. F. F. S. (1958). *Casa na praia de Esmoriz* (FAUP/CDUA/AE/CODA/187). Porto: EBAP.
- Portas, N. (1963). *Uma Experiência Pedagógica na E. S. B. A. do Porto*. In *Arquitectura*, nº 77, Jan. (pág. 16-18 e 39-40). Lisboa.
- Quintanilha, M. C. C. (1953). *Um jardim-infantil em Vila de Rei* (FAUP/CDUA/AE/CODA/131). Porto: EBAP.
- Segurado, J. C. S. (1954). *Centro Recreativo na Lagoa de Albufeira* (FAUP/CDUA/AE/CODA/142). Porto: EBAP.
- Sindicato Nacional dos Arquitectos (1948). *1º Congresso Nacional de Arquitectura, Maio/Junho de 1948. Relatório da comissão executiva. Teses. Conclusões e Votos do Congresso*. Lisboa: Sindicato Nacional dos Arquitectos.
- Sindicato Nacional dos Arquitectos (1961). *Arquitectura Popular em Portugal*. Lisboa: Sindicato Nacional dos Arquitectos.
- Ramos, R. A. O. (1954). *Restaurante sobre a margem direita do douro* (FAUP/CDUA/AE/CODA/139). Porto: EBAP.
- Ribeiro, M. N. (1955). *Uma escola primária* (FAUP/CDUA/AE/CODA/140). Porto: EBAP.
- Siza, A. (1965). *Casa de fim de semana, habitação Rui Feijó* (FAUP/CDUA/AE/CODA/301). Porto: EBAP.
- Távora, F. (1945). *O problema da casa Portuguesa*. *ALÉO*. série IV, ano IV, 10 de Novembro (pág. 10). Lisboa: Campos e Sousa.
- Távora, F. (1947). *O Problema da Casa Portuguesa*. Lisboa: Cadernos de Arquitectura.

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ALFREDO DE ANDRADE'S (1838-1915) SURVEYS ON VERNACULAR ARCHITECTURE ACROSS ITALY AND PORTUGAL¹

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Abstract

This paper examines the surveys on vernacular architecture made by Alfredo de Andrade across his two nations, Italy and Portugal. This broader (documentary and iconographic) material relates to central issues in the late 19th-century architectural debate centred on the 'construction of the nation': the identification, study and safeguarding of buildings, which represented an emerging national identity, and which, on the other hand, could also be a source of inspiration for new architectural design. Moreover, the paper suggests the importance of this background in defining 20th-century architectural culture.

Keywords: Surveys, Medieval Archaeology, Architecture, Safeguard, 19th Century

Although surveys on vernacular architecture enjoyed a particular significance in 20th-century architectural culture, an interesting background can nonetheless be found in the 19th century, involving such different fields as architecture, archaeology and ethnography².

¹ Alfredo de Andrade was born in Lisbon in 1839 into a wealthy Portuguese family. He went to Italy at the age of 14 to study business and languages, but soon became deeply involved in artistic studies and never again returned to live in his native country on a definitive basis. Andrade studied at the Academy of Genoa and engaged in prolific artistic and cultural activity in Italy as a painter, teacher, archaeologist, restorer and architect, also undertaking several public duties, such as working as an Inspector of Monuments and a Commissioner for Artistic and Industrial Education. The reflections presented in this paper derive from a broader PhD research. See FERREIRA, T., *Alfredo de Andrade em Portugal (1839-1915): Cidade, Património, Arquitectura*, PhD Dissertation, Politecnico di Milano, 2009 (currently in publication).

² In the Portuguese context, see, among others, the studies of Henrique das Neves (1841-1915), Joaquim de Vanconcelos (1849-1936), Rocha Peixoto (1866-1909), João Barreira (1866-1971),

Hence, in the 'century of the nations', several surveys were conducted in each country with the aim of identifying the characters of national art and architecture³ (focusing on the construction of an emerging national identity), as well as providing sources of inspiration for new architectural design.

Since the beginning of the century, the following question had been posed: "In welchem Style sollen wir bauen?" (Hübsch 1828). Thus, in each nation, architects and scholars were searching for the answer: for Viollet-le-Duc, it was to be found in medieval France (11-16th century); for Pugin and Gilbert Scott, in the English 13th century Gothic; for Goethe, in political-literary German Gothicism; for Camillo Boito, in the Romanesque style of Lombardy. Curiously, it was a Portuguese origin architect, Alfredo de Andrade, the spokesman for the ex-Savoyard kingdoms of northern Italy (Piedmont and Liguria), with its late medieval architecture: for some of his contemporaries, a language that could express the new identity of the young unified Italy.

1. A paradigmatic example is to be found in the surveys for the *Borgo Medioevale*⁴ in Turin, conceived by Alfredo de Andrade to host the first Italian National Exhibition in 1884.

This was meant to be a reaction against "Eclecticism" – in the words of his close friend Camillo Boito (1836-1914) – and to the meaningless associative stylistic *pastiche* displayed in exhibitions and in architectural production throughout the 19th century (Boito, 1884). Instead, the *Borgo* stood for stylistic and artistic unity (major and minor arts), defending philological and archaeological surveys,

Ricardo Severo (1869-1940) and Raul Lino (1879-1974). An interesting interpretation on this subject is quoted in LEAL, J., *Arquitectos, Engenheiros, Antropólogos*: Fundação Instituto Arquitecto Marques da Silva (FIMS), 2009.

³ There was also the desire to 'make history' by filling in the gaps in the historiography, namely in regard to the medieval period. An interesting critical interpretation of this subject is also provided in ZUCCONI, G., *l'invenzione del passato: Camillo Boito e l'architettura neomedievale*, 1855 – 1890, Venezia: Marsilio, 1997.

⁴ Concerning the *Borgo Medioevale* in Turin, see, among others: GIACOSA, G. D'ANDRADE, A. and VYRA, P., *Guida illustrata al Castello feudale del sec XV*, Catalogo ufficiale della Sezione di Storia dell'Arte, Esposizione Generale italiana, Ed. Vincenzo Bona, Torino, 1884 (ristampa anastatica, Torino, 1997); BARTOLOZZI, Carla and DAPRÀ Claudio, *La Rocca e il Borgo Medioevale di Torino (1882-1884). Dibattito di idee e metodo di lavoro in Alfredo d'Andrade: Tutela e Restauro...*, op. cit., pp. 189-214; SERRA, R. (Coord.) *Torino 1884 Perché un castello medioevale?*, Torino, Musei Civici, 1985.

recovery of artistic craftsmanship, sincerity in the use of materials and a more 'rational' architecture. Therefore, it symbolized the material realisation of a medievalist revival, which was then established as the best expression (artistic, cultural, ideological and political) for new architectural design. In addition, according to its mentors, it had a strong pedagogical mission as an open-air museum.

Furthermore, the medieval village in Turin was a masterpiece of synthesis of twenty years of Andrade's studies and surveys on the characters of late medieval local architecture, a *Dictionnaire Raisonné dell'Architecture Piemontese* written on fabric instead of words (Zucconi 1997, p. 204). The surveys about the *Borgo* are particularly interesting because they embrace minor architectures, such as common houses – an unusual subject in this kind of research in the period, which was generally centred on civil or religious monuments with national-political or historical relevance. Hence, Andrade was a pioneer in carrying out a systematic survey of vernacular medieval current housing and other typologies in the regions of Piedmont and Vale d'Aosta (Dondi 1981, p. 259), which has continued to represent a valuable and almost exclusive source of information on this heritage, right up to the present days (Prola & Orlandoni 1981, p. 358). These surveys consisted of collections of drawings – plans, elevations, sections, details – completed with photographs, notes in the margins and comparative analyses⁵.

Moreover, for the first time, the exhibition building was organized in an urban system, with a 'unity of style', including common houses, churches and a castle, aimed at recreating the historic image of a region (Serra 1981). Hence, the *Borgo Medioevale* in Turin was also a pioneering model for the presentation of a typical and unified image of one region (Gubler 1975, p. 30), which was followed by many other 'nationalist' villages spread across Europe: *Oudhollanosch Marktplaen*, *Village Suisses*, and later on, albeit in a different cultural context, *Vieux Anvers*, *Vieux Bruxelles*, *Vieux Paris*....

⁵ Most of these drawings are housed at the Galleria di Arte Moderna di Torino (GAM).

Nevertheless, the *Borgo* had a paradoxical destiny: the stance taken against eclecticism became the maximum expression of an epoch fascinated by disguises, as it was also the motor for a more superficial 'mass' appropriation, namely of enriched bourgeois medieval castle-style *villini* spread across the northern Italy (Zucconi, 1997, p. 60). Furthermore, the later 'regionalist' villages in national exhibitions, ironically became a driving force for nostalgic and populist mass seduction and consumption (sometimes with political-ideological scopes), which was largely distanced from the original meaning and intention of the mentors of the *Borgo*.



Figure 1. *Borgo medievale* in Turin, epoch photograph (in L.Pinto, *A obra Arquitectonica de Alfredo D'Andrade*, in "Ilustração Portuguesa", 170, Lisboa, Livraria Ferreira, 1909).

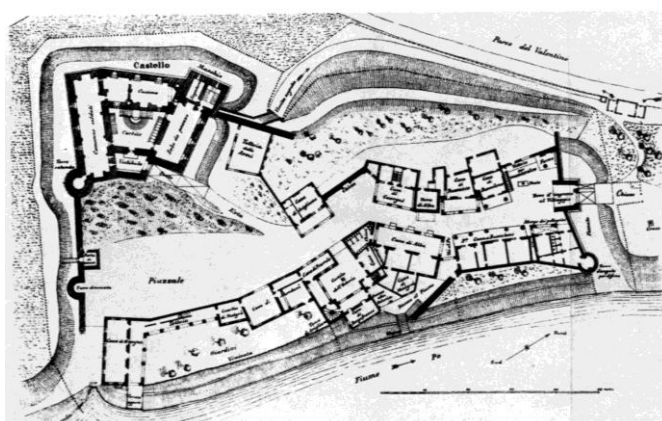


Figure 2. *Borgo medievale* in Turin, general plan (Andrade, A. in *Guida illustrata al Castello feudale del sec XV*, Catalogo ufficiale della Sezione di Storia dell'Arte, Esposizione Generale italiana, Ed. Vincenzo Bona, Torino, 1884)

The success of the *Borgo* and his previous work experience consecrated Alfredo de Andrade's reputation in Italy as an expert on heritage, as he was subsequently nominated 'Chief Inspector of Monuments' (*Direttore Regionale dell'Ufficio per la Conservazione*) in the regions of Liguria and Piedmont, becoming responsible for the supervision of hundreds of sites and the coordination of interventions. Moreover, he was appointed 'Commissioner for Artistic and Industrial Education' (*Commissario per l'insegnamento artistico e industriale*), highlighting the link between studies and surveys, artistic education, the rehabilitation of the minor arts and the safeguard practices adopted in this period. This evidences a circularity between past and present, considering that inherited art and architecture can provide a source of inspiration - scientifically backed by a rigorous archaeological surveys - for 'modern' artistic and architectural production.

Curiously, a few years before his work on the *Borgo Medioevale* in Turin, Alfredo de Andrade was deeply involved in 'artistic visits' (1880-81) across his birth country (Portugal), drawing and studying buildings and objects that were to be integrated into a future National Museum. Travelling around Portugal at the request of the Lisbon Academy of Fine Arts (*Academia de Bellas Artes de Lisboa*)⁶, he visited numerous monuments in the regions of Coimbra, Trás-os-Montes, Minho, Alto Douro, Castanheira and the Beiras and produced several surveys (drawings, notes and reports)⁷.

Many of these buildings were either in ruins or threatened with decay, abandonment and vandalism, resulting from the law dictating the suppression of the religious orders and the expropriation of their property in 1834. For this reason, and also due to the political instability experienced in the first half of the 19th century, Portuguese monuments were in a state of great devastation, despite the recalls of scholars such as Alexandre Herculano (1810-1877), who defined monuments as the '*documents of the history of a nation*' (Herculano, 1840), which were generally medieval buildings.

⁶ In the absence of any specific structures, the safeguarding of the artistic and monumental heritage was still the responsibility of the Academy of Fine Arts.

⁷ Most of these drawings are housed at the Galleria di Arte Moderna di Torino (GAM).

Nevertheless, with a long background in surveys and studies, Andrade did not pay attention only to the great monuments of his birth country, but also to its artistic handicrafts, urban conglomerates, minor architecture and the vast autochthonous rural heritage, from different epochs, scattered through the national territory.

On his first journey to the region of Coimbra (February, 1880), accompanied by the journalist Rangel de Lima (1839-1909) and the photographer Carlos Relvas (1838-1894), Alfredo de Andrade visited the monasteries of Lorvão, São Marcos and Ceíça. His great knowledge and his particular working method were noticed by his partners, who addressed him as '*Master*' (Lima, 1880, s.p.), impressed by his artistic erudition, his method of drawing based on direct observation, and the capacity for identifying, evaluating and classifying the artistic and architectural heritage. His method of drawing through observation, acquired in his previous career as an outdoor landscape painter, was aided by the use of a collapsible bench and table, a white camera and several sheets of paper and drawing instruments carefully arranged in a transportable bag (*idem*, 1880, s.p.). His drawings were completed with details or schemes (plans, elevations, sections, axonometries) with metric annotations and interpretive notes. Alfredo de Andrade's background and experience are evident in the composition of the inventories and reports, which contain detailed remarks on the studied monuments and objects : artistic, chronological, stylistic and comparative comments, as well as notes on decay and restoration.

Regarding to the selection of objects to be included in the National Museum is concerned, not only were the major arts considered, but also the '*objects of the industrial arts*' (Andrade & Lima, 1880, s.p.) - textiles, embroidery and laces, religious vestments, furniture, ceramics and glass, among others (*idem*, 1880, s.p.). In this way, a precise concept of museum was expressed, with original pieces and copies, with a didactic function, associated with the rehabilitation of minor, ornamental and industrial arts and crafts, which are considered to be also essential for the study of an artistic period.

As far as the monuments are concerned, special attention was paid on this first trip to the proto-Renaissance programmes conceived in the region of Coimbra by French masters originating from Normandy and the Loire Valley, known as the '*school of the 16th-century French Renaissance*' (Andrade & Lima, 1880, s.p.). Alfredo de Andrade would later compare these studies with other carried out on another visit, in the same year, with the Director of the Academy, António Tomás da Fonseca (1823-1894), to the Convent of Santo António da Castanheira, noticing similar features in the 16th-century architectural decorations, in a state of accelerated decay (Andrade, Fonseca, Lima, 1880, s.p.). The graphic and written material produced confirms his favourite periods of study, both in Italy and in Portugal, from medieval to the first Renaissance.

On a second journey, carried out in the same year to the remote northern regions of Trás-os-Montes, Minho and Douro Litoral (therefore more challenging in the research into the 'origins' of national art), the followed itinerary included several objects that he considered relevant for a rigorous comparative study by periods. Hence, Andrade studied several monuments, such as the Monastery of Castro de Avelãs, the Castle and the *Domus Municipalis* of Bragança, the Church of São Facundo de Vinhais, the Monastery of Leça do Balio and the Church of Cedofeita in Porto.

Among the more extensive graphic and written material produced by Andrade in this journey, it is important to notice (because of the novelty of the themes) the surveys around a common house in the city of Bragança from the 13th or 14th century, namely studying its elevation and the wooden constructive details. As has already been mentioned, the attention that he paid to the minor architecture was unusual in terms of the surveys and studies made during that period – generally centred on historically emblematic civil or religious monuments – in which Andrade was a pioneer, both in Italy and Portugal. Curiously these drawings were reproduced thirty years later in a text about the evolution of the

house in Portugal (Barreira, 1908, p. 164), when the debate on the 'Portuguese house'⁸ was gaining more expression.

Another innovative contribution of his surveys consisted in the representation of the 'old villages' (to quote Andrade's captions) of Bragança and Vinhais, considered as a whole with monumental value in itself. This idea also goes against the most common tendency in the period, which was to represent individual and highlighted monuments, without their surrounding context.



Figure 3. House in Bragança (in Barreira, J. , *A habitação em Portugal*, in *Notas sobre Portugal*, 2 vols., Lisboa, Imprensa Nacional, 1908)

Figure 4. Old village of Vinhais (in Bernardi, M. & Viale, V., *Alfredo D'Andrade: la vita, l'opera e l'arte*, Torino, Società piemontese d'archeologia e di belle arti, 1957).

⁸ The 'Portuguese house' was part of an ideological movement that centred on the study of vernacular and native domestic architecture, as a reaction to the imported international eclectic models, such as the *chalet*, *cottage*, *villa* and *chateau*, among others. This debate started in around 1890 with an interesting contribution being made by ethnographers, engineers and architects, although in later decades it would progressively become a catalogue of stereotyped elements appropriated by the dictatorial regime. There is a vast bibliography on this subject: see, among others: LINO, R.. *Casas portuguesas, alguns apontamentos sobre o arquitectura das casas simples*, Lisboa, V. de Carvalho [1933], TÁVORA, F. – *O Problema da Casa Portuguesa*. Lisboa, 1947; MAIA, H – *From the Portuguese House to the Survey on Popular Architecture in Portugal: notes on the construction of Portuguese architectural identity* in International Conference on Theoretical Currents: Architecture, Design and the Nation, Nottingham Trent University, 2010.

As far as Alfredo de Andrade's surveys and researches in Portugal are concerned, it is also important to mention the journey to the central inland region of the Beiras (1881) in the company of two other Portuguese archaeologists, Augusto Filipe Simões (1835-1884) and Joaquim de Vasconcelos (1849-1936). This was the first group of scholars to visit the pre-Romanesque chapel of São Pedro de Balsemão (Pessanha, 1927, p. 26), a hallmark of the period in Portugal. Other monuments included in these surveys and studies were a prehistoric monument in Peromogo, the castles of Guarda, Trancoso and Celorico, as well as the cathedrals of Guarda and Lamego and several Romanesque churches and chapels scattered throughout this region.

This unusual itinerary points to a profound study of 'medieval archaeology', as highlighted in Andrade's drawings, geared towards the complete survey, decoding, comparative analysis and classification of constructions from this period. Hence, we can observe in these studies the influence of the methods of French medieval archaeology, namely those used by A. De Caumont (1831), E. E. Viollet-le-Duc (1857-68) and F. De Dartein (1865-1882), whose books he possessed in his personal library. The analytical methodology was based on the direct observation of constructions on which he was to become an expert: systematic surveys with plans and reduced elevations, perspectives and details, including metric indication (stone stereotomy, ornamental elements, details, etc), constructive systems or signs of material culture, comparative studies with other monuments, as well as the notes in the margins relating to the author's analyses or to bibliographical sources⁹.

This broader graphic material is very interesting, both because it related to surveys of some monuments which had not yet been studied or drawn (therefore an important contribution to Portuguese architectural historiography) and because of the novelty in the methodology of analysis and interpretation. Moreover, it is important to notice the variety and quality of these drawings –

⁹ As far as Andrade's studies on Portuguese art are concerned, the most frequently quoted authors are Alexandre Herculano (*História de Portugal*, 1846-1853), Ferdinand Denis (*Portugal*, 1846), Athanasius Raczyński (*Les arts en Portugal*, 1846, *Dictionnaire Historico-Artistique du Portugal*, 1847) and Emilio Hübnér (*Noticias Archeológicas de Portugal*, 1861).

from the sketch to the ink outlines or detailed representations – which were his preferential (and almost exclusive) means of representation and communication.

Hence, the 'spirit' underlying the trips around Portugal was the research into the 'origins' of national art and architecture, through a methodology based on direct contact with the artefacts, using exemplary drawing as an instrument of research and representation. These journeys are also an interesting testimony of the passion for history and archaeology that motivated the scholars of his time.

This 'spirit' may also explain the fact that, unlike other contemporary researchers, Alfredo de Andrade did not study the greater 'national monuments' (Leal, 1868). Effectively, no drawings have been found, for instance, relating to the monasteries of Jerónimos, Batalha and Alcobaça, or other monuments classified by the *Real Associação dos Architectos Civis e Archeologos Portuguezes* as first class monuments (RAACAP, 1881). Moreover, the surveyed artefacts, buildings and objects, isolated monuments and urban settlements, major and minor architectures, covered a broad chronological span and pointed to a wide concept of 'monument'.

After these journeys, Alfredo de Andrade would carry out very few surveys on Portuguese architecture, with the exception of a systematic survey of the Castle of Óbidos (1888), complementing his vast knowledge on fortified architecture. This was one of his favourite subjects, both in Portugal and Italy, where he identified a 'network of castles' in the regions of Piedmont and Vale d'Aosta, precociously understanding the value of this heritage and the importance of safeguarding it as an economic and tourist resource (Della Piana 2007, p. 367).

It is difficult to draw conclusions on the precise impact of Andrade's surveys and reports on the Portuguese architectural culture and on its safeguarding¹⁰. Nonetheless, through his journeys, surveys and reports, he actively participated in the late 19th-century process of discovering national architectural characters,

¹⁰Andrade also made a relevant contribution to the Portuguese participation at the *Special Loan Exhibition of Spanish and Portuguese Ornamental Art* at the South Kensington Museum in 1881 and to the creation of the first National Museum in 1882. For further information about his contribution to the study and safeguarding of Portuguese art and architecture, see FERREIRA, T., *Alfredo de Andrade em Portugal (1839-1915): Cidade, Património, Arquitectura*, PhD Dissertation, Politecnico di Milano, 2009.

which was an important feature in the culture of the period, since they provided sources for new architectural production. Hence, in Andrade's surveys in Portugal, there was a predominant attention paid to the Romanesque period, which, by the end of the century, would effectively become a source of inspiration for new buildings, moving towards more rational architecture¹¹ (Tostões, 2000, p. 508).

3. Alfredo de Andrade's surveys across Italy and Portugal were part of a broader cultural project of writing illustrated 'Archaeological Memories of the Arts' (Andrade 1867). He started collecting these 'memories' around the 1860s, when, following a period of neoclassical learning, his activity reflected a profound change in its artistic orientation, being marked by the 'discovery' of neo-medieval culture. This transition was influenced by his contact with Italian *verista* painting, which gave rise to anti-academic discussions, such as the rehabilitation of the decorative arts, the defence of realism on art and the search for a language that could express the new identity of the unified Italy.

With a strong autobiographical character, these incomplete 'memories' report more than forty years of surveys between his two nations, Italy and Portugal. They are based on the analysis and description of concrete examples, also including personal observations, bibliographical notes, comparative analyses, drawings, photographs and newspaper cuttings. Most of the bibliographical references can be found in his extensive private library, which stands as a testimony to the persistence of an encyclopaedic and positivist culture, with texts in different languages, such as English, French, German, Italian and Portuguese. Furthermore, it includes a vast number of subjects, such as history, customs, architecture, archaeology, politics, agriculture, music and religion, among others.

The time span covered by Andrade's Dictionary is a broad one: even if the medieval era is the predominant one, the 'time-nation' is expanded to other periods that were representative of artistic identity, according to each region:

¹¹ Romanesque architecture was a privileged source of inspiration at the turn of the century, as it responded simultaneously to national identity (the period of the foundation of the Portuguese nation) and to structural and functional essentialism, moving towards a more rational architecture. See, for instance, the works of Marques da Silva (1869-1974) and Ventura Terra (1866-1909).

'Roman antiquities' in Italy and Portugal, considered decisive for characterising the origins of places, the *manierismo* and *rinascimento* of Liguria, the Portuguese *manuelino* and the proto-Renaissance, among others.

The subjects contained in Andrade's *memories* also confirm the scope of his researches and archaeological surveys, searching for the origins and national characters of art and architecture: most of the entries relate to sites and constructive characters in his two nations, as well as to minor or industrial arts, materials and techniques, architectural typologies, and particularly military architecture; the typology which expressed structural sincerity and authenticity in the use of materials and more constructive and functional 'rationalism' (Bordone, 1993).

Hence, in Andrade's surveys there is a strong effort in applying a rigorous and systematic methodology, focused on the interpretation and the construction of the 'nation'. Nevertheless, we can also perceive the contradictions emerging in the attempt to conjugate regional variants with the research of one national architectural expression. According to some of his contemporaries¹² (Boito 1880), the key seemed to lie in the application of a 'modern style', with a 'national character', but based on 'regional traditions' (Patetta, 2000).

The prevalence of geographical and constructive issues in Andrade's surveys and memories confirms how the search for a national style was related to autochthonous vernacular characters based on logic, climate, economics and the pragmatic and intelligent craftsmen production. Hence, surveys were used as methodological 'tools' for achieving a more profound and rigorous understanding of the constructive characters of each context, as well as a trustworthy source (not to be applied directly¹³) for the architecture of the present.

¹² In reference to the Italian context, it's important to notice the pioneer researches by Pietro Selvatico, into medieval architecture, followed by his disciple Camillo Boito. Boito was a close friend of Andrade and a central figure in the late 19th-century cultural and artistic debate in Italy, focused on the search for a national style, as he makes clear in *Architettura del Medio Evo in Italia* (1880), with an introduction on the 'Future Style for Italian Architecture'.

¹³ The inspiration drawn from the past was not a direct one and should also consider adaptations to 'modern' living standards and requirements (comfort, technology, etc).

This is certainly an important background for the following 20th-century architectural culture: history as a methodological tool for understanding and responding to the problems of the present, the progressive construction an idea of *genius locci* (based on geographical and constructive charactes), the rejection universalist and stereotyped solutions, the definition of a systematic and operative methodology for surveys, which could inform new architectural production in continuity with tradition.

Surveys of vernacular architecture would still be a common feature in the 20th century. For instance, in the Portuguese context, the reaction against stereotyped national architecture was sustained in a survey on vernacular architecture, defending its constructive rationality, functionalism, economy, essentialism, logic and coherence (Sindicato Nacional dos Arquitectos, 1961), "born from the People and Earth with the spontaneity and the life of a flower" (Tavora, 1947). Vernacular constructions were then proposed as a source for new architectural production, which should be simultaneously 'modern' and engaged with tradition.

More recently, in a different context, broader theorisation on 'critical regionalism'¹⁴ has once again called for a position of 'resistance' to be adopted against the universalist homogenisation of architecture, the kaleidoscope of images from post-modern culture, and the superficial or scenographic appropriation of architecture; instead, a regionalist approach defends the material culture of each place and its tectonic characteristics, providing for a more authentic, contextual and sustainable architecture.

References

Andrade A. (1867), Letter to the brother Julio, 1867, cit. in Bernardi, M. & Viale (1957), V., *Alfredo D'Andrade: la vita, l'opera e l'arte*, Torino, Società piemontese d'archeologia e di belle arti, 1957, p. 30.

¹⁴ On this subject see, among others, TZONIS, A. & LEFEBVRE, H., *Why Critical Regionalism Today?* in *Architecture and Urbanism*, May 1990; FRAMPTON, K., *Prospects for a Critical Regionalism*. *Perspecta: The Yale Architectural Journal* No. 20, 1983.

Andrade, A. & Lima, R. (1880), *Relatorio dirigido a Academia Real de Bellas Artes de Lisboa em 15 de Março de 1880*, in Arquivo Nacional Torre do Tombo, s.p.

Andrade, A., Fonseca, T. & Lima, R., (1880) *Relatorio acerca da visita feita em 1880 a esta Egreja, por ordem da Accademia R, das B. A. de Lisboa*, in Arquivo Nacional Torre do Tombo, s.p.

C. Boito (1880), *Architettura del Medio Evo in Italia, con una introduzione sullo stile futuro dell'architettura italiana*, Milano: Ulrico Hoepli.

Boito, C. (1884), *II Castello Medioevale all'Esposizione di Torino*, in *Nuova Antologia*, 2ª Serie, Vol. XLVII, Sett/Ott.

Bordone, R. (1993), *Lo Specchio di Shalott. L'invenzione del Medioevo nella cultura dell'Ottocento*, Napoli: Liguori Editore.

Barreira, J. (1908), *A habitação em Portugal*, in *Notas sobre Portugal*, 2 vols., Lisboa: Imprensa Nacional, p. 164.

Della Piana, E. (2007) *Antico, restauro, nuovo. Alfredo d'Andrade e il restauro come strumento di conoscenza*, in *Antico e nuovo. Architetture e Architettura*, Atti del Convegno, Venezia: IUAV. p. 367.

Dondi, A. (1981), *Case di abitazione in Val di Susa*, in *Alfredo d' Andrade: tutela e restauro*, Torino, coord. M. Cerri, D. Biancolini Fea, L. Pittarello, Firenze, Vallecchi, pp. 259-268.

Ferreira, T. (2009), *Alfredo de Andrade em Portugal (1839-1915): Cidade, Património, Arquitectura*, Phd Dissertation, Politecnico di Milano.

Gubler, J. (1975), *Nationalisme et internationalisme dans l'architecture moderne de la Suisse*, Lausanne : L'age d'homme, p.30.

Herculano, A. (1840), *Conservação dos Monumentos Nacionaes*, in 'O Panorama', volume IV, nº165.

Hübsch H (1828), *In welchem Style sollen wir bauen?*, Karlsruhe, 1828 [english transl. *In what style should we build?: the German debate on architectural style*, Getty Center for the History of Art and the Humanities, 1992].

Leal, M. (1868), *Monumentos Nacionaes*, Lisboa: Typographia Franco-Portuguesa.

Lima, R. (1880), *Uma visita artística ao mosteiro de Lorvão*, in 'Diário de Notícias', Lisboa, 29/07/1880.

Orlandoni, B. & Prola, D. (1981) *Alfredo d'Andrade: salvaguardia, conservazione, restauro alle origini della storiografia artistica in Valle d'Aosta*, in *Alfredo d' Andrade: tutela e restauro*, Torino, coord. M.Cerri, D. Biancolini Fea, L.Pittarello, Firenze, Vallecchi,

Patetta, L. (2000) *Il neoromanico e il neobramantesco a Milano in Tradizioni e regionalismi : aspetti dell'Ecclettismo in Italia*, coord. L. Mozzoni & S.Santini, Napoli, Liguori Editore.

Pessanha, D. José (1927), *Arquitectura pré-românica em Portugal: S. Pedro de Balsemão e S. Pedro de Lourosa*, Coimbra, Imprensa da Universidade, p. 26.

RACAAP (1881), *Relatório e Mappas acerca dos edifícios que devem ser classificados Monumentos Nacionais apresentados ao Governo pela Real Associação dos Architectos Civis e Archeologos Portuguezes em conformidade da portaria do Ministério das Obras Publicas de 24 de Outubro de 1880*, Lisboa, Lallement Frères, Typ.

Serra, R. (1981), *Uomini e fatti della cultura piemontese nel secondo ottocento intorno al Borgo Medioevale del Valentino*, in *Alfredo d' Andrade: tutela e restauro*, Torino, coord. M. Cerri, D. Biancolini Fea, L. Pittarello, Firenze, Vallecchi, p.35.

Sindicato Nacional dos Architectos (1861), *Arquitectura Popular em Portugal*,

Távora, F. (1947), *O Problema da Casa Portuguesa*. Lisboa.

Zucconi, G. (1997), *L'invenzione del passato: Camillo Boito e l'architettura neomedievale 1855-1890*, Venezia: Marsilio Editori, 1997.

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**POBLENOU DEL DELTA (VILLAFRANCO DEL DELTA) 1947: VERNACULAR
IN THE NEW AGRICULTURAL SETTLEMENTS OF THE INC (SPAIN)**

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Abstract

This study about Poblenou del Delta (Villafranco del Delta) has been carried out within the CAIT (Centre for integrated analysis of the territory), a recently created observatory-centre of research and documentation, of the Higher Technical School of Architecture of Reus (Escuela Técnica Superior de Arquitectura de Reus), University Rovira i Virgili (URV).

The study focuses on the urban nucleus constructed between 1947 and 1956 in the Delta of the Ebro river. It is a town that formed part of the settlements made for tenant farmers so as to increase their agricultural production in the Spanish territory during the first years of the political regime of General Franco. The rural nature of these types of new settlements implied a revision of some of the propositions linked to the modern movement, that appear in an incipient way. This was a constant in the promotions of the INC (The Land Settlement Institute) in Spain.

The hypothesis that the study proposes is to demonstrate that the rural nature of these settlements requires a revision of the projects instruments by architects. The presence of vernacular in these new farming settlements responds to a double condition: on the one hand, the aim of a return to the farming community as a value, even as a political project, compared with the values of the modern movement, but on the other hand and in a paradoxical way, to the continuity of the project of the figurative vanguards of the second Republic (GATCPAC), in which the recuperation of vernacular architecture and the values themselves of the Mediterranean, with the Island of Ibiza as a paradigm, made up a good part of the programme.

Keywords: 20th century architecture, farming settlements, Spain

1.

The land Settlement Institute (INC) was created on the 18th October 1939, being an autonomous organization that substituted the National Service of Economic and Social Land Reform, one of the five services that had existed in the Ministry of Agriculture of the *coup d'état* government of Burgos since April 1938, still at war with the Government of the Republic.

The aim of the INC was to increase the agricultural production so as to improve the provision of the population from a new hydraulic policy that would allow the creation of new irrigable areas and an increase in the cultivatable area. This aim was also linked to a policy that enabled the establishment of settlements in these new areas of cultivation.

The relation between the new human settlements with the newly created areas of irrigation explains why the administrative organization of the INC is linked to the most important hydrographic basins of the territory. Thus, the territorial delegations of the INC were: the Ebro, the Northwest, the Tajo, Guadiana, and Guadalquivir, the South east coast, the Balearic-Canary Islands and the Duero. The work of the INC in these areas wasn't only the administrative and economic control of the investments, but it also managed the process of the selection of the farmers who were adjudicated housing and the land to be cultivated, including the monitoring of the agricultural production and the fixing of minimum levels of production and profits.

The change in economic policy from 1959 onwards modified the central role of the INC in terms of the organization of the agriculture, that was reduced on a continual basis until 1971 when it was substituted by another organization. During its period activity, the INC acted on an area of more than 462,000 hectares, and founded more than 260 settlements, of different sizes.

Within this task of territorial and productive organization, the Regional Delegation of the Ebro was one of the most important both due to the size itself of the river basin, as well as the need for water in most of the territory, above all in the central section. The majority of the interventions of this delegation

were aimed at increasing the areas of irrigation of the area of the Monegros and the Flumen, mainly, and the possibilities of the areas linked to the Canal of Bárdenas and to the Canal of Aragón and Catalonia. These projects were carried out along with the construction of 40 settlements, with 5,086 dwellings to accommodate the new settlers and workers.

The nature of the majority of the works of the delegation of the Ebro was of the settlements and the civil hydraulic works for achieving areas of cultivation of irrigation in occasionally semi-desert areas. This circumstance already shows us some of the singularities, within the work of the INC, of the settlement of Villafranco del Delta. This is not an area lacking in water, quite the opposite, it is an area, with certain limitations, that is flooded and allows the cultivation of rice, different from the dry areas which were the main target of the study by the technical staff of the INC.

2.

The new settlement can be found in the right half of the delta of the river, a place that since the middle of the nineteenth century has been the setting for conflicts between cultivators of rice and the fishermen. Being marshland, between the land and the sea, they were the administrative competence of the Navy. The late formation of the Ebro Delta is the main reason for this situation, the deforestation that the central section of the Ebro basin suffered since the 12th century, which above all was accentuated in the 16th and 17th centuries, explains why most of the area of the delta that formed the sediments of the river were recently created and didn't show the current occupation until well into the 18th century. The right side with the presence of marshes and lagoons of differences sizes allowed a certain amount of fishing and a process of urbanisation which was practically inexistent, with a very small area which was suitable for cultivating rice.

Added to the conflict between fishermen and farmers, during the 19th century, was the administrative struggle between the major landowners to be titleholders

of the cultivatable lands in this area of the Delta. The different political situations, from the dictatorship of Primo de Rivera, in 1923, to the regime of General Franco, in 1939, passing through the Republic, fostered in an uneven way a greater availability for the cultivation of the land among the small farmers through leasing agreements or simply occupation. In fact, since the beginning of the forties, the area which was the object of the intervention of the INC had been part of an administrative process that had included the expulsion of the farmers by the major landowners. These farmers were dedicated to cultivating rice in small plots of land that due to the fact they were located on the limit between the area of land and sea only needed the permission of the Navy, that to a certain extent had legalized their situation faced with the pressure of the fishermen of the lagoons.

During the defining and study process by the INC of the division of the plots of land in the area of cultivation and the size of the settlement, the limits of the area were modified. The area for cultivation was initially foreseen to be of 4,754 hectares, of which 3,300 hectares could be the object of immediate intervention, the rest coming from the partial draining of the lagoons, 1,454 hectares. After the procedures for initiating the settlement of the area, in 1947, the pressure by the major landowners and the leaseholders of the area to be able to continue cultivation provoked the definitive changes in the field of action. Finally, in 1949, the INC granted, free of charge, to the neighbouring major landowners the majority of the lands to the north of the area defined, more than 2,000 hectares. The rest of the area that corresponded to three of the lagoons were maintained for fishing, an economic activity that in that moment still held a certain presence. The final area belonging to the INC for carrying out the works of the settlement would be 1,450 hectares.

In reality, this conflict that we have described in the settlement process of the Delta is an example, on a small scale, of a permanent contradiction of the works of the INC. That which is produced on having the will to boost these reforms with the implantation of new cultivatable areas that oblige the re-plotting of large areas of land against the inertias of the major landowners to maintain their properties and to be able to have surplus, and therefore cheap, labour.

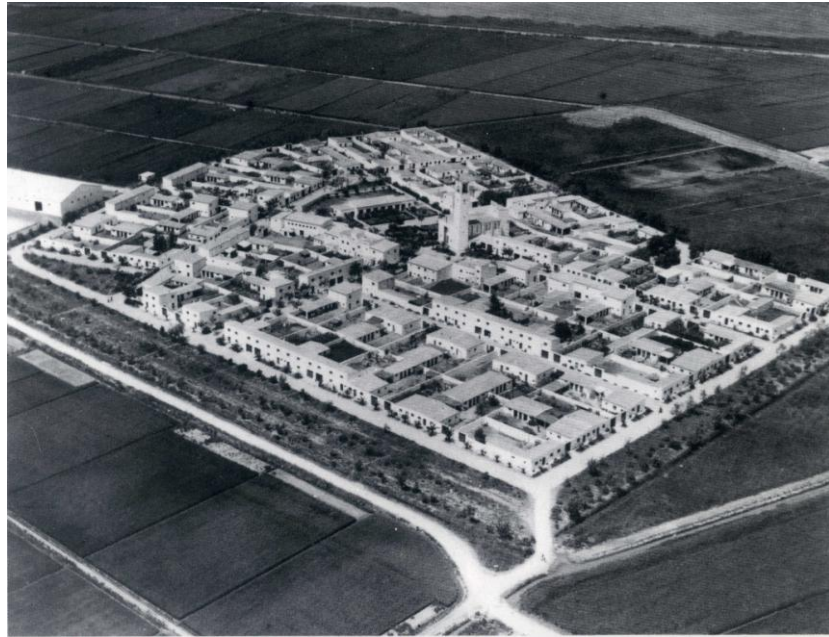


Figure 1. Poblenu del Delta, aerial photo. Around 1964.
Source: INC

3.

The revision of the territory to be settled in by the INC also involved the reconsideration of sizes of the plots of land, with the aim of incorporating plots of land that were already being cultivated in a leasehold agreement to the navy. Finally, the average area of the plots of land to be cultivated was 3.8 hectares, a size that didn't facilitate the mechanization in the cultivation of rice and obliged the new farmers to maintain the traditional cultivation by hand. 10.4 hectares were destined to the construction of the town.

The work of the commission charged by the INC with defining the area of action and the characteristics of the work to be carried out, began in 1947 and lasted two years. The drawing up of the architectural project was charged to José Borobio, the architect of the Delegation of the Ebro of the INC, in collaboration with José Aragón Austri, agricultural engineer. The preliminary architectural project was delivered in April 1951, and after incorporating some modifications, the definitive project was presented in August 1952 and the construction was

carried out between 1953 and 1955. The first dwellings were officially occupied during the spring of 1956.

The preliminary project contemplated the construction of 115 dwellings, using six different types. The definitive project ended up contemplating the construction of 96 dwellings, using three different types. The reduction in the number of dwellings was accompanied by a more complex geometry in the layout, with the incorporation of four different guidelines, so as to adapt better to the access roads. The definitive project also relocated the school building in the central area of the town, along with the church and the town council. The school had been located in the outskirts, in the southern corner, in the preliminary project of 1951.

The nature of the land and its proximity to the sea obliged the carrying out of civil works that included the construction of a defence dike along the coast, the construction of various access roads and the necessary drainage system for the provision of water, both for watering and for domestic consumption. It was also essential the work of delivering and compacting earth so as to raise the level of the settlement by 50cm and achieve the draining of the surface rainwater, as well as minimum slopes for draining waste water and, above all, a greater density of the land for the foundations of the new buildings. All these items reached 38% of the total cost of the works.

The need to prepare the land of the town to be able to construct the buildings and to ensure the good functioning of the hydraulic mechanisms, the energy supplies and the drainage, explains the compact nature of the town, and its absolutely defined perimeter. The construction of this settlement required works of containment to tackle the action of the seawater, and, as if it was an island, the definition of a new plan very close to the surface itself of the Mediterranean.

Despite these singularities, the project of Villafranco del Delta shares a good part of the criteria of the technicians of the INC with other settlements. The same organisation of the layout of the town, with three geometric guidelines, it

incorporates a certain complexity in the visual effect, and fosters a certain humanisation in the perception of the general dimensions.

The search for this urban qualification of the towns can also be found in other towns designed by José Borobio, such as Alera. In this case, the curvilinear geometry in the layout of the most important roads also favours this complexity of the vision that a walk along the streets facilitates and a closer perception of the tenant farmers of the general dimensions of the settlement.

The study of the geometry in the layout of the streets and of the general organization of the towns was produced in parallel to the study of a hierarchy of the roads, depending on the width and nature of the road itself. Thus, in Villafranco del Delta the following widths of the roads was considered: streets 6 metres wide for pedestrians, streets 8 metres wide without trees and streets 11 metres wide with trees and pavements a bit wider. These are the most important roads and that give access to the public spaces of the centre of the town.

In the majority of the projects of the INC, the segregation of the circulation between the pedestrians and the private vehicles and the access for cattle and carts was a topic of fundamental study, because it permitted an organisation of the dwellings with a backyard where the access of the carts and agricultural machinery didn't interfere with the circulation of the citizens and, in fact, in the preliminary project of José Borobio of 1951 this segregation of circulation was contemplated. However, it disappears in the definitive architectural project.



Figure 2. Poblenou del Delta, view of the access street from Sant Carles de la Ràpita. Around 1956. Source: INC

The same concern for the qualification of the overall urban environment of the settlement was what led to the use of different types of housing. The use of different building types achieved a general image of the town with a certain diversity and helped to solve the problem of the corners of the blocks. These different types also allowed for a greater adaptation for family groups that were to accommodate the new housing. In this sense, the types of dwellings that we can find in Villafranco del Delta are not very different from those used in the majority of the projects of the INC. The definitive project contemplates the construction of four different types: House type A, of just one floor, with a kitchen-dining room, two bedrooms, and pantry, used on the corners of the blocks. House type B, also of just one floor, with a kitchen-dining room, three bedrooms, and pantry. House type C, with two floors, with kitchen, dining room, and pantry on the ground floor, covered access to carts. On the first floor there were three bedrooms. House type D, also with two floors, has a similar distribution to type C, but with four bedrooms on the first floor.

All the dwellings have a backyard which lets them have a vegetable garden and outbuildings for livestock, all of which for the consumption of the families of the tenant farmers, depending on the will of each family. There were also outbuildings for storing tools and agricultural machinery. The crops from the

vegetable gardens themselves and the possible performance of the livestock were not considered in the examining of productivity and could be used for their own consumption, outside the administrative control of the technical staff of the INC.

The change in the location of the school building of the preliminary project of Villafranco del Delta to its definitive position, along with the rest of the public buildings of the centre of the town was not something new compared with the majority of the settlements of the INC. The locating of public buildings in the town centre was a constant. As such, the church, the town council, other buildings of collective use, both social as well as administrative, and the school, were all located in central positions, along with the public spaces of greater importance.

Added to the benefits of this central position, it is worth mentioning the aim of erecting something of symbolic reference of these elements, such as the bell tower of the church. In other projects by the same architect, José Borobio, such as the town of Alera, the bell tower of the church was also a reference point from the most important streets of the town.

The presence of this religious facility in the majority of the settlements of the Delegation of the Ebro shows us the ideological position from which the political regime aimed to found a new type of farm worker. Far from the urban agglomerations, that were examples of collectives of social organisation that the proclamation of the Republic and Civil war had showed, the new settlers responded to a type of farm worker who was healthy, Catholic, a follower of traditions, and far from the socialist ideologies and libertarian, typical of the metropolis.

The organisation of the town around the Church ended up showing also that foundational presence of the religion in the way of production of the farmers. It is a constant that we can also find, curiously, in Italian towns from the same period, such as La Martella, that Ludovico Quaroni started to plan in 1951, just

like Villafranco del Delta. It is a town promoted by the INA (*Istituto Nazionale d'Urbanistica*), that showed the same symbolic aim in terms of the location of the Church, despite the fact that the technicians and the administrations were totally different in character compared with the Spanish case we are studying, which can be found in cultural and political circumstances that are diametrically opposed to the Italian ones. In post-war Spain, the underlying ideological programme in these settlements is one more example of the symbiosis between the Catholic Church and Franco's State, engaged in achieving a population that was purified from any racial or ideological contamination.

4.

Despite these ideological components of the new political regime that were materialising in some settlements of the INC, there is continuity in the work of the architects of this organism that links with the proposals of the architectural vanguard of the second Republic.

In the case of the GATEPAC, that grouped together the architects most committed to the international architectural vanguard based around the magazine AC, the fundamental concern was to find another type of residence for the workers in the city. Projects such as the *City of Rest and Holidays* proposed new residential groups linked to spaces for relaxation and leisure, healthy, hygienic, for the working class, crowded together in the city centres¹. The worry of this collective was focused on proposing new types of schools, hospitals, health centres, and planning drainage actions to improve the hygiene of the most degraded areas of the centres of major cities.

In the pages of AC, Josep Lluís Sert vindicated as a reference for modern architecture the "Mediterranean nature" that we can find in the rural dwellings and some of the constructions of the island of Ibiza. For Sert, the characteristics

¹ About this project of the GATCPAC, it should be highlighted the unpublished doctoral thesis of Roger Sauquet, *"La Ciutat de repòs i vacances del GATCPAC (1931-1938). Un paisatge pel descans"*. Polytechnic University of Catalonia (UPC), 2011

of this popular architecture are revealed as a determining factor that give rise to new poets that from the centre of Europe participate in the modern project:

"If, after examining various examples of popular Mediterranean constructions, we compare them with the best creations of modern architecture, we would be unable to miss the common characteristics, not in terms of detail, but in these "constants" that give their spirit to the architectural work." (Sert, 1935, AC Nº 18, page 31)

The consideration of the Mediterranean vernacular as a "myth" that Sert explains, as a reference that lasts in time beyond the conditions that it conforms, we can confirm because this same text could be commenting on the works of another great author, José Antonio Coderch. Here we refer to two housing projects that appear published in the Italian magazine *Domus* in September 1950 (Nº 250) and in November 1952 (Nº 275). In the pages of number 250, the works of Coderch appear alongside photographs of examples of popular architecture of the Balearic islands.

In the Spanish Pavilion of the Triennial of Milan of 1951, José Antonio Coderch places in one of the display cases various photographs of the work of Antonio Gaudí alongside photographs of rural churches of the Island of Majorca as a reference of Spanish architecture. In another of the display cases there are baked clay receptacles that are traditional from the island of Majorca, along with other craftwork objects. The same ones that appear on the pages of AC referring to popular housing.

The continuity between the vision of Mediterranean vernacular that can be found on the pages of AC and that which we can find in the elements incorporated in the Spanish Pavilion of 1951, with the vernacular architecture of Ibiza as a paradigm, is clear and appreciable².

² Even in one of the publications of reference about the topic, the book by Carlos Flores, "Popular Spanish architecture", published in 1973, an extensive study of 5 volumes, the illustrations and drawings that appear in the section dedicated to the architecture of Ibiza are those which are done by Erwin Bronner, as published in the magazine AC 21, of 1936.



Figure 3. Poblenou del Delta, view of the inside of the blocks of houses. Around 1956. Source: INC

5.

Within this continuity that Coderch shows in his projects with Mediterranean rural architecture we can also place the architecture of Villafranco del Delta. In this case, the presence of agriculture as a productive factor shows with greater clarity the relation of this proposal of the INC with vernacular architecture, above all in the dwellings.

In reality, some technicians of the INC, such as José Borobio and many other architects, already had a certain knowledge of rural housing as they had trained with José Fonseca in the Seminar of Urban Studies of the Madrid School of Architecture in the mid nineteen thirties. In that seminar, the study of rural housing was a recurring topic. The collaboration of agricultural engineers and the aim of Fonseca himself to study rural housing as an element linked to the

characteristics of the agrarian exploitation in which it was located, facilitated the forming of a certain theoretical body about the topic³.

The administrative responsibility of José Fonseca after the Civil War as the technician in charge of the National Housing Institute (INV) and the incorporation of some of his students into the technical services of various ministries, among them being José Borobio in the INC, provided a new vision about the work of architects in the settlement towns. The confluence of the work jointly with agricultural experts in the definition of new towns with the updating of the theoretical work of the Seminars of Urban Studies provoke the fact that vernacular did not only appear as a mere exercise of style.

The constructive tradition that is used in these settlements due to lack of resources and the need to contemplate farm outbuildings in the dwellings themselves obliged the architects to revise some of the project tools. The relation between rural architecture with the way that farmers worked implied a direct relation with the place. In the Mediterranean, the houses and crop terraces participate in the same process of construction, as we can well see in the drawings of Edwin Bronner that appear published in the pages of AC⁴.

The stones that the farm workers of Ibiza or Mallorca find in the farming areas and the make the ploughing and planting of the land difficult, are placed at the edge for the construction of walls that allow, at the same time, another flattening of the land with a more horizontal surface than the previous one. The new platform formed a cleaner surface and one that is easier to cultivate, allowing a consolidation of the land that adapts very well to such an irregular rainfall typical of the area. In one of these platforms, the farm worker would build his house with the same stones that had been used for constructing the farming areas.

³ About this topic, it is worth highlighting the relevant contributions of José Luis Oyon in the majority of his studies and publications.

⁴ Bronner is the surname adopted by Erwin Heilbronner shortly after settling in Ibiza.

The use of local materials and of the same construction technologies used for settling on the territory explains why vernacular architecture has an absolute relation with the local characteristics and does not depend so much on a temporal component.

The dwellings of the settlement town of Delta del Ebro, that the INC started in 1947, do show us the adherence to vernacular that, from the pages of the magazine AC in the mid nineteen thirties to the work of authors such as José Antonio Coderch at the beginning of the nineteen fifties, aim to recognise the rural dwellings of Ibiza as a reference of architectural poetry of its time. Although it should perhaps be recognised that it is not with the same pure style that these authors achieved, it is however with the authenticity provoked by the incorporation of farming in the dwellings. The organisation of the spaces of the different types of housing around the vegetable garden, the space linked to the daily productive life of the farmers, makes us continue to speak of a way of life absolutely linked to the place, separate from the time factor.

References

- Armesto, A. & Diez, R. (2008), *José Antonio Coderch*. Barcelona: Belloch
- Berger, J. (1979). *Pig earth*. London: Pantheon books
- Bronner, E. (1936). *Elementos de la arquitectura rural en la isla de Ibiza*. AC documentos de actividad contemporánea, 21, 15-23
- Centellas, M. (2010). *Los pueblos de colonización de Fernández del Amo*. Arte, arquitectura y urbanismo. Barcelona: fundación caja de arquitectos
- Fabregat, E. & López, A. (2008). *El Poble Nou: la darrera colonització del delta de l'Ebre*. Benicarló: Onada Edicions
- Flores, C. (1973). *Arquitectura popular española (5 vol)*. Madrid: Aguilar
- Flores, C. (1979). *La España popular: raíces de una arquitectura*. Madrid: Aguilar
- Lejeune, J.F. (2010). The Modern and the Mediterranean in Spain. In Lejeune, J.F. & Sabatino, M. (Ed), *Modern Architecture and the Mediterranean. Vernacular dialogues and contested identities*. London: Routledge
- Monclus, F.J. & Oyón, J.L. (1988). *Políticas y técnicas en la ordenación del espacio rural*. Madrid: Centro de publicaciones (MOPU)

Oliver, P. (1997). *Encyclopaedia of vernacular architecture of the World* (3 vol).
Cambridge: Cambridge University Press

Oyón, J.L. (1985). *Colonias agrícolas y poblados de colonización. Arquitectura y vivienda rural en España (1850-1965)*. Tesis doctoral, UPC

Sert, J.L. (1935). *La arquitectura popular mediterránea*. AC documentos de actividad contemporánea, 18, 14-15

Sert, J.L. (1935). *Poblaciones mediterráneas*. AC documentos de actividad contemporánea, 18, 28-29

Villanueva, A. & Leal, J. (1991). *La planificación del regadío y los pueblos de colonización*. Madrid: Centro de publicaciones (MOPT)

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HOUSES AND TEMPLES

A useful survey

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Abstract

Eduardo Sacriste (1905-1999) was one of the most important Argentine architects of his generation. He is well known both as an architect and as a teacher -he worked all over his country and was founder and director of the Institute of Architecture and Urbanism of Tucuman. But Sacriste was also a great traveler, with a huge interest in vernacular architecture worldwide. Many of the solutions he used in his buildings are a result of his knowledge of vernacular architecture, and so are some of the books he wrote, especially "Houses and Temples" (FADU - Univ Buenos Aires, 1986) a short treatise in which more than 70 traditional buildings are detailed, with examples from southern India to the Spanish-Portuguese border, Tunisia or Mexico.

Sacriste's writings and drawings for "Houses and Temples" are surprisingly contemporary. His interest in vernacular architecture is not aesthetic, or anthropological, but strictly utilitarian. He is interested in the constructive solutions used in each area, the consistency between materials used and resources available, or the relationship between buildings and their environments. And he cares about those details because he actually wants to learn from tradition. Thus, "Houses and Temples" is a record of those elements that have made us turn our eyes nowadays to vernacular architecture -it can be read, in fact, as a list of examples of intelligent architecture.

The purpose of this paper is twofold. First, we claim Sacriste's architectural legacy, with an emphasis on his reasonable use of architectural traditions. And second, we want to put "Houses and Temples" together with other contemporary studies of vernacular architecture, which will undoubtedly reveal its value.

Keywords: Argentina, handbook, vaults, vernacular worldwide

1. – The Architect Sacriste

Eduardo Sacriste (1905-1999) was a renowned architect in Argentina in the second half of the twentieth century. Born in Buenos Aires, and trained as an architect at the University of that city, Sacriste completed, after graduating in

1932, his studies in the United States. During the 30's and 40's toured America, Europe, North Africa and large parts of Asia. Set in Tucuman in northern Argentina, he developed there his architectural practice and university teaching, although he was a visiting professor and lectured in the United States, India, England, Japan, Peru and Canada.

In 1946 he founded, together with Jorge Vivanco and Horacio Caminos, the Institute of Architecture and Urbanism of the city of Tucuman, the germ of the future School of Architecture in Tucuman (Marigliano 2003). In Tucuman he gave lessons and had various positions, including dean. From the Institute of Architecture and Urbanism Sacriste introduced the tenets of modernism, in line with the well-known "Grupo Austral". A large number of prestigious architects was trained in Tucuman with Sacriste, such as Eduardo Larrán or Cesar Pelli, who still praise his work. He combined the practice of architecture with teaching until his death in Tucumán in 1999.

Sacriste was strongly interested in modern architecture (most notably in Wright, whom he met), but was also notably concerned about architectural traditions. During his numerous journeys he accumulated considerable knowledge of the worldwide vernacular architecture, which allowed him to design his own buildings with elements borrowed from several traditions, always using the most efficient system among his wide technique palette. Proof of this are his most recognizable buildings, including a number of houses, many of which used vaults built with Mediterranean techniques.

His written production includes *Building Footprints* (1962) and *Lectures for Beginners* (1961), perhaps his best known texts, but he wrote and promoted many others, often claiming traditional construction systems. Such is the case of the forgotten *Vaulted Houses* (1977), signed with P. Kechichian and G. MacKintosh, or *Houses and Temples*, a short treatise on vernacular architecture which was published in 1986 but had been brewing since his first trips of the 30's and 40's.

The context. Argentina and South America in the 2nd half of the 20th century

It is important to know the context in which this study was conceived. It was a long process: Sacriste claimed to have been preparing the text, more or less consciously, ever since he directed a course on "popular housing" in the Howard School of Architecture in New York, in 1947. It truly can be traced, throughout his teaching career, how he wrote copious notes on the subject from the early 50's until the final publication in 1986. Therefore *Houses and Temples* can be understood as a distillation of those aspects and examples of vernacular architecture that Sacriste considered interesting, both academically and professionally.

During the 40's and 50's Argentina was the country with the highest educational level of South America. It was also the richest, although social inequalities were enormous. The first modern architecture had been taken normally, despite the distance, and the tenets of late modernity, particularly the demand for traditional values that to some extent it brought about, did also permeate into the most advanced architecture. For example, the use Le Corbusier (Maniaque 2009) did of tile vaults for his Jaoul and Sarabhai Houses (Le Corbusier, 1955 - both buildings were covered by straight generatrix vaults, built on sliding formwork) or the Erraruriz House (Vasquez 2001), a project ever undertaken in Chile, was highly suggestive for those argentine architects that began their architectural practice at that time¹.

The decades of the 70's and 80's marked the beginning of a downturn and were, especially in South America, lavish in architectural utopias: formal utopias, urban utopias and, why not, constructive utopias –we might agree on defining

¹ The relationship of Sacriste's buildings with modern architecture is especially interesting. Le Corbusier's visits to South America had created a two-way connection, as the Swiss architect had been interested in local building systems (including some tile vaults), and its projects in Chile or Argentina (or its mere possibility) had interested the younger generation of local architects. The fact that the Erraruriz House, a project Le Corbusier wanted to build in Chile, could have been covered with tile vaults could, for example, be highly suggestive for them. Many of Le Corbusier's assistants were also established in South America: A. Bonet traveled to Argentina in 1939, and R. Salmons finally settled down in Bogota in 1958. Both had experience in this type of vaults, and they used them, more or less distorted, in their South American stages: Bonet, in his seminal Berlingieri House (1946), a first outline of reinforced ceramics in collaboration with Dieste; Salmons, in several buildings, including his well known Guests House (1978).

them as trials, on a large scale, of the possibilities of new types of construction. The constructive utopia of looking back to vernacular architecture as something useful was a response, in a way, to both the excesses of international architecture and the crisis that darkened the future in South America. That utopia consolidated in Argentina in those years, based both on the known advantages of vernacular architecture (use of local materials, low cost, etc..) and on a new dimension of buildings that was being viewed as important: their moderate energy consumption.

Again the recovery of the domed construction might serve as an example, in the case of Argentina in the 60's and 70's. Headed by Sacriste, a prolific generation of architects and builders, many of whom studied with Sacriste, raised a number of buildings covered with arches and vaults (Larran 2007). The interest of these buildings lies both in the use of classic tile vaulting and the evolution of this system (caused by shortages of materials and absence of manual skilled labour) to new variants, some of great interest. Most of these variants, which were designed at the time for a particular area, have transcended its local condition: the legacy of Sacriste's generation is clear, at present, not only in some recent attempts to recuperate tile construction, but in numerous international projects of lightweight vault construction (Kalemkerian 1976, p.94)

Similar roots in vernacular architecture can be traced in the buildings of the Uruguayan engineer Eladio Dieste (Tomlow 1999), who acknowledged the influence of the traditional construction in his reinforced ceramic systems. Dieste summed up the general feeling in South American at that time when talked in these terms about vernacular architecture: *"The most conclusive example of the creative capacity of people are these marvelous modest small villages. They are something so perfect that there's almost no work of elite architecture that can be compared to them "* (Dieste 2005, p.261).

2. - Houses and Temples. A general survey

Houses and Temples is actually a glossary of examples of worldwide vernacular architecture, organized according to a criterion nor temporal or geographical, but practical. It is important to clarify that it is a general study on vernacular architecture, rather than a precise analysis of the architecture of a few areas. Usually, the depth of any analysis is inversely proportional to the size of the object of study –it seems clear that Sacriste was aware of this, and consciously did not want an over-deepened analysis on a particular case but, as noted above, a general handbook to provide an overview of vernacular architecture on a global scale.

It is also a handbook with teaching vocation, as its main intention is to show students and professionals the huge catalogue of technical solutions provided by vernacular architecture. But not only so that potential readers can study and understand these solutions, but also that they can, as far as possible, implement them. The internal organization of Houses and Temples, the examples chosen, even Sacriste's own comments suggest that it is a handbook that aims to show not only how and why certain vernacular architectures were built, but also how and why to use them again.

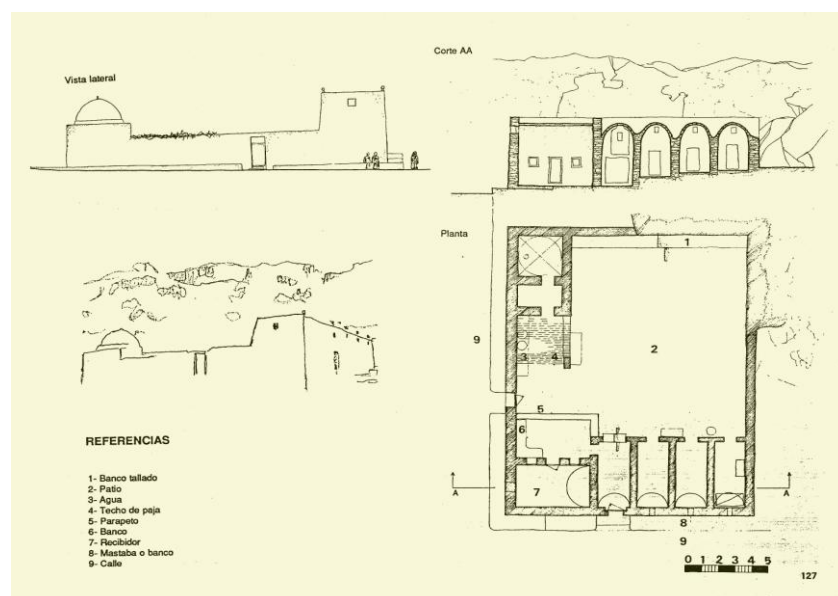


Figure 1. Assuan Houses. (Sacriste 1986, p. 127)

The text is divided into two sections: the first part consists on a series of general considerations, by way of introduction. The second part is a large block of examples. The first three chapters of part one are actually three different introductions from three different perspectives: the first deals with the basis of primitive architecture –relations with transhumance, sedentary lifestyle, agriculture, etc... The second talks about climate and its influence on architectural solutions to those problems studied in the previous section. The third deals with the basic elements that make up the housing under the above, including its practical and symbolic importance.

After these considerations (only 30 pages out of 250) Sacriste focuses on the essentials. The fourth chapter is a claim of vernacular architecture as a functional standpoint, a praise of the wisdom of traditions of different areas that have been able to choose, through a complex process of decanting (that Sacriste describes as a practical evolution) the best solution with the materials available. Next, the examples: 72 houses and 8 temples. The bulk comes from Asia, mainly from India (9 examples) but also from Indonesia and Borneo (5), China (3) and Nepal (2). Similarly numerous examples come from the Mediterranean area, many in the African coast (8 between Egypt and Tunisia, and 3 more in Morocco) and others in Europe, being Spain (7) Italy (4) and France (4) are the most studied. South America is represented by Argentina, Colombia and Mexico, with 3 buildings per country. Other areas are less well represented, as there's only one building in large areas such as Central Africa, Japan, the U.S., Canada or Russia. These buildings are precisely detailed with floor plans, elevations, sections and often photographs of both the inhabited house and the construction process –this being an issue to which he devotes many scholarly notes.

Examples in Egypt and India

To understand the way Sacriste focuses his studies we should go into detail of some of them. The case of mud houses of Aswan (Sacriste 1986, p. 126), in southern Egypt, is among the most interesting ones. Sacriste places it, in his handbook, immediately after a house in Camberai, in the Mediterranean island

of Ibiza, about which he emphasizes that the wall structure supports "*a flat roof on wooden beams*" (Sacriste 1986, p. 124). The house bears a certain kinship with the houses of Aswan, although these are covered with vaulted ceilings – Sacriste's intention is obviously to compare the two.



Fig. 26. Se coloca la cuarta hilada.



Fig. 27. Los peones construyen gradualmente la hilada inclinada.

Figure 2. Building a vault. (Sacriste 1986, p. 126. Original by H. Fathy)

The information Sacriste gives on the building of the vaults of these houses is almost enough to build them: "*These adobe vaults are built without using formwork. [...] The mixture is of soil and straw, and both the walls and the vaults are finished in plaster. [...] The thickness of the dome is 20 cm. at least, and it is supported by walls of 50 to 60 cm. wide*". He also states that "*vaults are of parabolic shape. The vault begins on a header wall, where the first courses are placed inclined to improve adherence, since the mixture employed is clay*" (Sacriste 1986, p. 126). The images accompanying this description are, in addition to those of the house studied, the ones Hassan Fathy took while his Gournia market was built. It is, moreover, images and studies that had already included in Sacriste vaulted Housing, published in 1977.



Figure 3. A tile vault in a building included in Sacriste's "Viviendas con bóvedas": the Wright House (M. Goldman, H. Ramos and J. Erbin. Buenos Aires, 1971)

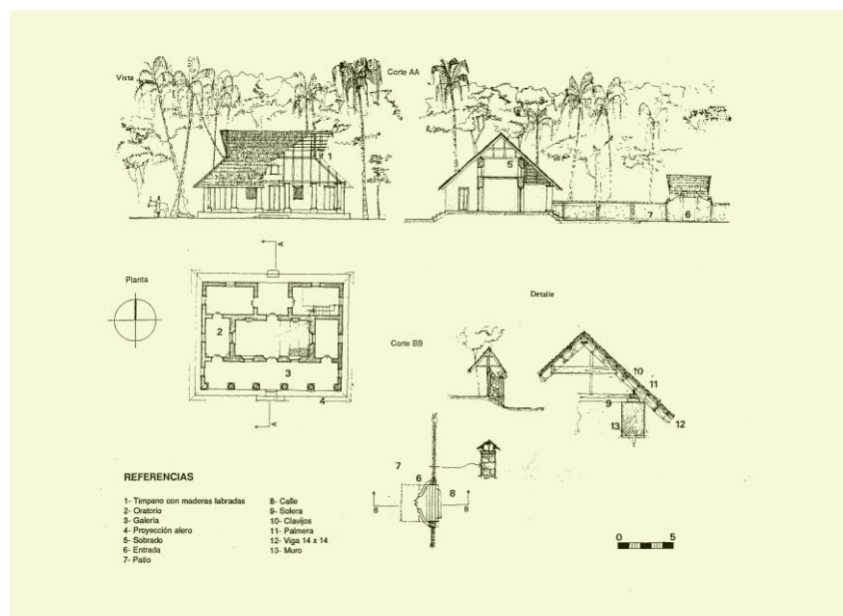


Figure 4. Kerala Houses. (Sacriste 1986, p. 135)

Another interesting example is the one of the vernacular houses of Kerala, a province in southern India. Sacriste locates his analysis immediately after the one of the Balinese village, whose houses are somehow similar to those in Kerala: lightweight structures, leaf and straw covers, etc. The two cases differ in several points, from their strategies for natural ventilation to their structural systems, of which Sacriste states, in the case of Bali, that bamboo is used and *"tied and held by palm fiber, discarding all kinds of nails"* (Sacriste 1986, p. 132), while in Kerala large Jackfruit Tree timber trusses are used to cover the building, with *"all connections made with vine fiber"* (Sacriste 1986, p. 134).

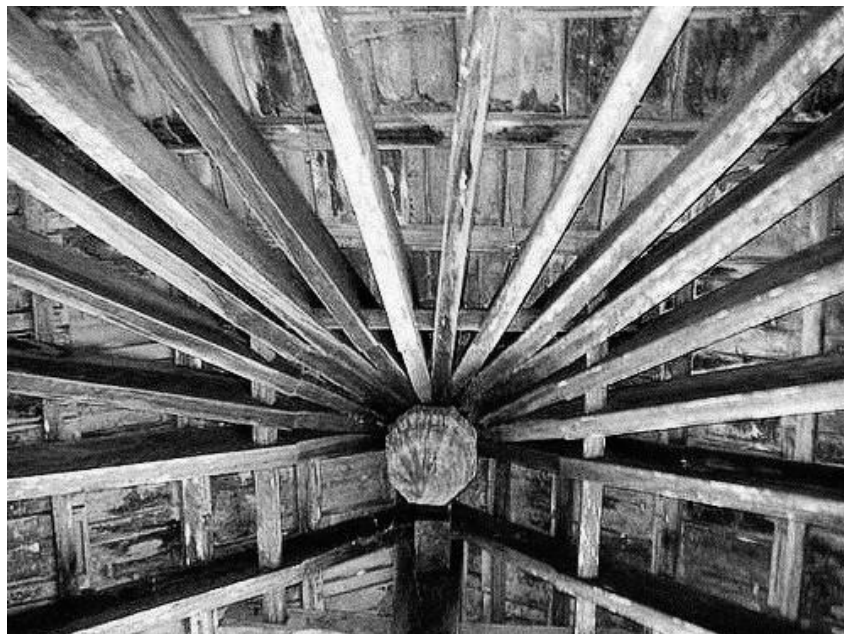


Figure 5. Traditional timber roof in Kerala.

In addition to information on geometry or construction Sacriste includes here, as in many other cases, data on ritual uses, always with the intention of justifying the solutions seen in plans and elevations. On the gables he stands, for example, that *"the one that faces the street is covered with an elaborate grid, while the symmetrical, on the west, doesn't"* (Sacriste 1986, p. 134), implying that this elaboration is representative rather than strictly functional. On the design of the plant he states that *"only people from the same social stratum can*

sit in the central room. All other visitors have to wait in the gallery, mostly when it comes to merchants who are on business" (Sacriste 1986, p. 134), willing to give an explanation to the distribution that goes beyond the mere hygrothermal building performance.

Sacriste is highlighting, with these notes, several aspects that appeared in his introductions, which are essential to the way he understood vernacular architecture. On one hand there is the fact that the separation, in these architectures, between ritual function, constructive function and architectural function is practically impossible to make. Culture and space form a whole that can hardly be justified only from a technical point of view. To understand the entire building it is necessary then, using Cassirer's expression, to "get other eyes to look." And secondly, Sacriste shows that vernacular architecture can respond to similar environments and similar problems with different solutions – that is, although these architectures respond adequately to the demands of a place and culture, many other solutions can work similarly well.

In what comes to history and anthropology, it is very interesting to evaluate the distance Sacriste established with the subject of study. Obviously he not a theoretical anthropologist, as he personally visited the sites, and even used the solutions he studied, raising buildings inspired in vernacular architectures. But he does not feel obligated to fully integrate into the societies he visited to understand some deep details of buildings, preferring to set his focus from a distance technique, performing a neutral field work focused on the practical condition of the buildings, but explaining some of its solutions, where necessary, from the perspective of society or history.

3. Conclusions. Architecture, history and society

The interfaces between disciplines are often fertile areas. Architecture, history and anthropology, areas of knowledge that rarely come into contact, share a common interest in vernacular architecture, a field which is enhanced when these disciplines they leave their independence and allow contact between the

approaches of different scholars. Works on vernacular architecture are always more interesting when the authors are aware of all these disciplines, and are therefore able to understand the architecture (their location, shape, construction) in relation to history and social structures.

Studies on vernacular architecture are so more interesting the more they make us understand the importance of social organization in the production of materials, and of those materials in the construction of a building; the more they are able to detect the influence of certain historical events in the design of a facade; the more they can understand that architecture can also strike back and modify social structures; that architecture can, to some extent, also mould history, and not only exist as an effect of it (Oliver 2003). Anglo-Saxon studies, generally very connected with anthropology (in which the knowledge of history and culture is as important as it is the object studied, architecture in this case) are the best examples of this form of addressing vernacular architecture.

Houses and temples is not exactly a canonical multidisciplinary study. It is more the manual a practical architect; practical but also traveller, educated, able to understand that the limits of the field he studied go beyond the scope of architecture. But architect in the end, offering his own view on some paradigmatic cases of worldwide vernacular architecture. The emphasis of Houses and Temples is in architectural plants, elevations and sections, which Sacriste almost always explains from a technical point of view: it is the static problems, the protection against moisture or the cross ventilation systems what justify many of the solutions studied. However, history and society are very present in his speech. Many of the solutions he refers to allude to historical or cultural reasons that may justify many architectural decisions: "*Given that negative spirits travel in straight lines into the house, as in China, a low wall is placed in front to prevent direct entry*" (Sacriste 1986, p. 132), says in his study of the houses in Bali.

So, what kind of book is Houses and Temples?

Beyond its relationship with other disciplines, it is clear that *Houses and Temples* is, as mentioned above, a handbook designed for teaching. Its main intention is to display and make available to students and professionals the huge catalogue of technical solutions provided by vernacular architecture. Sacriste himself used, as mentioned, many of these solutions in his buildings. The intention of those notes on historical or anthropological aspects accompanying plans and elevations is to make clear which are the elements of housing or temples plants and elevations that do not answer to the logic of architecture, urban planning or construction. These are not just scholarly notes on remote cultures, but also a way of keeping distance with the reasons for building certain architectural elements.

However, Sacriste's intention including these notes on history and anthropology, these readings that go beyond the strictly architectural, is twofold. On the one hand, he wishes to make clear which elements or solutions have a technical justification; to clean, somehow, the magic, religion or tradition included in the building. But, no less patent, he wishes to clarify that although most vernacular architectures fit suitably to the environment, there is no such thing as a list of unique ideal solutions, but many options that can be successfully combined; that there are many architectural variants that can be implemented in one area, and that historical and cultural factors can't help being involved, along with technical ones, in that variety.

References

Dieste, E. (2005) Técnica y subdesarrollo. *Eladio Dieste 143-1996*, p. 259-266. Seville, Consejería de obras públicas y transportes.

Kalemkerian, M. (1976) Nuevas instalaciones para el Arsenal de la Armada. *Informes de la Construcción* 284, p. 91-98. Madrid, CSIC-IETCC.

Larran, E. (2007) *Eduardo Larran: Arquitectura Moderna en el Noroeste Argentino*. Buenos Aires, Cedoal.

Maniaque, C. (2009) *Le Corbusier and the Maisons Jaoul*. Nueva York, Princeton Architectural Press.

- Marigliano, F. (2003) *El Instituto de Arquitectura y Urbanismo de Tucumán*. Madrid. Escuela Técnica Superior de Arquitectura de la Universidad Politécnica de Madrid.
- Oliver, P. (2003) *Dwellings. The vernacular house worldwide*. London, Phaidon Press.
- Sacriste, E. (1961) *Charlas a principiantes*. Buenos Aires, Editorial Universitaria.
- Sacriste, E. (1962) *Huellas de edificios*. Buenos Aires, Editorial Universitaria.
- Sacriste, E. Kechichian, P. y Mackintosh, G. (1977) *Viviendas con bóvedas*. Buenos Aires, G7.
- Sacriste, E. (1986) *Casas y templos*. Buenos Aires, Secretaría de Extensión Universitaria de la Universidad de Buenos Aires.
- Tomlow, J. (1999) La bóveda tabicada y el nacimiento de la cerámica armada. *Las bóvedas de Guastavino en América*, 209-221. Madrid, Instituto Juan de Herrera.
- Vásquez, C. (2001) La Casa Errázuriz de Le Corbusier. Cronología del proyecto. *ARQ num. 49, Diciembre 2001*, 66-69. Santiago, Universidad Católica de Chile.

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UNDAGI'S SUSTAINABLE ARCHITECTURE

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Abstract

In Indonesia, the foundation of architectural education is detached from the vernacular tradition. As a result, this paper puts forward that the architecture built are not sustainable, especially if we defined the word sustainable not only the renewable resources or the continuity of the environment in the realm of technology, but also as the continuity of a culture. Hence, this paper proposes that it is important to learn vernacular tradition of a place and adapt it to the contemporary world. This study analyzes how an undagi –a Balinese master builder- built in the past and in the present. An interview with the Balinese undagi is conducted to show his vernacular knowledge and how he sees the changing world of Bali. The result of the interview is examined in conjunction with literature research on the vernacular tradition in Bali which sees building as an extension of man as well as a microcosm of part of the whole environment. In the end, case study of a hotel in Bali, designed by this Balinese undagi, will be evaluated to show the sustainability of how he thinks about Balinese architecture in the developing world. Eventually, this paper demonstrates that sustainable architecture can be created by continuing the vernacular knowledge of 'making' architecture. In the end, hopefully this paper will contribute to the understanding of sustainable architecture that is achieved by designing relations between vernacular tradition, the developing environment and the changing culture.

Keywords: vernacular tradition, sustainable culture, undagi

Introduction

In Indonesia, the first school of architecture was *De Technische Hoogeschool te Bandung* (now known as Bandung's Institute of Technology) in West Java. It is built in 1920's by the Dutch government due to the increasing needs of engineer in Indonesia. Hence, the education model or the curriculum was derived from

the European knowledge of architecture¹, not from Indonesia's vernacular knowledge of architecture. Few of Indonesian finest young man learned architecture at that school. Eventually, after Indonesia's independence in 1945, they became architects and/or lecturer of architecture. As a result, the architecture built (before and after independence) were European buildings –brick, thick walls with small windows openings-, and not vernacular architecture of Indonesia –wood, thin walls, sometimes, no walls-. Through the emergence of architecture schools across Indonesia, the European education model spreads until now. These schools adopt the curriculum, enhancing the gap (Fig.1).



Figure 1. Mediteranian style house built next to Rumah Gadang in Padang Pariaman, West Sumatra. Ironically, the construction workers were proud to say that the drawings came from Java Island. Source: Gunawan, Y. 2008.

The phenomenon above occurs in many parts of Indonesia. As a result, Indonesia's vernacular architecture is in the edge of extinction. Eventually, this problem draws attention to some architecture academicians and practitioners in In-

¹ The knowledge derived from its history and theory of Greek and Rome architecture, to Renaissance, Baroque, Modern movements, etc. as well as Beaux Arts and Bauhaus education model.

Indonesia. They stated that a documentation of vernacular architecture and its knowledge are needed. As Urs Ramsayer (2003: 23) stated, '*A communication gap thus exist, which needs bridging sooner rather than later, before the young drift further away and, worst yet, begin to doubt the value of their tradition*'. In this sense, the awareness of continuing vernacular architecture as knowledge is crucial in the education of an architect (Oliver, 2006).

The reaction is supported by the growing awareness of sustainable architecture, and the expanded meaning of the term sustainable architecture which should '*pervade not only technological things, but also include questions of a building's suitability for its socio-cultural as well as environmental context*' (Williamson, 2003, p. 4). Thus, development of architecture should concern on the continuity of both environment and culture. Hence, a growing respect in traditional² ways of thinking is arising (Williamson, et.al, 2003; Steele, 2005).

This study chooses Bali Island as case study due to the strong existence of traditional ways of thinking, including their vernacular knowledge of creating architecture. Their unique culture caused 'exposure of Bali island to tourism as early as 1914' (Panji Tisna, IGR. in Ramsayer, 2003, p. 18-19), and still become one of the most well-known destination around the world till now. This phenomenon show that Bali's vernacular knowledge survives globalization and tourism. Hence, this study analyses vernacular architecture knowledge of an *undagi* –a Balinese master builder- and how he adapts to the changing world of globalization and tourism. Accordingly, it is interesting to seek out how the adaptation affected the creation of a sustainable architecture.

Undagi's vernacular knowledge on architecture

Studies on Balinese architecture mentioned a 'traditional architect', known as *undagi* who '*follows the palm-leaf manuscript of architectural rules which takes into consideration the principal tenets of Balinese Hinduism*' (Panji Tisna, IGR. in Ramsayer, 2003, p.21). These Balinese architecture rules are known as *Asta*

² The word traditional derived from the word tradition, and hence in this writings, the use of the word traditional related to the meaning handed-down from one generation to another.

Kosala Kosali (Danes, Popo in Ramseyer, 2003; Oliver, 2003: p. 184; and Alit, 2003). The main principle of *Asta Kosala Kosali* is the acknowledgement of human entity (microcosm/*bhuana alit*) as part of the universe at large (macrocosm/*bhuana agung*).

In recognizing microcosm and macrocosm, *asta kosala kosali* seeks to achieve balance amongst the three elements of life: God, human beings and nature (world, universe) –popularly known as the three cause of happiness (*Tri Hita Karana*). The Balinese believed that '*true happiness might be obtained when one establishes harmony with God, with other human beings and with the environment*' (Ramseyer, 2003, p. 22). And thus, it is the task of an *undagi* to keep the architecture in the state of balance between God, human beings and environment to achieve happiness (Alit, 2003; Davison, Julian & Bruce Granquist, 1999).

Tri Hita Karana points out that '*the environment (macrocosm) are made up of five basic elements: water (liquid), air (wind), fire (light), earth (solid matter) and ether (space), and come in the form of two complementary opposites (rwa bhineda) like material (sekala) and immaterial (niskala)*' (Ramseyer, 2003, p.21). Thus, the Balinese treats elements of nature, such as trees, water, etc. as well as building materials such as stone, wood, bamboo, etc., carefully and respectably, believing each elements (the material) embodied the immaterial. This kind of respect is most apparent in the Balinese shrines. The shrines vary in shapes and scale which denotes the different level of *niskala* (the immaterial), for example: village shrines or *pura* for the keeper of the village, *plinggih* for the keeper of the environment, *pamerajan* or *sanggah* for the house or known as family shrines, etc.

Another form of respect can be seen in how they treat the materials. Every stone has its own character and hence, each stone should be treated differently; some should be located above the human head, and some close to the lower part of the human feet. For example: '*the placement of Karang Asti and Karang Batu in lower part of a building (or nista angga in Balinese), while Karang Daun, Manuk and Sae in the upper part (vertical dimension of a building)*'. (Alit 2003:

105). This kind of respects is what Fritjof Capra identified as 'intuitive wisdom ...in which life was organized around a highly refined awareness of the environment' (Inglis, Julian T. 2003, p. 1) which should be added in most culture in the world occurs in the form of beliefs and ideology.

Moreover, the macrocosm of Balinese is the island of Bali with Gunung Agung as the holiest mountain. Thus the main direction of the dwelling compound (or the microcosm) (Ramseyer, 2003; Oliver, 2003, p. 168-189) is '*running north-south towards the highest and holiest mountain (to which north and the Holy or kaja, utama are assigned) and to the sea (to which south and what is low or kelod, nista are assigned).*' (Danes, Popo in Ramseyer, 2003, p. 96). The other direction is east-west, '*from the point of rising sun (to which the Holy or kangin, utama are assigned) and the point of sunset (to which the low or kauh, nista are assigned).*' (Danes, Popo in Ramseyer, 2003, p. 96; Julian & Bruce Granquist 1999; Eiseman, F.B., Jr. 1990).

Thus, the buildings in the dwelling compound are assigned in those directions; the shrines of the dwelling in the north-east, the kitchen and the gate in the south-west. Furthermore, '*An important feature in the compound is the communal outdoor space, in the middle of the compounds, the dwellers' center orientation called natah*' (Danes, Popo, in Ramseyer, 2003; Julian & Bruce Granquist 1999; Eiseman, F.B., Jr. 1990). As a result, spatial orientation in Balinese architecture are very important and should be maintain to achieve happiness (the goal of *Tri Hita Karana*). Hence, it is apparent that an *undagi* will not break the rules of spatial orientation as it will shatter the happiness. And therefore, at the same time, it is a direct connection to create sustainable architecture in the sense of maintaining the continuity of socio-culture of a community.

Thus, from the explanation above, this paper suggests that the *Tri Hita Karana's* acknowledgement of the immaterial aspects of environment contributes to how an *undagi* creates a balance relationship between the buildings and their environment. Because of this perspective, an *undagi* will not conquer and destroy

the environment with his buildings which is exactly what sustainable architecture suggested that architecture should be in harmony with nature³ and its culture.

The last implication of *Tri Hita Karana*, discussed on this paper is in considering happiness of other human beings. It places the emphasis on buildings as means for creating relations between people, and at the same time between people and buildings. Thus, *'...in the designing of a building complex along with its spatial layout, in the choosing of the construction's structure and building materials, an undagi must carefully takes into considerations not only climatic and environmental conditions, but also social and spiritual conditions'* (Danes, Popo, in Ramseyer, Urs. 2003, p.20). It is important for an *undagi* to take care of the stone craftsman, the brick builder, the wood craftsman, the occupants and the surrounding neighbours.

In the end, we should also note that in many research the socio-cultural aspect is link to the economic health and vitality of the people, which 'may or may not be linked with a concern for the well being of the environment for its own sake rather than solely as a potential resource and necessary support for human being. The sustainability of all three –environmental, socio-cultural and economic system- is sometimes called "the triple bottom line" by which the viability and success of design and development should be accessed' (Williamson 2003, p. 4). Hence, this study will also acknowledge a small part of economic aspect in the case study below.

Sustainability in Royal Pita Maha Resort

Royal Pita Maha Resort is chosen as case study because it is owned and designed by a Balinese *undagi* who has a master degree in business administration⁴. In this way, the *undagi* has an understanding of both vernacular knowledge of

³ *'Avoiding the destruction of natural habitats is as much a priority for architectural developments as the enhancement of existing natural environments, the development of links between them and the introduction of new habitats'* (Sassi, Paola, 2006, p. 33).

⁴ From the interview with several Balinese people, apparently, *undagi* as a title can also be given to someone who has a considerable achievement (and seen as a talent) in creating Balinese architecture. And this *undagi* whom designed the Royal Pita Maha Resort had received the Balinese master builder since 1990s.

Balinese architecture and modern ways of thinking. For the purpose of this paper, the analyses will be conducted in conjunction with three aspects of sustainability: environmental, socio-cultural and economic system.

The **first aspect** to be discussed is the sustainability of the environmental system. The resort is located in Kedewatan village, Ubud, Gianyar region in a huge site. The site starts from the street and ends at a river –called Ayung river– down the slope (approximately 80 meters height difference). There is also a natural water-fall and few rice-fields –in the North-, and tropical rainforest in the east side.

From the interview, in designing the layout of the resort, the *undagi* respects the existing environment (the macrocosm). He keeps the river and the natural waterfall as it were, as well as the trees and plants as many as possible, especially the huge ones. The buildings are placed in relations with contours of the slope, the trees, the river and the rice-fields. The river and the rice-fields became the main view of the buildings. Connections to the river 80 meters down the slope is achieved by a large swimming pool in the middle (approximately 30 meters from the street, or 50 meters from the river), an organic linear lagoon stretching alongside the river, and the balcony which directly captures the curve of the river (see Fig 2).



Figure 2: (left) the careful placement of buildings towards li-near lagoon alongside river and the rice fields and (right) the curve of the balcony. Source: Gunawan, Y. 2010.

In additions, the *undagi* uses the potential of the environment to enhance the resort's atmosphere and activity. For example: the water from the waterfalls is used for holy spring-water pool, the river is also used for rafting, the working rice-fields acting as views from the bungalows, and so on. As a result, the connections of the resort and the environment of the site are strong.

Moreover, most of the materials chosen are Balinese vernacular architecture's materials. The *undagi* used Balinese stone, bamboo, wood, and thatch roofs. And most of these materials are from the surrounding Gianyar villages. In this way, the *undagi* managed to lower the energy used for transporting building materials. The four Balinese stones (*Batu Paras Taru*, *Selekarang*, *Klating* and *Sarwogenep*) are carefully chosen because of its texture and motifs⁵. The stones are carved excessively in the resort gates and the walls (see fig. 5). Most of the construction workers are Balinese, hence they know the motifs of the stones (or known as *Karang*), how to thatch the roofs, and the bamboo weaves. This way, the *undagi* has successfully sustained a local craftsmanship which closely related to the Balinese culture as well as the environment.

The second aspect of the sustainability of Balinese socio-culture in Royal Pita Maha Resort is by following the North-South spatial orientation of Balinese architecture rules mentioned above. The design of the main circulation of Royal Pita Maha resort divides the North villas and the South villas, and ends in the *natah* placed in the middle of the site, acting as entrance, public space, and communal space (see Fig. 3). From the *natah*, visitors are welcomed by two main buildings; The North Wing Lobby and Restaurant, and The South Wing Lobby and Restaurant, enhancing the division of the North and South orientation.

The *undagi* also places the main shrines in the North-East direction, near the river. There are also several smaller shrines placed more dispersed to honour the huge trees and the stones (macrocosm). Near the waterfalls and the river, there are few smaller shrines or also known as *pelinggih* to worship the keeper of the water. And moreover, still connected to the immaterial aspect of the

⁵ As mentioned before, in *Asta Kosala Kosali*, there are certain rules on the placement of stones that suited their characters. Therefore, in this Royal Pita Maha Resort, some stone or *karang* are crafted and placed to suits the motifs, textures and symbols of the stone.

environment and the spatial orientation, the North South orientation also apparent in the construction stages of the resort, stage 1 is the development of the North lobby, restaurant and villas (completed), and stage 2 is the development of the South lobby, restaurant and villas (now conducted). In doing so, the *undagi* sustained Balinese culture in Royal PitaMaha resort.



Figure 3. Main circulation that divides the North and South villas, and the *natah* in the middle, acting as entrance.
Source: Royal Pita Maha site plan, 2010.

Furthermore, in the *natah*, he places huge statue of Goddess (see Fig 4). The statue not only emphasis the main entrance for the visitors/guests but also represents the story of the place. The local people believed that 'many centuries ago, a holy man called Maharsi Markandhya embarked upon a spiritual journey of enlightenment that led him to Mount Agung in Bali... Further exploration of this vicinity led Maharsi to the village of Kedewatan, a name originating from the Balinese words *Dewa* meaning the God. It is an area greatly revered by locals as it is believed to be blessed by the Gods' (from the interview). Furthermore, when the Maharsi found a river, he sees Goddesses of great beauty and he named the river, Ayung river (the river of beauty). The story is also carved in the walls of the North Lobby and Restaurant (see Fig. 4). In this way, the *undagi* skillfully combines two important identity of the site, as well as the unique atmosphere of the tourist that stayed in the resort.



Figure 4. (left) carved story of Maharsi and (right) the *natah* with Goddess statue. Source : Gunawan, Y. 2010.

The third aspect of sustainable architecture is economy. To enhance people's economy, the *undagi* did three things. The first is creating connections with the surrounding villages by designing three street junctions between main circulations of the resort and the roads to the Balinese villages (see Fig. 5). By creating this infrastructure, the *undagi* allows easier access to the village, and eventually, it will affect the development of vilager's economy. The second one is related to the construction workers whom are also the people from surrounding villages, except the workers for the thatch roofs which require greater skills.



Figure 5. Street junctions between main circulation to the resort and to the villages. : Gunawan, Y. 2010.

And last but not least are the hotel workers. The main principle of recruitment of the resort is the people surrounding the resort. Instead of one month usual training for professional, they conduct five-months training for the people, whether they are elementary graduates, a high school graduates or holds a

bachelor degree. Each degree will be given a suitable position in the resort. As a result, because many hotels' workers are Balinese, then the rituals of Balinese everyday life are conducted in the resort. It can be seen in the offerings in front of each villas' main door. In this way, the *undagi* participates in the creation of sustainable architecture in the economic health and viability in the realm of tourism.

Conclusion

From the results and discussion above, this paper shows that the *undagi* successfully achieves the goal of *Tri Hita Karana*: the happiness, by keeping the balance between God, the environment, and the people involved: the construction workers, the hotel workers, the villagers, and the tourist. And furthermore, by keeping the balance, the *undagi* has contributed to a sustainability in the Balinese culture through architecture.

Thus, this paper puts forward that it is important to 'teach' vernacular knowledge of architecture in the education of an architect. By continuing vernacular knowledge of making architecture, an architect can contribute to the creation of a sustained environment and culture; a balance between environment, human culture and economic system in this developing and globalizing world.

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References

Alit, I Ketut in Jurnal Permukiman Natak vol. 1 no. 2. (June 2003). *Kinerja Undagi dalam Pembangunan Rumah*. Udayana University; ejournal.unud.ac.id, accessed July 2011.

Davison, Julian & Bruce Granquist (1999). *Balinese Architecture*. Hongkong: Periplus Editions Ltd.

Heath, Kingston, W.M. (2009). *Vernacular Architecture and Regional Design: Cultural Processes and Environmental Response*. UK and USA: Elsevier Ltd.

Oliver, Paul (2003). *Dwellings: The Vernacular House World Wide*. London and New York: Phaidon Press.

Oliver, Paul (2006). *Built to Meet Needs: Cultural Issues in Vernacular Architecture*. Oxford: Architectural Press, an Elsevier imprint .

Ramseyer, Urs and Tisna, I Gusti Raka Panji (ed.)(2001). *Bali Living in Two Worlds*. Basel: Museum der Kulturen and Verlag Schwabe & Co. AG, Basel.

Eisemen, Fred B., Jr. (1995). *Bali: Sekala and Niskala: Volume II: Essays on Society, Tradition and Craft (3rd editions)*. Hongkong: Periplus Editions Ltd.

Sassy, Paola (2006). *Strategies for Sustainable Architecture*. London and New York: Taylor & Francis.

Steele, James (2005). *Ecological Architecture: a Critical History*. London: Thames & Hudson Ltd.

Williamson, Terry, Radford, Antony, and Bennets, Helen (2003). *Understanding Sustainable Architecture*. London and New York: Taylor & Francis.

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THE SIGNIFICANCE OF SURVEYS IN THE PRESERVATION AND RESTORATION OF THE VERNACULAR ARCHITECTURE. THE CASE OF CYPRUS

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Abstract

In 1964, The Charter of Venice launched a great interest in vernacular architecture in many European countries as in Article 1 the concept of an historic monument was expanded not only to the single architectural work but also to rural settings. In Cyprus, this interest was proven by the initiation of surveys on the vernacular architecture of the island. The first one was carried out in 1966, when a specialist from Greece was called to carry out a survey of traditional buildings and proposals for their preservation. She spent a month in the villages of Cyprus inventorying characteristic types of rural traditional dwellings. In 1972, another mission from Athens Polytechnic came to Cyprus to study the island's vernacular architecture. This was repeated in 1973, but a year later this mission was interrupted because of the Turkish invasion of Cyprus. After the establishment of an independent sector responsible for the protection of folk art within the framework of the Department of Antiquities in 1982, and the enactment of the Town Planning Law of 1972, many vernacular buildings in rural settlements were declared as monuments or listed buildings. Additionally, traditional settlements were characterised as areas of particular interest, and the necessity for surveying these buildings was imperative. Recently the importance of identifying vernacular buildings has increased and this identification necessitates knowledge not only of the architectural values and the fabric of the structures but also of their role and contribution to the history of society. Thus, the methodology of surveying vernacular dwellings and the concept for their study have been changed with the use of more sophisticated methods and at the same time with the consideration of these buildings as part of the living heritage and an important factor towards the future sustainable development.

Keywords: Vernacular Architecture, Surveys, Cyprus

Introduction

What could be considered an architectural monument had different interpretations through time. It could mean a pile of stones, a building, a structure, a site of exceptional beauty, and so on. As Alois Riegl defined it "In its oldest and most original sense a monument is a work of man erected for the specific purpose of keeping particular human deeds or destinies (or a complex accumulation thereof) alive and present in the consciousness of future generations (Riegl, 1996, p.69).

The interest in monuments goes very far back in time. It can be said that it began as soon as the conceptions of past and future became clear to human intelligence (Brown, 1905, p.12). In some cases, such as in the case of deliberate monuments, it is easier to identify a structure as a monument since its commemorative value is pointed out to us by its former creator (Riegl, 1996, p.72). What happens, though, in the case of the structures that were not designed by their creator to commemorate something in particular? Such structures were simply erected to fulfil some particular needs of their own, and were not intended to leave their artistic or cultural value to future generations such as in the case of vernacular architecture.

It is generally accepted that the Charter of Venice in 1964 launched a great interest in vernacular architecture in many European countries. This resulted from the impact of Article 1 that extended the concept of a monument not only to a single architectural work, but also to the urban or rural setting in which the evidence of a particular civilization, a significant development or a historic event can be identified. Article 1 also states that the concept of a monument does not embrace only great works of art but also more modest works of the past that have gained cultural significance with the passing of time.

The rapid development which Cyprus experienced after the Second World War and the economic boost which the island had since its independence in 1960, brought rapid changes in the countryside. The introduction of electricity, new means of transport and the facilities of modern life had a radical change in the traditional architecture and the traditional way of life. In a short period of time

new construction materials and techniques have shaped today's image of our towns, which is so different from the past.

Simultaneously, with all these rapid changes in Cyprus, the interest in vernacular architecture was also launched. This is evident by the initiation of surveys of the vernacular architecture of the island. In order to appreciate something, the first step is to understand it. When it comes to architecture, the best way to understand a building is to survey it. In this way, one understands how its elements bond together, what purpose it serves, why it was erected in the particular location, how an individual building is related to the rest of the environment.

Surveying in Cyprus

The first survey of the vernacular architecture of Cyprus was carried out by the architect Vanna Chadjimichali. She came from Greece in 1966 within the framework of the programme for offering technical support from the Greek Ministry of Foreign Affairs to the Department of Antiquities of Cyprus. She spent a month in the villages of Cyprus inventorying characteristic types of rural traditional dwellings. The drawings that she prepared were mostly plans because her major interest was to analyse the typology of the Cypriot traditional dwellings since this subject had not been investigated in detail before. Her inventories are kept in the Photographic Archive of the Department of Antiquities of Cyprus.

In an article that she wrote while she was in Cyprus, published in the Report of the Department of Antiquities of Cyprus in 1967, she expressed her own opinion about the significance of the survey of the vernacular architecture:

The benefits from surveying a building are not only restricted to the understanding of the building itself. The survey of the vernacular architecture and through it the identification of the typologies within certain geographic regions, their comparison with typologies in other locations and the detection of relations between them, can reveal

invaluable information about the origin of a race, its history and the evolution of its architectural designs.

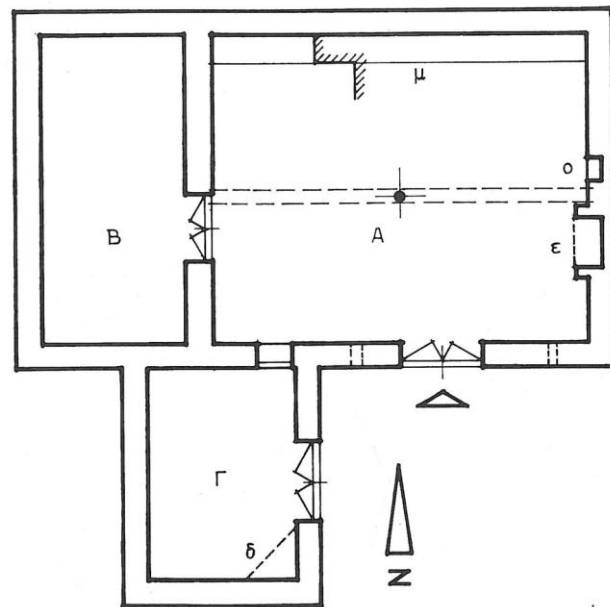
The survey and the study of the vernacular architecture of a country becomes more vital in the case where its origins are lost through time and the remains that have survived do not allow us to restore the evolutionary continuity of the various types of housing, or interpret its origin and the interactions. When discussing Greek architecture, including the architecture of Cyprus, due to the conservative attitude of the people, the historical and geographical factors contribute to the perpetuation of types of construction, then the study and the survey of the vernacular architecture is invaluable for interpreting and restoring the history of housing and architecture in general, since the emergence of the first building up to current forms (Chadjimichali 1967, p.87).

The fact that the Cypriot house is an evolution of the ancient Greek house with the subsequent amendments and additions for better living conditions of its residents, is a conclusion that George Papacharalambous, a Cypriot teacher and folklorist, tried to present in his book titled "The Cypriot house", the first book on the vernacular architecture of the island published in 1968. In this book, the plans of different types of houses from several villages are being presented (Fig.1). As Papacharalambous stated (Papacharalambous, 2001, p.1) he tried not to give a description of the house with regards to its typology or constructional materials, but he intended to investigate the house from a sociological aspect, trying to examine its evolution and symbolism.

The surveys showed that the basic type of house in Cypriot vernacular architecture is the *makrynari* (Chadjimichali 1967, p.91, Papacharalambous 2001, p.23, Ionas 2003, p.47), an elongated rectangular space (Fig.2), that its width would not exceed three meters due to technical reasons, since the available wooden beams (*volitzia*) were up to three meters long (NTUA 2003 Vol.2, p17). In the course of time, a second volume identical to the original one was added next to it. Openings were created on the intermediate wall so that

the two spaces would communicate, until the wall was eventually replaced by two wooden posts that would carry a principal beam.

The new type of housing which is created by the consolidation of two *macrynari* and the abolition of the intermediate wall is the so called *dichoro* (Papacharalambous 2001, p.26). In some areas, the need for the creation of a large unified space as well as the lack of timber, led to the replacement of the intermediate wall by a single stone arch (*kamara*) (Fig.2). This type of *dichoro* is also known as a *palati*. Usually, the *makrynari* is covered by a flat roof and the *dichoro* by a slightly inclined roof.



Οικία Κουτσογιαννή, Λεμύθου. 1:100. Α = δίχωρον. Β = σόαυτον. Γ = βοη-
θητικών δωματίων. Δ = γωνιακόν τοιχάμαρον. Ε = έστία. Μ = μεντάρι.
Ο = όπή επί τοῦ τοίχου.

Fig.1. Plan of a Cypriot house in the village of Lemythou.
Source: Papacharalambous 1968, pic.XXVI.

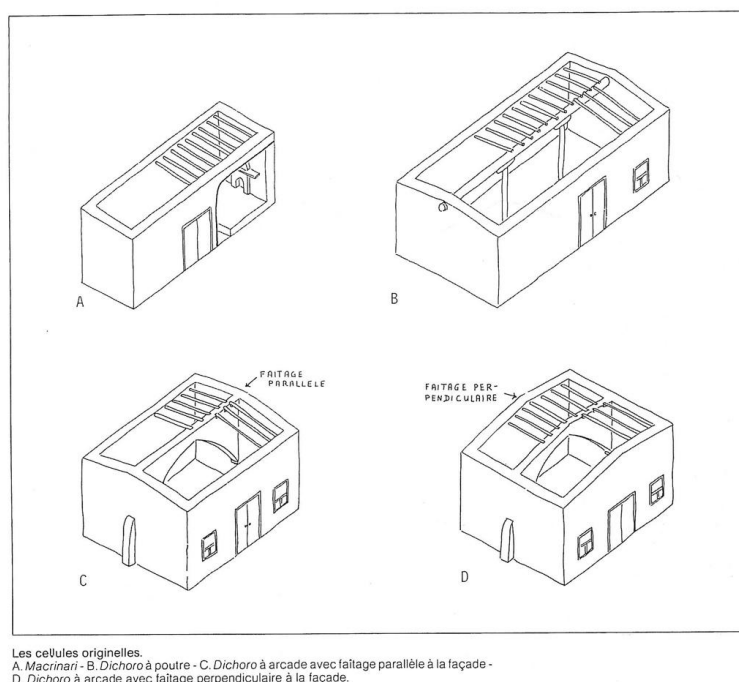


Fig.2. The basic typologies of Cypriot houses. A. Macrinari, B. Dichoro with wooden posts, C. Dichoro with an arch & parallel facade, D. Dichoro with an arch & perpendicular facade. Source: Ionas 2003, p.46.

In the years after 1970, several missions from the National Technical University of Athens after the request of the Department of Antiquities came to Cyprus to survey the vernacular architecture of the island. The first mission in 1973, was led by the head of the School of Architecture, Prof. Demetris Konstantinidis. In 1974, Prof. Stefanos Sinos led another mission which came to survey the vernacular architecture of the island. This was the chance for him to get acquainted with it, and in 1976 he published the book titled "Review of the Vernacular Architecture of Cyprus" (Sinos 1976).

While carrying out the localisation, description, preparation of plans and classification of existing material, it was possible for Stefanos Sinos to put forward proposals for the preservation of certain buildings and complexes (Sinos 1984, p.360). At the first stage, the Department of Antiquities of Cyprus concentrated all its efforts on the restoration of individual buildings as well as complexes. At a second stage, the attention was shifted to the restoration of

parts of settlements such as in the cases of Kakopetria (1975) (Fig.3&4), Omodhos (1975), Phikardou (1976), and Lefkara (1978).

In his book "Review of the vernacular architecture of Cyprus", Stefanos Sinos gives an overall survey and study of the vernacular architecture of Cyprus and analyses in detail many aspects of the vernacular dwellings, investigating the differences between four distinctive areas of the island. In this study no survey plans of vernacular dwellings are incorporated. The two books, Papacharalambous's and Sinos's complement each other since the first one analyses the Cypriot house from a sociological aspect, while the second one from a more technical aspect.

The surveys of the vernacular architecture of the island continued by the architecture students of the National Technical University of Athens within the framework of their coursework's curriculum, but this time focus was not on the individual dwellings, but on the settlement as a whole. The outcome of their work was published in two separate volumes: one for the settlements of Lofou and Kato Drys (NTUA 2003, Vol.1) and one for Pano Lefkara (NTUA 2003, Vol.2). Besides the predominant architectural types of each settlement, other aspects that are being presented are the private and public open spaces, the modes of composition of built and open spaces for the creation of units and the morphological character of the settlement.

After the establishment of an independent sector responsible for the protection of folk art within the framework of the Department of Antiquities in 1982, and the enactment of the Town Planning Law of 1972, many vernacular buildings in rural settlements were declared as monuments or listed buildings. Additionally, traditional settlements were characterised as areas of special interest, and the necessity for surveying these buildings became imperative.



Fig.3 &4. Kakopetria settlement. Part of the settlement before and after restoration and rehabilitation. Source: Department of Antiquities of Cyprus.

In 1988, another book was published on the vernacular architecture of Cyprus. This book, written by Ioannis Ionas is titled "*La Maison Rurale de Chypre (XVIIIe-XXe siècle). Aspects et Techniques de construction*". The book, despite the author's archaeological background, is oriented towards the technological aspects of the construction of the Cypriot house and not to the ethno-archaeological aspect (Ionas 2003, p.2).

More information about vernacular dwellings can be extracted through a detailed survey and study of the vernacular architecture of the Acamas area prepared in 1996 (Pitta and Theodosiou 1996). This study includes survey drawings of large complexes as well as individual houses, leading to general conclusions about the arrangement and layout of dwellings.

With the establishment of a state University (University of Cyprus) and a Department of Architecture, surveys of traditional settlements were incorporated in the University's curriculum. In many recent surveys of vernacular architecture carried out mostly by students of architecture, the different typologies of the dwellings are studied in detail with special reference not only to their physical and functional characteristics (size, circulation) but also to their cultural and social significance (connection to life style) as well as to their environmental

elements, thus following a multi-disciplinary approach towards the study of vernacular dwellings. Two private universities that have been established some years ago have also incorporated the survey of traditional houses within their course outline. Also, the Department of Antiquities which is responsible for the protection of several traditional settlements has employed students for the survey of traditional settlements, offering them the opportunity to get familiar with the vernacular architecture of the island. The Town Planning Department has employed from time to time, architects from the private sector for the survey of traditional settlements. The information gathered is being recorded into specially designed inventory cards. In those inventories, information such as topographic location, protection status, typological, morphological and chronological classification and condition of buildings are being recorded.

Recently the importance of identifying vernacular buildings has increased and this identification necessitates knowledge not only of the architectural values and the fabric of the structures but also of their role and contribution to the history of society. Thus, the methodology of surveying vernacular dwellings and the concept for their study has changed with the use of more sophisticated methods and at the same time the consideration of these buildings as part of the living heritage and as an important factor towards the future sustainable development. A detailed research project of the Department of Architecture of the University of Cyprus, is now in progress, aiming to create a digital archive regarding vernacular architecture and embodying social analysis as well as measurements of temperature, humidity and ventilation so that the bioclimatic function of these houses will be underlined and determined scientifically.

All this knowledge that was gained through the studies of people such as Papacharalambous, Sinos and Ionas as well as the various surveys of vernacular dwellings was extremely important for the restoration of their remains in the various settlements of the island. The Town Planning and Housing Department has set up some basic principles on which the preservation and restoration of a traditional dwelling should be based:

- a) the preservation of a building implies the preservation of all its elements (original traditional materials, construction details, finishes, decorative elements, etc).
- b) the new additions should respect all the aspects of the original building, its traditional framework, the balance of its composition, its relation to its surroundings and at the same time they should differ from the original parts, bearing the seal of their time.
- c) the use of traditional materials and traditional construction methods should be employed, and only in the case where these are insufficient, contemporary techniques and materials whose compatibility with the traditional materials should be scientifically and empirically proven can be employed.
- d) Listed buildings can obtain a new use according to the zone area to which they belong, as long as the new use does not alter the typology and the morphology of the building.

These four principles could not have been followed by any architect if the studies and surveys of the vernacular architecture had not been carried out. The traditional construction method recorded by Ioannis Iona for the construction of the traditional flat roof (*doma*) which consists of round beams (*volitzia*) or rectangular section beams, reeds tied together to form a uniform surface on which thin branches, twigs and leaves are placed, followed by a thick layer of compact earth, and a thin layer of mud and clay is the same in principal with the one followed for the construction of a *doma* today.

The correct approach that govern any intervention in a traditional building beyond the general principles of restoration and rehabilitation, the parameters that compose the building itself, the general characteristics of the surroundings and the microclimate of the area should also be considered. Basic research- historical, morphological and typological- into the architecture of a region is an essential prerequisite for any attempt to protect its architectural heritage. Through the recognition of various traditional building typologies, the basic

spatial relationships that characterise them are investigated. Keeping these relationships is essential for the proper restoration of vernacular buildings and should necessarily be the basis for any intervention approach.

Conclusion

The recent change of attitude towards the study and survey of vernacular architecture giving special attention to the cultural context and also to the future potential of vernacular architecture stressed the role that vernacular traditions could play in the provision of more sustainable settlements and buildings for the future. These recent surveys contributed greatly to the increased recognition of vernacular architectural studies as a multi-disciplinary field of academic and professional interest. Thus, vernacular architecture can make a significant contribution to broad interpretations of the past and indicate some ways in which research into buildings might have a great impact on history. Vernacular architectural studies are not considered any more as a study of romantic past traditions, being seen now as a contribution to new methods, ecological solutions and achievements for the future built environment.

Through the study and survey of vernacular architecture the respect towards vernacular settlements is achieved in order to integrate them as intrinsic elements of fundamental significance into the overall built environment. A deep and meaningful engagement with vernacular architecture, which can be achieved through survey, is helping towards the rehabilitation process and at the same time can inspire creative designs that sustain the productive life of existing environments. Through the study and surveying of vernacular architecture, its ethics and values, as well as the discipline of conservation are investigated and a respectful attitude towards historic environments is acquired, acting towards the benefit of the society as a whole.

References

- Brown, G.B. (1905), *The Care of Ancient Monuments. An account of legislative and other measures adopted in European countries for protecting ancient monuments and objects and scenes of natural beauty, and for preserving the aspect of historical cities.* Cambridge: University Press.
- Chadjimichali, V. (1967). Cyprus Vernacular Architecture (in Greek) in *Report of the Department of Antiquities of Cyprus (RDAC)*, (pp.87-99). Nicosia.
- Ionas, I. (2003). *La maison rurale de Chypre (XVIIIe-XXe siècle). Aspects et techniques de construction* (in French). Nicosie: Publications du Centre de Recherche Scientifique de Chypre XII.
- NTUA 2003 Vol.1, Traditional Settlements of Cyprus. Lofou & Kato Drys. Athens: National Technical University of Athens.
- NTUA 2003 Vol.2, Traditional Settlements of Cyprus. Pano Lefkara. Athens: National Technical University of Athens.
- Papacharalambous, G. (2001), *The Cypriot House*, Publications of the Cyprus Research Centre XXIX, Nicosia: Theopress Ltd.
- Pitta, A. and Theodosiou, A. (1996), *Architecture- Settlements of Akama*. Nicosia: A.G. Leventis Foundation.
- Riegl, A. (1996), The modern Cult of Monuments: Its Essence and Its Development. In N. Stanley-Price, M. Kirby-Talley Jr., A. Melucco-Vaccaro (Eds), *Historical and Philosophical Issues in the Conservation of Cultural Heritage* (pp. 69-83). Los Angeles: The Getty Conservation Institute
- Sinos, St. (1976). *Review of the Vernacular Architecture of Cyprus* (in Greek). Athens.
- Sinos, St. (1984). The folk architecture and art of Cyprus, *Report of the Department of Antiquities 1984*, (pp.354-374). Nicosia: Zavallis Press Ltd.

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TO BE CONTINUED

LESSONS FROM TWO (CONTEMPORARY) WIDE SURVEYS ON VERNACULAR ARCHITECTURE AND TRADITIONAL SETTLEMENTS IN GALICIA AND ASTURIAS (SPAIN)

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Abstract

For a long time, managing vernacular architecture has been a cultural goal. Just cultural reasons moved people to take care of our vernacular architecture. Now on, in Europe, economical crisis also reinforces the necessity of rebuilding, instead of building new dwellings. So a strong effort is expected to be developed in the next future to implement surveys to identify, protect, preserve and share built heritage. We pretend to expose in our paper how we managed Geographical Information Systems (GIS) tools to make possible affording large scale surveys and what they can offer to its users and the society as a whole regarding the future of our past. Our surveys Catálogo de los Núcleos Rurales de Asturias (2007) [Inventory of Asturian Rural Settlements] and Estudio do Habitat Rural de Galicia (2009) [Survey of Galician Rural Habitat] were both built over a database related to more than 5,000 settlements each. This GIS surveys, for the use of Asturias and Galician governments, are able to be explored in a lot of different ways as we could imagine related to the presence of vernacular architectures in the territory: promoting tourism activities, managing ecological agriculture, acting in degraded areas, reusing traditional villages, etc. Motivations behind these studies could seem different, but as far as we know, we recognize the same workflow: a survey stage, an analysis stage, and a publication stage. Data collectors started the survey gathering together information and compile it in an data sheet, using mobile devices. In the analysis stage, a domain expert examines all the information collected. Finally, during the publication stage, the results of the study are published in interfaces that computers produce automatically upon request of each different "explorer". Using GIS to survey vernacular architecture and rural hamlets has allowed us successfully to improve a wide variety of particular studies as it is easy to overlap and compare data with any other digital information. In this way, analysis processes and its rich and clear visualization help to find and understand dynamics that would not be discovered using non GIS tools.

Keywords: vernacular architecture, rural settlements, GIS, Galicia, Asturias.

1. Introduction

The territories of the northwest of the Iberian Peninsula evoke bucolic images.

Cosy villages in green meadows located beside a huge Atlantic or at the feet of beautiful mountains are understood as part of our identity. But reality is not so poetic.

The countryside is actually under pressure. And this pressure, due to the increasing of population or on the other hand because of depopulation, changes the landscape shape and threatens vernacular architecture.

In this context, performing a critical and specialized research on vernacular architecture must begin with a question: WHAT'S THE POINT NOWADAYS TO SURVEY VERNACULAR ARCHITECTURE?

The answer is: to introduce into a new rationality the components that today draw the transformations of the built environment.

And knowing this, we start surveying.

2. Definition and aims

The rationalisation of the territory requires in first term, knowledge and quantification.

In this way, the survey of the rural habitat will look for the strengths that hurt the countryside and its hamlets. Also the survey will be able to look for still available opportunities. And surely our research will advance which ways are opened by these opportunities. After this research, authorities, with the data obtained, will have to define the strategy, the programming and finally, the way to act in rural areas of the country.

In this way the information that we look for is:

-To identify, evaluate and locate in the space the phenomena due to habitat construction.

- To define those sensations transmitted by buildings (vernacular or contemporary) to the environment in function of its characteristics.
- Detection and location of the state of use of the vernacular real-estate park and contemporary constructions, identifying abandonment, absence of use, substandard housing or buildings under process.
- Location of homogeneous zones in function of parameters such as: potential of transformation, permanence of the vernacular architecture, farming activity, accessibility to a particular type of services, landscapes of outstanding natural beauty... which allow implementing actions.
- To draw conclusions that conveys diagnostics and clearly spells out recommendations for the administrations. Or open a proposal to make specific studies in areas or subjects related to the identified aspects.

3. The Inventory of Asturian Rural Settlements, IARS¹

Asturias, with a total surface area of 10,603.57 square kilometres, is characterised by the presence of high mountains close to the coast and by a landscape typical of the Atlantic bioclimatic region. Administratively it is divided into seventy-eight *concejos* which are subdivided into *parroquias* with its *barrios* and *aldeas*, from now on hamlets.

This territory, at the same time differentiated and diverse, is the raw material of the Asturias Natural Paradise, *Asturias Paraíso Natural*, successful campaign of external promotion of the *Principado*. Therefore, the paradise exists and is inhabited by little more than one million people (1,081,487 people in 2011), with a density of 102 inhabitants by square kilometre, slightly above the Spanish average.

¹ *Catálogo de los Núcleos Rurales de Asturias*. Technical directors: José Antonio Franco Taboada and José González-Cebrián Tello, PhD architects. Coordinators: Plácido Lizancos Mora, PhD architect, and Evaristo Zas Gómez, architect. Budget: 240,000 euros. Commissioned by *Consejería de Medio Ambiente, Ordenación del Territorio e Infraestructuras, Principado de Asturias* [Ministry of Environment, Regional Planning and Infrastructure, Asturian Government]. Date of start: April 2006. Date of completion: January 2007.



Figure 1. Detail of Asturias landscape from the air. Artedo beach. 'The authors'

3.1 The commission

The proposal of the IARS, Inventory of Asturian Rural Settlements, is a legal mandate of the Asturian Planning and Land Act 2002² and is commissioned to the School of Architecture in Corunna³ by the Asturian government⁴, signed in April 2006.

Every rural settlement in Asturias, altogether 5,199 hamlets, is object of this inventory if recorded in the local land-use plan.

The magnitude of the work and the urgency imposed by the commissioner, just nine months, represent an unprecedented challenge for the School of Architecture in Corunna, all a territorial pregnancy.

² *Ley 3/2002 de Régimen de Suelo y Ordenación Urbanística del Principado de Asturias.*

³ The only school of architecture in the northwest of the Iberian Peninsula, <http://www.etsa.udc.es>

⁴ Special acknowledgement to Manuel Carrero de Roa⁴, PhD architect and coordinator of the Inventory on the part of the Asturian Government as *Jefe de Servicio de Ordenación Territorial y Planeamiento del Gobierno del Principado de Asturias.*

3.2 The Methodology

We follow the compulsory instructions set by the Asturian government in a legal regulation⁵ developing the criteria, requirements and conditions for the inventory of the rural settlements as part of our methodology. This unusual document is characterised by his amenity, rigour from the scientific point of view, balanced consideration of landscape elements, critical approach, pedagogical vocation and besides it incorporates graphic examples, a rarity in the Spanish legal context.

The LARS has to tackle the protection of the rural settlements as heritage elements of the Asturian cultural identity. The key objective is to preserve the traditional morphological characteristics of the habitat, the formal structures of the traditional space, both built and empty, the landscape of the immediate surroundings and the environmental quality of the rural areas. This protection must be an efficient tool to add value to the hamlets in Asturias. The development has not necessarily to do with their physical expansion. This was important then and even more now in this context of generalised economic crisis.

So four different levels of protection are set to list the rural settlements:

-Grade 1: Those listed with the highest level of protection. It applies exclusively to the best rural settlements since they present an intact architecture and landscape framework or very mildly affected by buildings or other elements erected since 1950⁶.

-Grade 2: To be listed with a high or medium protection. Grade 2A1 settlements are those of high value, mildly altered and with reversible impacts. Grade 2A2 ones are those whose values are merely environmental. And finally Grade 2B applies to settlements with rural conditions to be protected by the local land-use plan, as hamlets that lost its environmental value, have got architecture or other elements of interest.

⁵ *Resolución de la Consejería de Infraestructura y Política Territorial* April 30, 2003. *BOPA* June 04, 2003.

⁶ This date marks the end of the autarchy in Spain and the slight beginning of a period of development that is going to leave a deep print in the traditional rural territory.

-Grade 3: To be considered by the local land-use plan, with some areas subject to specific preservation. It is of application to those hamlets whose interest circumscribes to just a part of it or to well preserved ones whose surroundings or landscape framework have been irreparably transformed by contemporary buildings or remarkable infrastructures built up since 1950.

-Grade 4: Not to be listed and as irreparably damaged settlements must be regulated by the local land-use plan. It applies to new hamlets or those whose original conditions have been seriously transformed in terms of dominant economic activity, morphology or landscape.

3.3 The execution

A professional and efficient team is needed in accordance with the complexity of the work: sixty-five⁷ professors and scholarship students at the School of Architecture in Corunna.

The Government of Asturias facilitates statistical data, 1:25000 maps and 1:5000 aerial views that allow us to identify all the rural settlements and begin the first and decisive phase of the inventory, the field work. At concentrating this part of the work in only two months, we get a valuable overview and an unknown snapshot of the Asturian rural world in the summer of 2006.

It is necessary to take decisions on the diverse approach to the delimitation criteria of rural settlements established in the local land-use plans. An extra problem turns up since statistical data do not necessarily correspond with these delimitations.

To tackle the complexity of the field work, the territory is divided into four zones based in the logic of the municipal limits: western, western-centre, eastern-centre and eastern. In such a way that each one of these zones had a similar number of hamlets to study, affordable for two professors and twelve students.

⁷ Four professors as directors and coordinators, eight professors as tutors, forty-eight scholar students for the field work, four scholarship students for the technical office and a clerk.

And this is a necessary division of the territory according to dimension, operating capacity and control.

In order to guarantee the homogeneity of approach these work zones are designed from the coast to the interior of the region, facing diverse contexts.

Of the previous reflection on the requirements of the regulations arises the design of a data sheet, key element for the success of the field work.

The data sheet incorporates inputs given by the regional administration and the ones to be filled during the field work such as:

- The identification: The toponymy and the reference.
- The geography: Site coordinates, altitude, morphological unit, territorial unit, orientation, location, surface area, evolution of the population, dynamics of the residential activity, appearance of the economic sector, land-use regulations and environmentally protected areas.
- The morphology: nuclear or multinuclear, radial physical structure, alveolar or linear and in terms of density compact or open.
- The elements of the site: predominant materials, typology of the dominant house, existence of public spaces, network of paths and roads, architectures of author, singular trees and gardens, *hórreos* or *paneras*⁸ and other ethnographic elements.
- The assessment of the built areas and the immediate landscape.

The data sheet is complemented by pictures of the hamlet and its surroundings taken from the outside and others taken from the interior with special attention to the singular elements.

A first reflection, almost immediate, will award the rural settlement to be listed as a proposed grade.

⁸ Typical barns or granaries in Asturias.

The results of the field work are processed in the technical office where a GIS is implemented with the maps, the database with the inputs from the data sheets and the photographic material.

And this is a process subjected to an iterative check. We are speaking of an average of 60 alphanumeric data and 15 images by each one of the 5,199 rural settlements to be considered.

Finally, the direction and coordination of the work subjects the inventory as a whole to a detailed review in order to guarantee the uniformity of approach and the achievement of the objectives. As a result of this final and comprehensive view some rural settlements are either upgraded or downgraded.

3.4 The results

The GIS, because of his numerous functionalities, allows us to manage an enormous volume of information, opening new ways of knowledge on the rural settlements and the habitat of Asturias.

Just with a click you can have all the information associated to a particular hamlet. Data and images can be obtained from the 1:25000 maps or the 1:5000 aerial views.

We will be able to also have thematic maps which enable us to view the spatial distribution of the rural settlements with specific features or obtain tables in which we relate, for example, the altitude and the different grades of protection.

The proportion of the hamlets listed by grade is clear. Around 10% of the Asturian rural settlements form part of the Grades 1, 2A1 and 2A2. These are the ones that have preserved its rurality in a better condition.

The largest group of hamlets, Grades 2B and 3, has important transformations but still preserve some interest and stands for 60% of the total.

The remaining 30% listed Grade 4 are the rural settlements with no evident vernacular features.

The identification of homogenous areas where several rural settlements of interest are concentrated has to be considered as an added value.

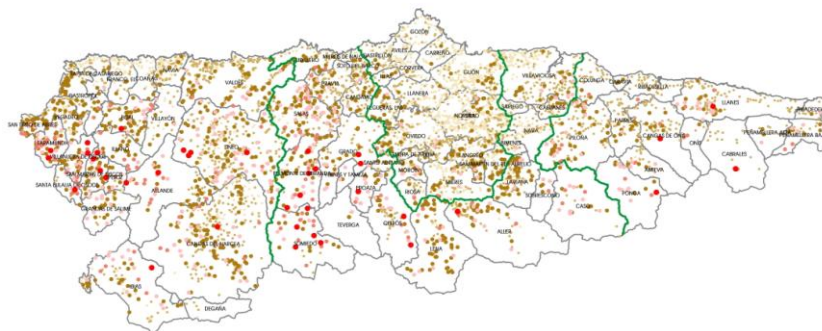


Figure 2. IARS, Synthetic map of the results showing rural settlements locations and its categories.

These results show the transformation of the territory accelerated by the extinction of the economic system that gave origin to the traditional habitat, the effects of the increasing sprawl and suburbs and the impacts of new activities.

4. The Survey of Galician Rural Habitat, SGRH⁹

4.1 The background

The initiative to realise this work rises in 2006 from a group of architects and computing¹⁰ experts, all of them professors at *Universidade da Coruña*, that propose to the Galician government surveying a territorial analysis focused in determining the state of the GALICIAN RURAL HABITAT.

This is an unprecedented investigative work in Galicia. All prior approaches to

⁹ *Estudio do Habitat Rural de Galicia*. Technical directors: Plácido Lizancos Mora, Xosé Lois Martínez Suárez, PhD architects. Budget: 320,000 euros. Commissioned by *Consellería de Vivenda. Xunta de Galicia* [Ministry of Housing, Galician Government]. Date of start: October 2006. Date of completion: January, 2009.

¹⁰ The group, headed by Nieves Rodríguez Brisaboa, has research interests in digital libraries, text retrieval, compressed text retrieval, deductive databases and spatial databases. Reference: http://lbd.udc.es/ShowResearcherInformation.do?lang=en_US&id=12

traditional dwelling focused in isolated aspects such ethnographic ones or targeted specific geographical areas.

The initiative for the realisation of this study grows accompanying the degradation of the built environment (as a consequence of, in some cases, wrong political initiatives of the government). Political response was positive as politicians understood that the survey could generate a tool that should allow them to implement properly their action¹¹.



Figure 3. Seceda. A settlement in Courel Mountains. 'The authors'.

4.2 The Definition of the project

The basic cell of construction and support of the survey is the RURAL SETTLEMENT. This conceptual cluster is the basic built element, just more complex than an isolated building.

¹¹ Politic objectives would include areas as diverse as: tourism promotion, management of new forms of agriculture, protection of vernacular architecture, management of utilities, etc...

This basic cluster is comprised by a group of houses, joined in accordance with its genuine morphological rules. It can be accompanied of other buildings like churches, mills, granaries, etc. and a myriad of elements of a shorter scale like fountains, walls, crosses but that contribute to confer cultural value to the rural settlement.

According to the Galician official gazetteer, there are 32,000 settlements¹² in the whole country, disseminated in a territory no larger than 29,000 square kilometres.

The actual status of conservation and the shape of each one of this huge amount of settlements vary widely, reflecting a diverse presence of vernacular houses and also diverse relationships between man and territory.

Some are expected to still preserve characteristic styles of the vernacular way of doing. On the other side, there are settlements that should have neither a little piece of ancient elements. In between, there are a lot of different situations, for instance, a few new developments built in so recent times.

Regarding his dynamism, some survey clusters host a vigorous economic activity while others were abandoned by their original inhabitants.

Anyway, the rigour and scientific accuracy of the survey requires surveying out the entire sample.

Only the shortage of the budget caused the subdivision of the project in several phases¹³.

4.3 The items to recognise and locate: from the hamlet to the isolated object

The innovative character of the investigation makes necessary to define the entity of population in which to develop the project and also to design in the

¹² Only five of this amount has more than 100,000 inhabitants. Other 5 settlements run from 15,000 to 50,000 people. The largest number corresponds to hamlets of very short dimension.

¹³ The first phase was determined looking for its maximum representativeness. It addresses 12 sub-areas, covering 7,286 km² (25% of Galicia) and a population of 372,300 inhabitants (13% of total) and approximately 6,500 settlements.

cartography the boundaries of the *survey basic unity*. This cluster will be the basic reference for GIS¹⁴.

To upgrade this operation, we developed a computer algorithm that applied to the existent digital cartography, set the entities to investigate as we needed.

The algorithm operated quantifying the density of built up objects existing in the maps. Surpassed a certain value, the computer device generates a polygonal line all around the edge of the entity.

Once this stage is achieved, it is time for uploading data.

Data, disaggregated in vernacular and non vernacular buildings, are:

- Identification and location. Expression of the building types, assigned them to a catalogue of typologies.

- Visual appearance of the buildings. We collect information of forms, colours, and absolute and relative dimensions.

- Use of the buildings. With attention to detect transformations from original uses, also type and time of occasional use, total absence of it or abandonment.

This entire enquiry is also applied to the system of public spaces and to the surrounding area of the village, including description of the natural and built elements located there.

A collection of digital geolocated pictures completes the inventory file of each settlement.

4.4 The execution of the survey

¹⁴ Implementing a GIS as the final backup optimizes data exploitation. For example, a GIS, makes easy to know the number of vacant homes in a given settlement; the number of buildings that have their walls without in brick in a specific area or so on.

This information may be managed in a way that a part of it could be open to everybody and just special data are only accessible to specific users. Another extraordinary capacity of GIS is the ability to allow a continuous updating.

The huge dimension of the sample to be surveyed forced us to design an agile and effective procedure for data acquisition. At the same time it must guarantee the reliable transmission of data to the office of the researchers and the organisation of the digital materials until the moment of its final processing.

We chose the palm book as the ideal device for data acquisition. Those devices run an application that contains the listing of the entities to be surveyed and the data sheet to be cover by the surveyors, *in situ*.

The device interface interrogates the surveyor, preventing him from mistakes or leaving the application without answering to all questions.

The machine interface offers previously programmed answers to the surveyor. So he must only pick one of the answers. When questions refer to visual aspects of buildings, sketches showing possible answers are displayed in order to prevent misunderstanding or subjective interpretations.

After this, the information is stored automatically in the device. And a telephone connection allows discharging these data in the computer located at the remote office.

4.5 The exploitation of the obtained data

The field work for the survey produced a large torrent of data¹⁵.

Two levels are concerned by the exploitation of this digital material. A first level offers data in rough format, readable in tables, lists and statistics. The other way of exploitation is more sophisticated, as the GIS engine manages information according to the attributes that previously have been assigned to data. And these attributes come from an SWOT scheme¹⁶.

¹⁵ We surveyed more than 6,000 settlements. On each one we took more than 80 alphanumeric data and an average of 20 digital images.

¹⁶ Strengths: to be located in a natural park, to preserve alive ancient folk traditions, to have a high quality agriculture production...
Opportunities: to host young population, to provide active trade, to be composed by less than 10% of discordant buildings...

From these attributes, the search engine could facilitate the location of *survey units* fitting with the interests of researchers. For example: tourist, historical, gastronomic, picturesque or sportive ones. This tool allows us to detect opportunities for the activation of actions of exploitation, improvement, promotion, launching of restoration programs of the vernacular architecture or to implement determinate type of services in an area.

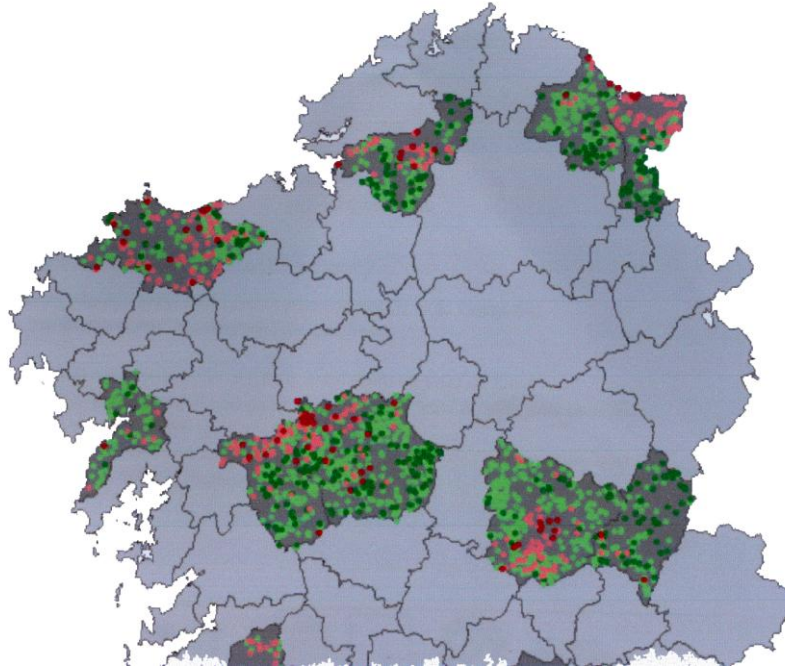


Figure 3. SGRH, Schematic map representing 'level of presence of vernacular houses' on each settlement from 'none' to 'all', categories.

The GIS technology allows us not only to obtain listings of data but analytical thematic maps and other kind of sophisticated graphics.

Weaknesses: to have an aging population, to have more than 50% of the vernacular buildings in disrepair, to present more than a 33% of discordant buildings...

Threats: to be located near an industrial site, in a congested road, quite close to a high voltage electric power line, to host more number of tourist beds than residents...

5. Conclusions

Surveying the vernacular heritage of Galicia and Asturias supposed an extraordinary technical challenge, successfully surpassed.

This survey has brought to us the knowledge of some territories in which the *rurality* must be perceived as a space of resistance in front of the advance of the *urbanity*.

During the development of the surveys we recognize ourselves identifying the tensions of the rural–urban confrontation as a fact that causes deep damages in our traditional identity.

The realization of the survey has brought to us tools and data that ensure political and cultural discussions on the future of the vernacular legacy in our countries to be held objectively and transparently.

Themes opened by the survey are substantive and transcendent. Some of them are just related to technical subjects but others are structural. Anyway, the results achieved go beyond the regional and local economics and also the administration of the territory as it could result in wide social repercussions.

We have found that the vernacular heritage (and also the traditional way of living) has been destabilised and in many cases, ruined because of a new world economic system for which the vernacular architecture is just a *beautiful and venerable* accessory or an annoying *companion*.

Once the surveys are finished, we are in conditions to affirm that urgent actions must be taken to assist not only the vernacular architecture, the vernacular landscape, but all the non-urban society.

As technicians we want to address society as a whole to do this work. And we want to give them these guidelines:

-The approach mustn't be idyllic as reality isn't so sweet. Farmers do not wake up every morning to make up farms and landscape to be ready for urban visitors.

-The apathy and indifference aren't the right ways of doing. Hamlets don't draw spontaneously to the best of possible destinations, as in the past due to the work of anonymous people. Today others are the dynamic vectors who are responsible of the initiative of the development.

-It's worthless to turn to hyper tradition to obtain right responses. The application of strategies, refractory to the contemporary and globalisation usually draws the vernacular to Disneyland. And that should be the worst end.



Figure 5. View of Barxa de Lor (Monforte). An abandoned settlement in a marvellous landscape. 'The authors'.

Society must assume that now on we are going to live in the stage of the end of the tradition. So we must recognize the evidence of the loss of the vernacular inheritance.

In a Europe running processes of inhuman and unsustainable urbanisation with the built environment (and even with the people), surveying the vernacular settlements has given us the necessary keys to set the quality of life that citizens require today and ensures our vernacular architecture TO BE CONTINUED.

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ACTIVISM AND AGENDAS:

Rural housing in Portugal from the 1930's to the 1950's as seen by architects and agronomers

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Abstract

In the inter-war period, a series of studies on rural housing were undertaken in Italy, in France and the UK, as well as by the Society of Nations. From the late 20's, and particularly in the 30's, public health officials, economists, geographers and planners conducted surveys and assessments of the rural habitat situation. In parallel, and already since the late 19th century, architects, historians, ethnographers, anthropologists and a number of engineers had taken an acute interest in the formal and social significance of buildings in rural settings. In this very rough cognitive and perceptual divide, between the more reformist and the more analytical or contemplative professions, architecture occupies a singular position. It participates in both endeavours, to transform and advance the world and to appreciate and understand the world. This paper's subject is the contrasting nature of the surveys architects and agronomers undertook in Portugal in the core period of Salazar's dictatorship. They reflect very different points of view on the vanishing rurality of mid 20th century in Portugal, even though their mentors broadly share a political common ground. The paper attempts to pinpoint the similarities and the disparities of the 1934-1936 surveys realized by professors of agronomy of the Technical University of Lisbon and the 1955-1960 survey realized by architects associated in their professional Union and under its promotion.

Keywords: vernacular architecture, professional bodies, university roles, rural habitat

Two Surveys

In the significant part II of his knowledgeable *Etnografias Portuguesas (1870-1970)*. *Cultura Popular e Identidade Nacional*, and in order to present a large panorama on the relationship between popular culture national identity in Portugal, João Leal rightly uses the lens of the house, its ideal and its concrete

situation. In fact, the concept of 'Casa Portuguesa' has permeated the architectural debate of more than fifty years, from the last decades of the 19th century up to the 50's; in fact, outside the professional circle it is still a powerful model, albeit not subject to debate. The other two occurrences of the built world gaining momentum in the auto-image of the national community and in its relation with the vernacular are initiatives covering the whole of the country's territory in mainland Europe - continental Portugal - , and are initiatives of specific group of professionals seeking a particular knowledge.

In 1934, Professor Lima Basto and his substitute and later to be follower, Professor Henrique de Barros, published the first of a sequence of three volumes dedicated to a particular survey of built structures, that of rural houses in the whole of continental Portugal. It was the Northern Portugal's part of the *Survey on Rural Dwellings (Inquérito à Habitação Rural)*.

In 1961, the SNA (the Portuguese Architects' Union, Sindicato Nacional de Arquitectos) published a two-volume work – *Arquitectura Popular em Portugal (Popular Architecture in Portugal)*¹ - mainly organized by the architect Keil do Amaral comprising a survey on regional architecture located as well in the whole of continental Portugal.

Both works were the result of many individuals' work. The first one – the Inquérito à Habitação Rural- counted on a team of roughly twelve individuals composed of Lima Basto, Henrique de Barros and a group of graduate students and recently graduated agronomers: Castro Caldas, Fonseca George, Laborde Basto, Lobo Martins, Flávio Martins, Francisco Rosa, Simões Pontes, António de Faria e Silva, Rodrigues Pereira and Carlos Silva. The second one – the *Arquitectura Popular em Portugal* – counted on a team of eighteen individuals that included Fernando Távora, Rui Pimentel and António Meneres (1st zone); Lixa Filgueiras, Arnaldo Araújo and Carvalho Dias (2nd zone); Keil do Amaral, Huertas Lobo and João Malato (3rd zone); Nuno Teotónio Pereira, Pinto de Freitas and Francisco Silva Dias (4th zone); Frederico George, Azevedo Gomes and Mata

¹ The work started off as a Survey on Portuguese Regional Architecture, but ended up as a book tellingly named *Popular Architecture in Portugal*. *The essentialism as applied to the nation as a unified and permanent entity had to be expurgated. The adjective 'Portuguese' implied that essentialism, whereas 'in Portugal' denied it, or at least ignored it.*

Antunes (5th zone); and Pires Martins, Celestino de Castro and Fernando Torres (6th zone).

If we consider the Agronomers' enquiry and the Architects' enquiry into the rural world made in the 20th century in Portugal, we come upon dissimilar perspectives². Having the same subject-matter - rural constructions, even if the agronomers dealt only with the housing stock and the architects comprised some urban buildings as well - the glances cast upon it are different, even divergent.

The agronomers' démarche was built upon a will to prospect and ameliorate the production of farming units – as was overtly assumed. On the other hand, architects sought to discover the true nature of the rural landscape as it was embodied in the built structures.

The prospect of the agronomers is built upon a threefold bench: a political/civic stand, an epistemological foundation of a disciplinary development and the creation of a brand new institutional architecture.

Both the main author Lima Basto and the co-author and follower of his work, after Lima's death in 1942, Henrique de Barros, were committed to the civic endeavour of social transformation of the country.

Eduardo Alberto Lima Basto (1875-1942) was an agronomer and a politician, taught in Coimbra and in various Higher Education Schools in Lisbon and was ultimately full professor at the Superior Institute of Agronomy. His activity in politics was intense: for four short periods, he was Minister of National Development, of Labour, of Business and Communications and of Finance during the 1st Republic (1910-1926) and President of the Municipality of Lisbon and exerted a vast number of political and institutional offices. As many other 1st Republican politicians, he was a free-mason. He was also a researcher in his field and wrote profusely on his various topics; his political views seem rather puzzling, with overt praise given to Mussolini in his preface to the Survey.

² Ethnologists were a third main professional group who got interested in the subject of rural housing Veiga de Oliveira and Jorge Dias were the most well-known; L. Leal describes in depth their work and progression.

Henrique Teixeira de Queirós de Barros (1904-2000) was the son of the poet, pedagogue, journalist and politician João de Barros (1881-1960), who devoted his life to the ideal of a Republican Education and served for a brief period of three months as Minister of Foreign Affairs in 1924-1925. Henrique de Barros was an engineer-agronomer and a researcher, and from 1944 full Professor at the Superior Institute of Agronomy. His anti-Salazar regime activism and his bondage with the Socialist Party led him to important posts in the aftermath of the 25th April Revolution: he was President of the Constitutional Assembly member of the State's Council from 1974 to 1977, State Minister in the 1st Constitutional Government and Deputy Prime Minister in 1976-1977. Notwithstanding his close family ties with the later Prime-Minister of the regime, Marcelo Caetano, his was a leading role in the creation of MUD – the Movement de Democratic Unity – and it did not prevent his elder Professor Mário de Azevedo Gomes (1885-1965), to whom he was a close collaborator, to be expelled from teaching at the Superior Institute of Agronomy from 1946 to 1951 on grounds of political opinion; and he himself to be suspended.

Eugénio Castro Caldas (1914-1999) was to be later a professor of the same institution – the ISA – and an advocate of an agrarian reform in the 50's and 60's.

These individuals had in various degrees an active voice in society – opposing Salazar's regime - and produced legislation, journals and newspapers' information and research. All did their teaching in a School of the Technical University of Lisbon. Soon after the Republican regime was overthrown in a military upheaval in 1926, a new University was established in Lisbon- the Technical University of Lisbon - and when work started on these rural realities, the commitment to deal with the knowledge and transformation of the situation was always present.

The second support for the Agronomers' survey was an intrinsic scientific disciplinary development. The formation of an epistemological foundation for rural studies had been influenced by Pierre-Guillaume-Frédéric Le Play (1806-1882), a French reformer who addressed not the individual but the family as a

social unit, studying types of families and applying a method of direct and extensive observation and comparing living conditions of traders, workmen, owners, and peasants in a comparative way across Europe. (Catholic Encyclopedia, 1913) He studied in particular the budgets of typical families. His sort of applied sociology enjoyed a huge intellectual success in 19th century knowledgeable circles, although his conclusions led him in an opposite direction to the Enlightenment as regards inheritance laws and the role of religion.

In his wake, the rural world since the end of the 19th century emerged in Portugal as a subject-matter for research, with authors such as Oliveira Martins writing extensively on the subject. Maria Inês Mansinho and Luísa Schmidt point out the emergence of a field of rural studies as seen through the lens of social sciences (1994: 445- 452), in which agronomers and foresters are at the frontline - Lima Basto, Azevedo Gomes, Henrique de Barros, Castro Caldas are cases in point. Using modern social sciences methods, were included in these investigations agrarian systems, studies on the landscape and on the living environment of the rural population: this would ultimately be the target of the Rural Housing Survey. A vast number of monographies directly influenced by Le Play emerged in the framework of the Superior School of Agronomy dealing with the regional and local situation and development. The peasant question was a special concern.

The founding of the Technical University of Lisbon in 1930 incorporated four pre-existing higher education institutions: the Schools of Economics, of Engineering, of Veterinary Medicine and of Agronomy; it later took in other pre-existing Schools, in a process that lasted fifty years. It was founded as an entirely new University – separate from the existing University of Lisbon, in place with the University of Porto shortly after the outset of the Republican regime in 1911 – in part due to the difficulty that this classical studies' University³ had in welcoming the technical knowledge and practical skills of fields such as Veterinary Medicine or Engineering. The overt aim of the founding of the University was a satisfactory functioning and development of the apparatus of both the State and

³ In fact, it is the 'University of Lisbon'. 'Classical University of Lisbon' is the expression by which it is known in the city and in the country, even by the most cultivated individuals.

private organizations. The state's role and performance was then a paramount objective for this new institution, located in the capital of the nation, which at the time incorporated a huge overseas empire. In the first years, the Senate of this new institution proposed to foster every year a research into the economic and social basis of the Portuguese society. Lima Basto and Henrique de Barros extensive work was a product of this University policy.

On the other hand, the prospect of the architects has a different stand-point: it deals with an essential trait of the professional practice in those years, that of the State-led stylistic determination for this professional's body production. It aims to contradict the unwritten law of solely applying a 'Portuguese' style to certain kinds of buildings, of respecting a correspondence between provincial or regional architecture and that of the new buildings. For the architects, this main objective converged with a much more diffuse but nonetheless present and genuine desire of coming to terms with the somehow mysterious nature of non-erudite architecture in the country, of the rural constructions, of the diversity of architectural and constructive styles. Not for nothing had the main propagandist of the 'Portuguese House', Raul Lino, written and published with huge success his first study on the matter organized into book form: the *A Nossa Casa* (Lino, 1918); nor had ethnographers, engineers and other architects dealt with the matter since the last decades of the 19th century. This Survey was conducted not by a Higher Education institution, but by the professional association: the *Sindicato Nacional dos Arquitectos*.

The lack or diminished status of the time dimension reunites both Surveys, as no enquiry was made either to the parents' anterior living arrangements prior to their move into the house or the use made of the house by anterior residents, in the one case; in the other, almost no signs of the passage of time appear, in the sense of it destroying the pristine purity of the rural construction.

Even started at the outbreak of World War II and published during the war's period, and notwithstanding the low prior expectations, the Agronomers' Survey encountered a situation of total dismay, of hunger, thirst, cold and innumerable

hardships from lack of basic infrastructure and fittings as much as the insufferable conditions of the housing stock. The miserable situation in urban contexts at the end of the 40's decade, as seen by a foreign visitor, is also to be seen in certain quarters of Portuguese towns. When Lucio Costa repeatedly visited Portugal to make his IPHAN's funded surveys probing into the roots of Brazilian architecture, he states the appalling hygienic conditions of streets and buildings and the general poverty of the people (Matos & Ramos, 2010).

The selection was done on the basis of capturing typical case studies throughout the country which would be subject to a minute and thorough inventory of fixed and movable contents, of prices and of an estimate as to the amelioration or rebuilding of the house. It meant an ethnographic survey with a practical end on view. The success of its publication was contradictory: the last volume was never published, the peasant's houses were never rebuilt, and its minutiae and scandalous level living conditions served the political agenda of the clandestine Communist Party and other reformers. The regime withdrew from the knowledge of the facts.

The Architect's Survey was a promotion of the SNA – the professional association of the architects - under the initiative which Keil do Amaral put forward in 1947, anteceded by an article by Fernando Távora in 1945; to which we should add the essential contribution of the illustrious Brazilian architect, Lucio Costa: in accordance to him, professor Carlos Ramos gave him credit for the idea of the launching of the Survey by the article of 1937 "Documentação Necessária" (Matos & Ramos, 2007). The cases were selected on the basis of a comprehensive picture of the built structures found in Portugal, but in reality many of them were chosen for their adequacy to the architecture principles of the Modern Movement. The adhesion of the Survey's agents to the new architecture, meanwhile totally dominant after WW II throughout the Western world, meant that the opportunity had to be taken advantage of from presenting only those buildings that were in consonance with the architecture they built or aspired to build. It resulted in an extremely valuable work with a repository of solutions and an analysis of hundreds of small and medium sized buildings, all commented or drawn or photographed or then registered in all those ways. The

main issue is the operation of selection: an interesting question to develop would be the criteria for selection, between the Agronomers' and the Architects', and submit them to a comparative analysis.

An outcome was the delight some of the powerful, clear and solid solutions they found caused in the minds of these young architects; it anteceded by some years the impact that the Rudovsky exhibition and book would have in the architectural circles around the world. The separation from the countryside of these young urbanites was very clear-cut: they in truth had to discover their country. Due to the few and winding roads in a mountainous country and to the scarcity of convenient hosting facilities, journeys across the countryside were difficult, time-consuming and sometimes pain-staking. The expression 'discovery' they use to characterize their adventure is appropriate: nothing close to the vernacular ever entered the curriculum of the two existing Schools of Architecture by that period.

The outstanding quality of the photographs contributed to the Surveys' success, both from the general public and in the architectural offices, where it was a daily resource in the following years. The lack of a precise map hindered a revisit by the many students of architecture that in later periods would be able to foster some protection measures. A large percentage of the buildings shown in the final volumes have probably disappeared; only the quasi or monumental structures are still in place, if only in ruins in some cases.

What is uncanny is the relative influence that the romantic or even the essentialism doctrine still had in some of the work: it sometimes overtones their text. The political stand that some of these professionals had taken, or would be taking in the future, places them in a roughly oppositional position to the regime. Nevertheless, none of the bitterness suavely conveyed in the Agronomers' Survey surfaces in these texts: the outlook is appreciative, positive, and frequently overly admiring; in this instance, not so far removed from the enchantment Raul Lino feels in his travels in the countryside. His books and doctrine in favour of a 'Portuguese House' were the essential backdrop

against which these young modern architects were layered. Dissimilar to the Agronomers', the work of the architects is more focused in the intimate relationship between buildings and site, or buildings and farming structure or buildings and construction skills. Not much is left to history or actual ways of living inside the house. The meticulousness of the recording of possessions by the Agronomers is here only applied to construction and to a few architectonic surveys of entire buildings.

No transformations to existing structures or additions are recorded.

The gaze

The gaze both Agronomers and Architects cast on the same subject matter place them at opposite ends of a spectrum of purpose. While the Agronomers had an interest, be it exogenous-induced or not, for the people they record living in a house, the Architects viewed them as permanent and fixed with lesser interest than the way a particular stone supports a cantilever. In the other hand, the Architects are playing a decisive card in their future: the outcome of this enquiry is profoundly, although not completely explicit, enmeshed with their future, in their aspirations for a free expression, or for a modern expression, in the possibilities given by the government to design or in repression. Theirs were a personal, or collectively professional, undertaking: they were the subjects. The Agronomies' subjects were the families of landowners of tiny agricultural plots and of peasants. They would soon start leaving in huge numbers for France, Luxembourg and Germany; or to Lisbon's a Porto' metropolitan areas; while those who stayed had to see their youngest son depart to one of the African colonial wars. The misery so minutely registered in the Agronomers' Survey would give way to a gradual entry into the consumer society; the radically pure constructions encountered by the Architects would soon receive a layer of ugly 'azulejos' ceramic tiles; or be abandoned; or be demolished. The eve of the downfall of this rural world was behind the corner. But in architecture, it would re-emerge in new guises: not the society, not the people, but the buildings or building solutions or devices. The architecture built by the enquirers and most of

their generation would perpetuate the line of a roof, a placement of a stone, a contrasting co-presence of certain materials that had come straight from this profound delving into the almost forgotten, unassuming, anonymous heritage.

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References

- Basto, E. L. & Barros, H. de (eds.), (1943). *Inquérito à Habitação Rural. I Vol. A Habitação Rural no Norte de Portugal (Minho, Douro-Litoral, Trás-os-Montes e Alto-Douro)*. Lisboa: Universidade Técnica de Lisboa.
- Barros, H. de (ed.), (1947). *Inquérito à Habitação Rural. II Vol. A Habitação Rural nas Províncias da Beira (Beira Litoral, Beira Alta e Beira Baixa)*. Lisboa: Universidade Técnica de Lisboa.
- "Catholic Encyclopedia (1913)/Pierre-Guillaume-Frédéric Le Play," *Wikisource, The Free Library*, (accessed December 3, 2011).[http://en.wikisource.org/w/index.php?title=Catholic_Encyclopedia_\(1913\)/Pierre-Guillaume-Fr%C3%A9d%C3%A9ric_Le_Play&oldid=2133461](http://en.wikisource.org/w/index.php?title=Catholic_Encyclopedia_(1913)/Pierre-Guillaume-Fr%C3%A9d%C3%A9ric_Le_Play&oldid=2133461)
- Lino, R (1918). *A Nossa Casa. Apontamentos sobre o Bom-Gosto na construção das casas*. Lisboa: Atlântida.
- Mansinho, M. & Schmidt, L. (1994). A emergência do ambiente nas ciências sociais: análise de um inventário bibliográfico. *Análise Social vol. xxix* (125-126), 1994 (1.º-2.º), 441-481.
- Matos, M. & Ramos, T. (2007). 'Um Encontro, um Desencontro. Lucio Costa, Raul Lino e Carlos Ramos', 7º Seminário DOCOMOMO Brasil 'O Moderno já Passado e o Passado no Moderno. Reciclagem, Requalificação e Rearquitectura, Porto Alegre. CD-Rom Proceedings ISBN 978-85-60188-07-9. Available at: <http://www.docomomo.org.br/seminario%207%20pdfs/034.pdf>
- Matos, M. & Ramos, T. (2010). Lucio Costa e a herança lusa. Na trilha do livro, das cartas e das viagens. In I Seminário Internacional. Academia de Escolas de Arquitectura e Urbanismo de Língua Portuguesa, Uma Utopia Sustentável. Arquitectura e Urbanismo no Espaço Lusófono: que futuro?, Lisboa: AEAULP.
- Sindicato Nacional dos Arquitectos (1961). *Arquitectura Popular em Portugal, 2 v.* Lisboa: SNA.

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THE DECLINE AND CONTAMINATIONS OF POST-SURVEY ARCHITECTURE IN ARCHITECTURE WITHOUT ARCHITECTS (1955-1985)

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Abstract

Throughout 30 years of research in the field of traditional architecture and architectural heritage in mainland Portugal, the Autonomous Regions of the Azores and Madeira, the Canaries, Cape Verde, in the context of the Mediterranean, in the far territories of Goa, Damão and Diu, Macao and Timor, among other territories with Portuguese influence and culture, we have carried out several works almost always interconnected by a common objective, to understand them in order to better save the values of the cultural traditions in the interest of their users.

We have sought to know and live with these users and observe their territory and the contemplative and productive landscapes as an essential framework of the traditional culture of different peoples and cultures, their materials and technologies, their typologies and expressions, their identity and the anthropological traces of the communities, placing man and his actions at the centre of the research.

Throughout these years we have observed a decline, a neglect, a collapse, a transformation, an assimilation, the corruption and the disappearance of traditional cultures in different environments, in accordance with which industrial and modern civilization has besieged it. We have seen different rhythms and intensities that conform to the environment and socio-political cycles and the frenetic acceleration of time and actions. We have seen a spatial transformation like no other in history, making it difficult to understand its direction and to completely understand the causes and the effects of the losses and the benefits for the good of the people. And in the midst of these violent changes it is important that we fight against resigning ourselves to the apparently inevitable disappearance or corruption of lifestyles in syntony with nature, with ancestral principles and common practices associated to the methods of construction.

Keywords: -

1. Introduction

The research under way that we will partly divulge, aims to demonstrate the decline in the theoretical and practical bases produced by the Portuguese

architectural “current” that emerged as a (con)sequence of the *Survey of Popular Architecture* (1961) with the promoters/authors of an “architecture” without architects at a time of the collapse of traditional culture.

In order to place ourselves in time and space, we would like to point out that this research corresponds to a period from about the middle of the 1950s to the mid-1980s and covers mainland Portugal and the autonomous regions, concentrating on the outskirts and suburbs of cities, areas in a phase of transition, clandestine lots and seasonal rural areas of holiday and weekend houses. The research includes free-standing houses and buildings of vernacular architecture and popular pre-existing constructions that have been transformed or renovated and the construction of new buildings in the same areas.

The actors studied were different and were mainly disconnected from their ancestral artisanal line, but still maintain autonomous professions or are grouped in small local or regional enterprises working in direct or indirect interdependence with the local authority.

There is no direct connection with the so-called emigrant’s house (Villanova *et al.*, 1994), as we started from an analysis of the typological matrix and the respective expressions of unequivocal origin in traditional architecture. In certain cases, however, we do not deny this possibility. The buildings and the houses observed are the result of “sensitive readings” of the owners who are attentive to the cultural and architectural cycle with a greater or lesser degree of depth in the quality of those that commission the project for these houses, but decide not to use the work of an architect, preferring to speak to technical drawers and/or “builders”. The owners and builders seek inspiration in recently constructed “models” designed by architects (Frampton, 1998; Tostões, 1997), observed at times even while the builders of these houses, in a perspective of reinterpretation through a means of selective simplification of determined technical aspects and forms, transform them into the “tools of their creative labour” so as to be different through the “typification” of their work as a project and as a construction.

2. Decline and contaminations

The diffused and fragmented frontiers of erudite and vernacular, traditional and popular architectures are experimental territories within the scope of local theory and practice, inclusively generating both programmed and spontaneous originalities. Some give rise to bases for new studies that, for those that objectively and continuously follow the activity of a building drawer, or observe it from the outside while commissioning houses, take advantage of those territories by interpreting and reinventing them in new experiences and in new places.

On the other hand, we can add the experimental practice of the professionals untrained in architecture, to which we have alluded, to the association of these practices to the fundamentals of theoretical currents or, at least, to the formation of an aesthetic and scientific awareness among architects to the technological questions inherent in the materialization of a set of emerging ideas based on the conceptualization of the potential genesis of “new” cultural identities, irrespective of their scope or dimension. In short, we refer to the possibility of mutual and potential exchange of ideas between academics and construction professionals and vice-versa.

Generically diffuse territories have “tradesmen” from different places with their own organizational models of a traditional line, which emerge as “spontaneous undertakings”, being moved by a compulsive will to innovate, invent and reinvent with the aim of making their work outstanding as an exception, creating parallel realities to the current process of the project and work that is the exclusive responsibility of architects. Free of academic concepts and “cultural prejudices”, they exercise their unlimited creative imagination, protecting themselves, however, in the safety of the common knowledge and technological practice that odd pieces of theoretical and practical teaching have provided. But even in this area, they tend to be “chained” to practices, which were once autonomous and subject to codes, through the use of distinct materials and technologies, thus enriching and widening their possibilities but also being

subject to eventual incompatibilities at the time of construction, or later, with the appearance of different degrees of pathologies.

Cities, and mainly peripheral cities and/or the transition between a growing city and an established city with plans and regulations, which generally have their prohibitions, and the parts of a city in "spontaneous formation" and/or unstable due to their condition of "expectant", are generally experimental territory where all types of knowledge connected to construction, architecture and technology are fused. In most cases, scientific knowledge is acceptable, being exercised empirically and also being superficial at a cultural level. These actors are moved and are motivated in conceptual processes of fragmented collage or copy, with no intellectual structure or process. They are disconnected and decontextualized from ancestral procedures within the ambit of practices and professional codes. Consequently, they are then subject to a vulnerability that rarely produces exceptional results. Similar to a long laboratorial process, they persistently experiment in the hope of achieving something innovative or unusual.

Vernacular architecture, more precisely that which is designated as urban, or peri-urban associated to current housing, is what comes closest to this description, comfortably living in harmony with the "models" of the erudite city, mainly on the frontier of the established city and stands out due to the "simplified" architectures that tend to be in rupture with conservative canons. The examples that are seen to be truly exceptional, although they are rare, show truly refined syntheses within the spatial / functional perspective, as well as presenting a suppression of "excesses" of architectonic mannerisms and artistic composition and often introducing a type of neo-classism whose metrics, proportions, rhythms and scales result in the permanence of the original matrix that is of an erudite conception, that is uncorrupted in its essence. These models are thus reconfigured, cited and/or copied as reinterpretations that are almost always "forced" by a lack of resources, with the planned aim of financial returns.

Popular architectures, inherent of a construction tradition of a certain region based on the materials, techniques and the repetition of ancestral cultural

procedures by masters who have followed in their ancestor's footsteps, is known for its conservatism and is certainly the style that has incorporated the fewest innovations during its existence.

This stability can be compared with that which determines the appearance, identification, recognition and persistence of a style, of an identity and/or a historical period, identified as erudite architecture of its time. This also becomes conservative within an aesthetic ideal, normally associated to a particular technology which, above all, is a conditioner of innovations / alterations, as it regulates itself in a finite pattern in order to safeguard its identity.

The closed models are those that most clearly denounce the time of their corruption, which normally happens due to factors that lead to the termination of their use, the cultural fashions of an influential elite and / or their technological and infrastructural sustainability due to their natural aging and the evolution of the demands of society.

This circumstance happens in both popular and erudite architecture. They both deal with great difficulties in being imperceptibly renovated and / or assimilating indispensable innovations for their permanence, as valid, positive and influential buildings in the daily life of their users.

On the contrary, it can be seen that diffuse architectures are those that are more easily adapted due to their conceptual, technological and functional versatility to a reuse and / or even a physical reconstitution. These "transformations" acquire an aura or simply an affirmative driving force of "contagions" in the urban geography where they are built or serve as an influence in other contexts, with special incidence in the building of houses in the "rurality of the urban soul". Consequently, they promote a return to the countryside of the city's inhabitants.

It must be noted here that the "contaminations", or the effect in the "collage" of certain plastic inducements, as well as empirically resorting to certain technologies associated to a spatial and functional ideal that appear in "hybrid" architectures that rarely have an erudite author (which does not only mean an

academic degree) tend to reflect the fragmentation of the models observed and “cited” as approximations in the search for its optimum reproduction. The result will certainly be a certain hybridism that is the fruit of the manipulation of diverse identities, most of them difficult decodification cases, which will mean something totally disconnected, i.e., incoherent. It could also lead to new paths, voluntarily or involuntarily, depending on the motivation and the capacity of the observers involved.

Of the many surveys in the area of popular architecture and the architectural heritage in several territories (Popular Architecture in Portugal, 1961; in the islands of Azores, 2000 and Madeira, 2002; Traditional Mediterranean Architecture , 2002; Survey of 20th Century Architecture in Portugal, 2006; Vernacular Architecture from Goa, Damão e Diu, 2007; from Cabo Verde, 2009; and from Timor-Leste, 2010)¹, we have intentionally observed the “possibilities” of these occurrences as keys for the understanding of some aesthetic realities of a historic time that endure in these territories.

The last 100 years are without doubt those that most clearly express this analysis, even though in Portugal and the territories where significant antecedents of socio-cultural influence of the past can be considered, depending above all on intense economic, cultural and political movements, the reflection of which became more intense with strong migratory contingents. These realities were confirmed mainly from the second half of the 19th century, firstly in our small towns and cities that underwent a pioneering “modern eruption of growth”, associated to the *Fontistas’* policies, mainly due to the effect of the train and the building and planning of new roads. The second eruption, associated to the *Estado Novo*, completely revolutionized the country and the overseas provinces by creating a global network of communications, infrastructure and amenities and implementing a policy of rural and urban housing, with special relevance for

¹ Participation of the author in collective Surveys on Azores Traditional Architecture (1982-2000), on the international Traditional Mediterranean Architecture (2000-2002), and on the national IAPXX-Survey of 20th Century Architecture (2003-2005). Individual Surveys conducted on Madeira’s Traditional Architecture (1982-2002), on the Survey of Vernacular Architecture in Cape Verde (2009), Survey of Vernacular Architecture in East-Timor (2010) and on the Survey of Vernacular Architecture from Goa, Damão and Diu, undergoing since 2007 under Coimbra’s University doctoral programme.

the work carried out by the architects and engineers of the Internal Colonization Board. The third diaspora was the most complex and led to the implosion of rurality on the traditional culture, around the 1950s and 60s, plus the conjugation of legislation promoted by the state with the aim of promoting mass civil construction in the mainland, with some examples in the islands and in the overseas territories, through the work developed by architects and other technicians working for the state Overseas General Agency and other economic institutions from the central government. It was precisely in this period until the end of the 20th century that we carried out a significant part of our research, where we emphasize the experience of having been a member of one of the teams of the Survey of Twentieth Century Portuguese Architecture – AIPXX (2006).

We turn now to a deeper analysis as a result of continuous fieldwork that we have conducted on our own initiative over the last thirty years all over the country, the autonomous regions and in some countries and territories where Portuguese influence is to be found. However, because this presentation is focusing on Portugal, we'll attempt to suggest some conclusions of eventual effects of the post-Survey and post-publication of the book *Arquitectura Popular em Portugal*, within the popular culture, or architecture without architects. We start from the assumption that the architecture projected by architects resulting from this widely divulged work and discussed in the professional association publications, with special emphasis for the magazine *Arquitectura Portuguesa*, is an unequivocal reality in terms of its own identity as a cultural movement aggregating architecture, anthropology, art and science.

As far as analysis is concerned, we have searched, as has always been our methodology in other research, to verify *in loco* the eventual reflux of this architecture reinvented by erudites, and meanwhile built in different contexts, the architecture built by non-erudites, some “enlightened architects”, others that have followed the lines of the traditional master builders that are spontaneous but more sensible to the new visions on tradition, and also some urban builders who participate in projecting houses closely related to local authorities and “culturally sustained” by a series of assumptions of a fantasy idea of rural

tradition. This reality, which emerged in the 1960s, was probably shaped through a non-existent rustic ideal that was strongly mythicized and backed up by a yearning of a false return to the countryside through the construction of weekend houses. Its authors were probably drawins technicians from recent technical courses of design, some with a rudimentary knowledge of engineering. There is a belief in this practice that building is the equivalent of architecture, which was one of the consequences of the courses of civil engineering. This idea has passed on and was legally safeguarded by the unspeakable Decree Law 73/73, which allowed any citizen to present projects for buildings up to three storeys high for construction approval by the local authorities.

The Survey of 1961 is related to the way erudite architecture, which appeared after its publication, although it had already been tried by some architects, among them the authors of the research themselves, validated and assimilated the most significant aspects of traditional architecture, reinventing them or overvaluing them due to their plasticity, materials, textures, colours, volumes, spatial and functional articulations and landscape integration among other factors. In some cases that we observed, namely in the so-called architecture without architects, it was these same aspects, mainly "simplified" plastic elements, in an apparently epidemic and stereotyped re-assimilation, as they had already been presented as "corrupted" in their original essence and had generally received a negative appreciation by the commissioning owners and/or builders, probably in their expression and their materials as they had not reached, according to them, the limit of their possibilities. Relevant examples are roofs not closed along the ridge, buildings with simple roofs at different heights articulating with open spaces, verandas and interior roofs, as well as the integration of volumes that in architects' architecture articulate with sheltered patios and take on secondary functions such as wardrobes, garage, various cupboards that are interpreted and assimilated as the "rusticity" of the house, from the chimney where food is smoked to the wine cellar and the outside kitchen or the space where the daily meals are taken, generally associated to a porch.

The number of specimens that confirm this interpretation are today submerged by a new reality, promoted at the turn of the century in the reductive assumption of this becoming as an "alternative to the emigrant house", becoming a new paradigm of a new historical and aesthetic era. Meanwhile, this reality gave rise to new, emerging identities that in turn gave rise to the return of the so-called Portuguese house in a neo-conservative perspective. They try to attain the essential of the materiality and the spatiality/functionality of the essential premises of the idea of popular architecture according to the inconsistent interpretation according to Raúl Lino's perspective, as opposed to the former, described above, imposing a critical and alternative discourse, among architects and non-architects. As a consequence, and in the face of this change in historical and aesthetic time, it seems that we may begin a period of critical analysis, even though the temporal distance is short. What spurs us on now, however, is the observation and systematic identification of these eventual transfers in the period prior to the publication of the Survey in detriment to a "moral judgement" of that time that we consider completely and ethically unacceptable. We have integrated our analysis into these diffuse areas of architectures of contagion, "out of focus", and free of critical elitist prejudices, which produce interpretations and revindicate preconceived models, in a series of architectonic currents that are representative of a dominant culture. We also considered the possibility that they had been diffusers of other experiences, like those in the field of anthropology (Leal, 2006), sometimes being transcended in form and content with great benefits for their most direct usufructors.

The anonymous architecture that we have referred to will continue to be included in the continuity of the centuries-old vernacular architecture with special cultural connections and project methodology in relation to the architecture constructed at the end of the 19th century in identical contexts, i.e., in the case of urban and peri-urban geography, where many creative sources and technological manipulation are mixed, as in the historical period dealt with here. "Return to the countryside" architecture will also be included in this historic period, located in vast areas of land or in uninteresting family building plots, as well as in small agglomerates, replicating models, materials and / or

expressions of an ill-defined antiquity, almost always of an urban and /or "manor house" characteristics still being reflected in local tradition, experimenting an integration of new signs and / or expressions of architecture "related" to the Survey of influential architects, at times merely in the form of a "magazine".

3. Conclusions

Although not yet complete, this analysis, limited to a specific territory, permit us to develop some conclusions that confirm these "transfers" between the architecture resulting from the Survey (accepting certain criteria that supposedly frame the definition and identification of this architecture) and the popular and vernacular architectures in a state of denying their lineage and supposedly involved now in a new process of evolution and being renovated due to the "refluence" of the Survey. They both cite works constructed between the end of the 1950s and the 1980s from the same origin, although they received them from different sources. They also claim with certainty the sensibility of their "influence" or even assimilation in the same period, in a new code of spontaneous architectures built by and for themselves or for others, both produced by non-architects, thus making it an indisputable reality. Which leads us to question if popular or vernacular architecture still exists, as seen by past generations, or if there are new identities whose time of appearance and permanence does not yet permit us to form an opinion on them as a possible new type.

References

- Arquitectura Popular dos Açores*. (2000) Lisboa: Ordem dos Arquitectos.
- Arquitectura Popular em Portugal*. (1961) Lisboa: Sindicato dos Arquitectos Portugueses.
- Frampton, K. (1998) *Introdução ao estudo da cultura tectónica*. Cadernos de arquitectura. Lisboa: Associação dos Arquitectos Portugueses.

IAPXX - *Inquérito à Arquitectura do Século XX em Portugal*. (2006) Lisboa: Ordem dos Arquitectos.

Leal, J. (1996) *Antropologia em Portugal: mestres, percursos, tradições*. Lisboa: Livros Horizonte.

Leal, J. (2009) *Arquitectos, Engenheiros, Antropólogos: Estudo sobre Arquitectura Popular no Século XX Português*. Porto. Fundação Instituto Arquitecto José Marques da Silva.

Mestre, V. (1985a, Maio). Relações entre as construções da Ilha do Porto Santo e das Ilhas Canárias. *Jornal dos Arquitectos* (37), 5.

- (1985b, Out./Nov.). Subsídios para o Levantamento da Arquitectura Popular do Arquipélago da Madeira. *Jornal dos Arquitectos* (40/41), 6-7.

- (1998). Arquitectura Popular do Arquipélago da Madeira, Património Atlântico: bases para a sua reabilitação enquanto Património Cultural. *Islenha* (23), 89-112.

- (2002). *Arquitectura Popular da Madeira*. Lisboa: Argumentum.

- (2007). Arquitectura Tradicional de Goa. Mestre, V. (2007). Arquitectura Tradicional de Goa. In: *Terra em Seminário - V Seminário Arquitectura de Terra em Portugal*. Lisboa: Argumentum, pp. 24-27.

- (2010a). Arquitectura em Timor. In José Mattoso (dir.), *Património de Origem Portuguesa no Mundo: Arquitectura e Urbanismo*. Vol. Ásia | Oceania. Lisboa: Fundação Calouste Gulbenkian, pp. 413-417.

- (2010b). A casa tradicional (Goa). In José Mattoso (dir.), *Património de Origem Portuguesa no Mundo: arquitetura e urbanismo*. Vol. Ásia | Oceania. Lisboa: Fundação Calouste Gulbenkian, pp. 200-203

- (2010c). Ilhas de viagem, Ilhas que viajam: a Arquitectura Popular da 'Ilha Continente' Portugal às Ilhas de Sòlor e de Timor. In: *As Idades da Construção: técnicas de construção tradicional e sua aplicação à arquitectura contemporânea*. Lisboa: IIEFP - Instituto do Emprego e Formação Profissional, pp. 179-195.

Oliveira, E. V., & Galhano, F. (1992). *Arquitectura tradicional portuguesa*. Lisboa: Pub. Dom Quixote.

Tostões, A. (1997) *Os Verdes Anos Na Arquitectura Portuguesa dos Anos 50*. Porto: Faculdade de Arquitectura da Universidade do Porto.

Traditional Mediterranean Architecture. (2002) Avignon, Barcelona, MEDA-Euromed Heritage, CORPUS: Ecole d'Avignon; Col·legi d'Aparelladors i Arquitectes Tècnics de Barcelona; Ecole des arts et métiers traditionnels de Tétouan.

Villanova, R.; Leite, C.; Raposo, I; Gaudin, P. (1994) *Casas de sonhos: emigrantes construtores no Norte de Portugal*. Lisboa: Salamandra.

Author identification

Victor Mestre. Architect, 1981. Master in Restoration of Landscape and Architectural Patrimony, University of Évora, 1988. Advanced Studies Diploma in Teoría y Práctica de la Rehabilitación Arquitectónica y Urbana, University of Seville, 2005. PhD Research student, Coimbra University. Founder partner of Victor Mestre | Sofia Aleixo, Arquitectos, a practice involved in research, conferences, and architectural design, in Europe, Africa, and Asia, with published work in national and international journals, books and magazines. Curator for Architecture and Public Spaces, and co-author of the Architectural Project for the exhibition 1999 | 2004 - Architecture and Design in Portugal - Triennale di Milano, Italy. Architect since 1995 and Director of the Safeguard and Revitalization Cabinet of Patrimony at DGEMN (2000-2003).

THE HICA CENTRAL WORKERS QUARTERS

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Abstract

In 1945, with the projects starting for the Venda Nova dam construction, the Cávado Hydroelectric (HICA 1945-1969) began the construction improvements of the hydrographic basin of the Cávado and Rabagão rivers.

In this context, along with the dam and the central, it was necessary to build a set of infrastructures, to lodge the workers during and after those improvements, and the population that was affected by submersion of the reservoir, as well.

The HICA instructed the Architect Januário Godinho, for the conduction of some projects for these infrastructures, namely the plans for the central workers quarters and the drawing of the main part of the buildings.

Some of those projects had significant recognition at the time of its accomplishment, being incorporated in exhibitions and architecture catalogues and systematically referenced by several authors (França 1991, Portas 1987, Fernandez 1991, Tavares 2000, Tostões 2004, Sales 2005). This recognition has converged in the idea of Januário Godinho, as one of the precursors of the critical regionalism, impression that elapses in the way as its collected works revealed a significant interest for the place and allows placing its work in the context of precursory ideas of the Inquiry to the Regional Architecture.

This paper intends to identify, in these projects for the HICA, the mechanisms of the architecture practice, facing them with the awareness of "survey architecture" that have been used in the critical reception of the artwork.

Keywords: Landscape, Januário Godinho, Hydroelectric, Territory.

Context

As a consequence of agriculturally-based policies and of the veneration of a modest lifestyle with the minimum of possessions at its disposal, the ultra-conservative Portuguese Estado Novo, or Second Republic, maintained, up to the 1940s, an undefined industrial policy (ROSAS and BRITO, 1998:65). This strategy resulted in the weak management of the nation's hydrological resources

and the creation of large hydroelectric power stations at a much later stage than other European countries. Despite the efforts made by some of the great names in the field of hydrological resources, such as engineers Ezequiel Campos (1874-1965), Araújo Correia (1894-1978) and Ferreira Dias (1900-1966), essential production, transport and distribution of electrical energy within Portugal was, up to the end of the first half of the 20th Century, carried out by small concessionary companies who generated power and then supplied it to the main Portuguese cities.

Based on the national electrification law of 1942, in which centralized production and the expansion of the energy transmission network was set out in detail (RODRIGUES and MENDES, 1999:318), a national hydraulic programme was begun utilizing the large hydrographic resources of the Zêzere, the Cávado and the Tejo rivers.

The importance of hydroelectric facilities for the production and distribution of electrical energy to the electrification and consequent industrialization of Portugal from the 1950s onwards was such that it was strongly encouraged by the state, becoming one of the main points used for propaganda by the then regime, and also helped to contradict the extremely conservative image of the Estado Novo.

In 1945, the Cávado hydroelectric company (HICA - 1945/1969) began work on the Venda Nova dam to be built on the Cávado/Rabagão water resource. Infrastructure was to be built alongside the dam and power station for the purposes of housing workers and staff both during and after construction work.

Januário Godinho was the architect initially chosen by HICA to work alongside company engineers to produce the plans for some of these projects.

Territory

The territory in question is the Cávado hydrographic basin, which is being analysed here in both its social and physical dimensions. The locations chosen for building dams is naturally decided by hydrographic and geomorphological characteristics, that in turn are the result of natural contrasts such as the lay of

the land, climate or geology. The reports that led to the creation of HICA also led to the creation of a plan by which Portugal would be divided into three main areas of energy production: the north, with the Cávado, Douro, Paiva and Lima rivers, the centre, with the Tejo, Zêzere, Ocreza and Mondego rivers, and the south with the Guadiana.

The hydroelectric power stations built by HICA and located in the valleys of the Cávado and its tributaries are in the north-east of Portugal, in the geographical region of the North Atlantic (RIBEIRO, 1991:145) in the province of Entre-Douro-e-Minho. This region is one of extreme differences in altitudes, with flattened peaks between 1300 and 1400 metres corresponding to the mountain ranges of Peneda, Soajo, Amarela and Gerês, with the Minho, Lima, Cávado, Homem and Ave rivers running through the fracture valleys and young slopes that emerge between them (BRITO, 1994:49).

The high levels of rainfall registered along the mountainous course of the Cávado permitted this river and its tributaries to be used for the construction of one of the most important groups of dams in the country, with HICA having designed and constructed six developments in this area. The Venda Nova development on the Rabagão river (1951), developments at Salamonde (1953) and at Caniçada (1955) downstream from the point where the rivers meet, the development at Paradela (1958) on the Cávado upstream from Paradela, the development at Alto Cávado (1959) and the one at Alto Rabagão (1964) on the Rabagão river upstream from Venda Nova. Not to be forgotten is the development at Vilarinho da Furna, located on the Homem River and built in the 1970s, after the merging of the separate hydroelectric companies into the Companhia Portuguesa de Electricidade, the Portuguese electricity company, CPE.

The six developments are located along the Cávado river and its tributaries the Rabagão and the Homem, within the boundaries of the municipalities of Montalegre, Vieira do Minho, Terras de Bouro and Barcelos, the first being in the district of Vila Real, and the rest belonging to the district of Braga.

This is a rural area, which from the 1930s attracted the interest of a series of specialists interested in understanding the culture, customs and way of living of the inhabitants of these remote rural areas. This interest was first sparked by the agronomists from the institute of agronomy (the Instituto Superior de Agronomia, the ISA) who were carrying out a survey into rural housing, later followed by the architects carrying out the survey into vernacular architecture in Portugal, and finally by anthropologists from the national ethnography museum who, under the guidance of Ernesto Veiga de Oliveira (1910-1990), carried out very many studies on this topic. [LEAL, 2008:11]

Using similar methods of data collection to describe and interpret what they found, these studies made possible an approach to the interior of the country which brought the Portuguese rural landscape into closer view, enabling analysis of their conclusions and leading to a better understanding of the interior regions of the north of Portugal, its culture, and in particular, the architecture to be found there.

In the 1940s, apart from the partial publication, in two volumes, of the survey into rural housing (BASTOS & BARROS, 1943 and BARROS, 1947), which focussed on the questions of habitability and salubrity of rural housing, nothing substantial had been written on the architecture of inland regions. It was only 10 years later, at the beginning of the 1960s, that the survey into Portuguese regional architecture took place. With its publication, the architects hoped to go one step further than the reforming criticisms made by the agronomists, and of the ethnographic and anthropological points, carrying out instead a reading of vernacular architecture from the viewpoint of modernism, which was, in 1950s Europe, becoming increasingly widely known. This functional approach dominated the survey, looking at whether construction solutions were appropriate to local conditions and the purpose of the building, as well as suitability of materials, and not in relation to visual aspects, which meant that the results presented did not reflect the existing vernacular architecture but only that which was most similar to the architectural concepts defended by modernism.

A critical eye that permitted the architects from the national union of architects, as Fernando Távora would state, to find that the diversity of vernacular architecture "... was a vision of continuity, of confirmation of the proximity between the values of modern architecture and that of vernacular architecture"¹. It is that modernist vision that can be found in the way in which the buildings studied by the survey into vernacular architecture are characterized, which influenced the practice of the following generations of Portuguese architects and helped to transform vernacular architecture "...into a recognized object, accepted, appreciated, which today is one of the categories commonly accepted by the middle classes and other social groups..." (LEAL, 2008:5)

And before the survey? What understanding did architects have of those regions, and what strategies did they use when intervening in those areas?

It is beyond the scope of this essay to answer that question, but rather to take a look at one person in particular, Januário Godinho, and seek to understand the sense of transformation effected by his architecture on the landscape of the Cávado, with a recognition of the history of the projects, and making use of the debate around their localization and general issues relating to their development.

H.I.C.A

In 1945, the Cávado hydroelectric company (HICA) gave the go-ahead for the development of four stretches of water, - the first on the Rabagão river at Venda Nova; the other three on the river Cávado at Paradela, Lavandeiras and Caniçada, with construction commencing half-way through 1946. With construction of the dam and the plant a priority for the Cávado hydroelectric company, less importance was given to other matters, such as accommodation for the workers, the expropriation of land and rehousing of the displaced populations, and the construction of housing complexes for the power station's future employees.

¹ A.A.V.V "Arquitectura Popular em Portugal", Associação dos arquitectos Portugueses, Lisboa, 1988, 3ª edição 1.ª edição, 1961, Sindicato Nacional dos Arquitectos), Volume 01



Figure 1. Access road to the hydroelectric Power station in Vila Nova, September 1948. Alvão photography ©, EDP archive, Porto.

The hurry to begin construction led to a variety of difficult situations, often resulting in rushed decision-making which depended on the stage at which the work had reached. One of those circumstances was the need to rehouse the population of Venda Nova, due to be submerged by the reservoir. This led to the hiring of Januário Godinho, a consultant architect who was to design a number of projects for the Cávado hydroelectric company.

For Venda Nova, Januário Godinho designed the town plan along with some of the facilities: the cemetery, the church, the school, the church hall, the teacher's house and some private houses². This initial step, despite there being little reference to it in existing HICA documentation, came to be seen as an essential part of the company's architectural legacy. On completing the plans for Venda Nova, Januário Godinho continued to carry out work for HICA on a sporadic basis. Between 1947 and 1964, he was awarded the work of urban planning for the housing complexes on the different developments as well as designs for buildings within those complexes, and was also asked to deal with façades and

² Although there are references to private houses on the specifications, plans for these projects have not been found nor were any actually built.

interiors of some of the buildings in the power station complexes, which had originally been drawn up by HICA's own engineering department.

At the beginning of 1947, once the basic programme had been carried out, the engineers proceeded to set about choosing the definitive location for the housing complex for the first development, that of Vila Nova. Access to the housing complex would be by means of a bridge over the river Cávado with a span of around 40 metres, just downstream from the Vila Nova power station, and a 400 metre stretch of road running along the bank on the right-side of the river.

It was estimated that once the power station of Vila Nova was fully functioning it would need a total of 36 men to run it. Given the different categories of staff involved and the location of the plant, which was quite far away from the nearest urban centre, the ambitious project included family homes as well as a series of facilities of general interest. This project was not built, and although the plans are unsigned, it is possible to confirm the participation of Januário Godinho in their creation; the identifying mark used on the plans is identical to those that exist on plans that came out of his studio, and there are various examples of solutions adopted that are practically identical to those of the plans and buildings that were later built for the definitive Vila Nova workers housing complex as well as for others designed by this architect for HICA.

In May 1948, a new plan was created for the housing complex, at a new location on the left bank of the river Cávado. Some 800 metres from the power plant, its basic plans had been redefined and greatly reduced in scale when compared to the previous ones. The final proposal contained: Two houses for chief engineers, four groups of two houses for managers, thirteen groups of two houses for workers, a hostel/hotel, a chapel, a school and a social centre and public services office.

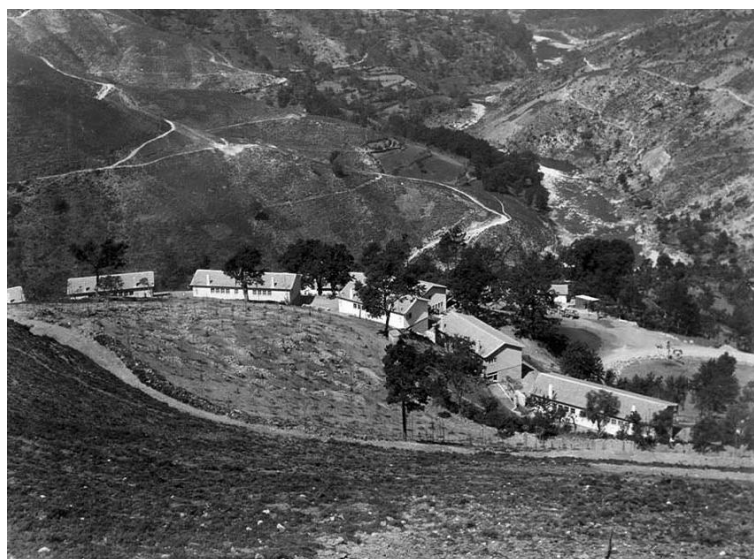


Figure 2. Village of the hydroelectrically Power station in Vila Nova, September 1949. Alvão photography ©, EDP archive, Porto.

The first stage saw the construction of: one type A house – two groups of type B and five groups of type C,³ with HICA reserving the right to come to a decision about construction of a second phase.⁴ Januário Godinho's proposal was not carried out, and in the end was restricted to the construction of the hostel/hotel and to fourteen houses for the managers, workers and chief engineer.

The development, located within a protective perimeter of around 60,000m² between elevations 360 and 450, was built in four sets attached to the hillside, with the houses grouped in blocks that accompanied the natural curve of the landscape. The buildings faced south, in a series of horizontal lines that created in space the actual configuration of the terrain.

The building which would act as the social centre appeared in the foreground ⁵, followed, at a higher elevation, by the most striking building within the entire

³ Minutes no 192, of 31 March 1949, EDP (*Portuguese state energy company*) Foundation Historical Archives, Minutes of the Meetings of the Board of Directors of HICA.

⁴ Minutes no 199, of 18 May 1949, EDP (*Portuguese state energy company*) Foundation Historical Archives, Minutes of the Meetings of the Board of Directors of HICA.

⁵ The social centre appears on the general design signed by Januário Godinho, April 1949, but was not built and the whereabouts of the designs/plans are unknown.

complex, the hotel/hostel, its layout forming a large curve, opening towards the landscape.

On the two upper circles, the two-storey houses cut the terrain into terraces so as to fit in the ground floor, and are semi-detached. The houses destined for managers and workers were mixed together, with social divisions only being shown by the length and greater number of windows of higher-ranking personnel. An exception to this are the two houses designed for the chief engineer, and the chapel, both of which stand alone, the chapel being built on the other side of the main access road to the housing complex and the power station.



Figure 3. Village of the hydroelectrically Power station in Vila Nova, houses built in the 1st phase, 1951. Alvão photography ©, EDP archive, Porto.

An analysis of the plans shows that great attention was paid to the morphology of the terrain, the location of the buildings and the manner in which these relate to each other, characteristics that give the idea that the architecture adapted itself to the conditions of the terrain and the locale. This idea is further reinforced by the manner in which the building was designed, with large walls in granite, tiled, sloping roofs with overhanging eaves or projecting balconies, all of

which are part of an architectural language that appears to be closer to an imagined rurality of the location rather than to the days of modernization in which we live.

It is not possible to see the results of that initial plan. After construction of the first phase, alterations were made by HICA engineers which interfered excessively with the end result, but analysis of the designs of Januário Godinho does shed light on the main characteristics of his way of thinking in relation to the work, its context and its relationship with the landscape.

Januário Godinho, in collaboration with the department of civil engineering at HICA, was able to choose the location of the housing complex of Vila Nova⁶, as well as those of the remaining housing complexes which he worked on for HICA, namely those of Salamonde, Caniçada, Paradela and Pisões. If in the housing complex at Caniçada this choice was more regulated, due to the proximity of national road 103 and with the complex being built alongside this roadway, in Vila Nova and the remaining complexes the only condition affecting location was proximity to the power station itself. In Vila Nova, the design of the housing complex is disciplined, with four concentric circles that follow the slope of the terrain, whereas in the remaining complexes, Januário Godinho adopted a strategy of dispersion in relation to the buildings, which were linked by winding lanes. These differences are not so visible within the architecture, which maintained, throughout the 19 years of the project, the same architectural concepts. The combination of traditional materials with ones that are technologically advanced, the fluid inner distribution, the connection between the building and the terrain. In many cases, the houses designed for Vila Nova were later adapted for the other housing complexes, with small alterations. Despite the formal differences in the design of the facilities of the different hotel buildings, similarities can also be found in the manner in which materials are dealt with as well as in the manner in which the interior spaces are organized or construction problems resolved.

⁶ Minutes no 159, of 24 August 1949, EDP (*Portuguese state energy company*) Foundation Historical Archives, Minutes of the Meetings of the Board of Directors of HICA.

As the final location of each complex was chosen by Januário Godinho, there has existed, from the very beginning and in all the complexes, a very clear idea of what is desired for each location. It is our understanding that the alterations produced by the designs carried out by Januário Godinho for the HICA housing complexes, had an impact on the locale that was much greater than previously realized, with significant alterations to the landscape having been introduced.

If the image that we have today of those structures is one of a large level of involvement with nature, a look at the photographs of the construction process leads us to understand that part of that nature was planted on purpose around those new buildings.

Januário Godinho did not intend for his architecture to mimic constructions that already existed in those locations, all his proposals were new, there was no intention of integrating the new housing complexes into other villages. The locations of these complexes had already been chosen for functional and operational reasons, and the same would have to happen in relation to the various dwellings and facilities that the complexes would consist of.

An architecture that does not follow the values of the vernacular, or the vocabulary of modern architecture, but rather seeks its own language, a language that is justified by the characteristics of a determined environment.

References

A.A.V.V. "Arquitetura Popular em Portugal", Associação dos arquitectos Portugueses, Lisboa, 1988, 3ª edição (1.ª edição, 1961, Sindicato Nacional dos Arquitectos)

BRITO, Raquel Soeiro de, Dir. "Portugal perfil geográfico", Editorial Estampa, Lisboa, 1994

FRANÇA, José Augusto, *A Arte em Portugal no século XX, 1991-1961*, Lisboa, Editora Bertrand, 1991

JACINTO, Rui Candeias, "As barragens em Portugal: de finais de oitocentos ao limiar do século XX" in *Momentos de inovação e engenharia em Portugal no século XX*, 3 volumes, Lisboa, Centro de estudos em inovação, tecnologia e políticas de desenvolvimento do Instituto Superior Técnico - Dom Quixote, 2004

LEAL, João, "Etnografias Portuguesas (1870 – 1970): Cultura Popular e Identidade Nacional", Publicações Dom Quixote, Lisboa, 2000

LOBO, Margarida "Planos de Urbanização: A época de Duarte Pacheco", Porto, FAUP, 1995,

OLIVEIRA, Ernesto Veiga de, e GALHANO, Fernando, *Arquitectura tradicional portuguesa*, Publicações D. Quixote, Lisboa, 2003, 5ª edição (1ª edição 1992)

PEREIRA, Nuno Teotónio, "Engenheiros e Arquitectos em meados do século: um testemunho pessoal in *Momentos de inovação e engenharia em Portugal no século XX*, 3 volumes, Lisboa, Centro de estudos em inovação, tecnologia e políticas de desenvolvimento do instituo superior técnico e publicações Dom Quixote, 2004

PORTAS, Nuno, "Januário Godinho – 1910", in Catalogo da exposição, *Arquitectura, Pintura, Escultura, Desenho*, integrada nas comemorações do 75º aniversário da UP, Porto, Universidade do Porto, 1987

RIBEIRO, Orlando "Portugal, o Mediterrâneo e o Atlântico", Lisboa, Livraria Sá da Costa, 6ª edição, Lisboa, 1991 (1ª edição 1947)

RIBEIRO, Orlando, "Opúsculos Geográficos – VI volume – Estudos Regionais", Fundação Calouste Gulbenkian, Lisboa, 1995

RODRIGUES, Manuel ; MENDES, José (Org.), *História da indústria portuguesa - da idade média aos nossos dias*, Ass. Industrial Portuense, Ed. Europa América, Lisboa, 1999

ROSAS, Fernando e BRITO, J. M. Brandão de, (Org.) *Dicionário de História do Estado Novo*, 2 volumes, Lisboa, 1998

SALES, Fátima, *Januário Godinho na arquitectura Portuguesa, ou a outra face da modernidade*, 2 Volumes. Valladolid : [ed. do autor], 2000. Dissertação de Doutoramento apresentada na Escuela Técnica Superior de Valladolid.

TOSTÕES, Ana, "Em direcção a uma estética industrial: Zeitwill ou vontade de modernidade" in *DOCOMOMO, A arquitectura da indústria – 1925 – 1965*, Barcelona, Actar, 2000

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THE VERNACULAR IN DUBROVNIK, 1956:

Fetishism or Commitment?

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Abstract

At the 10th CIAM congress held at Dubrovnik in August 1956, the Portuguese CIAM group presented the grid "Habitat Rural. Nouvelle Communauté Agricole". In the project's description, the group contends that it can contribute for the 'Charte de l'Habitat', reaffirming "the importance of the Rural Habitat, which should not be overlooked by CIAM if they want their proposals to be really universal."

The Portuguese project (designed by Viana de Lima, Fernando Távora and Octávio Lixa Filgueiras with Arnaldo Araújo and Carlos Carvalho Dias as collaborators,) was not alone in this venture. In fact, together with their contribution, other projects were settled in the rural world, including those designed by such prominent Team 10 members as the Smithsons, Aldo van Eyck, or John Voelcker. These projects delivered, however, different approaches on the relation between the machine tropes of early modernism and vernacular architecture.

The engagement of the Portuguese group with the Survey on Regional Architecture in Portugal, whose preliminary work supported their project, fostered an approach that was looking for a negotiated outcome between the universalist scope of the Athens Charter and a more culturally engaged outlook. Others, such as the Smithson's, were more focused on "inventing" new forms that could be created against a background of existing vernacular buildings in rural communities. Thus, in these cases what is the extent to which vernacular references were instrumental to deliver an alternative to the main strain of postwar architectural culture? Were vernacular references used as mere fetishist objects or were they valued as references for a more committed appraisal of local cultures?

Drawing on research developed on the participation of the Portuguese group at the 1956 CIAM congress, this paper will contribute to answer these questions and discuss how the tension between modernity and the vernacular fostered the mid-1950s reconceptualization of modernism from a machine oriented approach towards a situated modernism.

Keywords: CIAM, Vernacular, Habitat, Rural, Housing

Karl Marx, in his *Das Kapital*, explores the notion of the fetishism of commodities, discussing the origin of their mystical character. Marx argues that there is a transcendent quality ascribed to commodities (exchange-value), which is determined by a mysterious and magic process attached to the commodity itself, independent of its use-value. Hence, according to Marx, the product of labour has '*absolutely no connection with their physical properties and with the material relations arising therefrom.*' (Marx, 1887, p.47) Marx's use of the concept of fetishism brings about the alienation, from producer to consumer, of the specific qualities of the products of labour. Theodor Adorno, in 1938, explores Marx's notion of fetishism to deliver a critical approach on, according to him, which is the real secret of the masses adherence to light music. Thus, Adorno argues,

The consumer is really worshiping the money that he himself has paid for the ticket to the Toscanini concert. He has literally "made" the success which he reifies and accepts as an objective criterion, without recognizing himself in it. But he has not "made" it by liking the concert, but rather by buying the ticket. (Adorno, 1982, pp.278–279)

Adorno's essay is concerned with the extent to which music business veil the unconscious reactions of the listeners in order to orient them to the dominant fetish categories, thus providing them solely the appearance as the object of enjoyment. In architectural culture as in the musical milieu, architects are often consumers of images and objects produced under the aegis of a material culture to which they have little or none engagement with or understanding of.

This tension is immanent in the history of the architectural discipline. It has, however, been stressed in critical moments of our recent history. In the aftermath of World War II, for example, the intercourse between mass culture and vernacular expressions arouse as a token of the emergent drive towards a more humanistic approach to the habitat.¹ The CIAM (Congrès Internationaux

¹ The publication in December 1948 of the Universal Declaration of Human Rights by the United Nations' General Assembly, with its focus on promoting the rights of the individual and his responsibilities in contributing for the common welfare, triggered a disciplinary debate where the relationship between the human person and the community became a token of this new approach to the built environment.

d'Architecture Moderne) congresses were a privileged stage where this relation was discussed. These discussions, however, were profoundly charged with their protagonist's social and political programmes; and their aesthetic agendas, too. In fact, in Europe, the social and material conditions of a continent physically destroyed by the bombs and spiritually traumatized by the horror of the war's bloodshed, the intertwined relation between social commitment and aesthetic programme became a source of an intense debate among the disciplines of architecture and urban planning. To be sure, from 1951 until 1956, this relation would become the background against which the members of CIAM sought to produce a Charter of Habitat, embedded with the humanist values those times called for. Eventually, this goal was never accomplished.

In this context, what was the extent to which the vernacular was used as a reference to foster the introduction of those humanist values in the post-war architectural culture? Was it fetishized, mystifying its superficial qualities? Or, otherwise, was there a commitment on valuing its specific social character as a reference for a change of paradigm in the architectural approach?

To contribute for possible answers to these questions, in this article I will swiftly move from CIAM's debates in the immediate post-war period to the 1956 congress, held at Dubrovnik, where I will present and discuss some of the projects delivered there, which epitomize the debate on the blurred boundaries between typical polarities such as the universal and the local, mass-production and craftsmanship, *lingua franca* and the vernacular.

The emergence of a paradigm shift

The 8th CIAM congress, held in Hoddesdon in the summer of 1951, epitomizes this movement towards a more humanist approach to the habitat, by suggesting the addition of a fifth element to the Athens Charter's four functions, the core. The theme of the congress, 'The Heart of the City', clearly expressed the motivation to humanize Modern Movement's interwar principles. The invitation to the congress, released by the MARS group, noticeably stated that the core was

'the element which makes the community a community,' its 'heart or nucleus.'
(Mumford, 2000, p.203)

The approach of CIAM's *intelligentsia* was, nevertheless, still chiefly influenced by the generation of the founding fathers, meaning the entourage around Le Corbusier, Gropius and Giedion. At the 9th CIAM congress, held in 1953 at Aix-en-Provence, this situation was starting to change, though. The universalism of the model of habitat proposed by the generation of the masters was confronted with the emergence of a younger generation, which brought about references from other cultures. Moreover, an attention to 'the real' was also emerging as an alternative to the interwar focus on 'the ideal.'²

Over a period of five years, from Hoddesdon to the 10th CIAM congress held at Dubrovnik, the debate on a more humanist approach to the habitat became the organization's mantra. The disciplinary methodology to accomplish that common goal was not, however, unanimously supported. The meeting of some members of the Dutch and English CIAM groups, held at Doorn in January 1954, draws an important turning point in the debate's momentum, which was, until then influenced by the first CIAM generation, and chiefly focused on the issue of 'housing for the greatest number.'

The document generated after this meeting, the Doorn Manifesto, challenged the universalist and prescriptive character of the Athens Charter and its four functions of urbanism. As an alternative to it, by suggestion of Peter Smithson, that document advocated the adoption of a methodology inspired on Patrick Geddes' Valley Section, the scales of association. The idea was, thus, to pursue an approach that considered the built environment as having specific social and material characteristics according to its size and location. The four levels in the scales of association were: isolated buildings, village, town and city.

This paradigm shift would generate an intense debate, but it would become eventually the background against which the framework for the group's

² The grids presented at the Aix-en-Provence CIAM congress by the group GAMMA (Morocco), 'Habitat du Plus Grand Nombre'; CIAM-Alger (Algeria), 'Bidonville Mahieddine'; and the Smithsons / MARS Group, 'Urban Re-Identification', illustrate with clarity this shift. Cf. (Risselada & Van den Heuvel, 2005, pp.20-41)

presentations at Dubrovnik was devised. The instructions to the groups proposed that every one should present their work for, at least, one of the scales of association.

The rural world revisited

The 10th CIAM congress, held at Dubrovnik from 3 to 13, 1956, was meant to collect and discuss contributions to produce the Charter of the Habitat, ambioned by some CIAM members as a follow-up of the Athens Charter at the scale of the dwelling and its extensions. As stated above, this Charter was never produced, though. Nevertheless, an intense, lively and groundbreaking debate was nurtured by its preparation, which became notably epitomized with the emergence of Team 10 out of the CIAM. (A. Smithson, 1982)

Triggered by the Smithson's idea of the scales of association and by the on-going trend of fostering a more humanist approach to the habitat, the rural world emerged as a reference for the creation of a harmonic relationship between the individual and the community.

The 10th CIAM congress was initially due in the summer of 1955 at Alger, then part of the French colonial empire. The uprising of the nationalist liberation movement, which started at the end of 1954, gained momentum and caused postponing the congress and eventually deciding on a different venue. It was decided then to hold a CIAM meeting of delegates, in September 1955, at the foundational and mythical location of La Sarraz, while the new location and date for the 10th congress was being devised.

John Voelcker, member of the British MARS group, presented at La Sarraz his Rural Resettlement Project, which he had been preparing for the presentation at the 10th congress. In the first panel of Voelcker's grid, he argues that the intention of the project is '*to contrive a building of elements which have, besides their constructional purpose, a formal significance.*' The project is defined by a shattered group of individual houses with private gardens, organized around a common orchard, and unified by a continuous boundary strip made out of

concrete blocks. This scheme was inspired on the vernacular agricultural dwelling pattern, as mentioned in the second panel of the presentation.

The housing units were also designed according to the '*traditional cottage plan*.' Their building system, however, was mainly based on pre-fabricated elements using processed materials such as concrete blocks, concrete precast frame, and corrugated asbestos sheets, combined with more traditional solutions such as weatherboarding cladding. This scheme, Voelcker argued, was meant to '*signify connections between the inhabitants and the universe beyond. In so doing they may provide the means of extension from individual to communal, from man-made to phenomenal*.' (MARS Group & Voelcker, 1955)

Siegfried Giedion, at the La Sarraz meeting, presented a proposal for the debate at the 10th Congress, which should be focused on the problem of inter-relationships. This notion, according to him, should overcome the idea of specialization and "*provide a structure for CIAM X, which is to handle the subject of the Habitat*." Among those relationships, Giedion referred '*the relations between the new regionalism and the ambiance in which the machine civilization was developed*.' (Giedion 1955) The project presented by Voelcker could, thus, be offered as a good example to Giedion's call on the development of 'interrelationships.'

At the La Sarraz meeting, it was finally decided to organize the 10th congress the next year's summer at Dubrovnik, where Voelcker would eventually present a different version of the project showed at La Sarraz. However, his new scheme for a Rural Habitat evolved towards a more abstract layout, which was defined by a common spine of 'Night-time' components articulating the unobstructed 'Day-time' volumes. Regarding the building system, Voelcker argued that the dwelling components were designed to meet the local building industry, combining both traditional techniques with industrialized components.

Another members of the MARS group, the Smithsons couple, keen in demonstrating the ideas they championed, brought to Dubrovnik no less than five grids, providing instances to illustrate the four scales of association. The

scale to which they arguably dedicated more attention was the village, presenting two grids, "the galleon cottages" and the "fold houses."

In the "galleon cottages" grid, the Smithsons delivered a critique to contemporary politics of development patterns at the countryside, which were aimed at *"stooping non-traditional building to avoid 'loss of amenity'."* They argue, however, that *'a suburban house cannot be made into a country house by making its walls of stone or its roofs of slate.'* (A. Smithson & P. Smithson, 1956) They considered this approach an outrage, as can be boldly seen in the grid's first panel. Hence, they posit that the problem is *'to invent a form which can accommodate the typical houses required in a small village.'* They rejected the *'typical standard housing universally applied without reference to location or type of community'*, thus supporting a new approach to the design of non-urban dwellings. This novel approach was the "village unité", an architectural unit formed by placing several houses together, autonomous from the village's existing urban structure, an idea inspired on the traditional Almshouses.³

In the "fold houses" grid, although considering the same scale of association, the village, the problem was somewhat different. In this case, the Smithsons' goal was to bring about a solution to solve the problem of inventing a 'type house' to be used in infill developments at the village scale. They looked at vernacular settlements in the Scottish island of Tiree and in the Greek island of Poros to exemplify how the use of identical units articulated with the site's topography would foster, at the scale of the village, *'an identity of coherence - like red apples on a tree'.*

In a village, they argued, development patterns cannot be pursued since the scale is too small. They suggested, instead, that *'infill development is all this type of village can hold.'* They presented several variants of housing layouts, which could be added next to the existing constructions, *'placed over the whole of the old alike a new plant growing through old branches.'*

³ The Almshouses are charitable houses, usually terraced and often secluded from the public realm, to which they could gain access through a narrow passageway.

Aldo van Eyck, another Team 10 member present at the Doorn meeting in 1954, had been since the early 1950s pursuing his private survey on the primal elements of architectural language, which could guide him towards an alternative conception of progress. This quest for the 'elementary' motivated his trips to the North of Africa in 1951 and 1952 which were, according to Francis Strauven (1998: 144), *'journeys of discovery through the oases of the Algerian Sahara, (...) where the traditional settlements, due to the climate and their physical isolation, had remained, irrespective of Western civilisation, as constant as the pre-rational world-view that they reflected.'*

At Dubrovnik, van Eyck presented a grid with the plan for a new village in the Dutch Noordoostpolder, Nagele.⁴ Aldo van Eyck's acknowledgement of the virtues of the Saharian traditional settlements was not explicit in this plan. In fact, the outcome resonates more with a group of Jaap Bakema's neighbourhood units than with the 'pre-rational world view' of the traditional settlements.⁵

The organisation of this units reveals, however, both formal and social approaches that challenged the principles of the bourgeois planning. The egalitarian distribution of the neighbourhood units around the open core embodied van Eyck's rejection of the institutionalization of social hierarchies. Both the thick windswept surrounding the village and the central core epitomized van Eyck's goal that *'the entire village should be the expression of unity.'* (Risselada & Van den Heuvel, 2005, pp.58–59)

Van Eyck illustrates the fourth panel of his grid with an idyllic picture of a couple laying on the ground, adding a quotation from Dylan Thomas: 'four elements and fives senses and man a spirit in love.' Drawing on his attachment with Johan Huizinga's notion of Homo Ludens, van Eyck argues that the core of the village was meant to be the place where *'a large central green, grooves, woods and*

⁴ Aldo van Eyck had been engaged with the plan for Nagele since 1947 as a member of the Dutch CIAM group 'de8'. Different versions of this plan were presented at the CIAM's congresses held at Bergamo (1949) and Hoddesdon (1951). Aldo van Eyck did not attend any of these two congresses. The project presented at Dubrovnik corresponds to the second phase of its design, which resulted chiefly of van Eyck's ideas. In the same congress, Aldo van Eyck presented another grid, named "Lost Identity", which was related with his projects for several playgrounds built in Amsterdam.

⁵ This observation is not without reason since Bakema was involved with the Nagele plan since 1952.

places for fun, repose and seclusion.' And he went on contending that *'rather [these] than the rigidity of the vast polder or the street's of the usual village form.'*

In the context of the referenceless geography of the reclaimed polder, van Eyck rejects the urban customs of the traditional village and suggests a scheme that resonates with his proposal to build a place for each man and every man; a synthesis of the classic, the modern and the vernacular of the heart, as he will later illustrate on his Otterlo circles.

The Norwegian CIAM group, PAGON (Progressive Arkitekters Gruppe Oslo Norge), represented in Dubrovnik by the architects Arne Korsmo, Geir Grung and the painter G. S. Gundersen, presented at the congress a proposal that was focused on the relation between building and nature. They presented the vernacular (a farm in the countryside or fisherman's homes) as *'a simple understanding of living in its relationship to nature as defined through time into a form - expression and milieu of high cultural quality.'* (Korsmo et al., 1956)

These references represented the bringing together of nature and artefact. In fact, they argued that *'all these buildings belong to the landscape whether they seem to slip away or lay close to it.'* Contrasting to this, they presented the contemporary result of a *'shift from tranquillity and simplicity to the speed, the typically hurried and economically hazarded impression of our age.'* Their proposal aimed to bring together *tempo* and quality, essential virtues that naturally influenced the outcome of the work delivered by craftsmen and architects.

They contended that the sense of totality was jeopardized by contemporary demands of speed and the tendency to overlook the building's quality. Considering the social consequences brought about by this, they argued that *'it is terrifying to see the unconscious and passive condition into which modern man has been directed.'* They advocated, thus, a more personalized society with a more active individual in it, building for it a solution that forms intersections of aesthetical quality between housing and nature. *'The face of each family is to be seen in the façade of each family home.'*

The Norwegian project stresses, thus, the achievement in contemporary housing schemes of the qualities of the vernacular; fostering a symbiotic relation between nature and housing and between the individual and its community.

The project for a Rural Community, presented by the Portuguese group CIAM-Porto, showcases the first opportunity to develop an urban scheme since some of the group's members have become engaged with the "Inquérito à Arquitectura Regional Portuguesa" (Survey to Portuguese Regional Architecture).⁶

Alfredo Viana de Lima, Fernando Távora and Octávio Lixa Filgueiras authored the project, with the collaboration of the young architects Arnaldo Araújo and Carlos Carvalho Dias.

In their description of the grid presented at Dubrovnik they argued that

We believe our study can contribute for the *Charter of Habitat*, bringing about the following aspects:

- a) The importance of the Rural Habitat, which should not be overlooked by CIAM if they want their proposals to be really universal.
- b) The importance of very intense surveys, mainly in very specific cases, such as this one; an approach that will gradually eliminate the plans developed without contact with local realities, and that will, on the other hand, hinder the dangerous tendency towards the centralization that we find everywhere. (CIAM Porto, 1956)

The group's engagement with the study of pre-industrial settlements has deeply influenced the outcome of their project. The panels presented in Dubrovnik reveal an explicit attempt at translating the language of the vernacular into the syntactic codes of the discipline. This translation, in fact, occurs at all scales of the work presented. In the Panel number two, the master plan for the

⁶ The field work for the *Inquérito* started in 1955, one year before the Dubrovnik congress. Among the authors of the project delivered in the CIAM 10, only Viana de Lima was not involved in the *Inquérito*. Fernando Távora was the leader of the survey to Zone 1, and Octávio Lixa Filgueiras was in charge of leading the survey to Zone 2, with the collaboration of Arnaldo Araújo and Carlos Carvalho Dias.

community is presented alongside with two existing communities. This confrontation evidences the parallels between the new scheme and the traditional settlements, each of which organized at the bottom of a valley, with the buildings distributed in both margins of the river. A photography of one of these existing settlements is provided to show the physical context of the building site, chiefly its corrugated topography, which is responsible for the distortion of the, otherwise canonical, urban layout.

The third panel is focused on the housing unit and displays a rather complex set of information. The layout of this information is, however, meaningful. At the bottom of the strip with the textual information, at the left side of the panel, a picture depicting the hearth of a vernacular building is featured. This almost abstract picture, suggests the primitiveness of the life conditions at the Portuguese countryside. In the central section of the panel, the plan of the proposed dwelling is confronted, at the same scale, with the plan of an existing house surveyed in the region. This confrontation is self-explanatory in emphasizing the group's commitment on granting improved conditions to the community's prospective inhabitants.

In the case of the project's elevation, a different approach was pursued, though. A picture of a vernacular reference was used next to the representation of the new solution, which was drafted both with plain lines, suggesting the building's materialization, and with lines filled with solid hatching to emphasize the protruding and set back parts of the building. The result is a straightforward suggestion of likeness between the proposal and the vernacular reference. This strategy of presentation, thus, highlights the group's strategy of focusing their approach on two fundamental scales: the community (panel 2) and the family (panel 3).

Structuring communities: fetishism and commitment

In the first report of CIAM 10's commission B4, chaired by Peter Smithson, whose theme was 'the cluster', it was stated that *'the problem of cluster is one*

of developing a distinct total structure for each community, and not one of subdividing a community into parts.' (P. Smithson, 1956) Considering this, Peter Smithson, himself, recognized in the same report that *'in the grilles, outside the visually appreciated unit – hamlet or village – hardly any success has been achieved in the larger scale cluster.'*

It seems, thus, that the most successful cases analysed by the cluster commission were those that created a so-called 'visually appreciated unit', meaning the second level on the scales of association, the village. In fact, in the report of the commission's second meeting, it was stated that there was a *'study of the village type projects to see why they seem to be the most successful.'* Moreover, further ahead chasing for *'any evidence of a social basis which can guide development'*, the report mentions, *'only in agricultural communities can there be observed any closed economic and social basis. Such as in Nagele and the Portuguese scheme.'* (P. Smithson & CIAM 10 - Commission B4, 1956)

In the final report of the cluster commission, it was concluded that future work of architects and planners should be more concerned with the issue of community structure.⁷ *'If one lives in a community'*, the report argued, *'one should be able to understand its structure. This is more than a matter of being able to find its way about, it is a matter of feeling that you are somebody living somewhere.'* (CIAM 10 - Commission B4 & P. Smithson, 1956)

This statement embodies this generation's attempt at reconceptualizing the architect-urbanist's role towards a more humanist approach to the habitat. The projects discussed above provide different instances of contributions to achieve this goal. They were, nevertheless, dwelling on a blurred line between a fetishist assessment of vernacular references and a committed motivation to use them as to foster conciliation between the individual and the community.

John Voelcker's Rural Resettlement scheme highlighted the magical features of agricultural communities just to translate them into a highly abstracted instance of his vernacular reference. The 1955 version of the project showed an

⁷ The members of the commission were Peter Smithson (Chair), Alison Smithson, Shadrach Woods, Franco Albini, Arne Korsmo, Geir Grung, Fernando Távora, Nicolás Quintana, Vladimir Karkif, Aldo van Eyck, and Rolf Gutmann.

amalgamated addition of references, which were purged in the 1956 version, together with the remaining ties with the traditional rural settlements.

The projects presented by the Smithsons were deliberately severed from any kind of formal translation of vernacular references. They were, otherwise, using the rural world and vernacular architecture to deliver a critical assessment on both the country's housing policies and the discipline's drive into picturesque approaches.

Van Eyck's fascination with the timelessness of the Saharan vernacular architecture, which he contrasted with the mechanistic tropes of Modern Movement's *zeitgeist* driven architectural approach in the interwar period, is hardly recognizable in the Nagele plan. What remains of it, is solely his keen interest in rejecting hierarchical structures, hindering the inhabitant's alienation from the community.

The project presented by the Norwegian group, looks onto the surface of vernacular references to extract from it guidelines that could enhance the relation between nature and the artefact. The outcome is, however, noticeably detached from the rural settlements or fisherman's houses they praised.

The project for a rural community, presented by the CIAM-Porto group, delivers an outcome that diverges from those discussed above. This project deals with the vernacular beyond a mere appraisal of its magical resonances of an idyllic and romanticized habitat, or the imagined qualities of rural communities. Both the scheme's urban layout and the design of the housing unit reveal a commitment to upgrade the living standards of the community, preserving, nevertheless, identifying devices and formal references at both scales.

Hence, in the 1956 CIAM congress at Dubrovnik, vernacular references were often a mere instrumental support to either challenge or assert modern movement's interwar principles, regional urban policies, or disciplinary approaches. The vernacular was often fetichized for its transcendental qualities, commodified. It was also, nevertheless, an important ally as a reference to foster a committed architectural approach, engaged in the

promotion of a more humanist habitat. This is the case, I would argue, of CIAM-Porto's project. The engagement of the Portuguese group in a thorough survey to the country's vernacular architecture endowed them with a critical perspective to the living conditions of the rural world. It also brought about the *real* qualities of these communities. As a preliminary outcome of this process, the Portuguese rural habitat presented at Dubrovnik in 1956 is a groundbreaking instance of a critical translation of the vernacular into *lingua franca*.

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References

- Adorno, T.W. (1982). On the Fetish-Character in Music and the Regression of Listening. In A. Arato & E. Gebhardt (Eds.), *The Essential Frankfurt School Reader* (pp. 270-299). New York: Continuum International Publishing Group.
- CIAM 10 - Commission B4, & Smithson, P. (1956). *Report of commission B.4*. NAI – Bakema Archive.
- CIAM Porto (1956). *Group Porto, Portugal. Description de la grille*. NAI – Bakema Archive.
- Giedion, S. (1955). *Minutes of the CIAM Meeting of Delegates at La Sarraz*. NAI – Bakema Archive.
- Korsmo, A., Grung, G., & Gundersen, G.S. (1956). *CIAM 10 Grid*. NAI – Bakema Archive.
- MARS Group, & Voelcker, J. (1955). *Rural Resettlement*. NAI – Bakema Archive.
- Marx, K. (1887). *Capital. A Critique of Political Economy*. First English ed., Moscow: Progress Publishers.

Mumford, E. (2000). *The CIAM discourse on urbanism, 1928-1960*. Cambridge, Mass.: MIT Press.

Risselada, M., & Van den Heuvel, D., eds. (2005). *Team 10, 1953–1981. In Search of a Utopia of the Present*. Rotterdam: NAI Publishers.

Smithson, A. (1982). *The Emergence of Team 10 Out of C.I.A.M.: Documents*. London: Architectural Association.

Smithson, A., & Smithson, P. (1956). *Galleon Houses - Fold Houses - Burrows Lea Farm*. NAI – Bakema Archive.

Smithson, P. (1956). *Report 1st Meeting Commission B4*. NAI – Bakema Archive.

Smithson, P., & CIAM 10 - Commission B4 (1956). *Commission B.4. - Cluster. Report of Session 2*. NAI – Bakema Archive.

Strauven, F. (1998). *Aldo van Eyck: the shape of relativity*. Amsterdam: Architectura & Natura.

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THE SECOND MODERN GENERATION AND THE SURVEY ON REGIONAL ARCHITECTURE. SOME NOTES BASED ON PROJECTS OF ARMÉNIO LOSA(1908-1988) AND CASSIANO BARBOSA(1911-1998)

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Abstract

Based on the analysis of some projects of Arménio Losa(1908-88) and Cassiano Barbosa(1911/1998) conceived after the proposal of 'a survey and classification of peculiar elements of Portuguese architecture' and establishing references to contemporary designs by other Portuguese architects, namely Keil do Amaral(1905-1975), Viana de Lima(1913-1991), and Januário Godinho(1910-1990), we intend to show how these architects, members of what Nuno Portas(1934-)called Second Modern Generation, were related with this Survey of Regional Architecture.

These authors were connected in different ways with the multiplicity of principles found within the Modern Movement, an important fact in a broader analysis of the relations between Portuguese modern architecture and the Survey.

We will expose these relations in three different aspects, simultaneously pointing out possible interconnections:

- The emergence of the idea of a Survey, showing earlier related facts in the international architectural culture, namely in those countries with which Portuguese architecture has stronger connections – Italy, Holland and Brazil;*
- The participation of the mentioned authors in the Survey, which was not direct in some cases, clarifying which and how the relations with the architects directly involved were, and trying to propose some reasons for it;*
- The consequences of the Survey in their work, either in a direct way – by the incorporation of principles learnt in its process – or indirect – by the influence of architects with a different relation with the Survey [the project of 1950 for the Ofir House, by Fernando Távora (1923-2005) is used as an example]; and yet, in a broader sense, by the relations established with the debate on the principles of the Modern Movement - started after the War, but specially intensified upon the publication of the Survey on Regional Architecture. Three interrelated facts and founding stones of the Portuguese Architectural Culture.*

Keywords: Modern Movement Popular Architecture Portugal

We believe that some generalizations have been made on the relations between the Survey on Regional Architecture and the Modern Movement architects (and about the movement itself) that do not contribute to their exact reading.

Such generalizations point to a monolithic and uniform Modern Movement, faintly related with history and tradition.

This perception is probably based upon a strategic option, which, in fact, existed, which is nowadays perfectly identified and studied, and which had its origins within the Modern Movement itself. It was an attempt to join, under a common flag, different sensibilities and different expressions. It was a condition of affirmation –and maybe of survival- of a new form of architecture claiming universal validity, and therefore shy in its relation with regionalism, always feared as an open gate to academicism.

In Portugal, immediately after the end of the Second World War, the architectonic culture initiated a process of profound and quick transformation. In a very short period of time, several aspects, which had probably undergone a slower and more matured process in their international development, burst in our architectural scene.

Yet, if the abrupt nature of this process was not free of its own set of problems, in our opinion, it is essential to understand the identity of contemporary Portuguese architecture.

You should clearly bear in mind the generations involved in the Survey and the different ways in which they were connected with the Modern Movement.

The idea of a '*survey and classification of peculiar elements of Portuguese architecture on the different regions of our country*' (Amaral, 1947,p.12) was first advanced by Francisco Keil do Amaral(1905-75) - unquestionably its main mentor- in the pages of the architectural magazine *Arquitectura*, right after its acquisition by the organization he founded and directed -ICAT-Iniciativas Culturais de Arte e Técnica¹.

¹ This could be roughly translated as Arts and Techniques Cultural Initiatives.

This particular magazine renders a faithful image of the movements that are analysed here through its contents and the cultural significance of its successive editorial boards.

When this research was initially proposed in 1947, and also when, after several requests, the Architects Syndicate got a positive answer and support to the initiative from the state in 1955, the central priority was, as the chosen name suggests, the identification of the regional aspects of Portuguese architecture.

This focus on the regional aspects was not innocent.

The main goal was to destroy the idea of the existence of *A Portuguese Architecture* that the regime had increasingly been imposing since the mid-thirties, and at the same time to destroy its idea of an aprioristic regional codification of the type of architecture that should be used in the new buildings to be erected.

The idea of *A Portuguese Architecture* was based on a second reading of Raul Lino's (1911-1998) cultural indoctrination and writings (mostly about *the house*). It is interesting to note, as it was pointed by João Leal (Leal, 2009) that, immediately after its original publication –as a late sign of the Nationalist affirmation of the nineteenth century architects- historians and other personalities connected with the issue of building had raised serious objections upon the existence of *A Portuguese Architecture*.

However, the political regime at the time, following the Italian and German examples, whose development was a symptom of the re-emergence of the Nationalisms that could be observed in Europe before the Second World War, moved from support, or at least tolerance, of the incorporation of the vanguard advancements of the twenties in arts in general and in architecture in particular by Portuguese artists, to a position of control and even repression of the aforementioned demonstrations.

The year 1940 is fundamental in this process, with several activities connected with the celebration of the Portuguese nationality.

As a response to what can be considered as an attempt of ruralisation of the Portuguese society, a movement of affirmation and defence of the principles of Modern Art and Architecture, under the leadership of some architects born in the first two decades of the twentieth century -which Nuno Portas (Portas, 1973) called *The Second Modern Generation*- appears almost simultaneously and articulated in the two biggest Portuguese towns.

We cannot truly say that these architects had no connections at all with the regime strategy we have just described, as Pedro Vieira de Almeida has shown (Almeida, 1986). However, it is clear that, by 1945, with the end of the Second World War and the belief on an imminent change in the Portuguese political regime, they felt that it was time to introduce an architecture made in accordance with the principles of the Modern Movement.

The Survey on Regional architecture, at least at its beginning, was tightly connected with this purpose: the disassembling of the idea of *A Portuguese Architecture* which would pave the way for the acceptance of a new reality.

Yet, the problem is a bit more complex than some writings seem to suggest:

First, this process is neither immediate nor linear. The First National Congress of Architecture, which was held in May 1948, reflects unanimity among architects against the imposition of aesthetic restrictions by the State, which, at least in the minds of some of the participants, is connected with a claim for the right to apply the principles of the Modern Movement to new buildings and to the problems raised during the sessions. However, there is a great difference between unanimity within a professional class and the ability to put it into architectural practice, especially under the dominance of a dictatorial regime. Besides, the refusal of the aesthetic limits imposed by the state and the consensus on the principles of the modern movement are very different things (even if largely coincident at the time), as the analysis of the projects of the participants in the Congress shows.

Now let us focus our attention on the coincidences of the path followed by Keil do Amaral and Arménio Losa/Cassiano Barbosa, which led to the fact that each

of them was regarded as a reference for the younger architects in Lisbon and Oporto and had a direct expression in the founding of the two similar organizations under their leadership, which had a fundamental role in the situation we are describing- ICAT and ODAM²; it was also expressed in a profound friendship established between both of them that led to their spending their holidays together throughout the year³.

Moreover, the analysis of their projects ends any doubts that could arise about the coincidence of principles and goals in their architectural work.

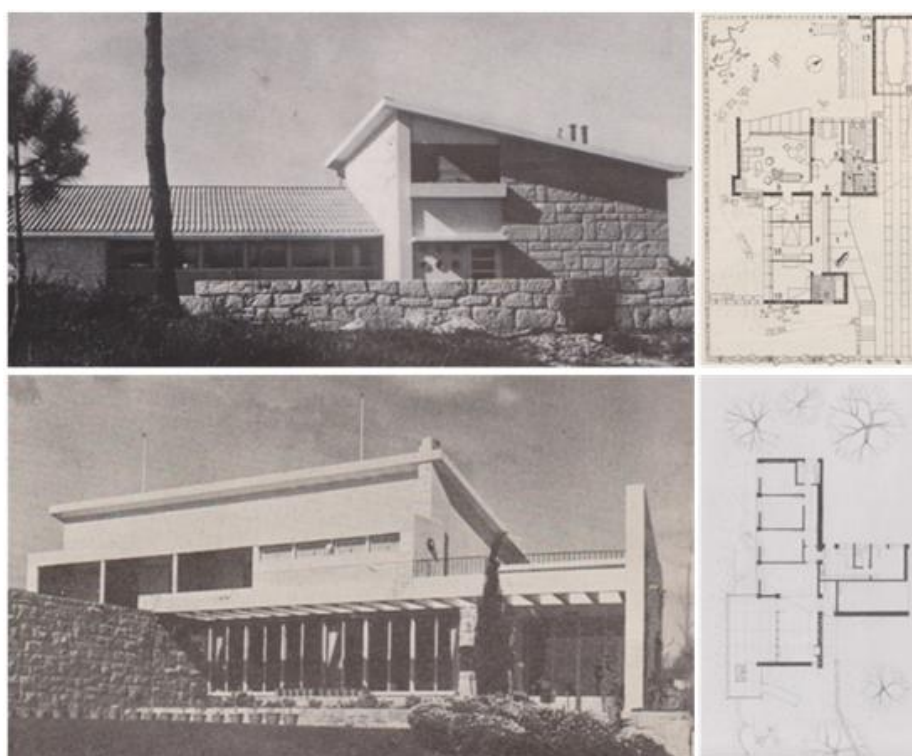


Figure 1. Arménio Losa + Cassiano Barbosa, Carrapatoso House, Oporto, 1948, View and Plan; Keil do Amaral, House in Ajuda, Lisbon, 1956, View; House in Magoito, 1957, Plan.

² This coincidence of objectives is testified by the fact that the Architectural Office of Arménio Losa and Cassiano Barbosa was the address of the North branch of the *Arquitectura* Magazine, held by ICAT and directed by Keil do Amaral in Lisbon.

³ According to an interview with Francisco Pires Keil do Amaral, Keil do Amaral's son, during the year both families spent their holidays at Keil's in Lisbon or Canas de Senhorim and at Losa's, in Oporto and, later, at Esposende in his summer house.

It is not only the unquestionable resemblance between these projects that we would like to point out.

We would also like to draw your attention to the relation that both authors' work establishes with the Dutch architecture, which led Keil to write a book about this subject (Amaral, 1946).

This relation is important not only because of its persistent influence on the Portuguese architectonic culture but also because it can testify certain doubts about the unconditional support of a Modern Movement centred in its most functionalist side, which is not normally emphasized namely in the case of Arménio Losa/Cassiano Barbosa.

We can go even further and propose the hypothesis of a situation analogous to the one described earlier regarding the international context, but now concerning the Portuguese Modern Movement: the need for eroding the differences of sensibility upon the several principles of the Modern Movement with the purpose of stressing a unitary position in the quest for the right to apply this new architecture.

This unitary position, which, as it also happened in the international context, would later be used by the later generations as an argument to confirm the obsolescence of the Modern Movement principles, namely those more connected with Rationalism and Abstraction, and to consign (even if in a respectable way) this *Second Modern Generation of Architects* to oblivion.

At this point, we would like to focus on two personalities that are younger than those that have been mentioned but older than the following generation that did the Survey field work (in some cases under their supervision), and that would take command of the aforementioned *Arquitectura* magazine.

These two personalities are Fernando Távora (1923-2005) and Nuno Teotónio Pereira(1922-) who, in a certain way, replaced or joined Keil and Losa as central figures regarding the development and the spread of the architectural thought in the cities in which each one of them worked.

Both of them had a remarkable cultural background, with an affinity established since Távora published *The Problem of the Portuguese House* (Távora, 1945), which led Teotónio Pereira to come to Oporto with the only and express objective of meeting Távora personally.

This text is not only seminal for the realization of the Survey, but also, simultaneously and indisputably, a passionate defence of the principles of the Modern Movement.

But if even after reading the texts and the interviews of Távora and Teotónio we would need further evidence of this connection between the Survey and the Modern Movement. The analysis of their projects could be suggested to show it.



Figure 2. Fernando Távora, Summer House, Ofir, 1954, View, Plan.

It is not our intention to state that the houses already shown and this house at Ofir are based upon the same theoretical principles, but we can say that they share common roots, namely in the organization of their plans.

Fernando Távora himself said that he had taken one of Marcel Breuer plans as a basis and had adapted it to give a better response to climate conditions. We can see how the lessons of the Modern Movement –a fundamental presence in the education of those of his generation–, the above mentioned Breuer's Plan, the volumetric differentiation of the several functional nuclei of the house, the interior/exterior continuity, the obvious Le Corbusier's citations are placed side by side with formal reinterpretations of the architecture found in the survey and also some of its lessons, like the strong connection with topography, a profound

concern about the relation building/site, the use of non-orthogonal geometries, the use of a pitched roof with clay tile covering, just to state a few. We can also find these aspects, even if in a less assertive way, in Keil do Amaral and Arménio Losa/Cassiano Barbosa's houses.

Távora later confirmed, in a 1993 interview, that his most profound and durable influences were those of Le Corbusier and of the Portuguese Popular Architecture.

But this awareness of the strong connections between Vernacular Architecture and the Modern Movement Architecture had some preceding signs, namely in a country with which Portuguese architects in general and the named authors in particular had strong connections: Italy.

The relations of our architectonic culture with the Italian one can be related to: the high quality of the realizations of Italian Rationalism; to the fact that, as it has been said, until the first half of the thirties the artistic vanguards were allowed some tolerance and even supported by the dictatorial regime, namely due to the influence of António Ferro(1895-1956) who considered the Italian Fascist regime the paradigm which Portugal should aspire to; and also to the affinities that can be established between Italian Geography and Culture and ours. If the citations of Adalberto Libera(1903-1963) and Giuseppe Terragni (1904-1943), among others, that we found in the mentioned authors (Távora Included), and their respective generations were not enough, we could point out a great number of facts, beyond the similar relations between the Modern Movement and the Political Regime. Due to text length reasons we shall choose only one:

In Italy, in 1936, an investigation on Rural Architecture connected with the Milan *Triennale*, and on the initiative of Giuseppe Pagano (1896-1945), (Pagano, 1936) was also carried out. In spite of being smaller, the architects in charge also pointed the close relations of Functionalism for which they were fighting with the profound rationalism of Rural Architecture, emphasizing the fact that the buildings that were the outcome of that rationality, due to their fairness and connections to the sole act of *building*, were immune to the pernicious effect of

academicism and eclecticism. This objective was also shared by the Modern Movement, whose new forms of architecture were also connected to the language of volumetric simplicity, the direct result of the functional needs of the building.⁴

However, this was not the only pre Second World War signal of a new issue.

This could also be found in the work of the Movement's principal actor, Le Corbusier. His work had already established new lines of investigation due to a conceptual option, the economic (and spiritual) conditions associated with the war, or the combination of these and other factors.

Buildings like Villa Mandrot and the house at Les-Mathes appeared. The metallic furniture was abandoned returning to the comfort of timber. These aspects were also to be found in the work of Alvar Aalto, who was then also involved in a quite different research than the one testified by his first projects.

The immediate post Second World War period was, in fact, a time in which all these approaches, signs of sensibilities already existent under the artificially built unity of the Modern Movement, started to make themselves noticed, creating an atmosphere of discussion that would later lead to the collapse of the movement as an identity.

In Portugal, the quest for an architectural update that emerged in the 1948 Conference was immediately joined by the echoes of this atmosphere.

These echoes were published by the *Second Modern Generation*, and in that way they found a quicker and now immediate divulgation in the *Arquitectura* Magazine. On that magazine, still under the direction of Keil do Amaral and with a Northern adress on the Arménio Losa/Cassiano Barbosa office, we could simultaneously find the *Chart d'Athenes*, published with more than 15 years of delay but with the comment `its actuality and its interest seems to grow bigger

⁴ It is also important to remember that, by that time, Pagano was also the director of Casabella Magazine, which published not only the initiative but also a considerable part of the survey in question, which could have reached Portugal by this means.

with time', and articles from Aalto, Zevi and others already involved in the critical revision of the Modern Movement basis.

We could also find several articles regarding the relations of Popular Architecture with the Contemporary Architecture and, of course, several articles about Brazilian Architecture, that then gained an enormous influence upon Portuguese, joining the mentioned Dutch and Italian, that had superseded the French Beaux-Arts culture.

Brazilian Architecture that in 1943, after the second presence of Le Corbusier in Brazil(1936), and also due to the influence of the first Brazilian building that knew international exposure - the 1939 New-York fair pavilion by Lúcio Costa(1902-1998) and Oscar Niemeyer(1907-)-, is the subject of an exhibition held in USA, more precisely in the MOMA of New-York. Called Brazil Builds, it was commissioned by Philip Goodwin.

Its catalogue (Goodwin,1944) was referred to by several architects as a book that was widely and immediately known in Portugal and which became a fundamental reference to Portuguese Architecture at the time.

Távora and Teotónio Pereira refer to it time after time, Celestino de Castro also emphasises its importance in an interview, and, according to Sérgio Fernandez(Fernandez,1988), some architects at the time considered it as a second *Vignola*.

The Brazilian architecture found in this book also reflects a national adaptation of the Modern Movement principles that was decidedly welcome within the Movement itself, testifying the plurality of sensibilities it agglutinated.

Moreover, a historical survey of Brazilian architecture since 1652, which, obviously and automatically, (re)establishes connections with Portuguese Culture and History can be found in this very catalogue.

In addition, and not less important, Brazilian Architecture confirmed how a technologically less sophisticated productive system was not an impediment to

the construction of truly *modern* buildings, as Le Corbusier had already shown in his writings and buildings.

The main protagonist of Brazilian architecture appeared as someone who had the ability to articulate apparently contradictory aspects and had, in our opinion, a capital importance for the Portuguese architects: Lúcio Costa. This fact was immediately pointed out by them.

In 1949 the same *Arquitectura* magazine published a text of Formosinho Sanches(1922-2004) where he shows his astonishment by the fact that 'Lúcio Costa(...) Classical and Colonial Architectures' greatest architect, today (...)the best prepared technician of the Modern Brazilian Architecture'(Sanchez,1949, p.17)

The analysis of Lúcio Costa's career, owing to the projection that it gathered among us, seems to be relevant to a more profound understanding of the relations between the Modern Movement and the Survey on Regional Architecture.

He started his career as a Neoclassical and Colonial architect, and then went in a subsequent denial of academicism, not expressing any support or interest in the Modern Movement Architecture; he even considered it as something more akin to a fashionable trend.

Later, after a long trip to Europe with the purpose of studying the most recent architectural developments, he became a supporter of Modern Movement Architecture due to the relations it established with the functionality, the non-adjective language and the pragmatism of the building systems of Vernacular Architecture.

This is another testimony of the parallelisms established between these two types of architecture in Portugal and abroad.

In 1936 he was commissioned to develop the building for the Ministry of Education and selected a team which included architects like Oscar Niemeyer and Affonso Reidy (1909-1964) among others and as consultant Le Corbusier

himself. This building would have worldwide projection as the first big construction arising from the principles of the Modern Movement⁵ upon its inauguration in 1945.

In 1937 Lúcio Costa was invited to join the recently formed SPHAN – National Artistic and Historical Heritage Service, and it was precisely in this organization's Magazine that he published some articles about the history of Brazilian Architecture and its relations with the Portuguese one.

Among these articles we would like to point out one called 'Necessary Documentation' (Costa, 1937), to which, upon its republication in the autobiographical book he published as his career testimony, he added this note: 'Professor Ramos, of Oporto University, said that the book 'Popular Architecture in Portugal' was born from this article' (Costa, 1995,p.457). The preoccupations advanced in that text brought him to Portugal twice with the express objective of finding the roots of Brazilian Architecture.

We could not find any records of the contacts he established with Portuguese architects during those two journeys in 1948 and 1952 but he certainly made some.

However, once again, his influence is visible on the architecture built by the architects of the *Second Modern Generation*.

⁵ This building indelibly marks the Building in Rua de Ceuta, arguably the Masterpiece of Arménio Losa and Cassiano Barbosa.



Figure 3. Lúcio Costa, Park Hotel, Nova Friburgo, 1940, Vista e Plantas; Januário Godinho, Pousada da HICA, Salamonde, 1953 Vista e Plantas.

Interestingly, it is almost always present in the work of an author of this generation whose professional career is even more complex, Januário Godinho (1910-1990), whose works have been considered as the result of an intense relation with the problems raised by the Survey (and they are). On the other hand, according to this, we can also strongly relate it with the Modern Movement, in a network process that confirms the point of view we are aiming to support in this article: that this *Second Modern Generation* of Architects, despite what is often said or suggested, was open to the problem of the revision of the Modern Movement taking place at the time in variegated ways, but which was incorporated in their work in a different manner than that of the generation born in the thirties and forties, who never recognized this fact.

In the case of Viana de Lima (1913-1991) this relation also had several testimonies not only in his built work –for its knowledge we suggest reading the recently published articles *Viana de Lima in Bragança* (Machado, 2012) and *Nem*

neogarretianos nem Vencidos da Vida(Alves Costa,Mota,2012) – but also in his participation as the Portuguese Committee leader in the CIAM, namely in the one held in Dubrovnik in 1956 where a ‘Study for an agricultural community’ was presented.

It must be recognized that, with the exception of Keil do Amaral, the Second Modern generation had no direct participation in the Survey. We can propose some hypotheses for this fact:

Some distrust due to the fact that the Survey was an initiative supported by the state, which would be coherent with the rupture some of these authors established with it.

There might be something else as it is suggested by Pedro Vieira de Almeida about Viana de Lima’s work:

‘Among us, even if we recognize the existence of the symbolic function of architecture and we try to respond to it, even with the feeling of doing it at the expense of some doctrines that demand more commitment, it is with some fear that we face that function, because we face it as a perverse by-product of official architecture.

Everything that looks like symbolic function is regarded among us with almost childish reservations.’(Almeida, 1996, p.61)

In our opinion, the non-involvement in the survey can also be a sign of an idea of formal evolution that has difficulty in accepting the introduction of traits from the rural architecture, even if it is open to its teachings. From our point of view, these are two different and not necessarily incompatible aspects, but which systematically were not separated from each other, as they should be. About this particular problem, one must have present the contemporary Italian polemics between Reyner Banham(1922-1988) and Ernesto Rogers(1909-1969) regarding the Neo-Liberty Movement and the stated retreat of Italian Architecture from the Modern Movement.

We should also have present the article which Bruno Zevi(1918-2000) wrote on this subject (Zevi,1959).

Zevi was, nevertheless, the key figure to the following generation who in 1957 took command of the *Arquitectura* magazine, with the immediate and symptomatic effect of Losa/Barbosa Office stopping appearing as its North branch...

In our opinion, it is fundamental to stress that the Modern project revision could not be understood in the same manner by the generation established then and by the generation born in the first two decades of the twentieth century, of whom Losa and Barbosa were members and who had ~~made~~ gone along a hard path for the formalization and acceptance of the mentioned project.

We cannot deny either that, among the elder, there were those who simply refused this renovation...

But it is astonishing that the magazine almost literally stopped publishing the older generation's works when they were right at the top of their careers.

In the case of Losa/Barbosa, only the Housing for workers in Ponte-da-Pedra of 1952 was published. Ironically its criticism was based on the functionalist aspects, without any reference to others present in the project and which were being revalorised then, such as the adaptation to topography and to its suburban condition, the spatial investigation within the dwelling, the domestic program articulation, and so on...

Yet, these architects continued their work and we think it is possible to sustain that even some of their earlier projects gave signs of the investigation then in course, to which the Survey on Regional architecture had capital importance.

And if the role and relation of Keil do Amaral and the Survey is widely known and revealed, it is very often forgotten that when it was launched, Arménio Losa

and Cassiano Barbosa were members of the board of the North branch of the Architects Syndicate.⁶

We have also been told by one the participants in the Survey himself that Losa accompanied it with great interest.⁷

In fact, when we analyse their contemporary work we unmistakably find the lessons from the Survey.

It is the case of Losa's own summerhouse, which he projected in the same year as the one we saw by Távora, where he was able to reflect only the aspects he wanted to and that occupied his mind at the time.

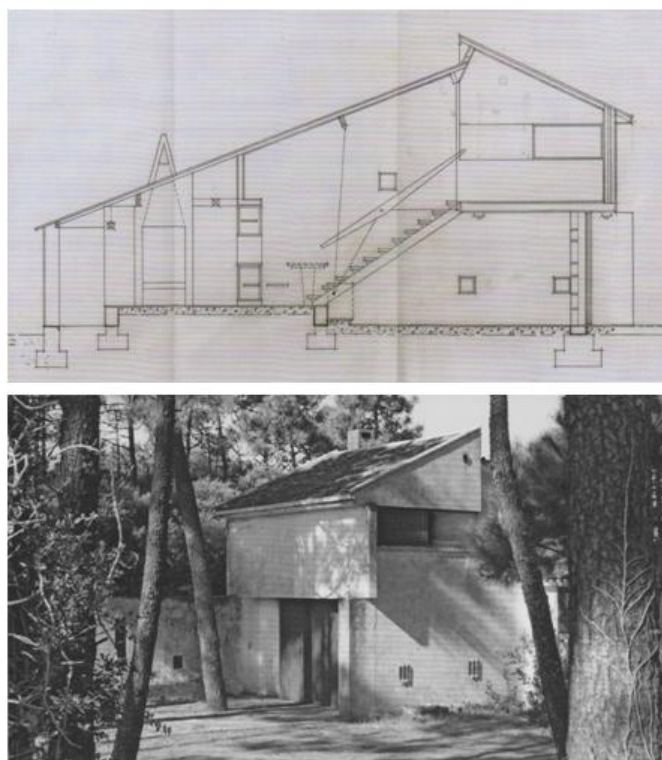


Figure 4. Arménio Losa/Cassiano Barbosa, Losa's Summer House, Esposende, 1954

⁶ Fact confirmed by João Afonso who is on the process of phd graduation based on the study of the Architect's Syndicate recent history.

⁷ Fact confirmed by Carlos Carvalho Dias who also showed and allowed us to use the image of Arménio Losa, António Menéres and himself during the Survey (figure5)

This architecture seems to be the result of a continuous and aggregating process of evolution, to which– in line with the historical characteristics of Portuguese Architecture, as stated by Alexandre Alves Costa(1939-)in *Introduction to the study of Portuguese Architecture*(Alves Costa,1995)-, without an obsession for conceptual clarity, very distinct skills were incorporated, resulting in a variegated synthesis in constant mutation, where one can always find elements from older paradigms.

In this way, which is not necessarily programmatically or even consciously, the work of Arménio Losa/Cassiano Barbosa and other representative members of the *Second Modern Generation* anticipated some of the thinking behind present Portuguese Architecture, whose roots directly connect us **simultaneously** with the Survey on Regional Architecture and the Modern Movement.



Figure 5. Arménio Losa with António Meneres and Carlos Carvalho Dias, respectively members of the Minho and Trás-os-montes team during the realization of the Survey.

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References

- Almeida, P.V.; Fernandes, J.M. (1986) *Arquitectura Moderna in História da arte em Portugal*, Lisbon: Publicações Alfa
- Almeida, P.V. (1996), *Viana de Lima in Viana de Lima Arquitecto 1913-1991*. Oporto: FCG/Árvore
- Alves Costa, A. (1995) *Introdução ao Estudo da História da Arquitectura Portuguesa*. Oporto: Faup
- Alves Costa, A.; Mota, N. (2012) in AAVV *Monumentos. Nem neogarretianos nem Vencidos da Vida* nº21. Lisbon: DGEMN
- Amaral, F. K. (1943) *A moderna arquitectura holandesa*. Lisbon: Gráfica Lisbonense
- Amaral, F.K. (1947) *Uma Iniciativa necessária*, in Lisbon: AAVV *Revista Arquitectura* 2ª Série, Year XX nº 14. Lisbon: ICAT
- Costa, L. (1937) *Documentação Necessária*, in *Revista do Serviço de Património Histórico e Nacional* nº1. Rio de Janeiro: SPHAN
- Costa, L. (1995) *Registro de uma Vivência*, São Paulo: Empresa das Artes
- Fernandez, S. (1988) *Percursos: arquitectura portuguesa : 1930-1974*. Oporto: Faup Publicações
- Goodwin, P. (1944) *Brazil builds: architecture new and old : 1652-1942*. New York: MOMA
- Leal, J. (2009) *Arquitectos, engenheiros, antropólogos : estudos sobre arquitectura popular no século XX português*. Oporto: Fundação Instituto Arquitecto José Marques da Silva
- Machado, C. (2012) *Viana de Lima em Bragança* in AAVV *Monumentos*. nº21. Lisbon: DGEMN
- Pagano, G.; Guarneri, D. (1936) *Architettura rurale italiana*. Milan: Ulrico Hoepli Editore
- Portas, N. (1973) *prefácio e estudo* em Zevi, Bruno - *História da arquitectura moderna* (1st Ed. 1950). Lisbon: Arcádia
- Sanchez, F. (1949)– *Arquitectura Moderna Brasileira – Arquitectura Moderna Portuguesa*, in AAVV *Arquitectura*, 2ª Série, nº29. Lisbon: ICAT
- Távora, F. (1945), *O problema da casa Portuguesa* in AAVV *Aleo*, Oporto:
- Zevi, B. (1959) *L'andropausa degli architetti moderni italiani*, in *L'Architettura cronache e storia*, n. 46, Roma: ETAS

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VERNACULAR IDENTITY IN THE BRUTALIST SCHOOL OF TOULOUSE 1950-1970

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Abstract

In the 1950s, a group of architects from Toulouse will promote new writing in reference to the so-called brutalist "raw concrete" use in the Unité d'Habitation in Marseille, published in 1953 in Volume 5 of the Complete Works of Le Corbusier. After the villas of purism of the inter-war years, Le Corbusier would have evolved on its buildings in France and India, to write a rough concrete formwork where patterns printed matter in a specific texture. Wooden boards or metal plates at the modular measure, tell in a near vision the history of site work and a distant view a vibration of light and shadow. On the same time, French regions are looking for specificity, drawing on their long history. Toulouse cradle of "occitanisme", the language of langue d'oc versus the one of langue d'oïl, will become the center of this quest for identity with some independence wills like the neighboring Basque or Catalan. Brutalist architects from Toulouse will also seek to define a writing drawing on the deep roots of Cathar castles, vernacular farms and country houses from Lauragais, Lot or Gers. From this hybridization of rough concrete and vernacular architecture will born a "new regionalism" in the line set by Siegfried Giedion in the last edition of "Space, Time, Architecture". We would like to mention here the reasons of this hybridization.

Keywords: -

In Toulouse the architects of this period found a common dimension, which may suggest to an art school around the notion of brutalism as defined by Le Corbusier. Most of them consider the "Oeuvre Complète" as a formal stock. Volume 5 particularly, published in 1953, which includes buildings from 1946 to 1952, will serve as a bible for a European generation, recognizing "l'unité d'habitations" of Marseille validating moderns theories on the city, habitation and on plasticity. We also find, in this famous volume 5, the project Roq & Rob in Cap-Martin, the holiday cottage of the architect, the first drawings of Jaoul

houses in brick and concrete buildings and the first Indian building in Chandigarh: the high Court of Justice where the economy echoes the political demands of Pandit Nehru.

Brutalism movement is not just about truth on material, but is also supposed to work on a social dimension, political, working from the city scale to the dwelling. Our hypothesis it's that brutalism is a radical form of "new regionalism" conceptualized by Giedion around the figure of Aalto in Finland and especially Le Corbusier in India. The term "New regionalism" is borrowed by Giedion on U.S. economy policy in the postwar period and is taken by all in the sense of freedom of CIAM modernist writing.

Faced to this international movement, Toulouse architecture of the period is positioned in a specific way. The Toulouse of "Trente glorieuses" bet on university, aviation and information technology emerging and wants to take the risk of a new architecture.

We will only recall here the main actors architects of this period: Fabien Castaing (1922-2012), Pierre Debeaux (1925 -2001), Paul Gardia, (1920-1969), Maurice Zavagno (1926), Pierre Lafitte (1920 - 1995), Erwin Schulz (1928), Bernard Bachelot, (1930-2011).

They discover and share the desire for modernity through several stages:

- The time for studies at the school des Beaux-arts in Toulouse and Paris, where, in a schizophrenic dimension of the period, students have to deal between classicism and struggle to be able to practice a modern writing.
- Most of the architects named above then integrate the school of Beaux-arts as a teacher, from 1965, where time is preparing the revolution of May 1968. They decide to teach together modern architecture and urbanism at the territorial scale.
- At the international competition for Toulouse le Mirail, in 1961, these architects form a team on the behalf of Le Corbusier where they experience scrupulously the Charte d'Athenes: "Flowing, Living, Working, Growing the body and the

mind" enriched by the 7V and the sectors theories from Chandigarh. They were proud, with Le Corbusier, to be declared "out of competition".

- Candilis, Josic and Woods won this competition for Toulouse le Mirail with a project that combines two majors' concepts of Team-Ten: stem and web. As soon as they start, the mayor of Toulouse asks them to invite local architects to participate in this modern criticism laboratory. The University Toulouse Le Mirail, done at the example of the Freie Universitat in Berlin, is the most learned place of "trame neutre" where architects as Castaing and Gardia will reuse on other buildings.

Scriptures, materials and devices for a modern-vernacular Toulouse: Cathar, Occitan and anti-Parisian.

Faced with this desire for modernity is developed in the immediate post-war, search for a regional identity in France, and Toulouse is not immune to the phenomenon. Increased criticism of the Parisian intellectual monopoly affects all backgrounds. "Paris and the French desert" by Jean-Francois Gravier reflects a general desire for a better balance of access to modernity and on all French territory. Intellectuals and academics will engage research work on the origins regionalism where the Cathar identity seems to many a starting point that extends into different forms of resistance through the ages: cathars, heretics, protestants, resistant... This Catharism could be find in the Paul Gardia diploma "a reception building in Montsegur" who made a scandal in the Melpomène Hall of the Ecole des Beaux Arts in Paris. The architect Castaing also explicitly refers to Montsegur in the Monument to the Resistance of Toulouse, by placing the tubes of light on the solar axis oriented at the summer solstice.

On another project, Chancholle Villa in Poucharamet, Castaing put on a window in a large blind wall go ahead into the void as tribute to the "vertiginous cathar citadels". It seeks to rise, to settle on the lines of slope failure, to dispose main rooms at the highest point in order to obtain long views to the Pyrenees. The view of the pyrenean chain is always the glorious position in Toulouse countries.

In the fifties and sixties the spatial sequence "fireplace / lounge / bay window / patio / Pyrenees" awake in each person the Cathar origins. The will of resistance and regional particularism, is stronger here than the idea of metempsychosis, or the will to achieve perfection in the rejection of the world. The fact that Le Corbusier makes this link from this family Protestant-Cathar, came from south of France to Switzerland, strengthened the fascination on local architects.

From Catharism to Occitanism, the link is recognizable on many levels. The war-resistant architects from Toulouse would not leave the maquis until the Republicans Basque and Catalan is achieved successful from Madrid government. From 1945 is created in Toulouse Institute of Occitan Studies held by Occitanist and war-resistant who struggle for the recognition of a local culture in all its forms. The action opens in 1951 on the approval of a law that authorizes the teaching of regional languages in secondary schools and universities. This modern "félibrisme" takes various forms to the most radical, even independence, which affects all intellectuals. We shouldn't underestimate the impact of that on Toulouse architects of the period. We assume a political dimension of catharism-resistance, of anti-Parisian, in the desire to find a local identity that is manifested by vernacular materials and vernacular disposition of spaces.

The identity by the material

The "new regionalism" had been expressed in different places over the world on the three corbuséen aspect theorized in Chandigarh, "use, climate, material". There are not clearly defined in Toulouse where the architectural identity its focuses more on the very famous local material: brick.

This regionalization of modern writing by the brick material is expressed initially in the hold center of the city where constructions are under the control of the Architect of historical buildings who impose by regulations brick construction. But, how to build in solid brick in the age of concrete? How the vernacular identity in Toulouse could escape to be only a mask of terra cotta tiles, a sign of decadence and postmodernity?

The younger generation in Toulouse seeks in a discourse of "constructive truth", to multiply the types of uses of terra cotta with the complicity of the great industrial in Toulouse. The two large factories Guiraud and Gelis will meet the demands with the rise of the production of 200 000 to 1 million tons between 1950 and 1960.

Initially, standardized products are diverted and later on in the period, architects ask for specific bricks. Fabian Castaing on a housing building in 1961 multiplies modules and brickwork apparatus, heavily influenced by Catalan architecture like Coderch or Bohigas. He signed one of the first double-wall in the region.

Very freely Pierre Lafitte is also asking for specific models and some of his projects use solid brick wall. The basement of the Villa Markish, it uses a sandblasted reuse brick Toulouse with a vernacular joint said from "Toulouse".

Bernard Bachelot has explored themes and modules with the idea to show the thinness of the material. He admits the decorative side plates stick vertically that stops on the middle of a horizontal concrete beam in order to show the material thickness.

Another young architect, Jean-Pierre Cordier, wants to show the beauty of the very industrial brick. He experiments in 1965 on housing to use a very common industrial brick of 20cm, seeking a new look at the tradition of this material. On different buildings it extends the experiment on the brick in a very personal writing that departs from modernist canons of his fathers to announce the new generation of "critical regionalism".

River stones of Garonne

The Garonne river-stone will be another material that will sign an anchor in vernacular architecture. It could be seen in old farm on Toulouse suburbs in alternation or raw brick. Placed in the bottom of metal concrete panel formwork, it has been used in thick walls. It gives the image of a thick root with widths of 50 to 60cm. We find this type of work vernacular long time in Le Corbusier work

as a "diplomatic wall" use first on Villa Loucheur project, then in the curved wall of the Swiss Pavilion and at Villa Mandrot.

These modernist references imply that architects in Toulouse naturally see in river stone walls the expression of regional identity. Initially it is simply facing wall to reinforce the base, then it will take a more abstract status. It is used in basement walls as in the villa Restayn in 1958, where the river-stone walls deployed on the slope and inside the house with the wall of the chimney establishing a strong link between home hearth and traditions.

Erwin Schulz at the villa Vignard in 1957 literally takes the apparatus of suburb vernacular houses, alternating rows of 3 stones with a row of brick to the foundation wall behind a beautiful purist composition above.

On Villa Deromedi Castaing use these river stone in an abstractive way on foundations and swimming pool of the house. The river-stone take there a specific materiality, a specific constructive reason.

The identity with a new urbanity

Urbanity sought here is not to be confused with "urban architecture" that will emerge in France in the mid 70s. Rather, it is more here a modern urbanity that governs the creation of corbuséens Parisians buildings including the rue Nungesser et Coli who was the archetype. How could the modernity dialogue with urban regulations in a measured transgression?

A well none building named Saint-Georges, designed from 1961 in Toulouse exemplifies the desire to generate a continuity in urban public spaces of the historic center while integrating modern data, such as a more light, less vis-à-vis, separation between pedestrian and vehicle, and also try to encrease the presence of nature in the city. How to pass the secular fabric of the city to modernity respecting and extending the urban atmosphere? The facade is positioned to south linking neighbor's buildings. Architects benefit from the gap created in the alignment break to install a square and a small activities building

that extends the variety of functions in the heart of block wanted to link with the new St. George area.

The vernacular identity by architectural features

The threshold of the house

Whether in urban or suburban situations architects develop around house entrance signs that refer to a local tradition of living. The doors, the threshold, are the places of archaism where the window is the place of modernity. They secure as a concrete sign marking the protection of home.

When the door is reinforced in its material playing on wood paneling or solid grids, opposed to the abstraction of window glass

This entry ground floor it's marked by the hollow joint between the two vertical massive walls in brick or river-stone placed at the perpendicular that extends dedans-dehors (outside-inside) accompanying visitors. In this thickness thus created takes place the threshold. Castaing, ironically, create a threshold with a fish pond and a large planter inside-outside.

Many houses have double entry playing tight between the domestic side where you could find the car services, generally to the north, opposite friend's access on south, by the terrace and the bay window. At the end of period Castaing drawing of the neutral frame of the University of Candilis, Josic and Woods multiplies the entries in Espagno house, leading then to the ideal of the Team-ten structuralist disappearance marking the entrance to a general opening of the composition to the landscape: the entrance is everywhere.

Modernity by the above-ground, lifting and "joint-creux"

Modernity of pilotis to be hors-sol (above ground) is found on some houses of the corpus, with the main living areas upstairs, widely open onto terraces suspended over the landscape. This is a vernacular features in the wet soil

country of Toulouse, to find main room at the first floor and secondary parts, services, garages and extra rooms on ground floor. It is reached from below, in the shade, in a situation where the base is rooted in the earth with brick walls or river- stones walls as we saw.

The villa Perry, because of its situation in the flood zone, has access via a bridge to the main floor of the house placed in suspension on rough concrete walls. This below does not have "gained ground" like the nature of the modern movement but rather want to rise above the rating of the highest known water. This feature has the inconvenience of breaking the continuity with the garden. Architect will invent feature of terraces, outside staircases lifting of land that come installed on the garden side an artificial continuity.

One of the recurring features of this school in Toulouse is the idea of lifting and detachment of vertical and horizontal planes by lines of shade in hollow joint or by lines of light by thin frame windows. A construction method in concrete pillars and beams, with filling of bricks allows use of the free façade spotted immediately by the moderns.

The house floating slightly above the ground is used by Castaing on the room-wing at Villa Deromedi where a river-stone foundation wall supports the house. He takes this system, also on the wing of bedrooms at the villa Espagno taking off the volume of less than 50cm.

This device is discoverable everywhere in modern, but rather to measure how much the architects of the period will use it together, making a common theme without any decision for it: "the thing is in the air".

The modernity of the traditional chimney

The chimney was among the moderns often ignored, as if the notion of home-hearth was not really useful. The most important thing seems to opening up space to the outside. The Villa Savoye, Villa Stein or even the Le Corbusier

apartment would have just a small hearth whose place in the composition is negligible.

We saw above the opposition between the strong interiority of the chimney and the framework of the landscape opens onto a terrace with views on Pyrenees. This composition by opposition is particularly marked in the architecture of Fabien Castaing. At Restayn, which looks like a holiday house, the chimney is janusienne, with a lounge side and a terrace side for barbecues, positioned at the joint inside-outside of a large picture window protected from direct sunlight to the west by a deep frame. In Villa Deromedi the fireplace becomes a kind of cave-brick with an organic form where you could sit in like in vernacular country-side feature. We could enter in the hearth as in the coldest corners of the Cantal or Lauragais, with, on the other side, facing you, a composition of large windows, ceiling openings and a mosaic of patios and pool decks.

At Chancholle we sit around the fireplace that is placed in hollows in the ground of the sitting room, opposite the bay window that opens onto several large terraces.

The chimney of the house Espagno is also a brick fireplace that fits into the composition of neutral frame home looking outside in many directions.

We could give a lot of exemple like Claude Parent, the father of oblique architecture, at villa Carrade who built a fireplace in the center of the composition with the oblique ramp space. Erwin Schulz in his villas uses the chimney as a center of the all composition in free standing in the middle of the lounge.

Pierre Debeaux in different houses, made chimneys with harmonic spiral sculptures that serve as starting point for the deployment of the entire composition. The architect who carries himself on the job site is very close to the interiors sculptures of André Bloc, in mid 60', widely reported in the review *Architecture d'Aujourd'hui*.

Gardia Villa Moussion deploys several levels by turning around a triangle chimney start from the basement and goes up the all composition turning with spaces seeking for different day light.

We would give many more examples of this opposition between the chimney and the bay window as the starting point of a desire for modernity. He said the encounter between a vernacular tradition, due to a climate and culture-specific, and a desire to open up the whole house on to the landscape.

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THE ROLE OF THE CENTRAL COURTYARD. SURVEYS IN THE VERNACULAR ARCHITECTURE OF CYPRUS

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Abstract

The central courtyard, an open space incorporated into the centre of residential buildings, has always constituted an important architectural feature throughout many centuries in Cyprus and at the same time has emerged in most of the civilizations of the world. The erection of dwellings attached to each other, the need for a private outdoor space due to social factors (introversion, security concerns) and the warm Mediterranean climate led to a widespread use of the courtyard in the rural and urban settlements of the island throughout antiquity and also during the last two centuries. The courtyard is the "heart" of the house and operates as a microclimate regulator, having a bioclimatic significance in addition to its social and functional significance. When surveying of vernacular courtyard houses took place during the beginning of the 20th century, no special attention was given to the cultural context and the future potential of vernacular architecture. More recently some new theoretical works and more detailed surveys have appeared dealing with the environmental features of vernacular dwellings and thus stressing the role that traditions could play in the provision of more sustainable settlements and buildings of the future with the use of some bioclimatic elements such as the central yard. These studies and surveys have contributed greatly to the increased recognition of vernacular architectural studies as a multi-disciplinary field of academic and professional interest. A detailed research project is now in progress dealing with vernacular courtyard houses and embodying measurements of temperature, humidity and ventilation, so that the bioclimatic functioning of these vernacular buildings will be underlined and determined scientifically. Thus, vernacular architecture can make a significant contribution to broad interpretations of the past and indicate some ways in which research into buildings might have a great impact on creative designs that sustain the productive life of existing environments.

Keywords: Courtyard, Cultural Role, Bioclimatic, Surveying

Introduction

The central courtyard, the open space incorporated into the centre of many houses, has always constituted an important feature and the central focus in a variety of houses throughout antiquity and until very recently both in Cyprus and in many other countries. Houses are designed with rooms of various functions surrounding the courtyards and organised in association with these yards as the life of the occupants grows around them. The important role played by the courtyard was mainly due to the warm climate of the area that offers occupants the opportunity to stay outdoors for longer periods of the year and was also associated with introversion in social life. Thus, the courtyard has always played an important social, functional and spatial role in the creation of the individual houses as well as in the rural and urban fabric. According to John Reynolds (2002), "Courtyards are special places that are outside yet almost inside, open to sky, usually in contact with the earth, but surrounded by rooms". The two natural elements of the courtyard—earth beneath and sky above—ensure direct contact with nature (Okzan, 2005).

Historically, courtyards (Das 2006) have been the most popular feature in residential architecture all over the world and in different climatic regions and emerged in practically all the civilizations. Paul Oliver (1987) maintains that courtyard houses have an ancient history: Examples have been excavated at Kahun in Egypt that are believed to be 5000 years old, while the Chaldean City of Ur, dating from before 2000 BC, was also comprised of houses of this form. Similar houses were also found in Minoan Crete. Over the past decades, architectural historians and theorists have constantly debated about the origin of the courtyard form. Generally, the courtyard-type house may be associated with the arid climates of Middle Eastern countries. However, the form remains equally prevalent in all the countries and climatic regions of the world. According to Craig Hinrichs (1989, p.2-38), "Time, civilizations and even climatic conditions seem to have very little effect on the courtyard-style house as evidenced by history". The dwellings of many different civilizations (Mesopotamia, Indus Valley, Egypt, China, Classical Roman, Hellenistic periods) bear evidence to the fact that the courtyard form of house is rather timeless in the history of

architecture. Atilio Petruccioli (2005 p.13) also argues that climate is not the underlying reason for the courtyard house. A number of scholars have observed that while the courtyard house is the leading type in many regions, it is not uniformly dispersed throughout the Mediterranean. Suha Ozkan (2005) mentions that the courtyard as a house plan type exists extensively from China to Morocco. However it becomes generic typology in hot, arid climatic landscapes. Apart from the climatic and functional efficiencies of this plan typology, its cultural relevance is of equal importance. It seems that the initial appearance of the courtyard houses all around the world was most probably associated with cultural, social (introversion of occupants) and functional factors and diachronically this typology also prevailed due to its environmental features.

Surveying courtyards in Cyprus

One of the very first surveys of Cyprus vernacular houses was carried out by Vanna Chadjimichali who came to Cyprus in 1967 in the framework of a collaboration between the Greek Ministry of Exterior and the Cyprus Department of Antiquities. During this investigation some important elements were revealed regarding the very simple form of the primitive dwellings of the island showing the strong connection between vernacular dwellings and prehistoric houses. According to Vanna Chadjimichali (1967), the many conquerors of Cyprus reinforced a conservative attitude towards vernacular dwellings leading to a continuity of some primitive forms and layout throughout antiquity. The descriptions in her report regarding courtyards are very brief and do not include special survey drawings.

More detailed descriptions regarding courtyards are included in another early study carried out by George Papacharalambous in 1968. He describes the way courtyards are defined by the surrounding walls and how they are accessed from the road. Many survey plans of courtyard houses are included in this study which constitutes one of the earliest surveys of vernacular houses in Cyprus.

Stefanos Sinos in 1976 during an overall survey and study of the vernacular architecture of Cyprus analysed in detail many aspects of the organisation of the courtyards of the vernacular dwellings, investigating the differences between distinctive areas of the island. Actually he divides the island into four areas according to the size, arrangement and layout of the yard (form and shape). In this study no survey plans of the yards are incorporated.

The different arrangements and sizes of the yards with regard to geographic factors as well as the different types of entrance to the yard from the road are included in a more recent study of Ioannis Ionas (1988) in which descriptions as well as survey drawings are presented.

More information about the yards of vernacular dwellings can be extracted through a detailed survey and study of the vernacular architecture of the Acamas area prepared in 1996 by Anastasia Pitta and Antonia Theodosiou. This study includes survey drawings of large complexes and individual houses leading to general conclusions about the arrangement and layout of courtyards depending on the size of the plot, the orientation of the house and the access to the yard from the road. There is specific reference with regard to the existence of large courtyards including one or two centres with rooms arranged around them. In some cases the courtyard is divided into two sections: one in front of the main rooms and the other surrounded by auxiliary rooms (Pitta and Theodosiou, 1996).

In many recent surveys of vernacular architecture carried out by students of the National Metsovion Polytechnic of Athens as well as by students of architecture in the University of Cyprus, courtyard houses are studied in detail with special reference not only to their physical and functional characteristics (size, circulation) but also to their cultural and social significance (connection to life style) as well as to their environmental elements, thus following a multi-disciplinary approach towards the study of vernacular dwellings (Fig.1 and 2).

A detailed research project of the Department of Architecture of the University of Cyprus is now in progress aiming to create a digital archive regarding the vernacular architecture of the island with special emphasis on courtyard houses

(size, layout, form, arrangement of surrounding rooms) and embodying social analysis as well as measurements of temperature, humidity and ventilation so that the bioclimatic function of these courtyard houses will be underlined and determined scientifically. The study and understanding of the past and especially the bioclimatic behavior of vernacular dwellings will also help towards the development of a new energy-efficient up-to-date architecture. Amos Rapoport (2006) suggests that a valid approach is to derive general principles by analysing vernacular environments using models and applying this knowledge to design, as vernacular dwellings can offer lessons in response to climate, energy use and notions of environmental quality.

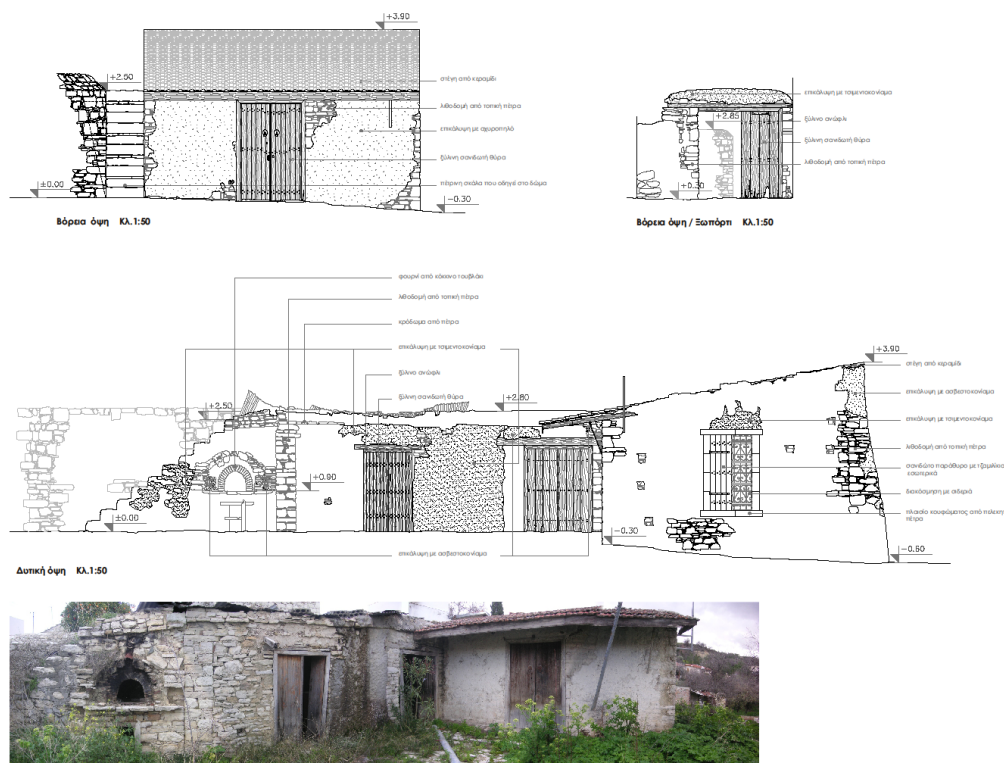


Fig.1. Survey drawings and photos of a vernacular dwelling in Lania (prepared by a team of students of the Univesity of Cyprus – Chatjicosta, K, Panagidou, A, Marcou, K. and Gennari E.)

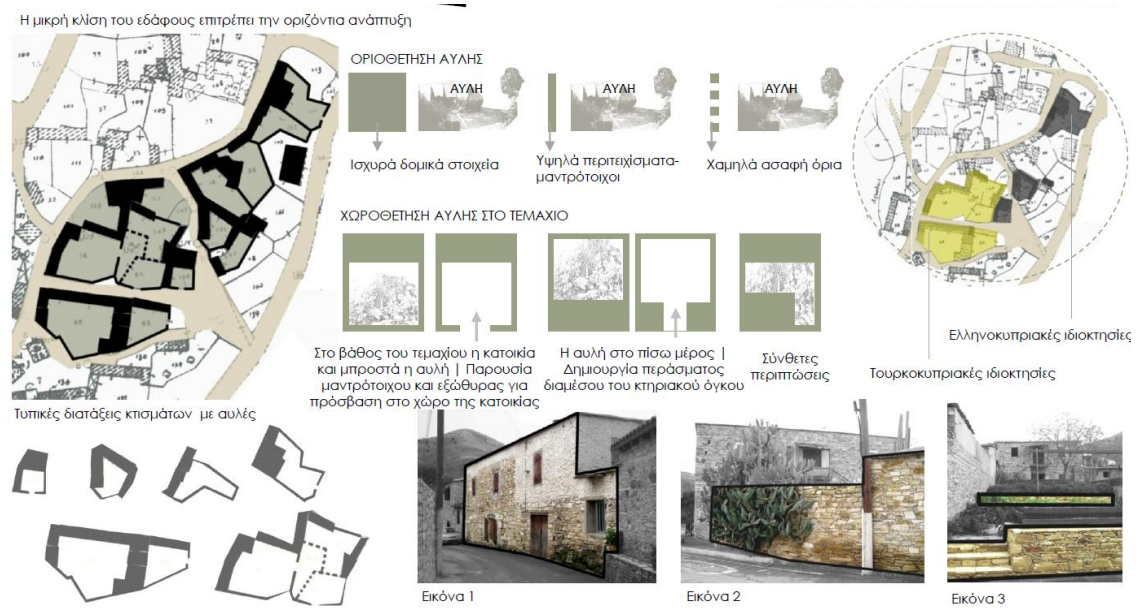


Fig.2. Surveying drawings and sketches of different layouts of courtyard houses of the vernacular settlement of Ayia Anna (Prepared by a team of students of the University of Cyprus: Constandinou, C., Palatie, S. Savvidou, I.)

Examples of courtyard houses in Cyprus throughout antiquity

Studies and surveys in Cyprus revealed that historically, courtyard houses appeared throughout all periods of antiquity. The archaeological reports and surveys showed that the primitive irregular yards of the Neolithic periods (circular units arranged around a central yard) were succeeded by the more regular and rectangular structures of the Early Bronze Age (2500 BC). More specifically, in the Early Bronze Age settlement of Alhambra-Asprogi, a house comprised of rooms in an L-shape plan with no internal communication between them, both opening into a central courtyard, was excavated. Similar examples with such a configuration (L shape) dated to the Late Bronze Age and later were excavated in many settlements (Kourion-Pampoula, Maa Palaiokastros etc.). More regular structures with rooms in a U shape arranged around central courtyards were initially observed in a series of early houses excavated in the Alhambra-Moutti belonging to the Middle Bronze Age. Of special interest is one house complex found in Kalopsida, comprised of twelve rooms around a central courtyard through which the movement and access to individual rooms was

achieved. The rooms in the northern part of the complex were organised around a second outdoor patio. This constitutes the first example of a complex incorporating two different yards. Worth mentioning is the existence of a semi-open space situated in front of a closed room, which probably served as a transition space between the open yard and the different rooms of the house. Similar arrangements with one courtyard can be observed in Late Bronze Age houses found in Enkomi, Kalavassos, Maa, Kourion and Pyla (Philokyprou 1998).

Examples of houses with rooms arranged around central courtyards belonging to the Classical and Hellenistic period were also found on the island. During the classical and even earlier periods in mainland Greece, private courtyards defined by a high wall along the road appeared. The exact determination of the private space of each house reflects a social change which is characterised by a continuously more precise separation of private from public areas. During the same period the peristyle courtyard makes its appearance in houses in mainland Greece.

During the Roman period many houses, excavated in Paphos, Kourion etc. had one or more often two open spaces, one peristyle courtyard and one small atrium. The appearance of two open-to-sky spaces is very common in Roman architecture. These different open areas were probably inspired respectively by the Greek peristyle houses and the Etruscan atrium houses. In early Christian and Byzantine times houses with courtyards of a relatively small scale can be observed.

Courtyard houses are also to be found widespread on the island in the vernacular architecture of the 19th and the beginning of the 20th centuries representing the most common type of vernacular dwelling in urban and rural settlements from mountainous areas to the plains. The arrangement of the courtyard presents many differences and innovations in design according to the type and location of the settlement. These designs were not indigenous but conformed to the climatic and morphological requirements of the different regions.

According to Stefanos Sinos, Cyprus can be divided into four regions (Karpasia, Mesaoria, Troodos, Kyrenia) that correspond to different arrangements of courtyards. In the Karpasia region examples of yards of relatively large size and irregular shape, without any defining building elements but with low boundaries can be observed. Thus the outdoor area of the house constitutes the natural boundaries of the fields. Similar examples of yards not defined by strong building elements can be found in remote villages of Cyprus such as Pano Pyrgos Tyllirias and Akamas area where yards become part of the surroundings. In the more densely populated regions of Karpasia, the houses have a more irregular shape and are located in direct relation to the size, form and exact position of the plot. In Mesaoria, a more dense built area, the open space of the houses is limited, the yard has a smaller size and it is often enclosed by a high wall. The rooms are located at the back of the plot and only in some cases are they built along the road with the yard located at the back. In the Mesaoria region the organisation of the free space is associated with the closed inward-looking nature (self centered character) of the area. In this region the security factor has a major impact on the structure of the settlements. In the Troodos area, the yards (where they exist) have a somewhat limited size due to the morphology of the region. The houses in certain settlements, such as Kakopetria are facing the street with large balconies acting as an open space on their first floor. In the Kyrenia and Pentadaktylos region the expression of open spaces has multiple characteristics because of the great social and economic differences of the inhabitants.

Discussion

Form and shape play an important role in the survey and analysis of courtyard houses. According to Amos Rapoport (2007), there is a distinction between form and shape as form refers to fundamental organisation of space (meaning and communication). In this regard, changes in shape and materials are less fundamental than relationships among domains. The analysis of courtyard houses shows that the shape of yards vary, being irregular and more rarely

rectangular or square, whereas their form-the more fundamental organisation of space-follows the same principles. According to Sullivan Chip (2002), the size and scale of a courtyard can vary from very intimate to quite spacious. In every case, the courtyard creates a wonderful frame of light and air. The shape of the courtyard has been modified to adapt to the topography, site restrictions, building orientation and functions, to create different shapes of the surrounding buildings such as I, L, U etc. (Fig.3). These surrounding buildings occupy one or more sides of the yard. Sometimes buildings appear peripherally along all its sides, the yard acquires a small size and thus appears as an atrium. The courtyard is located either in the front part of the plot (rural houses) and is defined by boundary walls with rooms located at the back or the yard is located at the back of the plot with rooms being projected in the front (urban houses) underlying the social status of their inhabitants.

In some vernacular houses there is more than one courtyard, the inner one being more private than the other. There are also cases of common yards between different houses. This arrangement was probably derived from the close relationship between the owners of the neighbouring buildings or was a result of later divisions of previously unified building complexes. This phenomenon can be observed more frequently and in more extended form in other civilizations (China, India) and in many cases courtyards are considered as communal courts, satisfying social access but not privacy (Rapoport 2007).

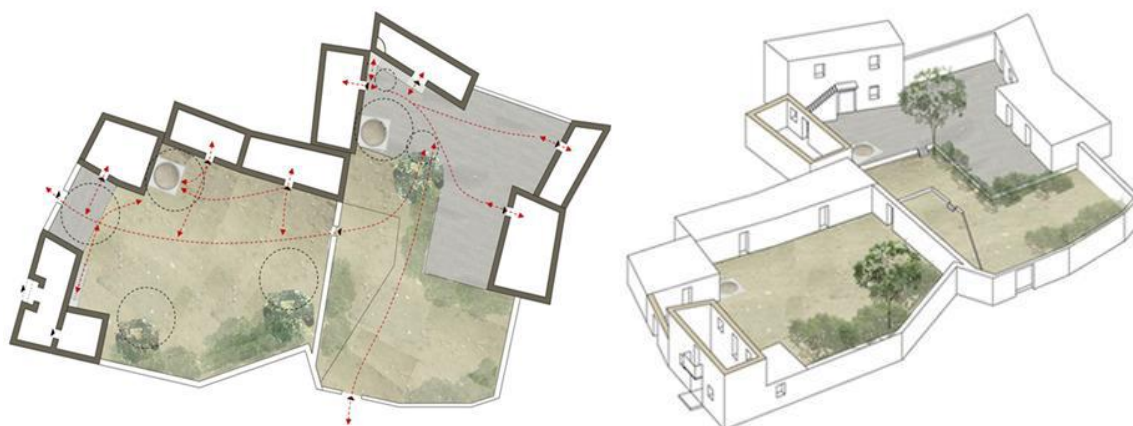


Fig.3. Surveying drawings and sketches of vernacular courtyards of Ayia Anna (Prepared by a team of students of the University of Cyprus: Constandinou, C., Palatie, S. Savvidou, I.)

The materials of the courtyard and more specifically, the method in which the floors of the yard were constructed (clay, paving slabs, cobbles etc.) depended on its function, on the required durability as well as on the economic status of the owner. The surveys that were carried out showed that courtyard floors are usually of earth with slabs often forming corridors leading to individual rooms. The use of slabs on the floors creates an interesting color effect in the yards. There are some excellent examples of decorated slab floors with circular or other rectilinear motives. The roof of the ground floor rooms, especially when a first floor exists, constitutes an extension of the courtyard.

Use of semi-open spaces (called *iliakoi*) in close relation to courtyards is particularly common because of convenient outdoor climatic conditions. *Iliakoi* usually have a south (meridian) orientation and play an important functional role of the house, often constituting either the main entrance, or an outdoor sitting area. When the *iliakos* is situated in close relation to the entrance it acts as an intermediate space between the public road and the courtyard of the house. It is a transitory area where the traditional societies maintain social interactions with the outside world, often being an extension of the street life. When the *iliakos* is located in front of enclosed rooms it serves as an outdoor reception area. This covered area of everyday life defined either by arches or with vertical wooden supports, is in direct relation with nature, being simultaneously a part of the house and the yard (Fig.4). This arrangement constitutes a simple and practical solution for the climate of Cyprus and has its roots in the way of life and the local culture.



Fig.4. Traditional iliakos of a vernacular dwelling in Kapedes (Student work: Mesveliani, E., Pantelidi, A, Soulouna T., and Tsaggaridi M.)

According to Nibedita Das (2006), the benefits of a courtyard house are psychosocial (introversion) and cultural as well as functional (accessibility, circulation). The detailed studies of courtyards showed that one of the primary benefits of the courtyard is the provision of a sense of enclosure and privacy (visual as well as acoustic) to the residents of the houses due to its inward form. The courtyard usually constituted the initial private space which the visitor entered from the road. Through the courtyard, the access from the road is achieved and thus the yard acts as the intermediate space from the public street to the private part of the house. The securing of the privacy of the yard was achieved using physical elements. According to Ammos Rapoport (2007), a settlement based on courtyard houses (called: the inside-out city) is fundamentally different from one where houses face outward relating to the street. Usually, the yard is defined by high walling in the cores of the settlements and with lower walls at its periphery. The private space of the dwellings is linked in some way to the public domain of the settlement. The form of these linkages-intermediate domains-tend to vary (Rapoport 2007) and are

related to the sequence of outdoor spaces, e.g. cul-de-sacs, streets, fence, gate, porch, door etc). The front door (xoporti) of rectangular or arched shape is often the only opening on the surrounding walls and constitutes the access from the public road to the yard of the plot. These front doors have usually a large width to facilitate the entrance of wagons/carts and animals. The inward form of the house is also recognised by the limited number of openings towards the street since the private life is highly guarded. This inward view helps to provide privacy within the house with each opening behaving like a one-way mirror that is screened from the exterior by the strategic positioning of different types of bars etc.

In addition to privacy, the courtyard constitutes an important area where many activities (related to agricultural production as well as domestic functions – cooking, looming, weaving, washing) used to take place as part of a larger system of activities within the dwelling. The courtyard is considered the heart of the house and acts as a place of interaction for the members of the family, being a place of social gathering for residents and visitors. It is an “outdoor room” and can be used as an extension of the closed rooms. Usually all the rooms face the courtyard, creating a direct relationship between the inside and the outside.

Central courtyards also provide the main access to other spaces. The rooms often have no communication between them, as the compact nature of the form of houses reduces space and corridors within houses. Thus courtyards connect the different areas and functions within the house, playing an important role in building circulation. The staircases leading to the first floor are usually located in the yard.

Another advantage of courtyard houses (connected to their ability to form a dense settlement fabric) that has received much emphasis recently is their climatic efficiency. Recent surveys recording temperature and humidity of the courtyards revealed that courtyards act as a microclimate modifier in the house and have an utmost bioclimatic significance. The courtyard proportions and the arrangement of the rooms around it, especially the two-storey parts of the house, can block the penetration of sun rays during summer (more

perpendicular rays in the summer than in the winter), leaving the sun to enter in the winter months, and thus mitigate high temperatures. The creation of a large shadow in the yard during most hours of hot summer days helps keep the temperature there low and bearable. According to Sullivan (2002), "The courtyard integrates a wide variety of passive devices into its design, each creating its own thermal environment."

In addition to the arrangement of the surrounding rooms, the planting of suitable leaf shading trees (usually vines) helps towards the shading of the walls as well as the self shading of the courtyard. More specifically, proper planting, usually in the form of deciduous trees on pergolas leads to the shading of the yard during summer, but leaving the sun rays to enter in the winter months. Using plants and water pools in the courtyards helps the increase of moisture of the air and enhances comfort conditions during hot-dry days. At the same time the courtyard floor with the use of highly reflective materials acts as a good radiator of heat and light penetration during winter when deciduous trees lose their leaves.

The detailed study and survey of the openings of the vernacular courtyard houses showed that ventilation and cooling of individual rooms was achieved through openings arranged around the yards. Thus, the courtyard provides a unique opportunity of orientation of the house in relation to sunlight and ventilation and modifies the amount of sunlight entering the house, providing an excellent microclimate.

Conclusions

Through the study and survey of vernacular courtyard houses the great significance of the internal courtyard was underlined. The investigation showed that the prevalence of this type of house is not only related to climate conditions but it is also due to social needs and its practical and social usefulness. In addition, courtyard houses have the ability to allow a "more efficient" use of space, thus reducing the area of the settlement as houses are allowed to be

“packed”, creating a dense urban tissue (Rapoport 2007). The importance played by the yards in the household organisation through time in Cyprus and the wider Mediterranean region is evidenced by their size, since they usually constitute the largest single area of the house, occupying up to 25% of the plot.

The courtyard, the semi-open and closed spaces, and their interconnection constitute the basic elements of the Cyprus vernacular dwellings of all configurations. Despite the diversity in the method of arrangement of individual open and closed areas of the settlements due to the turbulent history of the island as well as to morphological and social factors, the preservation of the basic principles and the effort of the residents to organise their lives according to their own habits, through thousands of years can be clearly observed. All these customs have their roots in the peoples’ need for free open spaces. The bonding with the land has always been the basis of housing creation and the courtyard dwelling stands in direct harmony with its surrounding environment.

References

- Das, N. (2006). *Courtyards houses of Kolkata: Bioclimatic, Typological and Socio-Cultural Study*, A Master Thesis, Department of Architecture, College of Architecture, Planning and Design, Kansas State University, Manhattan, Kansas
- Chadjimichali, V. (1967). Cyprus Vernacular Architecture (in Greek) in *Report of the Department of Antiquities of Cyprus (RDAC)*, (pp.87-99). Nicosia.
- Hinrichs C. (1989). The Courtyard Housing Form as Traditional Dwelling. in *The Courtyard as dwelling, Traditional Dwellings and Settlements Working Paper Series*, Volume six, IASTE, WP06-89. Center for Environmental Design Research, University of California, (pp.2-38). Berkeley.
- Ionas, I. (1988). *La Maisone Rurale de Chypre. (XVII-XXe siècle). Aspects et Techniques de Construction*, Nicosie, Publications of the Science Research Centre, Nicosia, Cyprus.
- Oliver, P. (1987). *Dwellings. The house across the world*. Oxford: Phaidon Press Ltd.
- Ozkan, S. (2005). Foreword –Courtyard: a typology that symbolizes culture, in Brian, E., Sibley, M., Hakmi, M. and Land, P. (ed.), *Courtyard Housing: Past, Present and Future*, Taylor and Francis.
- Papacharalambous, G. (2001), *The Cypriot House* (in Greek) Publications of the Cyprus Research Centre XXIX, Nicosia: Theopress Ltd.
- Pitta, A. and Theodosiou, A. (1996), *Architecture- Settlements of Akama*. (in Greek)

Nicosia: A.G. Leventis Foundation.

Petruciolli, A. (2005). The courtyard house: Typological variations over space and time in Brian, E., Sibley, M., Hakmi, M. and Land, P. (ed.), *Courtyard Housing: Past, Present and Future*, Taylor and Francis.

Philokyprou, M. (1998). *Building Materials and structures in the Architecture of Ancient Cyprus*, PhD thesis (in Greek) submitted in the University of Cyprus.

Rapoport, A. (2006). Vernacular Design as a model system in Vernacular Architecture, in *the Vernacular Architecture in the Twenty-First Century: Theory Education and Practice* Asquith, L. and Vellinga, M., (ed.) (pp. 179-198). England, Taylor and Francis,.

Rapoport, A. (2007). The nature of Courtyard House: A conceptual Analysis, *Traditional Dwellings and Settlements Review*, Vol. XVIII, Number II, pp. 57-72.

Reynolds, J. (2002). *Courtyards: Aesthetic, Social and Thermal Delight*, New York: John Wiley.

Sinos, St. (1976). *Review of the Vernacular Architecture of Cyprus*, (in Greek) Athens.

Sullivan C. (2002). *Garden and Climate*. New York: McGraw-Hill.

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FROM THE ORDINANCES TO THE PROJECT FOR A CITY. THE IMPORTANCE OF THE "SURVEY" ON COMMON ARCHITECTURE IN THE EIXAMPLE PROJECT (BARCELONA)

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Abstract

Ildefonso Cerdà's work has been undervalued in the context of the historiography on urbanism. However his work is becoming recognized as essential in the deployment of this field of social and economic practice and of research now called urbanism.

In this paper we will not address nor the aspects of "planning" inherent to the Cerdà's project nor the derived aspects of his thinking on the discipline of "urbanization". Instead, we focus our attention on some of the methodological procedures of Cerdà less widespread but that are essential for development, not only of his Reform and Expansion Project for Barcelona, but also for the articulation of his theory.

In the context of this conference we will focus on the "intervia", in the building and we will try to study, to what extent, Cerdà includes the popular construction.

Key words: Cerdà, Intervia, common housing, atlas

For Cerdà, the object of "urbanization"¹, a new scientific area of study can be summarized in

To give an idea of the development in the field of science, we say that [i] its constituent elements are shelters (intervia), [ii] its object reciprocity of services and [iii] its means the common pathways (vías), ie common use" (Cerdà, 1867:vol I, 44-45).

¹ Although he has not received due attention in the international context, we can find a vast literature concerning theories by Cerdà see Bohigas (1963), Rossi (1966), Choay (1980) for an overview and Puig i Cadafalch, J (1927); GATEPAC (1931; 1934;1935; 1937); Sert, J.L.(1933); Estapé, F (1971); Solà-Morales, M- Busquets,J- Domingo, M- Font,A- Gómez, J.L. (1974); Fernández Ordoñez et al (1976); Bohigas (1985); Busquets, J- Corominas,M- Eizaguirre, X- Sabaté, J. Laboratori d'Urbanisme de Barcelona , Ed (1992), Corominas, M (2002); Sabaté (1999) and Magrinyà, F- Marzà, F (2009) for a more specific framework of his contributions

"What matters now is to consign the characteristic forms of the house at the time we are speaking, because we are interested to know, how certain circumstances we find in some urban construction is incompatible with civilization, culture and customs of our times, because it remains very shocking at first sight. (Cerdà, 1867: vol I, libro IV, 699).

What circumstances referred Cerdà? What are and where incompatibilities come from?

Cerdà provides the circumstances in the data used to substantiate the *"General Theory of Building Cities"*, (Cerdà TCC 1859) and of course, can be found in the analytical part of the work. Before developing a series of statistical studies, Cerdà, develops a few pages on the *"demolition of the walls"* and the benefits that this operation produces for the expansion of the city².

From these studies we try to synthesize the physical characteristics of the city in a kind of still image.

In their important work López and Grau (1971:29) point out some of the fundamental features of the building in Barcelona, this will be those that Cerdà shall elaborate in his work.

The late Medieval urban development have created some formulas that are still valid to the eyes of many men of the late eighteenth. We should note, first of all, the type of house, adapted to the needs of the artisan mesocracy predominant in those centuries: a building used as a family unit, and comprising the workshop in the ground floor, one or two stories for family housing, accessible from inside the workshop, and a lower ceiling loft; the building does not occupy the whole parcel, but it leaves room for an orchard or garden in the back: the

² From the entrance of the Bourbon troops in Barcelona (1714) the city had been regarded as a stronghold and governed by the Captain General. In the second third of the nineteenth century begins a major citizens' movement demanding the demolition of the walls to allow the expansion of the city. In 1838, the City announces a contest for its demolition. The competition was won by Monlau (1841) and his work will serve as a basis of claim document, along with writings of various thinkers like Jaime Balme (1843). After several comings and goings, finally in 1854, a Royal Order authorizes the demolition of the walls. Cerdà developed the topographic surveys on the plain of Barcelona as the prior work prior to the implementation of projects for the Extension

parcel is generally close - 4 or 5 meters of facade –and the elongated of edification depth is usually, in principle, about 10 meters.

However, late in the first third of the eighteenth century, partly due to demographic pressure resulting from the work opportunities offered by the manufactures of "indianas"³, the medieval house undergoes a huge transformation, parallel to the transformation in relations of production and the changes in family structure. As pointed out by J.M. Montaner (1985, 1990) one passes from the medieval artisan house to the tenement for hire building. The main physical traits of this transformation are: (1) The subdivision of the house, separated from the dwelling staircase; (2) Growth in height (3) Growth in depth of the parcel with the gradual disappearance of orchards and gardens (4) Appearance of the inner patio (5) Second rear façade and interior courtyard (6) The pitched roof becomes flat (roof terrace) and accessible (7) The use of brick and partitioned vaults⁴ (8) Social hierarchy by plants (9) Specialized differentiation of the various internal parts and (10) Creation of a model for the house with a regular shape, granting a façade⁵.

If changes in housing were crucial, not least were those produced in the design of public space, with the emergence, eg of the artefact Public Promenade, the various provisions for the widening both of the cities⁶, as of the streets⁷, or incipient disamortization started with the expulsion of the Jesuits in 1767⁸. The

³ Generic name for cotton fabrics or for cotton blend with other artificial or vegetable fibres, printed on one side in one or more colours. The "indianas" industry suppose the starting of the industrialization in Barcelona

⁴ Rosell Colomina (1996) indicates that this transformation is possible by technical changes (1) in the manufacture of tight roof, replacing planking for the vault; (2) in the use of brick instead of stone and mortar, making it easier to raise plants at a lower cost and (3) changes in the roof and (4) the standardization of the balcony.

⁵ Vid. Guardia (1986), García Espuche –Guardia, M (1986) and Guardia, M- Monclús, F.J.- Oyón, J.L (1994)

⁶ In Barcelona, as will happen in other cities, the first extensions are made outside the walls, with the creation of new towns designed by military engineers, as it was the project for the Barceloneta by Cermeño in 1753, designed under the Albertian principles

⁷ In the case of Spain the Royal Decree of 1787 which mandates the installation of the cemeteries outside the cities or the Instruction to Mayors of May 5th, 1788 about the need of layout and alignment of streets, both delivered under the Government of Carlos the 3rd

⁸ The disamortization process consisted of to put on the market by forced expropriation and through a public auction, land and property that previously could not be alienate, held by so-called "dead hand", ie, the Catholic Church or religious orders, they had been accumulated as a regular beneficiary of donations, wills ... Also, the so-called vacant lands and municipal commons. In other countries, the phenomenon happened more or less the same. Its purpose was to increase national

regulatory capacity on urban issues, performed by the military authority during the eighteenth century, is gradually transferred to municipalities in the nineteenth century, which is reflected in a series of decrees enacted by municipalities.

The Barcelona constitutionalist City Council, adopted in 1823⁹ the Edict for Buildings, followed in 1839, by the Edict of the Good Government and Municipal Ordinances of the City of Barcelona, 1857

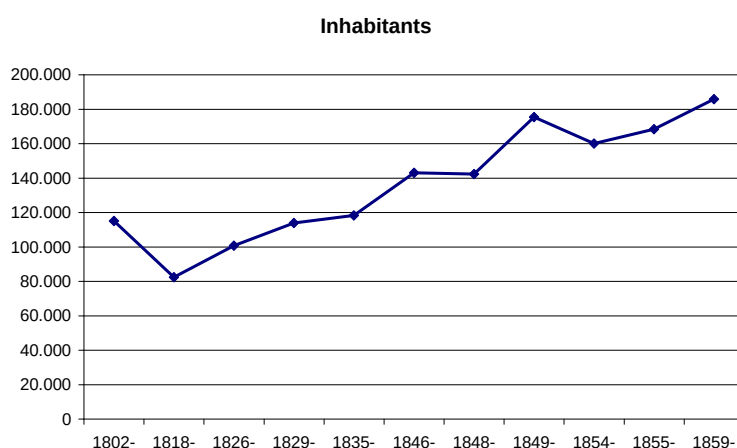
These regulatory texts, compulsory for developers and builders, regulate all possible variables related to the construction or renovation of buildings. The competent authority must know, prior to granting the building permit, the project by submitting a request together with a drawing of the elevation of the building. With the edicts, the City Council seeks to control the type of planned construction, which must be governed by predetermined patterns; with ordinances, regulating g the height of each building and its plants, the number of floors, type of openings and their separation, the cantilever of the balconies, and even the range of colour of the façade. The ultimate goal is to achieve streets and squares with a type of building of similar external appearance. (García Fortes, 2005: 166)

Which is Cerdà's Barcelona nearly 100 years after the beginning of the process? Barcelona was a close city, because of the walls, a city with an exponential population growth¹⁰...

wealth and to create a bourgeoisie and middle class of farmers owners. In addition, the state obtained extra income with the which was intended to amortize the public debt.

⁹ Previously, both the military and civil authority had issued other edicts in 1771 and in 1815

¹⁰ The difference in population between 1849 and 1854 is explainable because from 1850 to 1897 (Annexation of the towns of Plain of Barcelona) current Gràcia neighbourhood was an independent village



...with a meagre public space, as we would say today, and with relatively few facilities¹¹...

		Width in meters			
	Length of streets in m.	Max.	Min.	Average	Area in sq. meters
Streets	44.652,95	16,38	1,95	4,19	216.097,70
Squares	2.180,58	83,66	3,32	23,25	59.074,20
Interior Promenades	1.337,51	97,50	26,72	43,77	49.574,18
	48.171,04				324.746,09
Total area of the city without the fortress					2.023.742,56
Remaining area occupied by blocks					1.698.996,48

...very dense, especially in reference to other cities and with a built up stock¹² that exceeded the "classic" requirements for the management of the street (1:1), resulting in poor ventilation and sun exposure...

BARCELONA	
Density x Ha.	
1846	605,4
1855	746
1857	771

Density x Ha	
London	485
Paris	306
Madrid	419
Filadelfia	321
La Habana	347

...a city that shows a clear spatial segregation, both in land use as in the vertical section of what has been built¹³...

¹¹ Data by Cerdà (1855)

¹² Compiled from the Ordinances of Barcelona (1814, 1823, 1839 and 1857)

	Basement floor		Main floor		second floor		Third floor		Fourth Floor		The whole building		Surface of the lot in m2
	Families	Inhabitants	F	I	F	I	F	I	F	I	F	I	
Class 1 houses with four shops and as many homes at street level, a single home on the main floor and two in each of the remaining	4	20	1	9	2	14	2	14	2	14	11	71	302,25 Homes: from 302,25 to 151,12 m2
Class 2 houses for the middle class with two shops and two homes on the ground floor (idem)	2	10	1	9	2	12	2	12	2	12	9	55	226,7 Homes: from 226,7 to 113,35 m2
3rd class homes for the workers, with a shop and a home on the ground floor and two ... (idem)	1	6	2	10	2	10	2	10	2	10	9	46	113,35 Homes of 56,67 m2
4 th class for homes of the poorest, with a home to street level and four in each of the other floors	1	6	4	16	4	16	4	16	4	16	17	70	113,35 Homes of 28,33 m2
Homes of only one class in the Barceloneta with two homes at street level and in each of the two remaining floors	2	12	2	12	2	12	----	---	---	---	6	36	70,56 Homes of 35,28 m2

...a city that constantly "re-writes" itself, generating new parcels for building, renovating the built stock¹⁴...but...exposed, as well as all European cities¹⁵ to the ravages of epidemics¹⁶...

¹³ Cerdà, I (1859 TCC: 126)

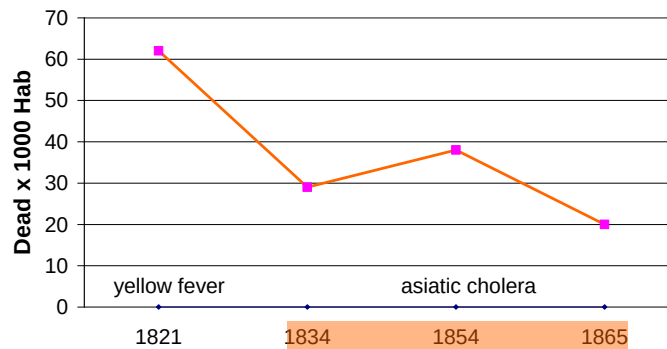
¹⁴ The struggle for the demolition of the walls, created some conflicts between citizens and the military authorities. In 1842, General Espartero ordered the bombing of the city from the fortress of Montjuïc destroying 462 buildings. If we consider also that in this period are being carried out works of alignment and widening of several streets in Barcelona we can conclude that the r shown rate of building was not able to replenish the stock destroyed in 1842.

¹⁵ "The repeated epidemics of cholera, typhus, smallpox and other diseases showed the British bourgeois the urgent need for the improvement of their cities, not to be, he and his family, victims of epidemics. So the most outrageous defects outlined in this book have either disappeared or do not jump to the eye. They have been made works channelling work or improved the already existing; wide avenues now cross many of the most sordid neighbourhoods" (Engels, 1845)

¹⁶ Compiled from Cerdà (1855) and Ajuntament de Barcelona (2012)

	1844-1848	1849-1854	1844-1854
houses built on new lots	99	56	155
houses built in old lots	61	48	109
restored old houses	87	86	264
	247	190	437

Epidemics (1821-1865)



The city's working population totalled over 70,000 people (about 42%)¹⁷, which had a rate of child mortality almost seven times the rate of the bourgeoisie...

As he rightly points out, in Barcelona:

The same lack of method, order and plan, which we miss in the construction of lodges and minor populations, the same lack of plan and of urban police that is noticed in their special arrangement, there must exist and actually exist in the creation and development of large cities. The laws and building codes have not only does not preceded it but later on and progressively given as they felt their absence, have always been incomplete, and are still far from achieving the degree of perfection that should have (...) Hence, those streets whose cross section is of an irregular and formless narrowness, having a thousand crookedness and protrusions incoming and outgoing, hence its longitudinal

¹⁷ "I have considered, under the name of workers, all officers, apprentices, labourers and assistants of any kind and sex, with no company-owned and, therefore, working by the day or piece of work either at the workshops, factories or offices, either at home (Cerdà 1859 "In relation to the working population census, it is noted that despite being raised to the figure of 54,272 souls, as appears in the corresponding state, there are not included in it none of the owners and sons of the facilities where they work; we have not included those workers who work in their own homes on behalf of a seller and whose number is estimated at ten percent the overall population of men of all classes, except those aimed at the manufacturing industry, for which we present the exact number. Likewise we have failed to include in the indicated census the worker's children under 8 years and that by their young age, we have assumed they are not engaged to work" (Cerdà, 1859 TCC 273)

profile displays all imaginable bankruptcies, with its slopes and ramps showing sometimes heavy problems for drainage and other for transit, hence their cross sections as soon have an inclination to the right or to the left or the center
*"Summarizing we can say that in all ancient cities there are no **major coordinate health pathways** in the direction of prevailing winds that offer better hygienic conditions.*

*There are no **roads of convergence** facilitating relations of all the districts with the center, or general centres of activity of the entire population such as: the port, railroads Gares, the stock market, markets, certain industrial facilities, other for public education, some churches, theatres, promenades and public gardens, &*

*There is not a **neighbourhood road system** facilitating relations with other neighbourhoods around"*

No spaces or squares that give the space and health they need the points where the population or commercial interests are more condensed." (Cerdà, 1859 TCC 1438 - 1443)

We are aware that Cerdà's ideas on the organization of the territory are based on a dual model¹⁸. On the one hand the hygienist (public health) model, on the other a systemic model based on mobility (vias, roads, railroads...). For Cerdà, circulation, movement, is the big subject:: movement of goods, services and people; circulation of air and light.

Building and viality are two correlative and inseparable ideas, of which one can not exist without the other, you can not conceive of viality without building, as its starting and ending point, nor can conceive building without the viality as a means of action, motion, manifestation of man's life. (...) The house is the beginning and end of the viality, and if it [the viality] is so important in large

¹⁸ Obviously Cerdà develops his thought from the knowledge that he has of the work of other thinkers, such as Léonce Reynaud [*it was necessary to learn all that was written in architecture from Vitruvius to Leoncio Renau (Reynaud) Cerdà's Journal 1875*]. The French architect, had at that time, through his *Traité d'Architecture* (1850) a major influence on architects in Barcelona. Enough to recall that Rovira, author of the winning project in the competition for the Eixample, used the phrase "LE TRACÉ D'UNE VILLE EST OEUVRE DU TEMPS PLUTÔT QUE D'ARCHITECTE" by Reynaud as the motto of his project

cities, it is because in them there is an overgrown number of houses that multiply and complicate the directions of movement (Cerdà, 1861, TVU: 842)

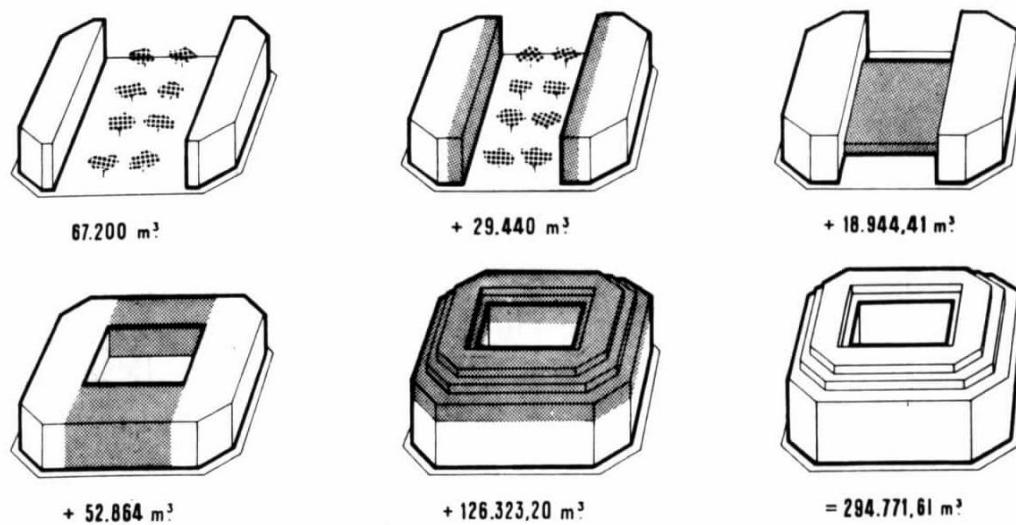
Regarding the "road" (vía), the results of the project by Cerdà for Barcelona are well known and we will not discuss them here. Simply following the GATCPAC¹⁹ assessing the lights and shadows of the Cerda's project.

The defects pointed out to Cerdà's project, have worsened, notably, by the inexplicable and shameful capitulation of public bodies to private interests.

They have been struggling gradually by all means to impose municipal ordinances that provide further income to the landlords whose representatives have a voice in municipal commissions and exert constant pressure on other members of these committees (GATEPAC, AC 1934:15)

Great qualities	Big misconceptions
"To build only two sides of the square of each block"	"The absolute lack of classification by zones"
"To leave gardens in the large open space between the two building blocks as well as pedestrian passages"	"The low priority given to industry, for which only provides very limited and scattered sites, mixing them with the residence."
"Also, to leave free spaces for collective buildings"	"The excessive depth of the buildable area for housing areas (28 meters perpendicular to the street), which forces air through internal courtyards"
"To have foreseen and rightly located a core axis of the city, parallel to the sea, Cortes Street" (<i>now Gran Vía</i>)	"The layout of roads over close understandable only for drawn vehicles"
"To provide public parks and parking spaces"	"The displacement of the normal axis to the sea towards the Besós river. Urban centres are rarely moved, so that this takes place, has to intervene any external cause".

¹⁹ Vid. AC 13 (1934)



Densification of the Cerdà's block resulting from the various building regulations of the City of Barcelona from 1859 until 1975. The permitted building volume has grown by over 438% (Image from the book Fernández Ordoñez,JJ- Tarragó, S -,Soria Puig, A. 1976:141)

Cerdà examines the corridor street, characteristic of the the Barcelona of his time making sure that this community of walls easily allows (a) the transmission of noise from one to another house, and (b) to make common the disasters that may occur in any of the houses.

The joint ownership, or the community of the partition wall in side by side houses, brings important prejudices, which also affect to the inhabitants of the houses, reaching too to the owners. (Cerdà 1867: vol.I, 606)

Further he notes that in the back are formed courts *"that contains all the drawbacks of the community, growing in inverse proportion to their width, which never reach to neutralize the inconvenient"* (op.cit: 607). Is why, the many dark rooms with no ventilation, which are in all the side by side houses. *"The action of ,if we may call, the courtyards, is not enough to diffuse the light and the air to every corner of the building, when it is wrapped in two or three sides by solid walls"* (op.cit 608).

The proposed "new town" (extension) and the reform of the old one attempt to resolve or alleviate this deficit of "viality" and hygiene, while solving the pressing problem of working class to access to worthy housing²⁰.

In the context of this publication can we now ask to what extent Cerdà has considered popular housing?

We can say that only vicariously, primarily as data for research. First, because Cerdà is not worried by constructive or artistic aspects of housing that we can call popular. His concern is not how to build houses -and in this sense, as a builder, how to incorporate techniques and construction procedures- but to know how the habitat influences the living conditions and how the improvement of the structure of the project, can improve these conditions.

When he decides to boot his "urbanization" adventure, Cerdà is fully aware of the scope and difficulty of his project since he must to relate different theoretical and disciplinary fields related to his subject. However, Cerdà accurately outlines what will be the extent of his raid on those fields

In the presence of so vast and extensive of work picture, I confess that I was about to deter me, the fact, however, of not having more than 27 years and considering that it was not necessary to study under the expert point of view each of the mentioned branches, being sufficient just to know for each of them what was concerning the special work that I was trying to do, encouraged me to continue on my first purpose that from that moment I did not hesitate to raise to the status of last, final and irrevocable.(Cerdà 1875)

Second, it is difficult to talk about popular architecture in a city. Military engineers, architects and master builders were responsible for deploying the built environment. The first with neoclassical rationality, the latter focusing on large representative buildings, the third - first from the guild structure and later following a neoclassical training- were the builders of the "common" Barcelona,

²⁰ "The Cerdà Plan, as everyone knows, has a double reading: the uniform and egalitarian layout, and within it, the fragmentation of neighbourhood units each of which focuses on the church or a public building and is articulated with passages and the layout of built-strips" (Bohigas 1985:143-144)

not only in the eighteenth century but even well into the nineteenth century. To some extent, are the master builders, who set the connection between academic and popular architecture, keeping techniques, procedures and materials from the "popular" architecture

In the houses of neighbours of Barcelona in the second half of the eighteenth century, the walls and load walls lose thickness and strength thanks to the replacement of the fence and the adobe wall by the brick, alone or combined with masonry, removing or reducing the presence of planking, plaster cast walls with mud or cane, the coffered ceilings and roofs on wooden trusses, while the plan tile vaults were generalized (Catalan vaults), the vaults, the paving flagstones or tiled floors and ceilings and they appear the first roofs "a la catalana", with the result of reducing the combustibility of the buildings, while improving their strength.

This type of house formalized in the last decades of the eighteenth century remains, with slight modifications, until the late nineteenth century and, perhaps, to more recent dates. And not only in the old town of Barcelona, but also in the Eixample and some villages aggregated to Barcelona in 1897 (for example, in Sant Martí de Provençals)[Arranz 1990:150]

For technical reasons (security, increased building volume ...) and economy (better use of the profitability of the properties, more speculation, adjust cost /benefit), the urban house moves away from the traditional building systems (popular), and as in other parts of Europe, incorporates on the one hand, constructive models of high architecture and, secondly, maintains, some language solutions that came from vernacular architecture²¹.

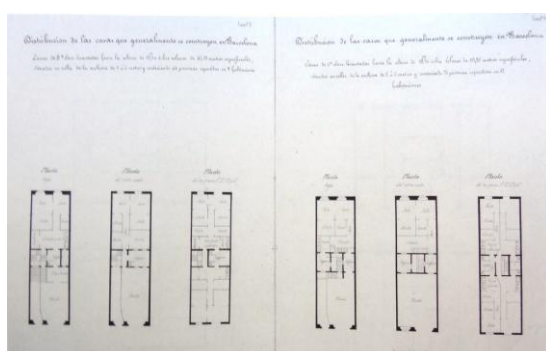
If previously we noted that the tenement building is a paradigm shift regarding the medieval/guild house that responds to the conditions of a new social organization, we must note that the housing typology that Cerdà proposes, will be another paradigm shift. Indeed, Cerdà assumes the existence of a new social structure in which the working class has a role, while assuming that the

²¹ The case of the reconstruction of Lisbon since 1775 and its subsequent development, it is essential to understand the contamination processes between academic and vernacular architecture (vid. Joana Cunha Leal, 2005)

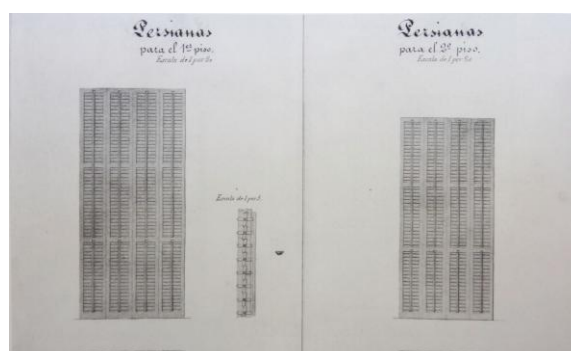
reproduction of the labour force should be done in physical scenario different from pre-industrial society

An important part of Cerdà's research is statistical in nature. His detailed studies on the organization of work and conditions on the family structure and its economic capacity (income, expenditure, consumption...) is a historic document that describes a time (Cerdà 1856; 1859).

But these studies are also the meeting point between his "theoretical model" (vid. García- Bellido, 2000) and the empirical test. His conclusion is that we *cannot keep living like this*. Hence in his project, not only reformulates the how the new city has to occupy the territory (by shifting the urban layout in relation to ventilation and insulation, establishing the proper relationship between vía e intervía...), but, also restating how it should be the house for the new city (Regarding the parcel: by ordering size and maximum built occupation. Regarding the homes: ordering their areas, their ventilation courtyards, their sanitary infrastructure...). In short, building a better, healthier, more equitable city.



Plant of 3rd-order houses for workers (Cerdà, 1855)



Different types of shutters used in Barcelona (Cerdà, 1859)

Given his objective, Cerdà developed a survey of different types of buildings in Barcelona.

The study of current housing conditions, the study of their physical characteristics is a fundamental step in the development of his thought. As someone trained in project methodology, Cerdà knew that between the statistic

figures and policy proposals contained in both the "*Reform and Expansion Plan*" and in its "*Building regulations*", there was a huge gap.

How to overcome the gap?. Cerdà develops a "visual survey" which results in a detailed "Atlas" of how housing was in Barcelona.

Already in 1855 (Cerdà 1855) he shows 9 plates that summarize the most common building types and that are the basis for developing its Preliminary Project. Later in 1859, in his *Theory of Construction of Cities*, he presents 4 plates engaged in morphological analysis of houses, 14 plates on exterior building elements (doors, windows, shutters...), 14 more on interior elements (doors, cabinets, ...), 1 on floors and 1 on black holes; 2 on ladders; 5 on plants of cities (Turin, Cienfuegos, Vitoria , St. Petersburg, Copenhagen, Stockholm, Buenos Aires, Boston and Philadelphia) and finally 4 plates with city projects for workers, including Mulhouse.

To this material we should add the 21 plates comprising the Atlas of the Extension project for Madrid (Cerdà1861). Interestingly, they are devoted to maps of the city and some longitudinal profiles of the streets

Cerdà's thought shows that knowledge of "place" is central to the development of the project proposals. The "knowledge" about local, about the specific, allows the project and its associated theory to get a high level of consistency and operability. In short, if we want to avoid an axiomatic thought we should proceed by constant movements of analysis and synthesis, proceeding from the particular to the universal and vice versa. In this process the role of "visual surveys" is critical.

The "real" is not there to certify the theory. On the contrary, theory, as an abstract elaboration of the real, is required to be able to guide its transformations. Otherwise it is not useful. Hence the importance of proceeding with different theoretical approaches: from the particular theory related to the project (Cerdà, 1859) to the general theory (Cerdà 1867) that can not forget that due to its high degree of abstraction and generalization can not be "applied" in the project but "reconstructed" as a particular theory for a specific project.

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References

Ajuntament de Barcelona. *Any Cerdà*. On-line since 2009. <http://www.anycerda.org/> (checked 15/04/2012)

Ajuntament de Barcelona Guies Estadístiques, Barcelona, 2012, www.bcn.cat/estadistica/

Ajuntament de Barcelona. Ordinances

1771. Edicto de Obrería Elaborado por l o s diputados . síndico personero y maestro de obras municipal en 1770- 71. Aprobado por el conde de Ricla. Comandante General del Principado el 8 de septiembre de 1771

1814. Edicto para el buen orden público, aseo , seguridad, conservación de los empedrados y solidez de los edificios. Recopilado por el Ayuntamiento y promulgado por Don Rafael de Velarde y Navía. . Gobernador Militar y Político de Barcelona el 9 de diciembre de 1814.

1823. Edicto de policía y buen gobierno en lo que concierne al ramo de Obrería Elaborado por el Ayuntamiento constitucional y promulgado por el mismo el 5 de marzo de 1823

1838. Bando General de Buen Gobierno o de Policía Urbana para esta ciudad de. Barcelona

1857. Ordenanzas Municipales de la Ciudad de Barcelona

Arranz, Manuel. La construcció. Un sector al marge de la Revolució Industrial. Barcelona, Finestrelles, n2, 1990 146-153, acc. <http://www.raco.cat/index.php/Finestrelles/article/view/211387/294022>

Balmes, Jaime. *La Sociedad Revista Religiosa, Filosófica, Política y Literaria*, tomo II. Barcelona. Imprenta de A. Brusi, 1843:349

Bohigas, Oriol. *Barcelona entre el Pla Cerdà i el Barraquisme*. Barcelona, Ed. 62, 1963

Bohigas, Oriol. *Reconstrucció de Barcelona*. Barcelona, Edicions 62, 1985

Busquets, J- Corominas,M- Eizaguirre, X- Sabaté, J. Laboratori d'Urbanisme de Barcelona (Ed) *Readings on Cerdà and the Extension Plan for Barcelona*. Barcelona. Ajuntament de Barcelona, 1992

Cerdà, Ildefons. (1855) *Ensanche de la ciudad de Barcelona. Memoria descriptiva de los trabajos facultativos y estudios estadísticos hechos de orden del gobierno y consideraciones que se han tenido presentes en la formación del ante-proyecto para el*

emplazamiento y distribución del nuevo caserío. Reed. in Cerdà y Barcelona vol 1. Madrid Ministerio de administraciones públicas / Ajuntament de Barcelona, 1991

(1859) TCC *Teoría de las Construcción de las Ciudades aplicada al proyecto de Reforma y Ensanche de Barcelona*. in Cerdà y Barcelona. Vol 1. Madrid Ministerio de administraciones públicas / Ajuntament de Barcelona, 1991

(1859) *Ordenanzas Municipales de Policía Urbana para la ciudad de Barcelona y pueblos comprendidos en su Ensanche*. in Cerdà y Barcelona. Vol 1. Madrid Ministerio de administraciones públicas / Ajuntament de Barcelona, 1991

(1859) *Ordenanzas Municipales de Construcción para la ciudad de Barcelona y pueblos comprendidos en su Ensanche*. in Cerdà y Barcelona. Vol 1. Madrid Ministerio de administraciones públicas / Ajuntament de Barcelona, 1991

(1861) TVU. *Teoría de la Vialidad Urbana. Reforma de la de Madrid*. in Cerdà y Madrid. Madrid Ministerio de administraciones públicas / Ajuntament de Barcelona, 1991

(1875) *Diario*. in Cerdà y Barcelona. Vol 1. Madrid Ministerio de administraciones públicas / Ajuntament de Barcelona, 1991

(1867) TGU *Teoría General de la Urbanización y aplicación de sus principios y doctrinas a la Reforma y Ensanche de Barcelona*. Tomo I. Reed. por Fabián Estapé, Madrid, Instituto de Estudios Fiscales, 1968

Corominas, Miquel. *Los orígenes del Ensanche de Barcelona. Suelo, Técnica e Iniciativa*. Barcelona. Edicions de la UPC, 2002

Choay, Françoise. (1980) *La Règle et le Modèle. Sur la théorie de l'Architecture e de l'urbanisme*. Paris. Ed. Du Seuil, 1996, 2nd Ed

Fernández Ordóñez, J.A – Tarragó, S – Soria Puig, A. *Cerdà 1876-1976*. Madrid. Colegio de Ingenieros de Caminos, Canales y Puertos. 1976

Cunha Leal, Joana. *Arquitectura privada, política e factos urbanos em Lisboa. Da Cidade Pombalina à Cidade Liberal*. Ph. Dissertation. Universidade Nova de Lisboa, 2005

Engels, Frederich (1845) *La situació de la classe obrera a Anglaterra*. Ed.by Joan Serrallonga COL·LECCIÓ DE DOCUMENTS D'HISTÒRIA – COLECCIÓN DE DOCUMENTOS DE HISTORIA Departament d'Història Moderna i Contemporània – Universitat Autònoma de Barcelona (www.uab.edu)

Estapé, Fabián. *Vida y obra de Ildefonso Cerdà*. (1971). Barcelona. Ed. Península 2001

Figuerola Laureano: *Estadística de Barcelona en 1849*, Barcelona, Imprenta y Librería Politécnica de Tomas Gorchs.1849

García- Bellido, Javier. *Ildefonso Cerdà y el nacimiento de la Urbanística: La primera propuesta disciplinar de su estructura profunda*. Barcelona, Scripta Nova. Revista Electrónica de Geografía y Ciencias Sociales. Universidad de Barcelona [ISSN 1138-9788].

Nº 61, 1 de abril de 2000. <http://www.ub.edu/geocrit/sn-61.htm>

García Espuche, Albert; Guàrdia, Manuel. *Espai i societat a la Barcelona preindustrial*. Barcelona, Edicions de la Magrana- Institut Municipal d'Història, 1986

García Fortes, Salvador. *L'arquitectura de Barcelona, 1837-1868: l'ornament com a proposta de singularitat*, Barcelona Quaderns d'Història, 12 (2005), PP. 166-178. Vid. too Garcia Fortes, Salvador *La terracota como elemento ornamental en la arquitectura de Barcelona. Técnicas de fabricación conservación y restauración,, Ph.D. Dissertation, University of Barcelona, May the 12th., 2001.*

GATEPAC. *La Urbanización de la Barcelona Futura*. Revista AC, nr 1, april 1931(20:21)

GATEPAC. *Notas previas a un estudio urbanístico de Barcelona*. Revista AC, nr 13, 1st semestre 1934 (14:20)

GATEPAC. *Precursores de la arquitectura moderna*. Revista AC, nr 17, first semetre 1935 (14:21)

GATEPAC. *Problemes de la Revolució*. Revista AC, nr 25, juny 1937

Guàrdia, Manuel. *Espai i societat a la Barcelona preindustrial*. Barcelona, L'Avenç, nr 97, oct.1986, pp 70-97

Guàrdia, Manuel; Monclús, Francisco Javier; Oyón, José Luis (dir.): *Atlas histórico de ciudades europeas*. Centre de Cultura Contemporània de Barcelona. Barcelona, 1994, pág. 69.

López, M – Grau, R. *Barcelona entre el urbanismo barroco y la revolución industrial*. Barcelona.CAU (Cuadernos de Arquitectura y Urbanismo), núm, 80, 1971, pp.28-40

Magrinyà, Francesc – Marzà, Fernando (Ed) *Cerdà. 150 años de Modernidad*. Barcelona.Fundació Urbs i Territori, 2009

Monlau Felipe: *¡Abajo las murallas!!! Memoria de las ventajas que reportaría Barcelona, y en especialmente su industria, de la demolición de las murallas que circuyen la ciudad*, Imprenta del Constitucional.1841. Accesible in <http://books.google.es/>

Monlau Felipe: *Elementos de higiene pública*: Barcelona, Imprenta de Don Pablo Riera.1847. Accesible in <http://books.google.es/>

Montaner, Josep M. *La modernització de l'utilitatge mental de l'arquitectura a Catalunya (1714-1859)*. Barcelona, Institut d'Estudis Catalans, 1990

Montaner, Josep M. *Escaleras, patios, despensas y alcobas. Un análisis de la evolución de la casa artesana a la casa de vecinos*. Arquitectura bis, sep. 1985, nº51, 2-12

Puig i Cadafalch, Josep. *La plaça de Catalunya*. Barcelona. Llibreria Catalonia, 1927

Rosell Colomina, Jaume. *La construcció en l'Arquitectura de Barcelona a finals del s.XVIII*. Ph. Dissertation. Universitat Politècnica de Catalunya, 1996

Rossi, Aldo. *L'architettura della città*, Marsilio, Padova 1966

Sabater, Joaquim *El proyecto de la Calle Sin Nombre. Los reglamentos urbanos de la edificación París- Barcelona*. Barcelona. Fundación Caja de Arquitectos, 1999

Saurí, Manuel – Matas, José. *Manual Histórico-Topográfico estadístico y administrativo ó sea Guia General de Barcelona*. Barcelona. Imprenta y Librería de D. Manuel Saurí, 1849

Sert, Josep Lluís. *Proyecto de grupo escolar en la Avenida del Bogatell, Barcelona*, Revista AC, nr 10. 2nd semestre 1933, 18:20

Antoni Remesar, Salvador. García Fortes, *From the ordinances to the project for a city. The importance of the "survey" on common architecture in the eixample project (Barcelona)*

Solà-Morales, M- Busquets, J- Domingo, M- Font, A- Gómez, J.L. *Barcelona. Remodelación Capitalista o Desarrollo Urbano en el Sector de la Ribera Oriental*. Barcelona. Gustavo Gili, 1974

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FROM THE SURVEY ON REGIONAL ARCHITECTURE IN PORTUGAL TO THE LOCAL APPLIED RESEARCH,

The experience of GTAA Sotavento in the built vernacular heritage studies

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Abstract

During the 1990's, a set of targeted initiatives for local development in the Portuguese rural areas was developed that encompasses the purpose of revitalization and rehabilitation of rural settlements, with particular focus on the enhancement of built vernacular heritage. As part of a broader process, promoting a return to a certain – sometimes symbolic – idea of rurality, these initiatives were based upon the identity roots as an endogenous valuing factor built upon the idea that heritage is a resource to consider in the context of economic diversification, associated with the new emerging dynamics. Among them, the "Programme for the Historical Villages" emerged as a pilot-action, and along similar lines, the "Programme for the Revitalization of Villages in Algarve" tried to implement, in this region, similar strategies, objectives, principles and good practices of intervention. The creation of the "Gabinete Técnico de Apoio às Aldeias do Sotavento", [Office for Support of the Villages of Sotavento] (GTAA Sotavento), offered, in this particular context, a unique opportunity to test a systematic practice of research, training and technical capability in specific fields of the built vernacular heritage. This intended to contribute, amongst other things and in particular, to the required transposition of scale of research in those fields: from the macro, a more generic and territorial scale – which the Survey on Regional Architecture in Portugal represents – to the micro, a more specific, local and particular scale, essential to support the practice of design and intervention in those areas. This article thus seeks to integrate the practice of research undertaken by the GTAA Sotavento, in the generic context in which the "Survey", operates and to demonstrate its importance to the development of its project-oriented practice, in order to contribute to the discussion and definition of good practice models for intervention in rural areas and nuclei.

Keywords: Built vernacular heritage, regional architecture, survey, rural areas, GTAA Sotavento

1. The Survey and the (re)discovery of vernacular architecture

The "Survey on Regional Architecture in Portugal"¹ was an ambitious project, carried out between 1955 and 1960, by the, then, National Union of Architects. It was intended to be a "systematic investigation of traditional architectural elements in the various regions of the country"² and is still a landmark in the history of Portuguese architecture.

The "Survey", was:

(i) Unique, in a few ways: the absence of similar studies on the discipline of Architecture's specific context; its demonstrated depth of knowledge; and in the demonstrated heterogeneity of approaches which it comprises, differing from region to region;

(ii) Novel, in the reading of a reality that is, imposing a *modern look* on vernacular architecture (Leal, 2009: 42) that both distanced itself from the *lovely little houses* of Raul Lino, as well as the *hovels* of the Rural Housing Survey³ (*Idem*: 19, 29);

(iii) A portrait of a world about to disappear, on the last possible moment and in all its fullness (Pereira, 1987: IX), given the transformations that the Portuguese rural areas would suffer over the next two decades;

(iv) One of the "four key moments in the constitution of a field of reflection on vernacular architecture in Portugal" (Leal, 2009: 14), indicating, according to Alves Costa (1995: 60), the very birth of Portuguese architecture.

Launched with a purpose that escaped (or was cleverly disguised from) the political regime of the day - to break down definitively the morpho-typological unity thesis of the *Casa Portuguesa* (Portuguese house) and the *architectural lie* which (Távora, 1947: 8) it presided over - and carried out by a group of young architects trained in the Modern Movement booklet, the result, however, seemingly went further than that stated purpose.

¹ Free translation of *Inquérito à Arquitectura Popular em Portugal* (Amaral, 1961).

² Cf. the first article of *Decreto-Lei nº 40 349*, the document that determines the commitment of governmental project funding (Amaral, 1961: p. XIV).

³ Free translation of *Inquérito à Habitação Rural* (Basto & Barros, 1943 & Barros, 1948).

In fact, the Survey may have also contributed to legitimizing "the expression of an anonymous, but educated architecture, place committed but conscious of modernity without succumbing to populism" (Tormenta, 2003: 65), and opened doors to a whole new and different attitude. An attitude that elicits a response to the paradox laid down by Paul Ricouer - "how to become modern and to return to sources" (quoted by Frampton, 1983: 16) - and sought to temper the extreme selfishness of the *international style*, through a strategy to mediate "the impact of universal civilization with elements derived indirectly [or directly, we add] from the peculiarities of a particular place" or through "a more dialectical relation with nature than the more abstract, formal traditions of modern avant-garde architecture allow" (Frampton, 1983: 21, 26).

Although this mediation may now seem obvious, and may have contributed to some career paths (among which Fernando Távora emerge as a key figure) that have sought to establish a possible synthesis between the necessary evolution, dictated by new demands for comfort and building performance, and the importance of permanencies and the characteristics of place, it is certain that in respect to the Survey's associated studies, regarding research on vernacular architecture, few further developments or deeper insights have been made.

On the one hand, and apart from a few more qualified projects, intended for a better-informed elite, little has been addressed to what one can call *current architecture* - the bulk of "architectural" production, that is, in many cases, an *architecture without architects* (Rudofsky, 1981 [1964]) - in the normal and necessary adaptive and transformative process that (and also, it is worth recalling) features vernacular architecture⁴.

On the other hand - and this is the point we intend to evidence -, throughout these five decades, there have been too few initiatives that have made the necessary scale transposition, that is, from the national and territorial scale of the "Survey", to the local scale⁵.

⁴ Regarding this point, cf. the definition of vernacular building stated in the *Charter on Built Vernacular Heritage* (ICOMOS, 1999).

⁵ An omission that, already in 1979, the Directorate of the then Portuguese Architects Association lamented in the 2nd edition's preface of the publication (Cf. Dias, 1979: XII).

Similarly, there has been a failure to develop an analogous study on urban architecture, i.e. a study of the city's architecti-morpho-typological character. A survey - of similar or even greater breadth and of the decisive (current) need to support the rehabilitation of our urban heritage - on the premodern urban building, that would provide multiple correlations with the "Survey".

Although, in the eyes of the less understanding or those hastier in their analysis, the "Survey" may have been (or still is) perceived as the last word on the Portuguese vernacular architecture, there are more doors left open than those which are closed.

Indeed, as Francisco Silva Dias, one of the Zone 4 team members, recognizes in a recent interview (Villas Boas, 2011), the "Survey" reflects essentially a macro analysis, necessarily generic (given the limitations of the project) and rather more concerned about setting out the singularities of the events - and their correspondence to the criteria of architectural modernism⁶ - than its constancy, quantity or actual relevance.

At that, despite its importance in breaking the hegemony of the *Casa Portuguesa*, as well as - upon his *death* (Alves Costa, 1995: 60) - the "institutionalization of vernacular architecture as a field with its own autonomy" (Leal, 2009: 61), the "Survey" far from exhausts the possibilities of developing more detailed studies. Studies that would have allowed the progression to a second scale, a more thorough and systematic⁷ one, which the "Survey" infers but fails to carry out.

However, as no action is well founded - whether that action be restoration, preservation or even necessary transformation - that is not supported upon a broad knowledge of the territory within which it is carried out, needless to say that the absence of these detailed studies has resulted in the following negative effects, which are easy to observe.

⁶ As Fernando Távora and Nuno Teotónio Pereira, the team leaders for Zones 1 and 4, admitted (Leal, 2009: 42, 48).

⁷ In other words, the "detailed scientific inventories" recommended by the Council of Europe (CE) (1989: 2).

Firstly, by allowing the "Survey", without this additional degree of study and analysis, to become a sort of catalog, a brochure or a manual (wherein the scale is of very little operative approach, as is also far from its authors intentions), leading to the emergence of caricatural generalizations⁸ - precisely one of the most criticized aspects in the *Casa Portuguesa's* formulary.

And, secondly, by contributing to the breakdown in constructive traditions⁹, allowing this breakdown to be stronger and more traumatic (in terms of heritage safeguard) than would be supposed or should have been.

However, determining the conditions that created "our old or popular houses" and to study "the ways in which materials were employed and met the needs of the moment" (Távora: 1947: 11), or "to know how the Portuguese eat and sleep, learn their building techniques and their ways of comprehending the space, retrieve the history of architecture [and] combine fine architecture with popular tradition" - which was what the "Survey" was all about (Alves Costa 1995: 61-62) -, required a much greater depth of study and analysis.

It required this "micro" scale of research, which did not fit the purposes of the "Survey" but the very nature of vernacular architecture¹⁰ could not dispense with in the intergenerational knowledge transmission process. Because, being those constructive traditions breaking down¹¹, that "micro" study would have allowed the recording and preservation of the links between modernity and tradition, and would have established the above referred mediation.

This required scale transposition bases itself, in our opinion, in five fundamental principles, the first of which is a, purely, academic need for greater depth to the analysis.

⁸ That the leaflets distributed by the weekly Expresso, not long ago, under the name *Casas do Norte, Casas do Sul e Casas das Ilhas*, are one of the most recent examples Cf. http://expresso.sapo.pt/casas_tradicionais_portuguesas=f501518.

⁹ Something that the life conditions associated with rural housing so urgently required, as had already been reported in the Rural Housing Survey (Basto & Barros, 1943 and Barros, 1948) and other studies including those carried out within ethnology.

¹⁰ "Vernacular building is the traditional and natural way by which communities house themselves. It is a continuing process including necessary changes and continuous adaptation as a response to social and environmental constraints" (ICOMOS, 1999).

¹¹ Something that is evident in the difficulty that is now to found, in some areas of the country, companies, masters of works or skilled and experienced workers in the old arts of building.

Secondly, this transposition is, in itself, an act of producing history, setting elements and essential aspects of our architectural and constructive culture in their own place (which it has been, somehow, denied) in the history of Portuguese architecture. Because "a culture without the presence of its history is a culture without roots and, very possibly, without meaning" (Oliver, 2006: 25), but also because History, as a tool to serve the project, can help solve the problems of the present (Távora, 1947: 7).

Thirdly, this transposition is justified in supporting a strategy for the preservation or rehabilitation of (at least) a part of that heritage - because, "in the end, we conserve only what we love; we will love only what we understand; we will understand only what we are taught" (Dioum, 1968).

Fourthly, because it is of fundamental importance in informing the planning, regional development and environmental protection processes, in order to incorporate built vernacular heritage safeguards into their aims and actions (CE, 1989: 2).

Last but not least, because the craft skills associated with the vernacular "should be retained, recorded and passed on to new generations of craftsmen and builders in education and training" (ICOMOS, 1999).

50 years later, however, the few known cases where this scale transposition has been applied, are more often associated with specific and timely needs arising from planned interventions in specific areas - such as the one that motivates this research - rather than to a more systematic, comprehensive and programmed purpose.

Thus, not only has that transposition of scale been unfulfilled, for the vast majority of the territories, but there is now the need for a further study - at the same scale as the "Survey", itself - into the state of the current and contemporary situation of vernacular architecture in Portugal. Just at the very moment that the urban growth processes are showing signs of exhaustion, a certain return to the countryside begins to be spoken about and increases the ecological concerns. A state of the current situation that would allow the

identification – leading to a better understanding – of the changes that have occurred and their determining power lines; the urgency, opportunity and ability to safeguard what remains; as well as its importance for the refunding of this knowledge within the discourse of sustainability, and to draw the paths to the future.

2. The rediscovery of rurality and the programmes for the revitalization of villages

Carried out in a moment that would prove pivotal in the history of Portuguese architecture, given, as stated above, the changes which occurred over the next two decades, the importance given to the vernacular architecture that accompanies the "Survey" reflects the process of *patrimonialization* of a whole set of human ingenuity and culture manifestations hitherto considered minor.

This process of *patrimonialization*¹² departs not only from the recognition of its importance and value, but also the awareness of the need for registration and safeguard in view of the *deruralization* process that intensified in Western societies, particularly Europe, in the postwar period.

Effort that will essentially translate into a spontaneous movement of (re)discovery and return to the countryside by those who never lived there, and only kept the idyllic image of postcards and a certain nostalgia for the lost roots of their identity; as well as into the launch of a series of actions planned and led or driven by European policies for local and/or rural development and supported by Community funding.

¹² Which can be fitted in what Françoise Choay (2003: 183-184) calls "ecumenical expansion" of the concept of heritage. Cf. documents such as, and among others, the *European Charter of the Architectural Heritage* (CE, 1975); the *Recommendation concerning the Safeguarding and Contemporary Role of Historic Areas* (UNESCO, Nairobi, 1976); the *Granada Appeal on Rural Architecture and Regional Planning* (CE, 1977); the *Tlaxcala Declaration on the Revitalization of Small Settlements* (ICOMOS, 1982); the *Recommendation No. R (89) 6 on the protection and enhancement of the rural architectural heritage* (CE, 1989); the *Recommendation on the Safeguarding of Traditional Culture and Folklore* (UNESCO, 1989); the *Recommendation No. R (95) 9 on the integrated conservation of cultural landscape areas as part of landscape policies* (CE, 1995); and the *Charter on the Built Vernacular Heritage* (ICOMOS, 1999).

Although we could associate, the first case, to a fashion phenomena or very specific and residual movements¹³ that do not follow an integrated and structured planning scheme and constituted disjointed individual actions, in the second, it is already a conscious action to halt this *deruralization* process through local development policies in rural areas. Policies that, together with the diversification of economic activity¹⁴, emphasize the importance of preserving and valuing the historic, cultural, natural and landscape heritage, and investing in the *patrimonialization* of local resources.

However, as underlined by Afonso de Barros (quoted by Graça, 1999: 311), this is not a return to a predominantly agricultural rural environment, whose main function was the production of food and where agriculture was the dominant economic activity, to which service architecture played an eminently utilitarian and functionalist role. It is rather a return to an aestheticized, or a merely symbolic, rurality, whose valuation is built on the idea of heritage. An idea which converges to a tendency, among others, to search for authenticity (Ferrão, 2000: 48) - as demonstrated in the intentions of conservation and protection of historical and cultural heritage.

Thus, after a phase¹⁵ in which the architectural and building traditions tended to be rejected by the mainstream population¹⁶, only remaining of interest to a small elite, the vernacular architecture and villages (the spatial unit that constitutes the bulk of the built rural environment), have become contemporary subjects, once again. It is within this context that was launched the Programme for the Historic Villages¹⁷, and a subsequent set of experiments for the revitalization and rehabilitation of rural nuclei associated with a structured action plan and framed in a purpose developed strategic programme, including the Programme for the Revitalization of Villages in the Algarve.

¹³ We are referring specifically to the installation, in some villages and rural areas, of foreign citizen heirs, for the most part, of the liberation and environmentalist movements developed in many European countries along the 60s and 70s of last century and looking for a new philosophy of life more connected to nature.

¹⁴ Considered essential in view of 'failure' of the model, which had hitherto prevailed, based on subsistence agriculture.

¹⁵ That one can match to the 60s, 70s and 80s of last century.

¹⁶ Who see them as a symbol of the poor living conditions that they intended to overcome and forget.

¹⁷ Free translation of *Programa das Aldeias Históricas de Portugal*.

Experiences are (re)enacted, environments are (re)created, assets are (re)built. However, apart from one or other of the more radical experiences, which tries to be as faithful as possible to the local building tradition, and some (very few, unfortunately) innovative projects which rehearses the necessary bridge between tradition and modernity, what remains, in essence, is a great deal of voluntarism, however well-intentioned, and a vast array of misconceptions.

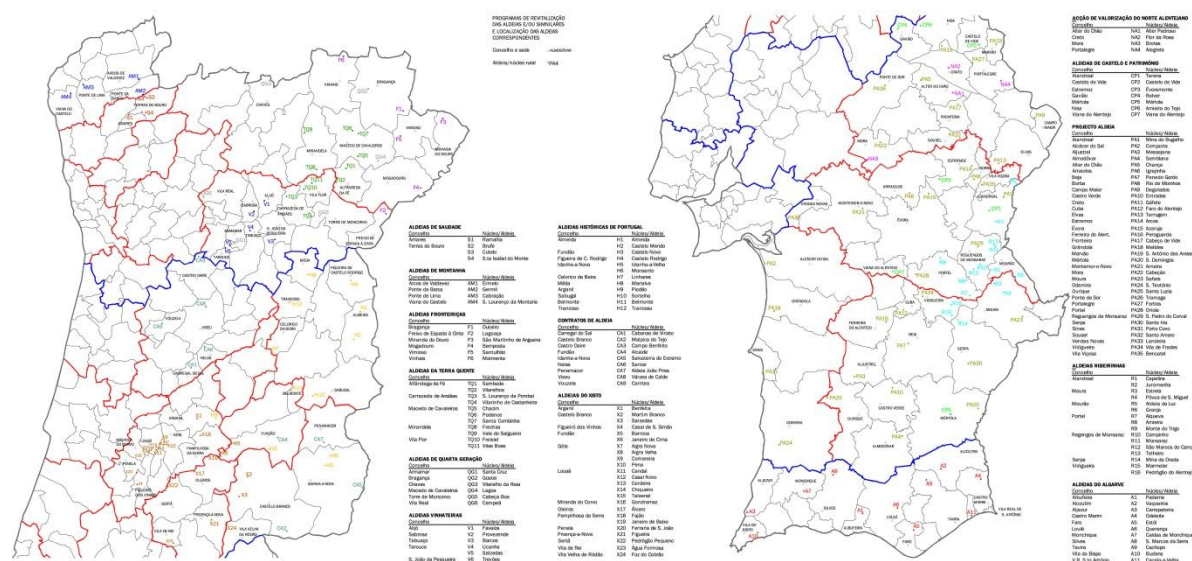


Figure 1. The programmes for the revitalization of villages in Portugal, and/or similar, and related village's localization. (Adapted from Ribeiro, 2011: 54-55).

Among these misconceptions emerges the absence of, either a critical reflection on the relevance of respect for tradition and the limits of modernity, or a proper and informed basis for the choices made – which can only be supported on the knowledge of existing reality, knowledge for which that transposition of scale was (is) essential. Though it may have allowed, in some cases, to bring out new perspectives and approaches, in many others, unfortunately, either it did not translate into concrete, structural and lasting actions, or, even involuntarily,

gave way to the culture of pastiche¹⁸, none of them considers the importance of proceeding, in advance, of such research and critical reflection¹⁹.

3. From the “Survey” to the local applied research: The experience of GTAA Sotavento in the built vernacular heritage studies.

Driven by the pioneering Programme for the Historic Villages and EU funds and financing - and reflecting the idiosyncrasies, realities and characteristics of each region, area of intervention and nuclei covered - various other programmes would follow the paths it opened.

Among these, the Programme for the Revitalization of the Villages in the Algarve, in which two Offices for the Villages Technical Support²⁰ (GTAA, respectively, of the *Sotavento* and *Barlavento*) were created, provided a unique opportunity to develop a local applied research practice in fields of vernacular architecture that allowed, within the region of Algarve, to test that transposition of scales.

Resulting in a concerted action between the CCDR Algarve²¹ and the involved municipalities, these two offices consisted of multidisciplinary technical structures which included architects, landscape architects, civil engineers, electrical engineers, estimators and (in the case of GTAA Sotavento) a designer.

Its creation was intended to operationalize the measures defined in the Villages Intervention Plans²², as well as to make the connection between the various scales of planning, design and monitoring of various interventions, contributing to the definition of a common set of intervention principles and methodologies to all villages.

¹⁸ Even though often well-intentioned and supported in a reading, although superficial, of the Survey. Where underscores, once again, the relevance of more detailed studies, as well as a more thorough critical reflection on the limits and scope of the concepts of restoration, conservation, rehabilitation and renewal and the possibilities of mediation between modernity and tradition.

¹⁹ Being fair, however, to acknowledge that the execution times associated with these programmes and the 'need' to do works (under the risk of loss of funding) also hardly would allow it.

²⁰ Free translation of *Gabinete Técnico de Apoio às Aldeias*.

²¹ *Comissão de Coordenação e Desenvolvimento Regional* (Regional Development and Coordination Commission).

²² Free translation of *Planos de Intervenção de Aldeias*.

With an expected duration corresponding to the timeline of the QCA III²³, which financially supported them, these offices had a first phase of operation between 2001 and late 2003 and a second between mid-2004 and late 2006.

In the case of the GTAA Sotavento, the office would affirm a structured and dynamic action that allowed them to pursue a course of systematic investigation, parallel to the project for which it was actually created, from which would emerge some academic research (Costa, 2008; Ribeiro 2011), including the present one.

This action, at first and still in the development of the Intervention Plans, resulted in the team's direct involvement in the characterization studies of the four villages that had been assigned - thus allowing a first approach, at the scale of the territory and the village and their relationships.



Figure 3. *Programa de Revitalização das Aldeias do Algarve, Vaqueiros Intervention Plan: synthesis of diagnosis general plan (GTAA Sotavento).*

²³ *Quadro Comunitário de Apoio* (Communitarian Support Framework).

Secondly, corresponding to a transition between the two phases of the programme in which the team was involved in a parallel study to the programme itself, such action would lead to a second scale approach or approximation, the study of the settlement and its morpho-typological organization (Costa, 2004).



Figure 3. Clarines village general plan survey (Costa, 2004: 58).

Finally, throughout the programme, such action would result in the further development of technical projects relating to objectives defined in the Intervention Plans, which would require a third level of approximation, relating to traditional materials and construction techniques, whose success would be assessed in some of the works executed.



Figure 4. Execution of a traditional street pavement with schist stone under a GTAA Sotavento's project and works monitoring (Ribeiro, 2008a: 192).

In fact, all of these projects contained information of the traditional materials and construction techniques, resulting from studies and surveys that were being developed in parallel and formed documents prior to the subsequent publication of an inventory of traditional construction materials, systems and techniques of the Eastern Algarve (Ribeiro, 2008b).

Thus, the GTAA Sotavento set out, early on, a consistent set of principles, all of which addressed the essential purpose of contributing to the recovery, the use and the application of these materials and techniques, that apply across all projects. This way, the office sought, through its incorporation into all projects, to induce demonstrable effects that could lead to the awakening of that forgotten knowledge and its associated practices, revealing their importance in the affirmation of local identity.

The use of these traditional materials and construction techniques took place either in interventions in existing vernacular structures, or in new construction resorting to new architectural languages and models, always trying to establish

an integrated (or mediating) dialogue between modernity and tradition, but refusing any mimetic processes or intentions²⁴.

The feasibility of continuing the GTAA Sotavento beyond its initial deadline²⁵ would allow more than to simply go on with the project work and construction monitoring developed in the first phase. This prolongation of the programme, allowed the launch, in its closure phase, of a set of dissemination and training actions regarding the vernacular architecture and traditional materials and construction techniques that fall in what would eventually become the most significant component of its work. Components whose importance would be emphasized by some disappointment related to the implementation of the Programme and the small number of the planned actions and projects carried out and effectively implemented.

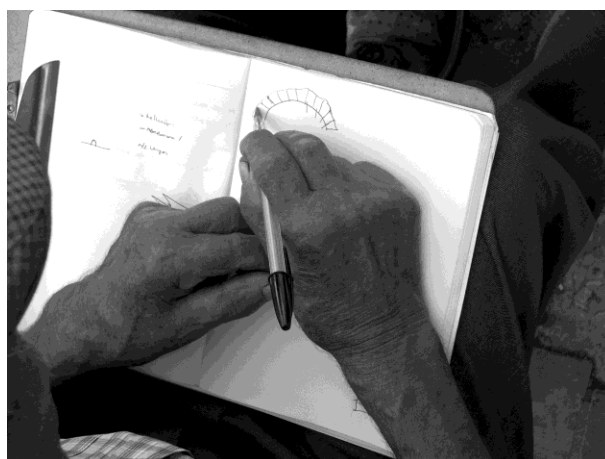


Figure 5. Older master of traditional building techniques explaining the construction of a vault to GTAA Sotavento's research team (Ribeiro, 2008a: 220).

Among these actions, we would highlight the seminar, the workshop and the video produced (GTAA Sotavento, 2007a, 2007b, 2007c) as well as the two

²⁴ Recalling in this regard that, as stated by Françoise Choay "to renew living spaces with the competence to articulate that, over the millennia, contributed with the same movement to set men to natural environment, and make them always restart the institution of their community, is a valid option"(Choay, 2006: 224).

²⁵ That is, prolonging its existence for another year, 2007.

edited books (Ribeiro, 2008a, 2008b), which, in any case, departed the recognition of the importance, due to the singularity of vernacular architecture, of the adoption of specific approaches, both as regards their study, both with regard to the technical education²⁶. Approaches considered essential in the process of assets valuation as a prime factor of local development and without which it is difficult to continue the vernacular architectural manifestations in contemporary practice, even if reinterpreted and incorporated into new architectural languages.

In this context²⁷, the publication of that book (Ribeiro, 2008b) espoused two distinct but complementary purposes: firstly, (i) the fulfillment of a proposed action centered upon the Intervention Plans; and secondly, and above all, (ii) the accomplishment of a research, investigation and survey programme, essential for understanding the area of action, which followed the development of the office's project practice.

The final product of a seven year programme, this publication was regarded by the GTAA as one of its most important works. Important as an educational tool; important as the means of transmission to future generations of the inheritance (heritage) bequeathed to us by our ancestors; but also important for the opportunity to assess the validity of the generalizations associated with the Survey and to go beyond them (and the Survey itself) as far as possible.

4. Final Thoughts

The experiment undertaken by the GTAA Sotavento in the study of built vernacular heritage is just one example – determined by specific and punctual

²⁶ In which context is included "the provision of courses, within the specialist training system, for architects, town planners, conservation personnel and construction technicians on: traditional building materials and techniques; the durability of such materials and their possible combination with modern materials; the cost of such traditional techniques and the conditions regarding their present-day use or their replacement by modern techniques and materials" (CE, 1989: 3), as also determines the *Charter on the Built Vernacular Heritage* (ICOMOS, 1999).

²⁷ Being conscious that a conservation policy "as part of a planning policy, is only possible if there is an inventory of properties to safeguard" (CE, 1977) and that the safeguarding of collective memory also depends on the development of heritage researching and identifying instruments (CE, 1989).

needs or circumstances – of the scale transposition of the study from macro to micro, which the purposes associated with the “Survey” did not allow for, but which remain, largely, unfulfilled.

In order to progress these purposes today it is, therefore, crucial to: (i) return to the sites of the “Survey” and try to understand, to learn, the transformation process; (ii) undertake the completion of the “Survey”, through the production of systematic and local atlases; and (iii) establish shared information systems (an online supported database for example) on local construction practices and their relationships with other disciplines (history, ethnology, anthropology).

On the other hand, and founded upon the first phase of implementation of the programmes for the revitalization of villages, what is also demanded is: (i) the provision of systematic information concerning these initiatives, distinguishing them in their purposes, types, problems, difficulties, contradictions and results; (ii) the analysis and discussion of their interventions in the light of the principles, concepts and practices of rehabilitation; (iii) the confirmation of the relevance of different approaches to the problematic nature of interventions in rural areas and nuclei and define its scope; and (iv) the demonstration of the applicability of an intervention model that views the specifics of its scale and territorial scope seeking to sustain the design of an array of good methodological practices of urban and architectural intervention in rural areas and the built rural heritage.

This last set of purposes is precisely the main aims of the research we undertake and within which falls the present contribution.

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References

- Alves Costa, A. (1995). *Introdução ao Estudo da História da Arquitectura Portuguesa: Outros Textos Sobre Arquitectura Portuguesa*. Série 2. Argumentos. Porto: FAUP.
- Amaral, F.K. do [et. al.] (2004 [1961]). *Arquitectura Popular em Portugal*. 4º Ed. Lisboa: Ordem dos Arquitectos. 2 Volumes.
- Barros, H. de (1948). *Inquérito à Habitação Rural*. Vol. 2º.
- Basto, E. A.de L., & Barros, H. de (1943). *Inquérito à Habitação Rural*. Vol. 1º.
- Choay, F. (2006). *A alegoria do património*. Lisboa: Edições 70.
- Conselho da Europa (1977). Apelo de Granada sobre a Arquitectura Rural e o Ordenamento do Território. In LOPES, F., & CORREIA, M. B. (2004). *Património Arquitectónico e Arqueológico. Cartas, Recomendações e Convenções Internacionais*. Lisboa: Livros Horizonte.
- Costa, M. R. (2008). *Casas e Montes da Serra entre as extremas do Alentejo e do Algarve. Forma, processo e escala no estudo da arquitectura vernacular*. Doctoral Thesis. Oporto University/Faculty of Architecture. Unpublished.
- Costa, M. R. (coord. técn.) (2004). *Património Rural Construído do Baixo Guadiana*. Castro Marim: Associação Odiana.
- Council of Europe (1975). *European Charter of the Architectural Heritage* [on-line]. Committee of Monuments and Sites, 4th session, Strasbourg, 25-27 June 1975. Retrieved from <https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=581176&SecMode=1&DocId=1141782&Usage=2>
- Council of Europe (1989). *Recommendation No. R (89) 6, 13 April 1989 on the protection and enhancement of the rural architectural heritage* [on-line]. Retrieved from <https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=610342&SecMode=1&DocId=701018&Usage=2>
- Council of Europe (1995). *Recommendation No. R (95) 9, on the integrated conservation of cultural landscape areas as part of landscape policies* [on-line]. Retrieved from

<https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=536539&SecMode=1&DocId=527032&Usage=2>

Decreto-Lei nº 40 349, de 19 de Outubro de 1955. In Amaral, Francisco Keil do [et. al.] (2004 [1961]). *Arquitectura Popular em Portugal*. 4ª Edição. Lisboa: Ordem dos Arquitectos. p. XIV.

Dias, A. S. [et. al.] (1979). Prefácio à 2ª Edição. In Amaral, Francisco Keil do [et. al.] (2004 [1961]). *Arquitectura Popular em Portugal*. 4ª Edição. Lisboa: Ordem dos Arquitectos. Vol. I, pp. XI-XII.

Dioum, B. (1968). Speech made in the General Assembly of the International Union for Conservation of Nature, New Delhi, India, 1968.

Ferrão, J. (2000). *Relações entre mundo rural e mundo urbano: evolução histórica, situação actual e pistas para o futuro* [Em linha]. Sociologia, Problemas e Práticas. Lisboa: Celta Editora/CIES. Nº 33 (Set. 2000). pp. 45-54. Retrieved from <http://www.scielo.oces.mctes.pt/scielo.php?script=sci_arttext&pid=S0873-65292000000200003&lng=pt&nrm=iso>.ISSN 0873-6529.

Frampton, K. (1983). Towards a Critical Regionalism: Six Points for an Architecture of Resistance. In Foster, Hal (Ed.). (1983). *The Anti-Aesthetic: Essays on Postmodern Culture*. Washington: Bay Press. pp. 16-30.

Graça, J. (1999). Turismo e mundo rural: que sustentabilidade? in CAVACO, Carminda (coord.) (1999). *Desenvolvimento rural: desafio e utopia*. Lisboa: Centro de Estudos Geográficos, Universidade de Lisboa. pp. 310-312.

GTAA Sotavento (coord. geral) (2007a). *Construções em Xisto*. [DVD]. Tavira: Câmara Municipal de Tavira.

GTAA Sotavento (org.) (2007b). *Seminário Materiais e técnicas de construção tradicional: um património com futuro?* [CDROM]. Comunicações e documentação. Faro, CCDR Algarve, 19 e 20 de Abril de 2007. Tavira: GTAA Sotavento/ CCDR Algarve.

GTAA Sotavento (org.) (2007c). *Oficina Materiais e técnicas de construção tradicional: conhecer para agir* [CDROM]. Comunicações e recomendações. Cachopo, 26 a 30 de Novembro de 2007. Tavira: GTAA Sotavento.

ICOMOS (1982). *Tlaxcala Declaration on the Revitalization of Small Settlements* [on-line]. Third Inter-American Symposium on the Conservation of the Building Heritage, Mexican National Committee of ICOMOS, Trinidad, Tlaxcala, 25 to 28 October 1982. Retrieved from <http://www.icomos.org/index.php/en/charters-and-texts?id=385:tlaxcala-declaration-on-the-revitalization-of-small-settlements&catid=179:charters-and-standards>.

ICOMOS (1999). *Charter on the Built Vernacular Heritage* [on-line]. ICOMOS 12th General Assembly, Mexico, October 1999. Retrieved from http://www.international.icomos.org/charters/vernacular_e.pdf.

Leal, J. (2009). *Arquitectos, Engenheiros, Antropólogos: Estudos sobre Arquitectura Popular no Século XX Português*. Porto: Fundação Instituto Arquitecto Marques da Silva.

Oliver, P. (2006). *Built to Meet Needs: Cultural Issues in Vernacular Architecture* (1st ed.). Architectural Press.

Pereira, N. T. (1987). Prefácio à 3ª Edição. In Amaral, Francisco Keil do [et. al.] (2004 [1961]). *Arquitetura Popular em Portugal*. 4ª Edição. Lisboa: Ordem dos Arquitectos. Vol. I, p. IX-X.

Ribeiro, V. (2011). *Boas práticas de reabilitação do património vernacular construído. A experiência do Programa de Revitalização das Aldeias do Algarve*. MSc Dissertation. Technical University of Lisbon /Faculty of Architecture. Unpublished.

Ribeiro, V. (coord.) (2008a). *GTAA Sotavento. Síntese dos Trabalhos 2001-2007*. Faro: CCDR Algarve.

Ribeiro, V. (coord.) (2008b). *Materiais, Sistemas e Técnicas de Construção Tradicional. Contributo para o estudo da arquitectura vernácula da região oriental da serra do Caldeirão*. Faro: CCDR Alg; Porto: Afrontamento.

Rudofsky, B. (1981). *Architecture without Architects: A Short Introduction to Non-Pedigreed Architecture*. 5th ed. London: Academy Editions.

Távora, F. (1947). *O Problema da Casa Portuguesa*. Cadernos de arquitectura. Lisboa: Tip. Imp. Libânio da Silva.

Tormenta, P. (2003). *Fernando Távora: do problema da Casa Portuguesa à Casa de Férias de Ofir*. DC: revista de crítica arquitectónica/Papeles DC. Barcelona. Nº 9/10 (2003).

UNESCO (1976). *Recommendation concerning the Safeguarding and Contemporary Role of Historic Areas* [on-line]. The General Conference of the United Nations Educational, Scientific and Cultural Organization, 19th session, Nairobi, 26 October to 30 November 1976. Retrieved from http://portal.unesco.org/en/ev.php-URL_ID=13133&URL_DO=DO_TOPIC&URL_SECTION=201.html.

UNESCO (1989). *Recommendation on the Safeguarding of Traditional Culture and Folklore* [on-line]. The General Conference of the United Nations Educational, Scientific and Cultural Organization, 25th session, Paris, 17 October to 16 November 1989. Retrieved from http://portal.unesco.org/en/ev.php-URL_ID=13141&URL_DO=DO_TOPIC&URL_SECTION=201.html.

Villas-Boas, M. (Entrevista) (2011). *Arquitetura Popular em Portugal, 50 anos depois* [on-line]. Encontros com o Património, TSF, 12 de Novembro de 2011. Retrieved from http://www.tsf.pt/Programas/programa.aspx?content_id=918070&audio_id=2117410.

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RUSTIC VERSUS RURAL:

The Vernacular Architecture Exhibition as Survey of the Many Faces of Italian Modernism¹

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Abstract

*For the historian writing in English about a phenomenon of appropriation that unfolded in specific political and aesthetic contexts of twentieth-century Italy, and whose manifestations were expressed equally specifically in Italian, use of a blanket term like vernacular in another language threatens to blur or even obliterate vital nuances that distinguish highly diverse practices and intentions. Titles assigned to the plethora of vernacular architecture surveys produced in Italy from the 1910s to the 1960s speak to this diversity and reveal tensions between authors. While historicist architects and artists such as Gustavo Giovannoni and Giulio Ferrari employed expressions such as *architettura minore* (minor architecture) and *architettura rusticana* (rustic architecture) to describe vernacular buildings, Rationalist architects such as Giuseppe Pagano and Daniel Werner used *architettura rurale* (rural architecture) for the title of their watershed exhibition at the Milan Triennale in 1936. Depending on the perspective of the writer or speaker, the same category could be assigned different value. For example, negative attributes were ascribed by Rationalist architects during the 1930s to rusticity while they praised the authenticity of rural buildings. The aim of this paper is to discuss how different operative agendas underlying the research and writing of surveys on vernacular architecture in Italy helped shape competing manifestations of Italian modern architecture and urbanism. In sum, by analyzing the debate among architects of different generations and political affiliations regarding notions of rusticity and ruralism, the aim is to reveal the dynamics behind the writing of a number of key architectural surveys that were produced in Italy during the first half of the twentieth century.*

Keywords: -

¹ The contents of this essay are drawn from my two publications:

Pride in Modesty: Modernist Architecture and the Vernacular Tradition in Italy (Toronto – Buffalo: The University of Toronto Press, 2010); Lejeune, Jean-François, and M. Sabatino, eds., *Modern Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities* (London: Routledge, 2010).

For the historian writing in English about a phenomenon of appropriation that unfolded in specific political and aesthetic contexts of twentieth-century Italy, and whose manifestations were expressed equally specifically in Italian, use of a blanket term like *vernacular* in another language threatens to blur or even obliterate vital nuances that distinguish highly diverse practices and intentions. Titles assigned to the plethora of vernacular architecture surveys produced in Italy from the 1910s to the 1960s speak to this diversity and reveal tensions between authors. While historicist architects and artists such as Gustavo Giovannoni and Giulio Ferrari employed expressions such as *architettura minore* (minor architecture) and *architettura rusticana* (rustic architecture) to describe vernacular buildings, Rationalist architects such as Giuseppe Pagano and Daniel Werner used *architettura rurale* (rural architecture) for the title of their watershed exhibition at the Milan Triennale in 1936. Depending on the perspective of the writer or speaker, the same category could be assigned different value. For example, negative attributes were ascribed by Rationalist architects during the 1930s to rusticity while they praised the authenticity of rural buildings. The aim of this paper is to discuss how different operative agendas underlying the research and writing of surveys on vernacular architecture in Italy helped shape competing manifestations of Italian modern architecture and urbanism. In sum, by analyzing the debate among architects of different generations and political affiliations regarding notions of rusticity and ruralism, the aim is to reveal the dynamics behind the writing of a number of key architectural surveys that were produced in Italy during the first half of the twentieth century.

Like the literary form of the manifesto, which addresses the general public as well as specialists, polemical exhibitions of architectural ideas promote a culture of resistance, opening up new ground and laying out new propositions. And, like the text of a manifesto, the architecture exhibition has the capacity to serve as an archive that condenses the tendencies of a particular moment in time and present them for consumption by both general and specialized audiences. As Francesco Dal Co has observed, "exhibitions are a complete expression of design

skills and knowledge when they act as places which accelerate communication, when reality and appearance, distance and proximity, 'quantity' and 'quality', to use Mies' words once more, are the irrepressible protagonists of eternal conflict." The power of exhibitions lies in their ability to present a synthesis of new ideas that are still percolating and have not quite provoked a "tipping point" in the built domain, for even though the research and design of an exhibition can be a lengthy process, typically the realization of an exhibition takes less time than the realization of a building.

Historically, exhibitions curated and designed by architects with polemical intentions have had crucial impact on the course of modernist design practice, becoming laboratories for experimentation and spurring critical debate and feedback in the profession. In Italy, over the course of the Fascist period as well as after the Second World War, exhibitions and publications emerging from them challenged the status quo of conservative state-sponsored architecture with its banal classical allusions and oftentimes ambiguous usage of vernacular aimed at diluting rather than promoting modern values. In particular, two exhibitions presented by the Milan Triennale—*Architettura rurale italiana: Funzionalità della casa rurale* (Rural Italian Architecture: Functionality of the Rural House) curated by Giuseppe Pagano and Guarniero Daniel in 1936, and the *Mostra dell'architettura spontanea* (Spontaneous Architecture Exhibition) mounted in 1951 by Giancarlo De Carlo, Enzo Cerutti, and Giuseppe Samona — contributed to the diffusion of less ideologically charged attitudes to appropriating anonymous, modest, even small-scale "vernacular" architecture and urbanism. These initiatives, which revolved around questions of Italian identity, advocated both regionalist and modernist ideas with the potential to challenge the dominant tendency toward large-scale architectural and urban schemes characteristic of the Fascist regime and at the same time functioned as an antidote to banal functionalism during the postwar period.

Pagano and Daniel strategically deployed the medium of documentary photography as well as inventive and strategically understated display tactics in their installation for a modest pavilion Pagano designed and built adjacent to Giovanni Muzio's 1933 Triennale building. For this public venue that addressed

itself to both general audiences and practicing architects, I would argue that, in reaction to the Mostra della Rivoluzione Fascista (Exhibition of the Fascist Revolution) mounted in 1932 in the nineteenth-century Palazzo delle Esposizioni in Rome, Pagano and Daniel avoided the theatricality of the “museum in motion” approach of Giuseppe Terragni’s Sala O, or the monumentality of Mario Sironi’s Sala Q, in order to draw attention to the social and architectural problems of their time. Their exhibition convincingly demonstrated the extent to which vernacular buildings and urban forms suggested vital, “functionalist” design solutions in contrast to the stale, historicizing tendency of official Fascist architecture like Marcello Piacentini’s scheme for the EUR complex of 1937–1942. Pagano, a committed member of the Fascist party at the time and a close ally of Giuseppe Bottai (Minister of Education between 1936 and 1943), sought to persuade reactionary forces within the regime to embrace a more progressive modernism that he argued was both “Italian” and Fascist. Pagano’s activism belonged to a diffuse phenomenon that manifested itself in Europe during the 1920s and was described by Julien Benda as “intellectual treason,” a “crime” committed by intellectuals who refused to shy away from direct political engagement. Fifteen years after the 1936 Triennale, Giancarlo De Carlo’s Spontaneous Architecture Exhibition used photography assembled on large panels suspended from the ceiling and attached to the walls to propose that the high density and heterogeneity of Italian villages, towns, and cities could be seen as a corrective to the functional but socially insensitive tactics promoted in the Athens Charter (1942) by members of the Congrès international d’architecture moderne (CIAM).

The exhibitions of Pagano and De Carlo constituted acts of resistance aimed at galvanizing support for their belief that the vernacular could infuse “rational” modern architecture in Italy with a regional dimension without lapsing into nostalgia. They strategically gathered their material and “designed” these exhibitions with an eye to operative consequences for design practice. As such, their two exhibitions were emblematic of what Bruno Zevi described as “architectural criticism in architectural forms” and what Manfredo Tafuri dismissed as “operative criticism.”

Toward a Prehistory: The Exhibition of Italian Ethnography (1911) and the Exhibition of Rustic Art (1921)

Little was known about the scope and diversity (let alone history per se) of vernacular building traditions across the various regions of Italy until the *Mostra di etnografia italiana* (Exhibition of Italian Ethnography) was mounted in 1911 in conjunction with other exhibitions celebrating the fiftieth anniversary of the founding of the Italian republic. Curated by ethnographer Lamberto Loria, the Exhibition of Italian Ethnography in Rome addressed the specificity of vernacular traditions in a strategic effort to cultivate unity by activating national and regional pride. Loria commissioned architect engineers Augusto Giustini and Angelo Guazzaroni to reconstruct vernacular buildings from different regions of Italy and installed them in the Piazza d'Armi across the Tiber west of the Villa Borghese. A "casa colonica" (tenant farmer dwelling) typical of the countryside of Lucca in Tuscany flanked by haystacks and adorned with corn braids competed for visitors attention with stone "trulli" (dry laid stone dwellings) from Alberobello in Puglia. Although Loria intended for the 1911 installation to become a "living museum" of Italian vernacular architecture (inspired by Artur Immanuel Hazeliuss's Skansen in Stockholm founded in 1891), when the exhibition closed, the structures were demolished.

Yet another exhibition revolving around the vernacular was held in 1911. The Italian artist and designer Duilio Cambellotti co-organized the *Mostra dell'Agro Romano* (Exhibition of the Roman Agro) with political activists and intellectuals Giovanni Cena and Alessandro Marcucci. Their aim was to reveal the living conditions of the disenfranchised rural poor of the Roman countryside. Cambellotti's "village," located in proximity to Loria's exhibition, presented a number of large reed huts typical of Lazio. The primary hut—embellished on its front facade with ox skulls and plows—was outfitted with didactic materials, paintings, and household objects (furniture and ceramics), emphasizing both material culture and the social dimension of peasant life. At the time, he was immersed in reading Leo Tolstoy's *What is Art?* (1897), and the exhibition was essentially a political project to promote education in Lazio, where the poorest of Italian peasants remained basically illiterate. Some thirty years afterward,

Cambellotti was still writing poetically about the “dark beauty” of poverty, the starkness, and the brutality. In effect, his preoccupation with the disappearance of the reed hut from the countryside was heavily tinged with nostalgia: The structures he sought to memorialize were systematically eradicated by the Fascist Regime during the 1930s in the course of their reclamation of the marshlands to make way for the “new towns” of modern Italy. The huts were replaced by whitewashed stuccoed brick homes that were thought to improve the hygiene and living conditions of the peasantry; significantly, they were also calculated to gain the regime popular support among the working rural classes. Although the basic cottages made available to farmers via long-term mortgages (typically 30 years), looked “modern,” the values associated with Mussolini’s “ruralesimo (ruralism)” policies were drafted upon anti-modern values. In a pair of images published in a propaganda pamphlet translated into French so as to communicate Mussolini’s “achievements” outside of Italy, emaciated and unkempt inhabitants of a primitive reed hut are juxtaposed with well-scrubbed and well-fed children who sit in front of a new agrarian dwelling realized in Littoria (present day Latina). Despite their different approaches, it was significant for the history of Italian architecture in general, and for architectural exhibitions in particular, that both Loria and Cambellotti drew heavily upon the evidence of the vernacular rural building traditions as an expression of Italy’s “other” ancient tradition, the vernacular that was for so long overshadowed by the classical tradition.

The first architect-organized exhibition of Italian vernacular buildings addressed a more restricted audience of professional practitioners than the 1911 exhibition. Mounted in Rome by Gustavo Giovannoni, Vittorio Morpurgo, and Marcello Piacentini, the *Mostra d’arte rustica* (Exhibition of Rustic Art) of 1921 juxtaposed a selection of architect’s drawings of extant vernacular buildings with designs for contemporary houses that drew inspiration from them. Folk arts and crafts (blankets, carpets, chairs, and vases) were also displayed alongside architectural sketches and projects such as Marcello Piacentini’s *Villino Nobili*, completed in 1918 for the Parioli neighborhood of Rome. The scheme for this modest-sized three-room exhibition organized under the auspices of the *Associazione artistica*

fra i cultori di architettura (Friends of Architecture in Rome) hinted at the relevance of the vernacular tradition for contemporary design practice, but, following the lead of English critic and artist John Ruskin, tended to emphasize style and rusticity over rational tectonics. Just prior to the opening of the exhibition, in 1920, Giovannoni started planning the neighborhoods of Garbatella and Aniene on the outskirts of Rome, with meandering streets and stylized multifamily dwellings comprising ornamental rusticated bases and pitched roofs clad with terracotta tile. Giovannoni was not interested in representing the humble reed huts of the disenfranchised peasantry, and not by coincidence was the "radical" Cambellotti excluded from this exhibition. Giovannoni's more conservative agenda focused on what he called the "minor architecture," which exhibited a stylistic coherence that had a certain appeal for academicians. As longtime president of the Friends of Architecture in Rome, a civic group with cultural and artistic aspirations, Giovannoni spearheaded the publication of a number of studies devoted to the "minor architecture" of Rome and Lazio: In the preface to the first of three volumes the authors lament: "Nothing has been written about Italian minor architecture of the past; if monuments in many of our Italian cities represent architectural poetry the more modest yet equally interesting buildings, architectural prose, should also be remembered."

Against this background, Pagano and Daniel's 1936 exhibition at the Triennale reacted to the historicist attitude underlying Giovannoni's Garbatella and Aniene. Trained as an architect in the Turin Polytechnic, Pagano was wary of aesthetic appeal and instead sought to understand how the vernacular had responded over time to the requirements of dwelling at different levels of society, essentially, to "program." For Pagano, both ethnographic and aesthetic or stylistic issues were completely subordinated to the modernist architectural project: "Exhibitions are among the most effective vehicles for testing, promulgating and making understood the ideas upon which modern taste is based." In contrast to Giovannoni's valorization of picturesque rusticity, Pagano was interested in the rational, functionalist attitude of anonymous rural builders, an interest he shared with Adolf Loos. Like Giovannoni's Exhibition of Rustic Art of 1921, Pagano's exhibition at the Triennale sought to derive from extant

vernacular forms operative principles that could be applied to contemporary practice. And whereas the 1921 exhibition relied heavily upon hand drawing as a medium for documenting vernacular structures, Pagano elected to use the medium of black and white photographic documentation, perhaps because it accentuated the simple volumes of vernacular structures but also because the photograph eliminated the subjectivity of the draftsman's hand.

Rural Italian Architecture: Functionality of the Rural House, Milan, 1936

Staged four years after the Exhibition of the Fascist Revolution, Pagano and Daniel's exhibition opened the year after Italy invaded Ethiopia. The project had been in the works since 1935, in the shadow of this pivotal military campaign, which represented a turning point in expansionistic Fascist politics and ultimately led to Italy's isolation from Europe. Essentially a leftist who advocated for reform from within the nationalistic ranks of a right-wing Fascist party, Pagano opposed elitism and the triumph of bombastic architecture realized under Fascism in the name of tradition. In his multi-faceted identity as activist, designer and director of the periodical *Casabella*, Pagano fought with determination and urgency to promote his political and aesthetic ideals of frugality and austerity. He projected the tectonic and material simplicity of the vernacular in opposition to its picturesque simulation as a potentially new impetus in modernist, rationalist design that could lay claim to traditional values grounded in Italy's agrarian past and ultimately cast it as a source for contemporary functionalist practice. The intent was to foster awareness of and appreciation for a little understood and up to then barely studied aspect of the built domain. Interest in the vernacular had been on the rise since Loria's project of 1911, but the "operative" and polemical dimension Pagano brought to the documentation of vernacular architectural forms were new. To this end, the medium of black and white photography along with straightforward display tactics and the polemical texts published in the accompanying catalogue were deployed to expose the public as well as designers to a wide range of vernacular buildings representing Italy's diverse regions. A series of horizontal panels were mounted on and hung perpendicular

to the perimeter wall in order to create a continuous band of identical niches that could be entered and exited while traversing the exhibition space.

Although exhibitions gave weight to the debate, publications also helped to diffuse awareness of the vernacular tradition to a broader audience. The first comprehensive study of vernacular architecture on the Italian peninsula was Giulio Ferrari's *L'architettura rusticana nell'arte italiana* (Rustic Architecture in Italy) published in 1925, a few years after Giovannoni, Piacentini, and Morpurgo's exhibition. Ferrari's book was distinguished by the breadth of material it covered and its use of photography and illustrative drawings (mainly executed by the author). Commenting on pioneering studies of the vernacular some fifteen years later, Giovannoni wrote that it was "the most extensive and well-known" publication on the subject. Departing from the approach taken by most authors who typically treated individual regions, Ferrari attempted to trace the Italian vernacular tradition chronologically, subsuming the building types of every region into a single timeline. Diverging from this chronological approach, Pagano and Daniel's overview of Italian vernacular architecture (published as a catalogue accompanying the exhibition) betrays the architects' perspective insofar as the material was organized typologically rather than along a timeline. The structures were presented as "timeless," with the curators altogether ignoring the issue of dating or "periods," and especially "style." In stark contrast to the historicizing tendency of architecture of the late nineteenth and early twentieth centuries, Pagano and Daniel's operative focus was on the present and "timeless" (a-historic) past. It is no surprise that historian Guglielmo de Angelis d'Ossat later criticized the exhibition catalogue precisely for its weak historical-critical approach.

While Pagano was certainly not the first to employ photography to document vernacular architecture, he advanced a new mode of display, deploying images in the gallery installation and in the layout of the publication as series or sets organized in horizontal bands reminiscent of filmstrips. If early Italian photographers like the Alinari brothers documented Italian vernacular architecture somewhat unsystematically, Pagano's project set a new precedent with its sheer comprehensiveness. Despite his social engagement and the

extensive fieldwork involved in his selection process, he was reluctant to include the inhabitants of rural buildings and rarely photographed building interiors. The air of suspended reality that pervades these images in which sentimentality is expunged falls somewhere between the “New Objectivity (Neue-Sachlichkeit)” style of Albert Renger-Patzsch’s documentary photographs and the melancholy of Giorgio de Chirico’s paintings.

None of the “historical” buildings presented were measured or drawn in elevation or plan, as had been the tradition among Italian architects from at least the sixteenth century when Palladio combined classical and vernacular sources for his designs of working villas. Pagano may have avoided the sketch in order to discourage picturesque and sentimental readings of the material, but it is curious that measured engineering drawings were not made in order to explicate structural issues, since engineers and architects in Switzerland, Germany, and Austria had made extensive use of measured drawings of vernacular buildings during the first decade of the twentieth century.

Pagano and Daniel (like Loos before them) were concerned with the anonymous builder’s functional response to program, materials and techniques used for construction, and less interested in projecting picturesque qualities onto rural buildings. They believed that the functional constituted a common ground from which the elements of a new “rational” and modern Italian architectural syntax would emerge—as free of sentimental or nostalgic references to an idyllic and picturesque past as it was liberated from the excesses of rhetoric of a certain “pompiere” classicism. Pagano’s vision for a new modern Italian architecture, infused with an ethos he extracted from rural architectures, shared little with bourgeois nostalgia for “rustic living” subsumed in designs for luxury weekend villas of the “leisure class” during the late-nineteenth and early twentieth centuries. He believed that through the careful study of vernacular structures, innovative building systems could be distilled for use in the design of buildings as divergent as luxury weekend villas and multifamily housing, hotels, and schools “The analysis of this large repository of building energy, which has always existed as an a-stylistic undercurrent, can hold for us the joy of discovery of qualities of honesty, of clarity, of logic, of building health, in the place of

perceptions of the past in which it was viewed as a source of arcadia and folklore.”

In the same year that the Rural Italian Architecture exhibition opened, Neapolitan architect and historian Roberto Pane published his *Architettura rurale campana* (Rural Architecture of Campagna). In the introduction of this study of the “architetto contadino” or peasant architect, Pane validated the thesis of Pagano and Daniel’s exhibition, arguing that

“...what the vernacular shares with new architecture (whether modest whitewashed cubes or large buildings covered in marble) is the elimination of ornament and its focus on program...” The rural houses of Campagna are seductive because they are defined by a rudimentary necessity of program and are alien to superfluous elements; they fit naturally into the landscape like any fruit of the earth.”

Art and architectural historian Enzo Carli reinforced Pane’s position in his Casabella review of the exhibition. It was clear from Carli’s comments that the operative role of the exhibition in design practice, rather than its documentary or historical content and import, was the dominant aftereffect of the exhibition.

In 1931, Pagano completed a weekend house in Rivara, in the Canavese region of the Alps near Turin, in collaboration with Gino Levi-Montalcini. This project, begun in 1929, seemed to initiate what would become a tendency in Pagano’s work, that is, the combination of classical symmetry in plan and elevation as well as the device of the podium with vernacular elements and materials in homage to the anonymous builders of the Alpine region, the “peasant architect” whom Pane had extolled. Not by coincidence, a page of the Italian Rural Architecture catalogue draws attention to the “primitive” loggias of vernacular buildings in the Val Seriana near Bergamo. Although this was a weekend villa for an affluent client, Pagano and Levi-Montalcini chose understatement over pomp. Pagano took the same approach when in 1942, a little over a decade later and the same year that he abandoned the Fascist party, he completed his last building, a small weekend residence in the town of Viggiu` outside Milan. When it was published in *Domus*, a short text by Pagano accompanying plans and

photographs of the little wooden house explained how the design was motivated by the desire for something that was truly just “una cosa qualunque (an ordinary thing).” Consistent with his agenda for the exhibition six years earlier, Pagano claimed that its design and realization were modeled on “those houses without pretension that do not offend the landscape,” that is, anonymous vernacular buildings. He stressed his commitment to the legacy of the anonymous builder by means of reinterpreting and offering a new synthesis of the elements of vernacular architecture. Weary of the arbitrary nature of poetics (and virtuosity) in architecture (insofar as it recalled the “genius” XXX architect of centuries earlier), Pagano patently rejected the “lyricism” celebrated by Giuseppe Terragni during the late 1920s and 1930s and other protagonists of the *Quadrante* journal who combined rationalism with the poetic dimension of “Mediterraneità” (an ideal that brought artists, architects, and writers together around their common interest in the Mediterranean basin’s claim to being the center of the classical world) in favor of a straightforward approach that perhaps reflected his training as an architect in the engineering school at Turin. In fact, of Terragni’s Casa del Fascio, completed in 1933, he wrote:

“If we wish that Italian architecture would follow a path that allows for moral and aesthetic developments, and if we want to express our world, we must act, think, and be poetic, not with an aristocratic and eccentric sensitivity. We must desire to be anonymous, to purify ourselves from rhetorical attitudes. We must not be enamored of rationalizing speculation. We must avoid imprisoning ourselves in an academy of forms and words... I would like architects to work toward finding pride in modesty, the pride of great and anonymous heroism.”

Pagano’s design for the house at Viggiu` was based on simple components that could be assembled on site, anchored to a stone foundation.

It was constructed predominantly of local wood and sheltered by a single inclined large roof plane. To some extent, it reflected an approach that was already evident in his house at Rivara, filtered through the experience of intently studying rural architecture of the Italian countryside in preparation for the

exhibition and later tested in his design for the Bocconi University in Milan (1938–1942), in which he appropriated the loggia typical of alpine as well as classical buildings. In this last project at Viggiu`, with the exception of the rusticated podium-like base, Pagano eliminated all the classical references in plan and elevation. Needless to say, this “ordinary thing” was in many respects extraordinary, and its genesis owes much to the impetus of the 1936 Triennale exhibition.

Spontaneous Architecture Exhibition, Milan, 1951

With the collapse of the Fascist regime began a new chapter in the history of modern Italy, one that would result, thanks to the American Marshall Plan, in what has been referred to as the “Italian metamorphosis,” that is, the rapid transition that transformed Italy from a primarily agrarian to an industrialized society with the migration of masses of peasants from the countryside to cities. When the Second World War came to an end, a popular referendum held in 1946 gave Italians an opportunity to choose between monarchy and a republican government; they chose the latter. This political shift ushered in a new era for architecture and its audiences. The long-awaited opening of the Museo Nazionale di Arti e Tradizioni Popolari in Rome in 1947, where Loria’s collections displayed in 1911 were finally installed, coincided with the resurfacing of several loose strands of the long-standing debate over the status of the vernacular tradition in Italian modernist practice. The urgent need for housing stock to accommodate the newly urbanized working class provided the socioeconomic backdrop for the rekindling of intellectual debates about the vernacular in publications and exhibitions and within the domain of practice. Four distinct approaches surfaced to shape these debates, each having a different genesis and generating its own following and argumentation during the overlapping prewar, interwar, and postwar periods: “minor architecture,” neorealism,” “spontaneous architecture,” and “organicism.”

During the interwar years, the Fascist regime had championed the rhetoric of classicism for public buildings and to a lesser extent vernacular forms for

domestic architecture in “peripheral” seats of power comprising the New Towns of Italy and its colonies in Africa. As a way of redressing the housing crisis in the postwar period, architects were invited by the new republican government to design projects for the working class — former peasants who had left the countryside—under the auspices of the state-sponsored Fanfani Plan (also referred to as the Piano INA-Casa). This initiative was approved in 1949 and partially financed by the United States under the Marshall Plan.³⁸ The Tiburtino and Tuscolano housing estates in Rome (1950–1954) and in Cesate (1951–1953) respectively were developed and built under the auspices of this initiative. The utopian impulse of interwar architecture and urban planning eventually collapsed with the realization that such abstract and overambitious projects depended upon a kind of centralized authority that was no longer viable or possible to imagine after 1945. A growing enthusiasm for projects on a smaller scale was in large measure also a function of the economic realities of postwar Italy and restrictions imposed on foreign aid dedicated to rebuilding. Not only did the Fanfani Plan strategically promote artisanal and vernacular building approaches over more modern, industrialized technologies, but it also encouraged the development of small-scale, autonomous communities as “villages.”

It was in this political climate characterized by hope and caution that the Exhibition of Spontaneous Architecture was developed for the Milan Triennale in 1951 and hosted in Giovanni Muzio’s building. Curated by architects Enzo Cerutti, Giancarlo De Carlo, and Giuseppe Samona` working in conjunction with graphic designer Albe Steiner, the exhibition’s focus was the urban vernacular—architectural and urban forms characteristic in particular of the villages, towns, and cities of Italy, which were thought to pose a viable model for contemporary urbanism. Simultaneously, the Triennale presented a commemorative installation dedicated to architects who perished in the Second World War and who were identified with the rationalist tendency in Italian modernism: Giuseppe Pagano, Edoardo Persico, Giuseppe Terragni, and the critic Raffaello Giolli—all of whom were considered to be “martyrs” of the Fascist regime. This was staged to provide an opportunity for a younger generation of Italian architects trained

after the Second World War to engage in the legacy of Giuseppe Pagano's term "rural architecture," which in the aftermath of the war was charged with the negative associations of a disgraced political regime.

Franco Albini employed the term "architettura spontanea (spontaneous architecture)" as an alternative means of describing "certain examples of urban planning and of spontaneous architecture which developed in strict coherence with their cultural, economic, social, and natural environment and not through external influences which were in turn imposed upon them."

The term used by the curators of the exhibition generated a controversy. Critic Gillo Dorfles complained that it was problematic because all forms of artistic creation could be described as "spontaneous" to a certain extent. Dorfles also linked the renewed interest for spontaneous architecture to preservation concerns. Francesco Bono joined the chorus of critics with his essay "Architettura 'spontanea' o 'popolare'? ('Spontaneous' or 'Popular' Architecture?)." And, basing her argument on Pagano's text in the exhibition catalogue, Liliana Grassi dedicated an entire chapter of her 1960 compendium *Storia e cultura dei monumenti* (History and Culture of Monuments) to an encouragement to contemporary architects to take inspiration from the "empirical" origins and functional character of spontaneous architecture. Grassi (following Albini) read this as an example of contemporary architecture imposing "external influences" that were not in keeping with the sociocultural identity of the people for which it is designed:

"The risk with spontaneous architecture is that some designers might think it is possible to imitate spontaneity by simply repeating certain motifs of architecture they have already seen elsewhere, without worrying about the intrinsic value of such a transposition."

In organizing the exhibition, De Carlo and collaborators engaged voices that had emerged during the Fascist regime. They also expressed loyalty to the ideals of architects such as Giuseppe Pagano, who had abandoned Fascism after realizing that advocating change within the party ranks was futile. Such interest in experiments and people associated with Fascism reinforced the perception of

continuity between prewar and postwar debates on the subject of the vernacular. Roberto Pane, for example, was invited to contribute his photographs of “spontaneous” architecture of southern Italy.

Art historian Renata Egle Trincanato was invited to contribute photographs from her 1948 book entitled *Venezia minore* (Minor Venice), which revived Giovannoni’s term but did not subscribe to its nationalist thrust even though she carried out the research for the book during the height of the Fascist Regime.⁴⁶ The concept of “minor architecture” as it was recast in the 1950s abandoned notions of hierarchy (Minor vs. major) in favor of associations with understated yet thoughtful design. Pane’s 1948 essay “Literature and Architecture” lent new currency to the concept by redressing the differences between prose and poetry already delineated by Benedetto Croce in his seminal essay of 1929.

Whereas Trincanato’s study refocused attention on “minor architecture” as an alternative to architect-designed buildings, Bruno Zevi and his journal *Metron* fueled a debate about “organic” architecture in Italy, at times in agreement with and at other times in contradiction to the ongoing debate on the vernacular, which also touched “neorealism.” Both these trends favored the experiential dimension over the perceived formalism of classicism. The constitution of Bruno Zevi’s APAO (Association for Organic Architecture) specifically targeted classically-inspired architecture by stating: “Organic architecture is thus the antithesis of the monumental architecture that serves myths of state. It opposes the major and minor axes of contemporary neoclassicism—the vulgar neoclassicism of arches and columns, and the false neoclassicism that is born from the pseudomodern forms of contemporary monumental architecture.”

If organicism sought to eliminate a priori design solutions, neorealism looked to activate the poetics of everyday environments. As the debate over spontaneous architecture surfaced among Milanese architects coming to terms with their own involvement with the Fascist Regime, there was a parallel movement in Rome. In his journal *Metron* and the Association for Organic Architecture founded in 1944, Bruno Zevi and other proponents of organic architecture spearheaded a movement in opposition to rationalism. There were several causes. Rationalist

modernism in Italy never shed its associations with the “many souls” of classicism. In reaction to the realization of monumental and classicizing complexes like EUR, Città Universitaria, and the Foro Mussolini (renamed Foro Italico), postwar architects in Rome began introducing into their practice less rhetorical references drawn from vernacular forms. Architects based in Milan were less emphatic about disavowing rationalism.

Despite obvious overlaps between the impact of extant rural and hill-town vernacular architecture and urbanism on neorealist architecture and the phenomenon of organic architecture, Zevi was often ambivalent about endorsing the vernacular, perhaps because of its vulnerability to ideological manipulation. Even though Frank Lloyd Wright was his guiding light, Zevi’s own version of organic architecture was based more on a social and cultural agenda than a linguistic (or, *stricto sensu*, folkloric) one. Quite revealing of his idiosyncratic interpretation of “organic architecture” is the fact that when, in an interview conducted by Emanuele Carreri a couple years before his death, Zevi was asked which Italian architecture of the 1920s and 1930s best exemplified the principles of organic architecture, he cited the Villa Oro (1934–1936) by Viennese-born Bernard Rudofsky and Luigi Cosenza on the outskirts of Naples, thus leaving the reader to understand Zevi’s organicism as a method more than a visual language.

The Tiburtino and Tuscolano “villages” in Rome (1950–1954) by Mario Ridolfi, Ludovico Quaroni, and Adalberto Libera were the most emblematic experiments with the vernacular in postwar Italian architecture in Italy’s capital: the variety of building types employed (row houses, patio houses, multistory towers, etc.) give these neighborhoods variety and avoid the image of unrelenting “projects.” Like Pagano, Zevi recognized the merits of experiments involving modernized rural architectural typologies, such as the patio house and the *casa colonica*. In particular, Zevi championed Adalberto Libera’s patio houses at Tuscolano, which he likened to a “skyscraper lying down,” and Pier Luigi Giordani’s designs. Having published a number of essays of Giordani’s essays on the built environment of farming communities in the Po River Valley in *L’architettura – cronache e storia* in 1956,⁵⁹ Zevi hailed Giordani’s book *I Contadini e*

l'urbanistica (Peasants and Urban Planning) of 1958 for its contribution to the understanding of "spontaneous planning" as it was practiced by peasants in rural Italy—just as Pane had drawn attention to the "peasant architect" much earlier. It is significant that Giordani oscillated between research, writing, and practice, designing a number of rural hamlets or towns in the region in this same time period.

Zevi's interest in organicism, which he equated with democracy in America, was linked to his conviction that classicism was fundamentally authoritarian. This conviction was filtered through his interest in the work of Frank Lloyd Wright. During those years, interest in nonclassical forms of planning surfaced via a new interest in the "organic" growth typical of garden cities.

The Italian translation of Ebenezer Howard's *Garden Cities of To-Morrow* published in 1962 included Giordani's in-depth analysis and overview of Italian experiments with the English urban planning concepts, drawing new attention to the movement.

Rather than taking up the picturesque cues of garden cities, Zevi's interest in the simple, functional character of rural architecture as opposed to "rustic style" had informed his collaboration with Mario Ridolfi and Pier Luigi Nervi (as well as Mario Fiorentino and Adalberto Libera) on the publication of *Il Manuale dell'architetto* (1946), produced under the aegis of the Consiglio Nazionale della Ricerca and the Information Office of the United States. Much influenced by American do-it-yourself empiricism, the *Manuale* sought to merge the straightforwardness of the venerable *Architectural Graphic Standards* (first published in 1932) with Italian "know-how" and was intended for amateur builders and artisans engaged in the production of housing after the war when architects could not meet the overwhelming demands of the time.

The *Manuale* was perhaps one of the most interesting postwar experiments with respect to building per se, insofar as the authors demonstrated the degree to which extant vernacular forms could still be employed as models for affordable contemporary designers in semiurban and rural contexts. Especially significant is the chapter dedicated to "costruzioni rurali (rural buildings)," presenting a brief

history as well as an explanation of adaptive uses.

In Milan where his architecture practice was based, the Exhibition of Spontaneous Architecture was an auspicious start for the young De Carlo even though some critics wished he had produced a catalogue to accompany it.⁶⁵ De Carlo's early introduction to vernacular models as a "student" of Pagano just months before Pagano was murdered in a Nazi concentration camp, having previously been tortured in Milan, allowed him to steer clear of classical architecture. De Carlo's rediscovery of extant "rural architecture" and "minor architecture" of the medieval hill towns of central and southern Italy was paralleled by his interest in the reformist dimension of William Morris's Arts and Crafts Movement.

Following the completion of De Carlo's housing estate in Matera (Spine Bianche, 1956–1957), in which his own brand of neorealism with an exposed structure, pitched roof, and simple massing was adumbrated, the University of Urbino engaged him as consulting architect. It was there, over a period of several decades, that De Carlo undertook the challenge of integrating contemporary architecture, vernacular forms, and ancient landscapes. To establish a rationale for this work, De Carlo and graphic designer Albe Steiner brought out Urbino: The History of a City and Plans for its Development (Figure 18). The crescent-shaped layout of the two-story housing complex for university employees (1955), executed in brick and terracotta tile, followed by the terraced Collegio del Colle (1965), were the first projects he realized under the direction of Catholic intellectual and rector of the university, Carlo Bo.⁶⁸ By the time De Carlo completed his student housing in 1983, his work covered the summit of an entire hill thus creating an acropolis for students.

During the years De Carlo spent building on the premises of his Spontaneous Architecture Exhibition, many architects and urbanists were turning to the study of "minor urbanism." Unlike Renaissance urban projects and architecture, the domestic architectural fabric of the hill towns was rarely "designed" by professional architects and was instead produced by local guilds. Because of its irregular topography, the hill town not only generated but also absorbed

“spontaneous” forms adapted to the site and integrated into the extant urban fabric. With his student housing for Urbino, for example, De Carlo took cues from the site and laid out groupings or “villages” of dormitory buildings that are connected to each other by external paths. His scheme simultaneously embraces and facilitates communal student life by collaborating with the topographical complexity of the site and cues from the urban model of the hill town. Perhaps no other Italian university designed during the twentieth century received such endorsement from the international community. What made it more interesting especially for non-Italian architects was the fact that it was designed with great sensitivity to a historically charged site. De Carlo alternated between using brick and reinforced concrete to evoke the rugged qualities of the hill town and applied terracing strategies to ensure that the structures would not stick out like the proverbial sore thumb. His interventions always sit gracefully in the site, recalling Wright’s famous saying “I knew well that no house should ever be on a hill or on anything. It should be of the hill. Belonging to it.” Responding to a movement to restore the historic centers and housing stock of the hill towns, especially after the end of the Second World War, a series of publications by architects and preservationist including Edoardo Detti and others established their importance as “minor centers” in relation to Florence and Rome and in effect strengthened Italy’s cultural legacy.

The overlap between architecture and urbanism in the historic hill towns allowed architects to reignite an operative interest in urbanism and the historic fabric.

De Carlo’s 1951 exhibition and subsequent designs based on its premises were especially important if one considers his role in the moribund CIAM and his contribution to Team X, as one of the “rebels” who formed the group. Architects like Aldo Van Eyck and Peter Smithson eventually joined De Carlo in 1974 as participants in the International Laboratory of Architecture & Urban Design (ILAUD), which conceived and functioned as an in situ design charette, in which students and practicing architects would meet annually to work collectively on thematic projects. De Carlo was the only living Italian architect who continued to respect the legacy of Pagano to his death and who upheld and celebrated the virtues of the anonymous builder as a source of moral integrity. In 1992, in an

unprecedented move, De Carlo installed a commemorative plaque honoring Astolfo Sartori, the master mason who worked on the colleges for Urbino, which in effect honors all the workers who served under him: "Astolfo Sartori. Master builder has participated in the building of these university colleges from 1965 to 1987." This plaque serves as a concrete reminder of Pagano's pioneering celebration of the vernacular tradition. It also attests to De Carlo's commitment to "collaborative architecture"—something that is in no small part due to his appreciation of the vernacular tradition and his close engagement with end users for his student housing in Urbino and the Matteotti housing estate for workers in the industrial town of Terni.

Rather than simply appropriating vernacular models, De Carlo actually brought "people" into the design process.

During the years in which architects like De Carlo were engaged with thoughtful interventions, designing new buildings to be inserted into fragile historic urban fabric such as that of Urbino, the Italian hinterland surrounding the historic cities was being radically transformed into "citta` diffusa" (conurbation); much of this haphazard and rapid transformation of the rural areas surrounding historic cities was the result of the work of the "geometra" or surveyor instead of the architect or planner. Empowered by the legislation of 1929 that allowed them to erect "small and modest" buildings without supervision by professionally trained architects, such operators seized upon the ambiguity of their mandate to fulfill the demands of a growing middle class who gained new status and wealth with the unfolding of the "Italian metamorphosis." Rather than look to the rural vernacular as a source of inspiration, they were more interested in reproducing models reflecting the wealth and prosperity to which these middleclass clients aspired, albeit "in small": scaled-down villas or the suburban American dream house. Hence the ubiquitous "villino" or "villetta" invoked yet another layer of meaning inherent in the term vernacular during this period.

During the years of rapid growth spurred by the "Italian miracle of the 1950s, spontaneous" urbanism (in Italian, "abusivismo" or abusivism)—a term that came to mean building without permits, informal sprawl that occurred off the

grid, so to speak—also transformed Italian cities and suburbs at large. The ethical impetus underlying Pagano's small wooden house or De Carlo's contextual approach to urbanism was ill-suited to the large-scale transformation of Italian cities as they struggled to fight corruption (abusivism) and redefine themselves to meet contemporary demands of city dwellers. The "frugal beauty" of the vernacular so valorized by "progressive" Italian architects from the 1930s to the 1950s as an antidote to bombastic classicism and as a means with which to achieve a regionalist modernism declined into the shabbiness and indifference of suburban developments at the periphery of fast-growing cities.

Perhaps the source of Pagano and De Carlo's powerful contribution lies in the dynamic interplay between theory and practice, the role they both played, not only as conceptualizers of their landmark exhibitions but also as practitioners. With respect to the tradition of polarization between scholarly and architect-curated exhibitions, between theory and history, and between scholarly publications and professional journals, the space of Pagano and De Carlo's critical curatorial practice bears testimony to the power of "archival" research and dissemination through public exhibitions and publications.

Author identification

Michelangelo Sabatino (www.michelangelosabatino.com), (Ph.D.) was trained as an architect and architectural historian in Venice, Italy and Toronto. His work explores the intersection of intellectual history and material culture in the practices of modern to contemporary architecture, design, and urbanism. After completing a post-doctoral fellowship at Harvard University's Department of the History of Art and Architecture and teaching at Yale University's School of Architecture he was appointed at the Gerald D. Hines College of Architecture where he now serves as Associate Professor. His sole-authored book entitled *Pride in Modesty: Modernist Architecture and the Vernacular Tradition in Italy* (2010) has won four national awards including the Alice Davis Hitchcock Book Award from the Society of Architectural Historians, Best Book from the American Association of Italian Studies, Modern Language Association and the Southeast Chapter of the Society of Architectural Historians. Sabatino's co-edited book *Modern Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities* (2010) has received a Commendation from the UIA's International Committee of Architectural Critics. Sabatino has received fellowships and grants from the Canada Council, Graham Foundation for Advanced Studies in Fine Arts, Georgia O'Keeffe Research Museum, the Houston Architecture Foundation, the Japan Foundation, the Wolfsonian-FIU, and the Social Sciences and Humanities Research Council of Canada. He has recently been appointed Visiting Scholar at the Canadian Centre for Architecture to

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BUILDING WITH THE CLIMATE IN POPULAR ARCHITECTURE IN PORTUGAL:

Critical reading of the "Survey on Regional Portuguese Architecture"

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Abstract

The paper deals with the critical reading of the book "Popular Architecture in Portugal" (Survey) from the thematic of the PhD thesis that is being held with the working title: "Tradition and Innovation in Construction in Portugal: A Study of Portuguese architecture of the building systems in the 60's from the "Survey on Regional Architecture" to the Revolution of 1974".

The analysis of this Paper focuses on the theme regarding the influence of the climate on popular architecture taking into account the existing premises environmentally responsible for the design, for strategies viewing adaptation to climate and for passive measures leading to the energy conservation. The goal of the work thus aims at identifying strategies on climate adaptation of popular architecture and verifying how the environmental issue was outlined in the Survey, once the influence of climate on regional architecture appeared in methodological objectives initially set.

In the first outcome of the Paper, one has verified that the popular architecture represented in the Survey was adapted to the weather conditions, looking forward to be as efficient as possible. And that due to this climate adaptation, the popular architecture produced, for each one of the regions, types of human and housing settlements according to each place. Secondly, the question with regard to the climate influence on the popular architecture has not been properly addressed by the six teams in the Survey, and that there have been discrepancies in the deep analysis of such matter. Nevertheless, it has been allowed to analyse and confirm in the issues of the publication of the Survey some of the principles regarded as efficient from the energetic standpoint nowadays.

Keywords: Popular Architecture in Portugal, Survey on Regional Portuguese Architecture, Vernacular Architecture, Energy efficiency, Sustainability.

Introduction

The book *"Popular Architecture in Portugal"*, published in 1961 by the Syndicate of Architects, with the initial name of *"Survey on Regional Portuguese Architecture"* (Survey) carried on a survey of popular architecture in the mainland of Portugal along 1955-1961.

Ana Tostões in the *"Verdes Anos"*¹ describes the discipline and the spirit that launched the Survey, calling back to the fact that one of the original objectives of this Survey was to acknowledge how popular architecture solved *"the climate problems, the available materials, the economy and living conditions of each region"*, and to what extent such solutions *"were able to maintain themselves alive and functionally, economically and spiritually adequate"* (Tostões, 1997, p. 160).

On the other hand, in the João Leal *"Portuguese Ethnographies"*, the history of the Survey is described, stressing that under the methodological point of view what is obvious in the final published text are *"the different ways of looking at popular architecture in each of the six studied areas"*, rather than making a structured research according to a *"common framework of study"* or an *"integrated analysis and comparative data within the scope of the different chapters of the survey"* (Leal, 2000, p. 170 – 173).

The introductory Survey text authored by Keil do Amaral - main encourager and coordinator of the research (Tostões, p. 159) - confirms the two aforementioned aspects. On the one hand, the main methodological objectives are clarified. The Surveys team's allocated within six geographical areas, were entitled to carry out the previous work regarding the *"definitions of guidelines to ensure the collection of overall study units"* as follows: *"territory occupation, urban structure, materials and current proceedings for building, influence of the climate, of the economy, of the social organization and of the development factors viewing buildings and their settings."* (Arquitectura Popular ..., vol.1, p. XXVI). On the other hand, despite having been defined standards viewing

photos, drawings and written notes, it was stressed that each group "*should attend its own area without following total strictness of common order*". Such measure is justified in order "*to avoid the monotony of display*" (id., p. XV).

However, one may stress that, although there is a degree of freedom in the production of findings – a state wished by Keil (Leal, 2000, p.172) –, it is clear that the book which was published has the same graphic layout, number of pages and images for each one of the Zones. One may still stand out that the overall teams follow a narrative structure based on a sequential presentation order: introduction to each region, according to the historic, geographic, climatic, economic and social viewpoint, classification regarding rural and urban settlements, the analysis of constructive and architectonic typologies and, still, the presentation of the latter with erudite background. In the overall zone, maps of regional scope are also presented, such as those referring to: relief, hydrography, geology, types of agricultural cultures, population allocation, settlement types and architectonic typologies. The differences will be within the approach at disciplinary level, within the different ways of responding to the "*guidelines*", namely to those which will be referred to in this paper on the existing relationship regarding Popular Architecture and Climate.

Methodological Objectives of the Paper

This paper focuses the theme regarding "*weather influence*" on popular architecture, or, to summarize, Climate influence, taking into account the assumptions of the present "*bioclimatic design*" (Gonçalves & Graça, 2004), within the adaptation strategies to the climate and energy preservation measures, namely:

a) the analysis of the Place – located area, microclimates, landscape and implantation selection;

¹ Verdes Anos (Green Years) is the name of a popular movie of Paulo Rocha, made in 1963 and was part of the well-known Portuguese "New Cinema".

b) the analysis of architecture – functional allocation or distribution, passive strategies liable to heating, cooling, lighting, ventilation and natural methods for heating and cooling.

Survey Analysis

The analysis of the Survey to be carried out will fully examine the written document in order to acknowledge how, from the methodological viewpoint, the several teams organised the survey on the influence of the climate on popular architecture. Once the information obtained from such analysis it will be methodically arranged so to ascertain which were the climate strategies highlighted in the surveys pertaining to each region. Finally, the possible synthesis will be carried out according to the findings in this analysis in order to identify which and how were the real strategies of climate adaptation to the regional architecture, based on the aforementioned “*bioclimatic*” premises.

In general, the presentation methods drawn by the several teams were different concerning the specific focussing on certain various guidelines: the North one – Minho and Trás-os-Montes – had a “*more anthropological and less functionalist vision*” towards a more human approach to architecture (Tostões, 1997, p.162). The team from Beiras, coordinated by Keil himself, tried to objectively respond to the aforementioned guidelines in the Introduction. The rest of the other teams – Estremadura, Alentejo and Algarve – besides the issues within the general scope, stressed the survey on public spaces due to the climatic conditions favourable to the existing of semi-external transition spaces (Almeida, 1964).

Zone 1 – Minho

Within this Zone, the analysis of the relationship between Climate and Architecture is carried out with very few references. One may stand out a

passage concerning a farm house existing in a "*disseminated settlement*" clearly showing the awareness of the Minho team² with regard to this matter:

Free from the usual constraints of the villages, they seek the ideal implant that the master mason's experience and his rustic taste altogether with the farmer's know how do advise to be more favourable.//They protect themselves from the Southwest rain and turn to the sun their facades more alive and opened, leaving to the public route the sheltered and covered side or the house front damaged by storms, and where outstands the very tiny windows of the bedrooms and the wide access gate leading to the yard. (Arquitectura Popular..., 2004, vol. 1, Zona 1, p. 38-43)

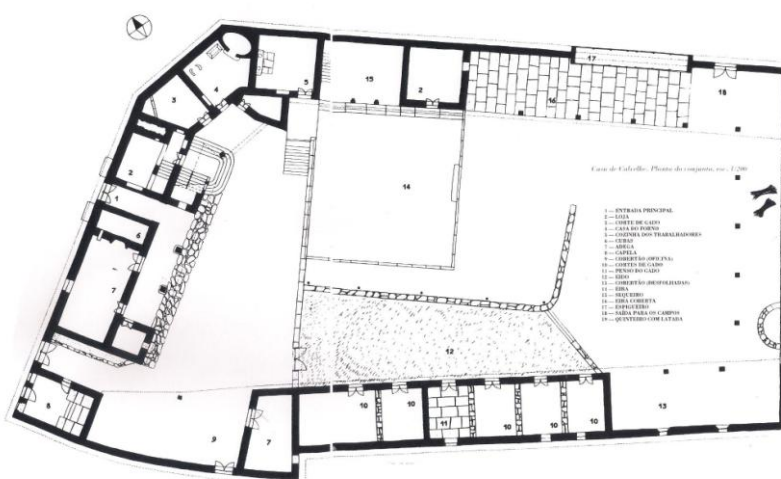


Figure 1. Calvelhe House, Barcelos, Minho. Example of a farm house with a courtyard where the dwellings, the barn and the other working spaces are facing South.

To validate such analysis there was undoubtedly a gap: the geographical north in other examples was not mentioned. Other references relate to climatic features of the buildings in the highlands with regard to their peculiar design – small openings, more narrow balconies and "*retracted*" eaves in Lindoso – in order to stand against the "*violent weather*" (Zone 1, p. 71) or the eaves sticking out

² Zone 1 team– Fernando Távora, Rui Pimentel and António Menéres.

from the roofs and protecting the households from the rain in Guimarães (*id.*, p. 85). It is also important to stand out the fact that only two balconies were fit up with glass in the overall area of the Minho team.

Zone 2 –Trás-os-Montes e Alto Douro

In the Trás-os-Montes team³, the analysis concerning the relationship between Climate and Architecture has very few references. The indication of the geographical North is limited to few drawings. In the text, they are although aware that the orientation of the buildings is important, but very little or even nothing is said on that subject. It is written that in the village so called Montes the houses “*lean against each other outlined along paths on the slope facing south*”, without any further comment with regard to this (Zone 2, p. 122). Even when the balconies are referred to, the building feature is stressed and the climatic one is forgotten (*id.*, p. 139). On the other hand, it is referred that, from the observation of the images, some strategies for climate adaptation may be confirmed: on the thatched roofs of Pitões das Júnias where man takes advantage of this insulating heating material (*id.*, p.174-175), or on the “Forno do Povo”⁴ in the village so called Santo André, where the building of this community equipment has been based on a proper sun course orientation and on the protection against the North winds (*id.*, p.166-167).

Zone 3 – Beiras: Beira Alta, Beira Baixa and Beira Litoral

The analysis of the relationship between Climate and Architecture has a proper chapter in this area and the geographic north is mentioned in almost every drawing in this Zone (Zone 3, p. 288-233)⁵. In the introduction it is stressed that homes are “*dark, uncomfortable and distressing, with primitive and scarce furniture*” (*id.*, p. 244). Here, comfort is directly related to the fireplace: “*The*

³ Zone 2 team– Octávio Lixa Felgueiras, Arnaldo Araújo and Carlos Carvalho Dias.

⁴ Forno do Povo means the Oven of the People.

⁵ Zone 3 team– Francisco Keil do Amaral, José Huertas Lobo and João José Malato.

fireplace is the fulcrum of the dwelling" (*id.*, p. 244). It is still mentioned that the rural man living in this area acknowledges that architecture may take advantage of the climatic conditions. But, without realizing and making the best of it all, he also uses casually and according to tradition certain strategies adapted to the climate conditions such as: functional organization on the houses, which directs to the South the main spaces, and towards North the supplementary ones (stables, barns and so on) as a thermal lid – see the examples of Malpartida and Paúl (*id.*, p. 249-251) -, as well as porches and sheltering the entrance doors. Following the Keil – *"for all intents, purposes and acknowledgent the Sun, just as it is: friendly and generous"* - that warms and that in the Beiras region is often shining even in the Winter months (*id.* p.289). And it is in the well orientated balconies that the people's wisdom is revealed with regard to this free and unfailing energy source. The text goes so far as to say and consider that such factor in climate adaptation is *"primordial"* and prevalent so that the balconies should be considered one of the architectural elements more characteristic of the popular architecture in the Beiras region. The preferred orientation is that concerning south/west more than south/east. They are never ever facing the North. When the balconies are glazed, heat increases inside, the wind does not enter and the houses become more warm and cosy.



Figure 2. Place of Casteirão, Meda, Guarda. The glazed balconies and the stables on the ground floor of the houses in the Beiras region.

There are other strategies aiming at the maintenance of heating: localization of stables on the ground floor of the dwellings, thatch roofs and hay beddings stocked under the roofs, and the aforementioned fireplaces in the centre of the family living unit for cooking, lighting and heating.

Zone 4 – Estremadura

The analysis of the relationship between Climate and Architecture, thus, is not clarified in the text. Within this geographical Zone⁶, the concern with the environmental comfort emerges, now, related to the outdoor spaces. This observation is due to situations viewing “*unplanned urban arrangements*”. In Óbidos, in squares and small urban spaces, people prefer comfortable areas with shade in Summer and to hold community meetings in the part which faces the

Winter sun. In Cabo Espichel, *"a rare example of a designed settlement"*, one may add to the morphological values described in the text, the values of the climate adaptation. As a matter of fact, following the different extensions of the two wings of the "pilgrims houses", considering that the north wing is longer than the south one, respectively from 63 arcade modules to 47 ones, it is said that *"thus, when going to the Sanctuary, coming down the road from Sesimbra, one perceives the enclosure without having yet reached the square"*. One juxtaposes the idea that the differences in the two wings may be also due to a greater sun exposure, houses and arcades facing south, and, essentially, to protect the square from the Northwest winds (Arquitectura Popular..., 2004, vol.2, Zone 4: 38-41).

On the other hand, the text is going to be very clear with regard to climate values and their influence in the architecture of the region, highlighting to the existence of porches and balconies in spaces contiguous to the houses, due to mild Winters and hot Summers. These spaces of climate transition, between "torrid" exteriors and "cool" interiors are, in general, facing south, offering permanent outside spaces protected from the northeast wind (*id.*, p. 46-47).

In another record, after checking the images, one verifies that the importance of a good sun orientation towards South is no longer a steady practice within this region. Here, the climate adjustment is made, generally, by means of walls with high thermal inertia, painted in white, in order to reflect the sun radiation in Summer, and of little windows to control heat losses in Winter and to avoid the overheating in Summer. There was no preference with regard to the sun orientation of the houses, so doors and windows were laid out according to that fact. Openings facing North were avoided and windows were drawn on opposite façades with a view to set cross ventilation.

⁶ Zone 4 team– Nuno Teotónio Pereira, António Pinto Freitas and Francisco Silva Dias.



Figure 3. Nossa Senhora do Cabo, Cabo Espichel, Sesimbra. Different wings on the yard sides emerging from architectural composition and climate protection against the prevailing winds. On the left the south wing and on the right the north one.

Zone 5 – Alentejo

The analysis of the relationship between Climate and Architecture carried out by the Alentejo team⁷ has not been clarified in the text. Also here there is no geographical north. Nevertheless, it may be stressed the suggestion of the “climate diagrams” on temperature and raining that enables to have a more reliable framework of the zone. Within this geographical zone the concern with the environmental comfort emerges now related to the protection of the buildings, to the exterior environmental conditions stressing the hot Summer season. Although the text identifies a synthesis when it acknowledges that the climate directly affects the architecture of the houses in Alentejo, referring the *“use of lime and the absence of widened openings to the exterior”*, how and with

⁷ Zone 5 team– Frederico George, António Azevedo Gomes and Alfredo Mata Antunes.

what findings that the climate affects the buildings in the region has not been ever explicitly referred to (Zone 5, p.126). Besides this reference, one more example have been mentioned: the use of canes on the inside roof lining which increases the thermal insulation (*id.*, p. 173).



Figure 4. Chimneys in Vimieiro, Arraiolos, Évora. The hermetic houses with few openings and the white walls as strategies liable to climate adaptation and thermal comfort.

Another evidence explored in the text is the chimney with great formal expression. Much more than serving for smoke ventilation, it is also the place where the family gathers to produce the sausages from their pig breeding. There are two more chimney topics: the first one is of cultural roots, related to the family meeting when gathered around the fire under the big chimney span, and the second, connected with the climate, when the chimney enables a good fire in Winter, compensating, almost nearly or if not fully, the absence of sun warmth due to the lack of openings, especially from the South point.

Of opposite sign, with regard to cooling, it is stressed that the text mentions “the evaporative cooling” through humidification by means of “*sprinkling or wetting*” the inner ground pavements, covered with very porous ceramic tiles (*id.*, p.160). It is still pointed out, as stated, the solutions for the thermal transition through “trellised vines”. On the other hand, one may still acknowledge the existing of high ceilings which enable the stratification of the indoor temperatures to avoid their increase at the low level of the house (Zone 5:192).

Zone 6 – Algarve

The analysis viewing the relationship between Climate and Architecture of the Algarve Zone has a proper chapter⁸. Although the geographical north has been seldom indicated in the drawings, there was a concern to refer it in the text whenever necessary, and the drawings on the setting of the different settlements were equally orientated in the same direction⁹. Like the Alentejo area, it is still stressed that this Zone shows clearly the maps on the Rainy Season and on the Average Air Temperature.

In the Algarve Region, perhaps more than in the others, the climate factor is, according to certain aspects, directly related to places and to economic activities. On the Burgau Beach, in Vila do Bispo, it is mentioned the fact that this settlement is placed on the flanks of the east hill, protecting itself from the prevailing north and northwest winds. The dwellings have a courtyard with functions related to fishing or seafaring (fishing gear and clothes) directed to the sea so as to observe the arrival and departure of boats. Towards this end, they follow the curves of the place level “*according more to the typography than to the sun exposure*”. It is also mentioned that the houses recently built when compared with the ancient Burgau nucleus, have their courtyards always facing south, independently from the direction of the streets house entrance. (*id.*, p. 255).

⁸ Zone 6 team– Artur Pires de Lima, Celestino de Castro and Fernando Torres.

⁹ The geographical north was put on direction of the top page.

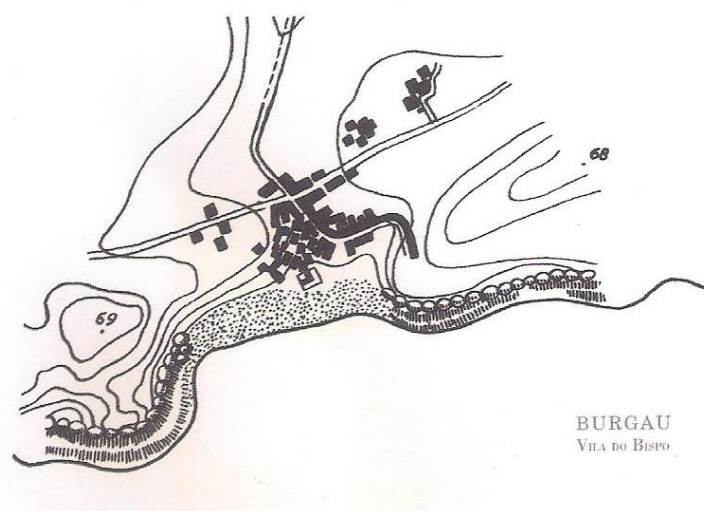


Figure 5. Burgau, Vila do Bispo, Algarve. Topographic and climate adaptation of a fisher settlement that follows the curves of the slope facing east (sun rising) and is protected from the prevailing northwest winds.

But it is due to the particular sun exposure of Algarve and to its Mediterranean climate that the team was able to find some specificity at regional level. The importance of the good orientation towards South is brought up again to the present. In the households, the windows are opened facing the sun. And, here, the text is clear and describes the awareness of the popular builders with regard to the thermal phenomena related to comfort: *"If, on the one hand, acknowledgements and profits from the Sun benefits during the cold Winter days, they does not forget, on the other hand, the hot Summer days"* (*id.*, p. 282).

The examples begin to appear - those fully illustrated with the elements characterizing the environment with regard to the Summer conditions, those of inner strategies already referred to in the Alentejo zone (high thermal mass, walls and high ceilings), those of the protection of the outside - balconies, courtyards (almost always facing south), "trellised vines", and those of the expressive wooden "lattice-work" enabling the simultaneity of intimacy, sun protection and ventilation (*id.*, p. 358). And, for the most part in the Algarve South coast, the houses also take advantage of the favourable winds blowing

from land, for a cross-ventilation of air inside the dwellings in the evening. In a short terms one can say, like the Algarve team, that the entire elements put altogether set "*the most perfect conditions of living and using*" (*id.*, p. 282).

Conclusion: climate synthesis

The first conclusion confirms that the concern with the issue regarding the "weather influence" on popular architecture has not been properly addressed by the overall teams, and did not even start from a common "*study grid*", as referred to by João Leal (2000). The fact is that the teams from the Beiras and Algarve were the only ones who have made an operative approach to the climate issue, enabling, nowadays, to analyse and confirm some of the principals regarded as efficient ones according to "bioclimatic" terms.

The second outcome recognizes that the regional architecture made known in the Survey has been able to adapt itself to the climate conditions, taking advantage of the more favourable sun orientation and of the implantation of buildings. It equally assumed strategies responsible for heat conservation and protection, and for the use of regional materials with thermal functions.

An outline of the main characteristics or "climate summaries" are pointed out as follows:

- In the North of Portugal (Minho, Trás-os-Montes and Beiras), seeking the best solar orientation facing South, defending the northern quadrant and building well orientated balconies, if possible glazed ones to maintain the heat and to protect the dwelling from the prevailing winds;
- In the Centre (Estremadura, Ribatejo and Alentejo Litoral) caring to protect against prevailing winds, especially those blowing along the sea coast, and setting thermal transition spaces within porches well directed to the South;
- In Alentejo, seeking the rising and setting direction of the sun, avoiding Southern and Western openings on the walls of high thermal mass, painting

them in white to reflect the solar radiation, building houses as a great hermetic whole to protect them from the Summer Sun;

- In Algarve, preferring the Southern quadrant for their houses and creating heat transition spaces – courtyards, porches, “trellised vines”, etc.

In general, except Algarve, there is a control of the amount and of the dimension of openings to the outside, in order to prevent heat changes between the inside and the outside – the input of cold weather in Winter and of hot temperature in Summer and, on the other way round, the preservation and maintenance of the inner heat in Winter and of the cool temperature in Summer. One recalls that in the popular architecture of the poorest populations there were no glazed windows and so such openings were closed by means of wooden shutters.

Future developments

Within future studies focussed on the theme of this paper, the influence of the popular architecture raised up in the Survey will be analysed, without excluding from it the architects who have worked and participated in its development and, also, the entire architectonic procedures carried on between the commencement of the Survey (1955) till the 1974 Portuguese revolution.

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References

- Almeida, P. (1963-1964). Ensaio sobre o espaço em Arquitectura (1, 2 e 3), *Arquitectura*, 3.^a série, (79, 80, 81).
- Gonçalves, H. , Graça, J. (2004). *Conceitos Bioclimáticos para os edifícios em Portugal*. Lisboa: Direcção Geral de Geologia e Energia.
- Leal, João – (2000). *Etnografias Portuguesas (1870-1970): Cultura Popular e Identidade Nacional*. Lisboa: Publicações Dom Quixote.
- Keil, A. et al. (1961). *Arquitectura Popular em Portugal*. (2 Vol. 4th ed.), Lisboa: Sindicato Nacional dos Arquitectos, 2004.
- Keil, A (1947). Uma iniciativa necessária. *Arquitectura: Revista de Arte e Construção*, 2.^a série, (14), 12-13.
- Tostões, A. (1997). *Os verdes Anos na Arquitectura Portuguesa dos Anos 50*. Porto: FAUP Publicações.

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A MODERN PERSPECTIVE ON VERNACULAR CULTURE. LUCIO COSTA'S STRATEGIES IN PARQUE GUINLE RESIDENTIAL COMPLEX, RIO DE JANEIRO (1948-1954)

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Abstract

The understanding of the relationship between avant-garde and vernacular architecture, have been approached contemporarily by authors who recognize the conflicts and controversies inherent to the subject. This article tries to overcome the ideologically biased opposing vernacular and erudite, considering the dialectic relation between past and present. It also offers a Brazilian perspective, represented by Modernist architect Lucio Costa. The same architect who conceived Brasília, the country's iconic capital city, has also reflected on the relationship between vernacular and modern architecture, materializing it in Parque Guinle residential complex, built in Rio de Janeiro between 1948-1954. In this project, Costa seemed to have consistently privileged vernacular references, a representative strategy to enhance the architectural quality and construction permanence of Modern buildings. The aim of this essay is to re-read the impact of the vernacular in Brazilian Modern architecture considering Lucio Costa architectural practice and discourse.

Keywords: Vernacular architecture, Brazilian modernity, modern architecture

The Colonial baroque tradition since the 1940's has been nationally and internationally accepted as an essential factor of modern Brazilian architecture singularity. The baroque as an element of a typical Brazilian root was super valued in the North American exhibition Brazil Builds (1943), as well as in its worldwide known catalogue, where it was approached as a politically correct statement of a national identity that reacted to globalization. The exhibition, held at MoMA in New York has had an extraordinary success, and circulated

through United States, Mexico and Canada. During its season in London, subsidized a special issue of the Architectural Review journal in 1944.

One of the consequences of both the exhibition and the catalogue outstanding reception was that the recognition of Brazilian modern architecture originality during the 1940's was in a great measure intermediated by the international critique (see: Comas, 2005). The international authors had recurred to powerful Brazilian stereotypes, such as tropicality, sensuality, exoticism, that were integrated to the erudite baroque art, establishing the most "logical and adequate" cultural connection, if not the only one possible, to explain the origin of such a singular expression. It would be convenient to wonder if a certain pejorative intention in attributing a baroque affiliation to Brazilian modern architecture expressed in an interview with the Swiss critic Max Bill in 1953 to the Brazilian magazine *Manchete* – has already been overcome in the architect Lucio Costa reply, who recognized a '*baroquism of legitimate and pure native affiliation*', characterized by '*grace and invention*' (Costa, 1953).

This article discusses some notions of vernacular architecture such as they had appeared in various architects discourses through Europe, from around the 1930's on. It approximates the concepts of vernacular architecture developed in Portugal, that values the 'roots' as an idea that underpins the concept of a 'people's character', to that concepts which have inspired Lucio Costa in his architectural studies and projects. Being a major Brazilian intellectual, the architect's thought reveals a deep cultural and social sense in the use of the vernacular architecture elements, either conceptually, in his discourse, as for instance in the article *Razões da Nova Arquitetura* (Reasons for the New Architecture, 1933-35), or materially, in his architectural works, as exemplified by Parque Guinle residential complex (1948-54) in Rio de Janeiro. The assumption that modern Brazilian architecture, especially that produced around the 1950's (which includes Brasília and several Lucio Costa's and Oscar Niemeyer's works) has worldwide deserved the attribution of being singular, underlies the argument presented here.

Contemporarily, it is still opportune to discuss the understanding of roots and singularity in Brazilian modern architecture, not only through the buildings analysis but also through the discourses, situating it in an international context in which other modernisms of local accent are included. It is necessary to dig in search of other roots that may be a little bit bitter and difficult to digest. We are referring specially to the vernacular tradition recognition as one of the fundamental factors of the Brazilian modern architecture singularity, a factor that has been whispered or cited in footnotes, but that is still far from being approached as a consensual data in critical analysis. This eclipse phenomenon happens in spite of being endorsed since the 1930's by Brazilian respected intellectuals such as Mario de Andrade, Lucio Costa and Gilberto Freyre (see: Santos, C. H. G. R., 2007).

The reference to local traditions and cultures is a constant in the architectural production, being present in the vanguard movements and in the new architecture manifestoes creation. From around the 1930's on, and more intensely after the II Great War, Europe began to observe a reaction against some of the main paradigms of the Modern Movement, especially those ones related to the machine and the universality. It seemed that, after so many manifestoes, revolutions and wars, it was necessary to come back home. This meant to recuperate the memory and the meaning of the Ruskinian house (see: Ruskin, J. *The Poetry of Architecture: the architecture of the nations of Europe considered in its association with natural scenery and national character*), the simple and truthful family house, which has no foundations, but roots, which has been transformed in residence, habitation, cell and even machine, loosing itself from the men and women who had built them and had lived in them. Portuguese modern architects, according to *Arquitectura Popular em Portugal*, define a house looking to their own vernacular tradition: '*By house we understand a closed space where cold and rain infiltrate with more or less difficulty, but which is the last dwelling of an individual life*' (1980: 124).

The possibility not only of rupture, but also of reconciliation with history and of continuity is opened to modern architecture when it is recognized that the vanguards do not cause an irreversible rupture with history, but with the

academy and the other normative universality represented by the classicism. In fact, as Colquhoun (2004) considers, the XXth Century crisis observed the passage from a history concept, defined as the representation of past events that had the purpose to learn through the models imitation, to a history that only has meaning when the past events are situated into a specific context, seeking to define some essential ideas underlying a flow of happenings. Within this perspective, some questions arise: what kind of interlocution would be possible to maintain with which past, or even how to incorporate this dialogue in the architectural form and discourse.

Le Corbusier himself has weaved with an opening in direction to the Mediterranean architecture, which starts to reveal a more or less emphasized accent in the Modern architecture from approximately 1930's on. His introduction of rubble walls at Villa Mandrot at Le Pradet (1929-1932), for instance, is considered indicative of a major turning point in his career (Passanti, 1997). Soon after the II Great War he would widen this possibility even more, pointing to factors that were already attracting moderns to the vernacular architecture study: '*In building in a modern way, it is reached harmony with the landscape, the climate and the tradition*' (Santos et. Al., 1987). The always curious sight and even delighted sight that Le Corbusier has dedicated to the traditional and popular art is a constant in his carnets entries, since the first trips during his youth. Maybe he was preparing the reflection that situates harmony, that one intrinsic to the vernacular, as an objective to be reached by modern architecture. In his book *Voyage D'Orient* written in 1911, in a letter directed to Perrin, from Atelier d'Art, Le Corbusier makes long considerations on the artistic qualities of the '*great popular tradition*', awoken by the traditional pottery from Hungary and Serbia, that he will discover in locations untouched by the Western industrial civilization. In the 1930's Le Corbusier rediscovered vernacular architecture: he take summer vacations near Bordeaux, observing the fishermen's houses in the pine forests of the Bassin d'Arcachon and, with Charlotte Perriand, he spent two years photographing and surveying old farm houses in the Jura mountains (Benton, 2011). According to Tim Benton in his article about the house Le Sextant (1935), designed by Le Corbusier and Pierre

Jeanneret for Albin Peyron, at that time Le Corbusier *'began to understand the vernacular as being the secure link between man and nature, the direct expression of instinctual human needs, uncontaminated by abstract reasoning'*.

Among other references and dissidences, in the ambit of the local cultural valorization, some European architects set off in the 1920's and 1930's in search of building archetypical forms -the 'primitives' or 'others vernacular' – traveling through 'exotic countries' and re-tracing the English and French ethnologists roots, who during the XIX century were studying and researching in the colonies, amidst the primitive societies, the European civilization origins (see: Santos, C. H. G. R., 2007). The Danish architect Jorn Utzon travels through India, Nepal, Mexico and reaches Japan and China and the Norwegian Sverre Fehn travels through Africa. Even the Mexican architect Luis Barragan, before searching around the rural zone of his natal State Jalisco, travels seeking vernacular Mediterranean references through the North of Africa.

These architects were part of a group that architectural historians and critics called the third generation of modern architects: born between 1907 and 1923, the most significant part of their respective works is located in the 1950's. The buildings they produced may be interpreted, in general, as the result of the *'application of the vanguards general and universal principles to different cultural and material contexts'*, according J. Montaner (1993: 56). They were the result of a research that led to a modern architecture of great variety and interest, but which differs from the architecture produced by Brazilian, Italian or Portuguese architects, among other nationalities, who have chosen to ransack their own grounds in search of roots. For another group of European architects, working in the first decades of the XXth century, regionalism meant to copy native forms found in colonies or among the innumerable colonial expositions organized in Europe between 1866 and 1948, where the empires richness were celebrated with monumental reconstitutions of villages, where the natives people were exposed to the visitors curiosity among constructions and artifacts.

Alan Colquhoun (2004) defines vernacular by opposition to classical, the new denomination for antiquity that starts to be employed in the Renaissance. While

the word 'classical' assumes a connotation of 'higher social class' and designates the Greco-Roman art and architecture, the word vernacular will be applied firstly to the local language and afterwards to the local arts, native and minor, once that *verna* means slave and, by extension, vernacular referred to a person who lived in one's Lord's house. From the origin of the term, innumerable were the interpretations of the vernacular architecture meaning. It has been often mistakenly took as anonymous architecture, architecture without architects, traditional architecture, spontaneous architecture, popular architecture, rural architecture, regional architecture, ethnological architecture, primitive architecture, minor architecture. Nevertheless it is indubitable that its recognition as part of the architectural cultural universe has been growing as to count on research and protection specific tools, being considered part of the communities' patrimonies, by institutions such as UNESCO. Vernacular architecture may be understood as those 'popular art monuments' already pointed out by the Brazilian writer and music researcher Mario de Andrade in 1936, when he elaborates the guidelines for the Serviço do Patrimônio Histórico e Artístico Nacional – SPHAN (National Service for the Artistic and Historical Patrimony) (see: Santos, C. H. G. R., 2007).

Vernacular architecture may be defined as a community answer to its physical, economical, social and cultural environment. Or as an architecture that employs materials, techniques and building forms determined by climate, geology, geography, economy and local culture. Its 'spontaneous' construction doesn't receive professional or technical advice, but follows teachings that are transmitted through generations. Its recognition parameters are mainly associated to traditional building techniques expression, to the use of the site available materials and with the sharing of some communities' peculiar languages and spatial organization characteristics, of an ancestor origin.

In his 1969 book *House Form and Culture*, a reference in vernacular architecture studies, Amos Rapoport (1972) proposes three architectural categories, erudite, primitive and vernacular, being the last one subdivided in pre and post-industrial. The author points out the frequent influences and exchanges among the categories, considering that vernacular architecture expresses some of the

most important cognitive and appropriation processes, as well as strategies of places distinction. These aspects could lead to the identification of complex meanings impregnating built spaces. Extending this reasoning to the whole architecture, the author sustains that the truly understanding of a house, the human shelter, depends on the comprehension of the culture to which it belongs, once it is the determinant factor in the project elaboration, in the construction and to the posterior appropriation and fruition.

The Modern Movement search for vernacular architecture characteristics of truth and authenticity would follow different motivations and would know different expressions. Montaner considers that

'(...) the return to the figurations, techniques and details of traditional architecture, will be a modern architecture characteristic from the 1930's on. It is present in Le Corbusier's works, in the Spanish GATCPAC, from authors such as Raoul Hausmann and Erwin Bronner and, during the 1940's, in the incipient Nordic countries empiric architecture. This vernacular architecture *usage* had a double reason: to improve the constructive quality of the architecture composed by flat roofs and straight façades, without reliefs or frames, that had revealed to be very fragile, and to reinforce the expressive capacity as well as the integration to the cultural milieu employing materials, figurations, objects and details from the primitive and conventional architecture ' (Montaner, 2001, p. 95).

We agree with the author's perspective that there is two European moments especially relevant in this study. The first one is the period ranging from the 1920's to the end of the 1950's in Italy, when the country was divided between the rationalist architecture defense and its surpassing through history and tradition, vernacular included (see: Danesi, 1994). The second is the 1950's in Portugal where the exemplar work of vernacular architecture documentation has been carried out,

The book *Arquitetura Popular em Portugal*, published in Lisbon in 1961 by the Sindicato Nacional dos Arquitectos, was the result of a sistematic register of the

Portuguese vernacular architecture, the 'Inquérito à Arquitetura Regional Portuguesa', which was initiated in 1955 with the purpose of contribute to the 'aportuguesamento' of the modern architecture. We add a third period extending from about 1930 to about 1970 in Spain. In 1974 is published *Itinerários da Arquitetura Popular Espanhola* (Itineraries of Popular Spanish Architecture) the result of register and valuation which were intensified since the pioneers publications of Fernando García Mercadal, *La casa popular en España* (1930), and Leopoldo Torres Balbás, *La vivienda popular en España* (1933): '*Torres Balbas's interest in popular architecture (...) must be understood as an attempt to bridge tradition and modernity (...). Popular architecture offered Spanish architects is a way to renew architecture through simplicity, ornamental austerity, and sincerity of construction*'. (Calatrava, 2007).

In Brazil, the concern to define the national cultural origins of architecture becomes a problem to the Brazilian architects as from the 1920's. In his conferences and texts, the Portuguese architect, archaeologist-ethnographer Ricardo Severo (1869-1940), defended the popular tradition and the vernacular production as references for a national art and architecture creation (see: Mello, 2006). In Portugal his discourse was inserted in a European context of discovery and valorization of colonial and early national *architecture*, vernacular architecture, as it is possible to observe in the articles published in the magazine *Portugália: materiais para o estudo do povo portugues*, released in the city of Porto in the ends of the XIXth century. In Brazil he focused mainly in some architectural elements of the baroque that could easily be associated with a Portuguese-Brazilian past. The first echoes of his ideas will be manifested in an architecture of neo-colonial features and in intellectuals essays, designed and writhed by himself and by other Brazilian architects, among them Lucio Costa, in the earliest works, and José Mariano Filho.

Lucio Costa graduated as an architect in the National Academy of Fine Arts in Rio de Janeiro, in 1922. Two years later, and almost ten years after discovering the modern architecture by studying the works of Le Corbusier and Walter Gropius, Costa travelled to the colonial city of Diamantina, in Minas Gerais, commissioned by José Mariano Filho, in order to gather formal references to neocolonial

architecture. Beyond the authentic monuments of colonial architecture, what had stood out for the architect was the anonymous and current architecture '*authenticity spell, sincerity and purity*', as well as the discovery of a '*constructive truth*' of those stud and mud constructions, with its independent structure, so integrated to the place that were like the '*ground that continues*' (Costa, 1938). Diamantina had inspired Lucio Costa a creation process that would accept juxtapositions and additions of different epochs, moderns and olds, of different moments, erudites and above all vernaculars, chosen in order to elaborate a synthesis of the present modernity and to root the European modern movement in Brazil: '*I admire more and more the ancient architecture and particularly our ancient architecture (...) The old cities of Minas Gerais opened my eyes and made me understand the true architecture, not futuristic (...), but just contemporary, according to our materials and ways of elaboration, and our habits*', writes Costa in 1933. At the same time he criticizes the neocolonial architecture which becomes for him the application of stylized lies over real structural skeletons.

Lucio Costa sought to offer an alternative to the '*improperness of constructive solutions*' that he has observed in the enclosure walls, after they had been liberated by the new architecture independent structure, a preoccupation that comes to surface in his fundamental text *Razões da Nova Arquitetura* (. In the memorial to his project for Monlevade laboring village (not built) Lucio Costa emphasizes: 1. the necessity of '*clearness and simplicity*' of all the buildings design, that had to be modern and traditional at the same time; 2. the use of coatless armed concrete, with the possibility of being whitewashed; 3. the use of the traditional bamboo ceiling to relieve the heat in schools and houses; 4. the '*updating of the old capistranas*'¹ (in using concrete plaques and grass joints in the streets of unpretentious features (Costa, 1934).

The colonial Brazilian house '*which presents itself almost always unadorned and poor*' deserves, in Lucio Costa's opinion, to be conveniently studied in order to

¹ In Minas Gerais 'capistrana' designates the big stones that used to be placed in the center of the streets, forming a kind of strip between a small stone and a irregular one. Cf: Real, R. (1962). Dicionário de Belas Artes, Rio de Janeiro: Ed. Fundo de Cultura.

be useful as material for new researches and also in a way that *'us, modern architects, may take profit of this experience of more than three hundred years, in such a way that it wouldn't be a simple reproduction of its already dead aspect'* (Costa, 1938). This is precisely the way the architect will proceed when elaborating the Guinle Park apartments project (1948-1954): studying the Brazilian house program social development, from the indigenous house, *oca*, until the XIXth century house, observing the transformation of habits, of programs and the plans adaptations. Aiming to revive the essence of a traditional scheme and to reestablish a tie that had already been lost, he have designed a *'kind of winter garden, contiguous to the living room and a chamber without a specific function, connected to the rooms and to the service area; one more formal, the other more relaxed, corresponding, this way, to the house veranda'* (Costa, 2001, p. 76) that was ultimately refused by the real estate agents. 'The verandas, when are well oriented, are the best places that our houses have to stay; what is the veranda, after all, if not a completely opened room?', still argued Lucio Costa. *'If the house is a world, the veranda is a little world into this world'*, answer Portuguese modern architects looking at the vernacular architecture of Trás-os-Montes in the Introduction of the book *Arquitectura Popular em Portugal*.

In 1948 Lucio Costa went to Portugal and tried to establish *'a fundamental system where it should be possible to perceive the natural links of affiliation of the differentiated expressions of the metropolis original architecture at that time and condition'* (Costa, 2001, pp. 451-54). He confirms his opinion, but decides that it would be impossible to establish *'logical and coherent links of affiliation'* between the Portuguese architecture and the one the Portuguese built in the colony. His studies on the integration process of the old shapes to the new environment showed a vernacular Portuguese architecture, regionalized and diversified, fruit of its different functions and of the physical and social environment. Ready-made shapes came to Brasil from the north of Portugal, but not only from there, and they had to adjust to the new circumstances, suffering the intervention of other metropolitan traditions, as well as *'arbitrary*

interferences, rectifying or degrading them'. And so was forged an architecture with a Brazilian personality, with a multiple affiliation and vernacular.

Inspiration, belonging, sobriety, economy, ingeniousness, adequacy, legitimacy, harmony, simplicity, coherence: these are some aspects of the lesson that some of the modern architects will learn when ransacking the vernacular roots in search of the respective architectural identities, in order to build the architecture of their times, necessarily modern and national. Nevertheless, these lessons may have revealed themselves of a subtle and unattainable distinction because *'they do not refer to a unity of types, features or architectonic elements, but to something of our people character. To integrate and to belong are serious and deep things. It's absolutely not a form of vesting either people or buildings'*, as the Portuguese conclude.

The subtlety of this once more valued character is the same that Quatremère de Quincy had already clarified, still in the ambit of a continuity and rupture debate, when discussing the originality that he had considered possible, the *'distinguishable character'* of a work. Architecture has got a distinction character *'a certain quality that seems to have origin in the dominant tune and mode'*; the character would stand for architecture as the physiognomy stands for a face.

So, when Lucio Costa establishes the creation and construction as the main new architecture values, integrated and complemented by the ballast represented by tradition he is much more concerned with the modern architecture of character, than with the modern character of architecture. And surely his sight is directed to a rational and functional architecture, but also rooted in the ground and integrated to the landscape, conceptually defined and culturally justified and unquestionably modern.

References

Arquitectura Popular em Portugal (1980). Lisboa: Associação dos Arquitectos Portugueses.

- Benton, T. Le Corbusier and the vernacular plain. In Archphoto, http://www.archphoto.it/2011/01/25/tim-benton_le-corbusier-and-the-vernacular-plain/
- Calatrava, J. (2007). Architectural Restoration and the Idea of Tradition in Early Twentieth-Century Spain. In: www.arch.columbia.edu/.../V4N2_Calatrava.pdf
- COHEN, J-L. (1984). *La coupure entre architectes et intellectuels, ou les enseignements de l'italophilie*. Paris: IN EXTENSO
- Danesi, S. Aporie dell'architettura italiana in periodo fascista – mediterraneità e purismo. In: Patetta, L. (1994). *I razionalismo e l'architettura in Italia durante il Fascismo*. Milano : Electa.
- Colquhoun, A. (2004). *Modernidade e tradição clássica*. São Paulo, Cosac & Naify.
- Comas, C. E. D. (2005). Brazil Builds e a bossa barroca: notas sobre a singularização da arquitetura moderna brasileira. IN 6º Seminário DOCOMOMO Brasil. Niterói: UFF.
- Costa, L. Diamantina. In: Costa, L. (1995). *Lucio Costa: registro de uma vivência*. São Paulo: Empresa das Artes.
- Costa, L. (1933-35). Razões da Nova Arquitetura. In Xavier A. (org.) (2007) *Lucio Costa: sobre arquitetura*, Porto Alegre: Editora UNIRITTER, (pp. 252-259).
- Costa, L. Registro de uma vivência, 1986-94. In: Costa M.E. (org.) (2001). *Com a palavra Lucio Costa*. Rio de Janeiro: Aeroplano, 2001, (pp. 76 e 77).
- Costa, L. Tradição local. In Costa, L. (1995). *Lucio Costa: registro de uma vivência*. São Paulo: Empresa das Artes (PP. 451-454)
- Costa, L. (1938). Documentação Necessária. In Costa, L. (1995). *Lucio Costa: registro de uma vivência*. São Paulo: Empresa das Artes.
- Costa, L. (1953). Oportunidade Perdida. In Xavier A. (org.) (2007) *Lucio Costa: sobre arquitetura*. (pp. 252-259). Porto Alegre: Editora UNIRITTER.
- Costa, L. (1934). Vila Monlevade. In Xavier A. (org.) (2007) *Lucio Costa: sobre arquitetura*. (pp. 42 - 55). Porto Alegre: Editora UNIRITTER.
- Le Corbusier (2007). *A viagem do Oriente*. São Paulo: Cosac Naify.
- Mello, J. (2006). *Ricardo Severo: arqueologia portuguesa e arquitetura brasileira*. São Paulo: Annablume.
- Montaner, J.M. (1993). *Después del movimiento moderno*. Barcelona: Gustavo Gili.
- Montaner, J. M. (2001). *A modernidade superada*. Barcelona: Gustavo Gili.
- Passanti, F. (1997). Vernacular, Modernism and Le Corbusier. *The Journal of the Society of Architectural Historians*, Vol. 56, No. 4 (pp. 438-451).
- Rapoport, A. (1972). *Vivienda y Cultura*. Barcelona: Gustavo Guilli.
- Real, R. (1962). *Dicionário de Belas Artes*, Rio de Janeiro: Ed. Fundo de Cultura.
- Santos, C.R. ET. AL. (1987). *Le Corbusier e o Brasil*. São Paulo: Tessela/Projeto.

Santos, C. R. (2007). *Mapeando os lugares do esquecimento: ideias e práticas na origem da preservação do patrimônio no Brasil*. PhD thesis, São Paulo: FAU-USP.

Severo, R. A Casa e o Templo "(1914)". In: *Homenagem a Ricardo Severo: Centenário do Seu Nascimento 1869-1969 (1970)*. São Paulo: Liceu de Artes e Ofícios.

Severo, R. (1916). A Arte Tradicional no Brasil (1916). In: *Homenagem a Ricardo Severo: Centenário do Seu Nascimento 1869-1969 (1970)*. São Paulo: Liceu de Artes e Ofícios.

Soto, J. A. F. (2010). El debate de lo vernáculo en España durante la primera mitad del siglo XX. *Revista de humanidades y ciencias sociales*, n. 6. In <http://elgeniomaligno.eu/el-debate-de-lo-vernaculo-en-espana-durante-la-primera-mitad-del-siglo-xx-jose-antonio-flores-soto/>

Szambien, W. (1986). *Symétrie Goût Caractère*. Paris: Picard.

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Ruth Verde Zein. Prof. Dr. Architect and Urban Planner, lecturer and researcher, Mackenzie Presbyterian University, São Paulo. List of most important publications: 1. *Brasil, Arquiteturas após 1950* (co-author). São Paulo, Editora Perspectiva, 2009; 2. *Projeto como investigação: antologia*. São Paulo, Editora Al ter Market, 2009; 3. "Habitat, Lina Bo Bardi y la Crítica de Arquitectura no alineada". [in] *Summa+* n.101, June 2009, p.32-41; 4. *Three moments of Oscar Niemeyer*. São Paulo, Museu da Casa Brasileira, 2007 (Vol.1. MCB Itineraries / 100 works of architecture in São Paulo); 5. "Paulo Mendes da Rocha: fiel a si mesmo" [in] NOELLE, Louise. (Org.). *Arquitectos Iberoamericanos Siglo XXI*. 1 ed. Mexico, DF: Fomento Cultural Banamex, 2006, v. 2, p. 442-455.

SPECIFIC ARCHITECTURE ROOTED IN THE COUNTRY

Survey on regional architecture and tourism development

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Abstract

After the failed revolution in 1956 an intensive development began around the Lake Balaton in the spirit of détente and as an investment in tourism. The new regional plan included a survey on monuments, which was extended also on vernacular built heritage. The paper presents the findings of the survey and compares them with the planned and realised buildings, and with the architects' manifestations. The investigation includes public buildings which gave the bulk of building activity in the first period, but it analysis also the award-winning designs of weekend houses submitted for a competition in 1958. The research concludes that while decades later some architects remembered this time as when 'the spirit of the vernacular was in the air' the buildings were not fully in tune with this statement, against the well-documented built environment. The duality of place-form and product-form that is of tradition and technology was interpreted by the majority of architects as either/or problem and by the middle of the 1960s led to the victory of technology.

Keywords: Hungary, Lake Balaton, tourism, place-bound architecture

Lake Balaton

After the failed revolution in 1956 the old-new socialist government in Hungary had to stabilise its power. In the spirit of détente they intended to raise living standards, let people more privacy and at the same time open toward the West. The main target of home and international tourism development was Lake Balaton – the largest lake in Central-Europe – which was popular as a resort place already in the first part of the 20th century. In the history of the lake the Second World War was followed by a period of decline: the private hotels and

villas were socialised, and the situation soon was characterised by a lack of maintenance and occasional unregulated developments. A radical change began when the Managing Committee of Lake Balaton (BIB) was re-established under the supervision of the National Tourism Board in March 1957.¹ This meant that all developments concerning the lake were concentrated and had a direct access to central financial resources. The BIB's responsibility covered everything concerning the development around the lake: from managing infrastructural, building and landscaping plans, through legislation up to the surveying the attendance data of resort places. The BIB involved professional associations from all the attached fields, among them also the Association of Hungarian Architects. To manage the project a chief architect was appointed, whose office, the Balaton Construction Management belonged to the Ministry of Building Affairs.² Finance, organisation and professional knowledge was concentrated, the government and the Socialist Workers Party expected quick results.

Survey on vernacular architecture

The architectural preferences for the development around the Balaton had been defined already before the BIB was re-established. The architect, later in charge the project at the Ministry, summarised two main tasks in his early proposal. Firstly that facilities and characteristics which make attractive the Balaton as a resort place should be preserved and developed. He listed press houses, manor houses and ruins from the middle ages, all evaluated as *'prime representatives of the cultural landscape at the Balaton. It is obvious that architects' role is important in prevention, organisation and implementation'* – he emphasised. (Kisléghi Nagy, 1957, p. 51) A few paragraphs later he repeated the importance of the former and added vernacular architecture to the list. He mentioned only

¹ The Managing Committee of Lake Balaton [*Balatoni Intéző Bizottság, BIB*] was originally founded in 1929 but was abandoned in 1949.

² The chief architect was Tibor Farkas. He got this job after he had led the task force for the reconstruction of the flood damage in southern Hungary in 1956 with success. He shared the job with two chief-engineers both selected from his former staff. Károly Polónyi was responsible for the south shore, István Bérczes for the north.

secondly the creation of the appropriate circumstances for recreation, including summer cottages and new facilities for holiday makers and excursionists.

As soon as the Balaton Construction Management was established the chief architects published their program. They summarised the main steps of implementation in eleven points. The tasks included mainly infrastructural questions, planning and design problems and the protection of natural environment. The last point referred to the monuments.

Although they need much less money than the above mentioned tasks, conservation and maintenance of the architectural heritage around the Lake Balaton should be mentioned among the most needed ones. The state of our monuments is getting worse year by year, so that we may lose our most important cultural values. (Farkas et al., 1957, p. 112)

The survey on the listed fields began in the summer of 1957 including the survey on the built heritage. It covered two main areas: the first included the settlements around the lake within a 3 km distance from the water (Galambos, et al., 1958), while the second project covered the northern bordering area, the so-called Balaton-highlands (VÁTI, 1958).³ Due tight deadlines the research groups spent only a day or two on each settlement and made a list on the architectural values. The items were classified according to their importance as a monument or as an element of the streetscape, and were followed with a short description. The first survey covered 40, the second 38 settlements. Neither of the surveys included graphic documentation of the valuable houses – the most important monuments of the region were already documented earlier – but they were accompanied with plenty of photos. The main findings of these works were the maps, which indicated all the processed settlements and buildings, referring to their functions and building periods.

The novelty of this inventory was that it included also vernacular architecture, though it was not an accurate collection and documentation of these houses, as

³ Both surveys were delivered by the state design office VÁTI, *Városépítési Tervező Vállalat* [Urban Design Company] under the surveillance of the same experts in monuments preservation. Now only the second research report (VÁTI, 1957) and research material (VÁTI, 1958) are accessible in the archive of the National Office of Cultural Heritage.

it was expounded also in the research report. *'We have to make it clear, that the aim of this survey didn't include the collection and documentation of vernacular architecture.'* (VÁTI, 1958, p. 3) However if we take a look at the maps the many signs referring on vernacular architecture shows the rich heritage of the territory in this respect. The increased importance of vernacular built heritage is mirrored also in the building regulations announced in the report, which protected the vernacular streetscapes just as strictly as the townscapes or natural green spaces. The official protection of vernacular architecture – after some rare exceptions – was realised in the Balaton regional plan first.



Figure 1. Peasant house, Mindszentkál, Fő utca 83. (VÁTI, 1958, N° 129.213)

The research report on the survey on the Balaton-highlands contained also a brief proposal on how to protect the vernacular built heritage. Beyond the standard criteria of monuments preservation the authors included an interesting paragraph into the text.

We shouldn't exclude new building initiatives in such streets [with rich vernacular built heritage], but we have to orientate and help people with showing exemplary old buildings as models. We have to show and explain

the works of good taste; this is the proper way to defend us against bad taste. (VÁTI, 1957)

The report proposed to complete the survey with the detailed documentation of the vernacular architecture of the region to publish the material for a wider public.

To explore the values inherent in vernacular architecture it would be desirable to edit different kind of publications – illustrated with drawings and images – presenting the characteristic buildings of the Balaton region, for the first time. It may be either an attractive book made for the wider public or the dissemination of the survey drawings in the form of reprints. (VÁTI, 1957)

The authors didn't expound in detail how to use the vernacular architectural collection as a source: whether it should be a model, or an inspiration for architectural details and building materials. Its importance lied in the initiative to propose vernacular heritage as a basis for the present.⁴ To sum up: the inclusion of a survey on built cultural heritage into a regional development plan was a new initiative especially because the vernacular architecture was integrated into the group of monuments. However both researchers and officials took important the preservation of this heritage as a cultural value, which enhances the power of the region as a touristic destination. The use of the collected material as a source for contemporary architecture was formulated only in an unpublished research report.

Summer cottages

The surveys on built heritage listed all kinds of monuments – strongholds, churches, bridges, chateaus, country and peasant houses, barns and granaries – but the majority of the items, especially in the Balaton-highlands belonged to peasant houses. This allows the assumption, that if the built heritage of the

⁴ The first book on the Balaton-highlands vernacular architecture was edited only decades later (H.Csukás, 1986)

region had had any impact on the new constructions it would have been appeared in summer cottages. Private weekend houses were never excluded from the development plan supported by the architects, but the laymen' opinion differed from that of the profession. *'Why couldn't thousands of families have a small weekend house at the Balaton? Why can't we change the well-known slogan "stand out to sea, Hungarian" into "stand out to Balaton, Hungarian"?' -* expressed a reporter the common desire. (Tatár, 1957) Architects were not so enthusiastic concerning summer cottages, the low level of these buildings, and the lack of relevant building regulations were recurrent theme of professional manifestations.⁵

Construction of weekend houses soon began to increase, so the Ministry of Building Affairs – together with the Association of Hungarian Architects – announced a design competition on the theme in 1958.⁶

On the one hand the aim of the competition was to gain designs of modern weekend houses, that may serve as a basis for the production of prefabricated elements and houses, easy to assemble. On the other hand its aim was to supply the future builders with economical design packages representing high cultural level. (MÉSZ, 1959, p. 1)

The sequence of the two types of designs – first prefabricated and second traditional – clearly expressed professional preferences. Practical considerations were emphasised also in the evaluation process, the 'appearance of the building' was listed only as the sixth criteria, following the requirement of practical layout, extension possibility or clear structure. The different construction types had a further impact: *'We appreciated those buildings which expressed materiality. As a result of the different building construction the duality of approaches are the most visible in this respect: romantic and unemotional constructive forms are running parallel.'* (MÉSZ, 1959, p. 2) The entries using traditional materials were not only labelled 'romantic', but were accused with individuality, namely that their form was too special, and didn't fit into the row of existing cottages. The

⁵ The Association of Hungarian Architects organised a voluntary architect-patron system, within which the experts helped the private builders and the municipal councils giving professional advice. The system worked actively in 1957-1958. (Bérczes et al., 1958)

⁶ The competition was successful: 140 entries were submitted. (MÉSZ, 1959, p. 1)

reviewer and the contributors to the discussion shared the opinion, that the proper handling of weekend house problem would be the use of prefabricated construction for houses settled group-form.

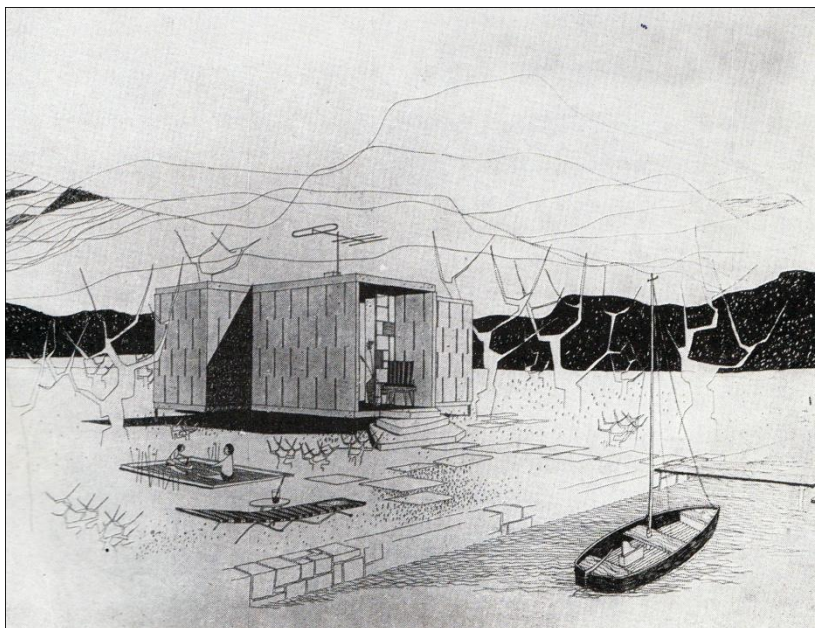


Figure 2. First prize winner entry at the weekend house competition 1958. Architects: Tamás Mandel & Tibor Tenke (Callmeyer, 1960, p. 25)

The price winning designs were presented in the leading architectural journal a year later (Callmeyer, 1960) and were made accessible for the wider public (potential builders) in the form of a brochure in 1962 (Bánszky & Egressy, 1962). The architectural journal published 10 projects, six of which with a flat roof, representing (in details even emphasising) the prefabricated line. The other four entries stood for the traditional line.⁷ The 'traditional' entries were very similar in form: all had a double pitch roof but without side walls, so they looked like a tent. The gables were made of stone, brick or wood, but the roofing material was reed thatch in each case.

⁷ The 6:4 rate mirrored professional preferences, as the reviewer made clear already in the article that the majority of the entries used traditional materials. (Callmeyer, 1960 p. 23)

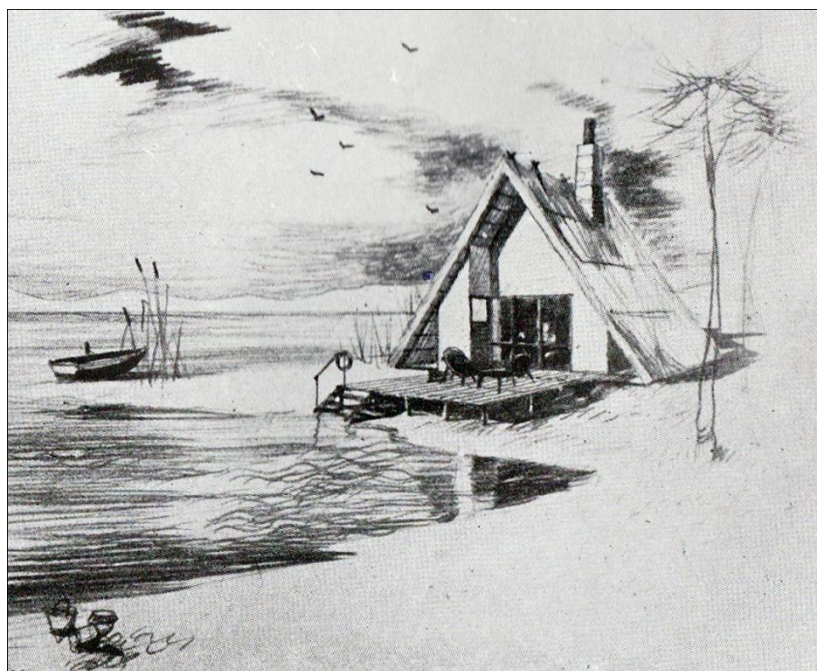


Figure 3. First prize winner entry at the weekend house competition 1958. Architect: Zoltán Farkasdy (Callmeyer, 1960, p. 24)

The 1962 brochure expressed a slightly changed interpretation of what a traditional house means at the Balaton region. It published 18 designs from the competition entries and divided them into three groups. The houses designed for prefabrication were listed into the second group, while the tent looking, reed thatch roof buildings were ranked into the third one as 'proposals for special demands'. The most popular designs – *'which are feasible with traditional building methods, with usual building materials, accessible at any resort places and which can be realised with local building firms or masters with simple means, even with home-made methods'* – were listed as first (Bánszky & Egressy, 1962, p. 17). On the basis of the six designs published under this label the expression 'traditional building methods' referred to the masonry, namely that the walls were made of brick or natural stone. Knowing the characteristics of the peasant houses in the region, the published summer cottages had only two elements – if at all – in common: the use of reed thatch and natural stone, both as a building material. As a conclusion, the 1958 architectural competition on weekend houses and its later publications show that the profession didn't rely consciously on the findings of the survey made on vernacular architecture.

Public buildings

The Balaton regional development project offered a long-awaited opportunity for the profession. It is not surprising that the architects concentrated not on the small summer cottages but on the large developments.

By the end of 1957 the regional plan draft of Lake Balaton was completed. It grouped the settlements by their intended character, which defined their future development. The first group served mass tourism that is the weekend visitors; the second served hikers, while the third was devoted to international tourism. (Bérczes et al., 1958) However from the 20 investigated settlements only four belonged to the third group, all well-known resorts from the pre-war period. The architects focused on mass tourism, the main task for the upcoming years.

We intend to concentrate the available financial forces on certain points, primary on the supply of weekend visitors, providing them with large and well equipped beaches, catering facilities, shelters and with camping places. We intend to solve the mass accommodation for the increasing number of tourists by different quality camp sites and motels. In the centres of the main resort places we intend to meet functional and aesthetic demands. We plan to design our buildings with contemporary lightweight construction in accordance with their temporary and leisure nature. (Bérczes et al., 1958, p. 140)

The realised architectural developments followed the objectives set out above: investments concentrated on beach facilities serving weekend tourism. Architects developed a construction system – simple shelters – adaptable to many different uses, such as buffet, dressing room, store, camp central building etc. The supporting structure consisted of reinforced concrete pillars and beams, which were prefabricated in a workshop during the winter. The basic elements of the structure were one type of pillar and one type of beam, which could be duplicated in various ways. The outer walls were made of rubble, and for the partitions brick or wooden panels were used. The combination of prefabrication and on-site manual work made possible that the completion of the facilities needed only a truck-crane and did not require specialists, but local masters.

Simplicity inherent in the construction was interpreted by the designers as an architectural approach relevant to the Hungarian conditions. *'Simplicity that is equally present in structure and architecture - we think so - means a big step towards the new practice which stands for a contemporary, unsophisticated, architectural approach against the fashionable modernity. It is an emerging practice also here in Hungary being in tune with home realities.'* (Polónyi & Klimov, 1959, p. 434)

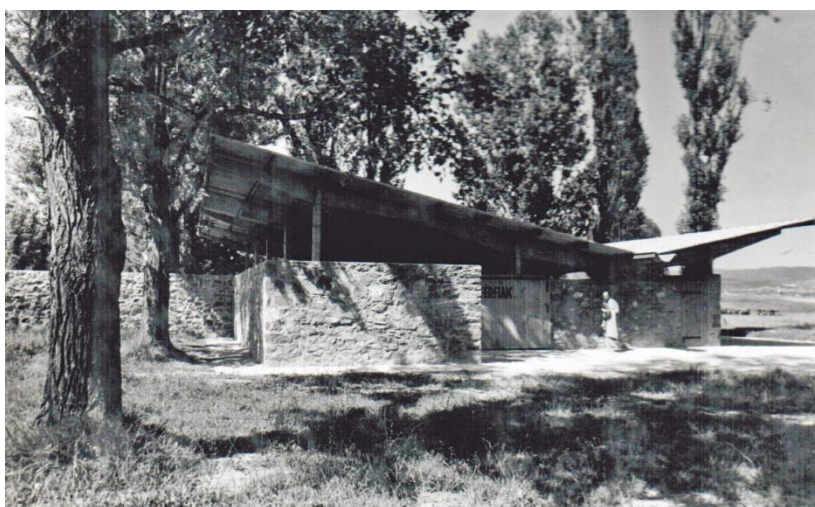


Figure 4. Dressing room on Keszthely beach. (IPARTERV photo archive, N° 3810)

The combination of prefabrication and on-site manual work featured not only the seasonal buildings, but it characterised a number of other buildings built around the lake – restaurants, buffets, shops etc. – during this period. The architects preferred reinforced concrete or steel for construction, but applied also traditional materials, mainly ashlar, sometimes as load bearing walls, sometimes only as cladding for their buildings. The natural stone – grey or red basalt – was a traditional building material on the northern shore of the lake, where it was mined from the mountains of the Balaton-highlands. It never characterised the vernacular architecture of the plain southern shore, however it was applied all around the lake in the first period of the Balaton-development.

The impressive presence of local natural stone in the architecture might be interpreted as a conscious strive to be in tune with the environment or as a reference to existing vernacular architecture. However in contemporary building reviews we hardly find such intentions. The only exception was a small wine pub, which was not only built from traditional materials, but the architect confessed that it was designed to fit.⁸ In all other cases the explanation of architectural form referred to simplicity in order to be in tune with the natural environment.



Figure 5. Wine pub in Badacsony. Architect: Ferenc Callmeyer. (IPARTERV photo archive, N° 2740)

⁸ 'We applied all local building materials, from reed thatch up to the dark grey basalt. The exceptions are the glass wall of the entrance and the hyperbolic paraboloid frame of the shading canvas above the terrace. The interior is bare brick, resembling the atmosphere of wine cellars. It has an empty roof showing the reed thatch. ... The building tries to become part of the surrounding green, landscaped, mountainous environment.' (Callmeyer, 1958, p. 55)

Why vernacular architecture?

We may conclude that the survey on vernacular architecture of the Balaton region – the first such action considering its project-related nature – didn't have any direct impact on contemporary architecture. However the situation is more complex. More than two decades later the architects active in the 1960s brought back this time when *'it was in the air to create a special Hungarian architecture.'* (Zalaváry, 1988, p. 46) An architect - who explained the longitudinal form of his restaurant that to be in tune with the landscape – evoked his intentions differently later.

I felt that the simple forms and proportions created by light and shadow are those elements which make peasant architecture so attractive and worthy of follow-up. So I used these ancient and cheap means already at that time, and I know it for sure by now, that it can't be a bad job done with these means, resisting to time. (Callmeyer, 1988, p. 30)

The architect of the seasonal shelters recalled the period also as that was affected by vernacular architecture. *'The composition and construction of the buildings were always very simple, applying commonly used materials in the spirit of vernacular architecture.'* (Polonyi, 1992, p. 28)⁹

The interpretations changing in time can't be explained simply with cheated memory, because 'the spirit of vernacular architecture' was in the air indeed. In 1957 not only the Balaton development gained new impetus, but the monument preservation agency was also reorganised, with a particular emphasis on vernacular architecture. Within the Association of Hungarian Architects the two working groups – one on the Balaton and another on vernacular architecture – were formed parallel, too.¹⁰ Practicing architects were involved not only into the 1957 survey on the Balaton-region, but they were active in several further

⁹ Polónyi presented the seasonal buildings at the Otterlo conference in 1959, and there he referred to the affect of the local spirit of peasant houses – but he didn't expressed the same in Hungary in the 1960s.

¹⁰ The Balaton working group was formed on April 16. 1957, while the vernacular architecture group on April 23. (MÉSZ, 1957a and MÉSZ 1957b)

surveys on vernacular architecture.¹¹ The Balaton development and the reinvention of vernacular architecture were connected also by persons. The 1957 survey on the Balaton-region had many antecedents, made mainly within the frame of the former BIB. The last book on their findings was written and edited by Kálmán Tóth (Tóth, 1936) who played an active role also later. He was the representative of the Association of Hungarian Architects in the Managing Committee of Lake Balaton, (MÉSZ, 1957b) and he also took part in the design of some new buildings.

Vernacular architecture as a plausible reference point for creating a nation-bound architecture re-emerged in the theoretical debates around 1960, too. The posts focused on the relationship between modern architecture and tradition. The opinions were different, but if the contributors accepted the importance of tradition at all, they interpreted it as vernacular architecture. In terms of tourism vernacular heritage was also determining. When searching for the main features of Hungarian architecture as a tourist attraction the author (responsible for the Balaton project at the Ministry of Building Affairs) summarised them as follows.

We think of the thousands of peasant houses with porch, or the hundreds of small medieval village churches, when searching for the specific examples of our architecture. ... Maybe they don't belong to the high architecture but they are still valuable, mature structures. ... It is not applied art, neither sculpture, but a clear and specific architecture rooted in the country. (Kisléghi Nagy, 1961, p. 179)

Despite the fact, that the spirit of vernacular architecture was present in Hungary after 1957 it didn't have an overall effect on contemporary works. Even those architects, who used some elements of the vernacular (or regional) architecture in their design denied or didn't mention it. After the forced historicism of the so-called socialist realism intermezzo during the 1950s Hungarian architects returned to modern architecture with enthusiasm. They wanted to make up for what they have missed. 1960 onwards politics also changed the development concept of the lake for fully equipped large hotels

¹¹ According to the documents practicing architects participated in surveys in 1958, 1960 and in 1964. (MÉSZ, 1958 & MÉSZ, 1960 & IPARTERV, 1964)

settled along high density resort places. This new image of the Balaton – the Hungarian Riviera – was attractive for architects, too. Leading architects dismissed the idea of the 'specific architecture rooted in the country', while it re-emerged in the romantic form of the 'tcharda', the Hungarian inn.

References

- Bánszky, Z. & Egressy, I. (1962) *Nyarlóépítés a Balaton parton*. [Summer houses at Lake Balaton] Budapest: É.M. Építésügyi Dokumentációs Iroda.
- Bérczes, I. & Farkas, T. & Kisléghi Nagy, I. & Polónyi, K. (1958) Beszámoló a Balatonfejlesztés egyéves munkájáról. [Report on the first year of the Balaton-development project] *Magyar Építőművészet*, 7(4-5), 137-166.
- Callmeyer, F. (1958) Poharazó Badacsonyan [Wine pub in Badacsony] *Magyar Építőművészet*, 7(1-3), 55-56.
- Callmeyer, F. (1960) A hétvégi ház pályázat. [The weekend house competition] *Magyar Építőművészet*, 9(1), 23-29.
- Callmeyer, F. (1988) Badacsony, Tátika. *Magyar Építőművészet*, 37(3), 30.
- Farkas, T. & Polónyi, K. & Bérczes, I. (1957) Beszámoló a balatonkörnyéki munkákról. [Report on the works on the Balaton-region] *Magyar Építőművészet*, 6(3-4), 112.
- Galambos, F. et al. (1958) Regionális műemléki vizsgálat rövid ismertetése. [Short summary of the survey on regional monuments] *Magyar Építőművészet*, 7(4-5), 144.
- H. Csukás, Gy. (1986) *A Bakony és a Balaton-felvidék népi építésze*. [Vernacular architecture of the Bakony and the Balaton-Highlands] Szentendre: Szabadtéri Néprajzi Múzeum.
- IPARTERV, Ipari Épülettervező Vállalat (1964) Managerial action N° 26, December 24. MOL archive XXIX-D-10-a
- Kisléghi Nagy, I. (1957) A Balaton-táj fejlesztése építési szempontból. [Development of the Balaton-region from architectural point of view] *Magyar Építőművészet*, 6(1-2), 51-52.
- Kisléghi Nagy, I. (1961) Építészet és idegenforgalom [Architecture and tourism] In *Építészetünk kérdései* (pp. 177-197). Budapest: Magyar Építőművészek Szövetsége.
- MÉSZ, Association of Hungarian Architects (1959) Rövidített jegyzőkönyv a hétvégi ház tervpályázat bemutatójáról és vitájáról. [Short minutes on the presentation and discussion of the Weekend house competition] February 27. BUTE Department for History of Architecture and of Monuments archive.
- MÉSZ, (1957a) Board Meeting Minutes, April 16. BUTE archive
- MÉSZ, (1957b) Board Meeting Minutes, April 23. BUTE archive

MÉSZ, (1958) Board Meeting Minutes, April 8. BUTE archive

MÉSZ, (1960) Board Meeting Minutes, March 15. BUTE archive

Polónyi, K. & Klimov, B. (1959) Idényjellegű épületek egységes szerkezeti elemekkel. [Temporary buildings designed with uniform structural elements] *Magyar Építőipar*, 8(9), 431-434.

Polonyi, Ch. (1961) Seasonal Buildings, Lake Balaton. In Oskar Newman (ed.), *CIAM'59 in Otterlo: Arbeitsgruppe für die Gestaltung soziologischer und visueller Zusammenhänge*. Stuttgart: Karl Krämer Verlag. 42-47.

Polonyi, Ch. K. (1992) *An architect-planner on the peripheries*. Budapest: Foundation for Political Culture.

VÁTI, Városépítési Tervező Vállalat (1957) A Balatonpart műemlékállományának megállapítása. [Defining the built heritage around the Balaton] Research report, National Office of Cultural Heritage archive, No 8853.

VÁTI, Városépítési Tervező Vállalat (1958) A Balatontól északra húzódó terület műemlékállományának áttekintése. [Survey on the northern bordering area of Lake Balaton] Research material, National Office of Cultural Heritage archive, No 1866 and 1867.

Tatár, I. (1957) Balatonra Magyar! Szálloda a szállodából, miniatűr-bár a kukoricatárolóból, de ez még nem minden. [Stand out to Balaton, Hungarian! Hotel converted into a hotel, corn-storage converted into a mini-bar, and this is not yet the end] *Esti Hírlap*, 19. March 3.

Tóth, K. (1936) *A Balaton vidék népének építésze*. [Architecture of the people at the Balaton region] Budapest: M. Kir. Balatoni Intéző Bizottság

Zalaváry, L. (1988) Jászberényi fürdőépület. [Bath Building in Jászberény] *Magyar Építőművészet*, 37(3) 46.

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BETWEEN HERE AND THERE

Rural and urban space as national identity in 1960's Portugal

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Abstract

*This paper will try to understand how, in the late 1950s and early 1960s, Portuguese architects and filmmakers developed a fascination with a disappearing rural world, of which the Survey on Popular Architecture or films like *Acto da Primavera* (Oliveira, 1963) and *Mudar de Vida* (Rocha, 1966) were just some of the most visible outcomes. The real country they found did not coincide with the ideal country publicized by the dictatorship and research carried out both in architecture and cinema had clear political motivations of opposition to an increasingly claustrophobic regime. Their works integrated and bear witnessed the most genuinely Portuguese features: the lack of resources, the invention from the available materials and community life as a survival strategy. It was in this confrontation with a reality hitherto hidden, that filmmakers and architects found a possible solution to the crisis of modernity, but also a way to pursue a new national identity, recognizing the qualities of a landscape and a culture that stemmed from a particular geographic, political and socio-economic context, with no false formalisms, often full of poetry. The paper will also consider how, concurrently with this interest in the rural world, both architecture and film debated the return to the city, its traditional values, the qualities of the historic centres, the rediscovery of the street and its unpredictability, all recurrent themes in the 1960s, internationally, but also in Portugal. Consideration will be given to how architects and filmmakers were challenged with the growing urbanization of the Portuguese territory, consequence of the abandonment of the countryside, and how the renewed interest in the city issues was also seminal, both in post-survey architecture and the first films of the so called Cinema Novo.*

Keywords: Architecture, Cinema, Urban, Rural, Ruptures

In the turn of the decade to the 1960s, Portugal, as did much of the western world, witnessed the beginnings of a social, cultural and political disruption. Worthy of note are the ruptures that occurred on cinema and architecture, which set themselves to become, not only a counterpoint to the dictatorship that ruled

the country, and whose official style could still be found in some buildings and cinematography, but simultaneously, an alternative to the modernism that latterly came to Portugal. Therefore, they were both anti-fascist and post-modern disruptions that questioned the assumptions of a nationalist policy and proposed specific objects that intersected the national characteristics with the contemporary trends from abroad. And they did not fail to address the main concerns of an oppressed population: poverty, the right to housing, social parity, the colonial war and emigration, subjects that both architects and filmmakers tried to tackle.

Since the early 60s over a million Portuguese were forced to leave the country, often illegally, drawn to a fast developing Europe. Inside borders, the peripheries of large cities absorbed a huge mass of people who escaped the countryside in search of better living conditions, initiating *"a double process of urban redevelopment: the gentrification of the traditional city centers pushed the population to the peripheral areas, where the bulk of migrants who came to work in the city settled as well."* (Rosas, 2008, p. 138)

The urban population started to show signs of unrest, first with the candidacy of Humberto Delgado, and later in the academic crisis of 62 and 69. With the anti-colonial movements gaining expression all across Europe, the Portuguese government chooses the military option over a peaceful transition in the African colonies. In that same period about 150,000 men are mobilized for the war effort and more than 10,000 will never return. And despite the censorship filtered much of the information, echoes of the May of 68, the Vietnam War or the Prague Spring did arrive and made their mark. All this led to

social, cultural and mindset changes that have a decisive influence in the history of the period. The proletarianization of much of the rural population that arrives to the cities, the birth and expansion of a modern services sector, the progressive literacy, the increased access to education, culture and media, the new forms of sociability - all of this will turn the urban and suburban population in major cities and metropolitan areas (...) into an agent of social and political intervention of increasing importance. (Rosas,

2008, p. 139)

The invention of a new identity for Portugal, a permanent desire but not a goal theorized by this generation of architects and filmmakers, was related, on one hand, with the need to overcome the underdevelopment of the country, without losing its purest traditions that had little to do with the folklore invented by the Estado Novo propaganda; and on the other, with the absolute need for freedom: political, cultural and of expression, but also individual. The dictatorship of Salazar and Caetano was a shared enemy, a common denominator that maintained a certain group cohesion, but, at the same time, architects and filmmakers did not renounce to their personal freedom as persons and artists, not willing to join political or artistic movements that could somehow limit their life and work options. The shaping of this new identity did not impose itself limits. It was from the combination and questioning of seemingly contradictory worlds that arose its own logic. It combined national identity with international references, crossed the urban culture with the rural imaginary, intertwined the modern language with the vernacular and mixed contemporary technology with the techniques of the past.

The motivations of architects and filmmakers were not, however, only political; they were embedded in their own disciplinary practices. The quest for a new identity was also the search for a new language, crossing the universality (or hegemony) of the modern legacy with local traditions. In the period that followed World War II, there was no longer a collective certainty in modern thinking and crisis settled in, with individuals trying to tackle it based on their own assumptions. The abstract and unified logic gave way to a desire for the real and concrete. The *new waves* in cinema and the emergence of groups like *Team X* in architecture were authentic revolutions in the universe of the two disciplines, with effects that persist to this day.

Portuguese architecture, keeping up with the European trend of reassessing modernist conventions, began to question the absolute need to use a preformatted language, a tendency that crossed the 1950s after the National Congress of Architecture, held in 1948. The main conclusions of the Congress,

which proposed a radically modern architecture in opposition to the imposed Portuguese style, were, in fact, anachronistic. By then, the modernist masters themselves were questioning the validity of a rationalism that allowed for the barbarity, initiating a revision process. The deliberations of the Congress of 48 were already out of synch with a modernity that was no longer possible.

This was not the case with film, for one can state that, with rare exceptions, there was no modern cinema in Portugal. It went directly from a parochial and out-dated cinema to films using radical new languages, in line with the revolutions that were underway in Paris, London or New York. The desire to reinvent the film language, challenging the then-current models of the Estado Novo, leaving the studio and filming the city *in loco* attested to the desire to portray the reality.

But questioning the city as it was then perceived was also essential in both disciplines. The failure of the Athens Charter, the questioning of models that despised the historic city, the desire to seize the spatial richness, the unpredictability and the social relations of the traditional city, have become central issues in architecture and urbanism in the end of the 50s and the early 60s. The discipline questioned itself through the pioneering reflections of Nuno Portas, collected in books such as *Architecture for Today* (1964) and especially in *The City As Architecture* (1969), where it departed from both the modern movement and the progressive overrating of language and authorship, proposing a qualified current architecture in a critic return to the democratic city.

This fresh look at the city was also present in Portuguese cinema, particularly in the films that inaugurated the movement that became known as the Novo Cinema. Curiously this designation was also coined by Nuno Portas, who as a film critic for the journal *Diário de Lisboa*, called for a renewal of the Portuguese cinema that could meet the expectations of a society in renovation. The Novo Cinema questioned the idea of the city, which was previously represented as an enclosed community, offering a new way of looking at the urban space, showing the outskirts, the expansion of the city, the multiplicity of places but also the individuality of characters.

In *Dom Roberto* (1962) - the film that many consider the transition element to the new cinema - the old city of courtyards is already crumbling, with these contained and closed microcosms in abandonment and ruin. The homeless couple that occupies a vacant building in order to survive, conveys a clear political message on the subject of poverty and housing rights. The end of the movie, with the evicted characters returning to the inhospitable flow of the city, with no assurances about their future, makes it clear that it was also Portugal that was on the screen.

But it is the first films of directors like Paulo Rocha or Fernando Lopes that really debut a new approach to the city and to filmmaking in Portugal. Both films depict misfits, characters living on the edge that, as their country, have failed. These films show a willingness to question reality but also the city itself.

The presence of the city in *Os Verdes Anos* (1963), and the new way in which it is represented, is one of the images that mark the Portuguese New Wave. Unlike the comedies of the 30s and 40s, where all the characters were integrated into a solidary community, the protagonists of Rocha's film were marginalized by the city. Lisbon is a metaphor for the social prison that was Salazar's regime and

the stage of a conflict that is expressed cinematically by the overt segregation of the protagonists from spaces and liveliness of the city, portrayed either by the Baixa streets, or by the new modern neighbourhoods of the Avenues of Rome and of the United States of America. In *Os Verdes Anos* the protagonists find an oppressing city that constantly demeans and marginalizes them, exploiting the most of their vulnerabilities and revealing at every step, their dominated status. (Baptista, 2008, p. 94)

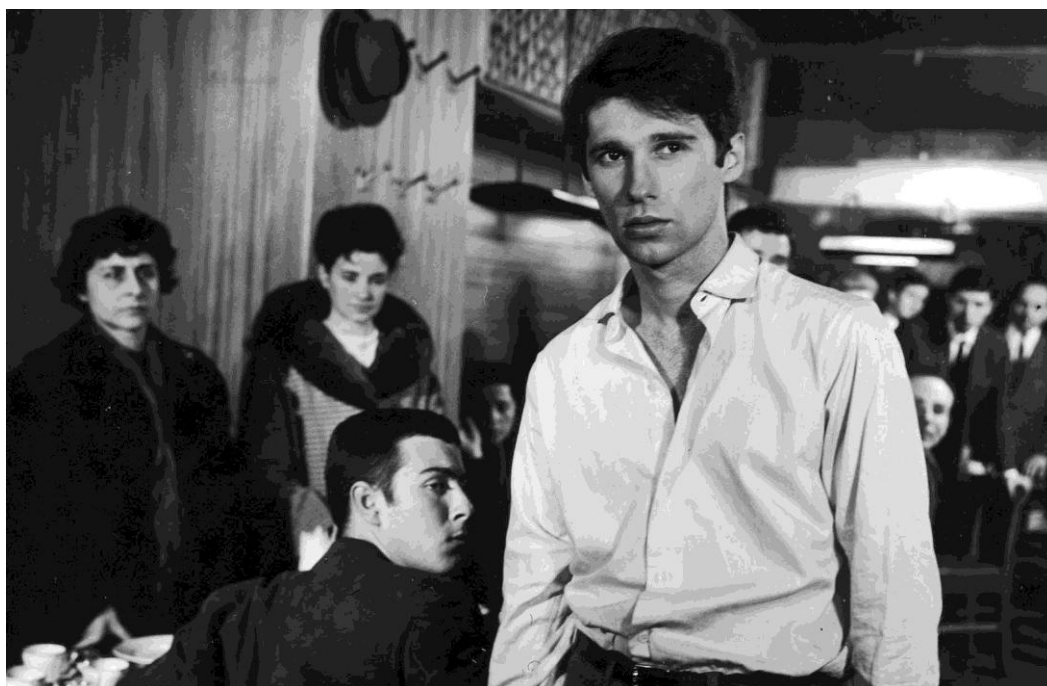


Figure 1. *Os Verdes Anos*, Paulo Rocha, 1963 (Cinemateca Portuguesa)

Belarmino, by Fernando Lopes, debuted the following year, in 1964, and is affiliated to a trend that crossed fiction and documentary, in this case in a clearly urban setting, in which the character moves through the city with the freedom that was lacking to his fellow citizens and in which hostility is not identified with the urban space or the architecture, as in *Os Verdes Anos*, but with poverty, repression, and the claustrophobic environment of a paternalistic and castrating dictatorship.

Both films shared with the European and South American "new waves" the desire to leave the studio and film the street, on the exact locations where the action was unfolding, to escape the conventionality of the previous cinema, considered too distant from the vast social and cultural changes brought by the 1960s.



Figure 2. Belarmino, Fernando Lopes, 1964 (Cinemateca Portuguesa)

But if the city was a central theme, the rural space also played a key role in the cultural debate of the 1960s. Following previous investigations by "*agronomists, who organized and carried out the Survey on Rural Housing in the turning of the 30s to the 40s*" or by anthropologists "*who carried out, between the 50s and 70s, several ethnographic and anthropological researches on the traditional Portuguese architecture*" (Leal, 2009, pp. 9-11), architects and filmmakers also turned their attention to country life. They were interested in understanding and portraying the lifestyle of rural people, who often comprised forms of social, cultural and even political organization - as was the case of Rio de Onor or Vilarinho das Furnas - that symbolically questioned, not only the national identity shaped by the Estado Novo, but the very political organization of the dictatorship. But they were also the evident expression of the enormous underdevelopment to which the dictatorship condemned the country and of the immensely difficult living conditions of the rural population, which could only rely for their survival on obsolete farming techniques and production methods,

conditions that the state propaganda sought to conceal through the myths of "honored poverty" and "proudly alone".

One cannot properly speak of a return to the countryside, as Portugal in fact had never really left it. At the end of the 50s, Portugal was still, by choice, a predominantly rural country. The rural essence instilled by the Estado Novo only gave in to the industry interests at the turn of the decade, into the 60s. Isolation, poverty and the lack of education were essential tools for the perpetuation of the regime. It is not so surprising that architects and filmmakers, themselves plunged into an identity crisis, have turned their gaze to what was considered the last bastion of the authentic Portugal. They knew the new identity they sought could not be solely created within the Portuguese cities, where, despite the repression and censorship, the population lived in a privileged world that did not correspond to the reality of the country. For those who had political concerns of opposition to the dictatorship, dismantling the myth of a rural paradise became an essential goal. The political agenda was to demonstrate that the reality did not match the propagandistic image of the country. The lifestyles, traditions, culture or architecture, were diverse in the different regions of the country, sharing only an immense poverty, isolation and illiteracy. By taking apart the fantasised construction of a unified country, the very foundations of the dictatorship would collapse.

In architecture, for this rediscovery of the rural world was essential the idea launched by Keil do Amaral, in the aforementioned Congress of 1948, to conduct a survey on Portuguese popular architecture. The objective, decidedly political, was to tear up the aspirations of the regime to consolidate a "Portuguese style". It was this study, conducted between 1953 and 1957, and published in 1961, that indorsed a "third way", as refered by Fernando Távora, which combined the modernist tradition with the vernacular, with architects acquiring the freedom to design without constraints, what is already apparent in some works of the 50s, but became widespread in the 60s. The poetic creativity, the appropriateness to the environment and existing materials, the diversity, rationality and functionality of the design solutions found by different teams that toured the country researching for the Inquiry, served the architects, in addition to the

political significance that derived from it, to reinvent the identity of Portuguese architecture.

At a crossroads between the failure of international modernism and the restraints to adopt a fictionalized Portuguese-style, architects, particularly those of the Porto School, found a way that allowed them to practice a language that was both modern without being hegemonic and national without being nationalist. Or at least, according to circumstances, wander between the two, being sometimes more radically modern, others more encompassingly traditional. That is the case of Álvaro Siza in Leça da Palmeira, who at the Tea House (1963), and despite the references to the work of Alvar Aalto, sought a direct relationship with the site, particularly with the nearby chapel, using materials such as wood, plaster and roof tiles, referring to the vernacular architecture, but at the Tide Pool (1966) is uncompromisingly modern, using concrete against the rocks and a geometric logic influenced by Wright that estranges from the natural order of the place, integrating by opposition and an smart disappearance strategy.

As we know, this path was short lived because soon this “third way” was adopted by the more commercial architecture, popularizing it in such a way that it would be massively used in tourism projects developed in the Marcelismo. This led to its abandonment by the more educated architects who turned back to seek in the history of the modern movement, although without the dogmatism of the past, the formal references that would allow them to embrace the contemporary.

One of the latest manifestations of this ‘third way’ was the holiday house Vill’Alcina designed by Sergio Fernandez between 1970 and 1974. The design was actually for two twin but not symmetric houses. The building is a filter to the overwhelming landscape and on arrival, still on the outside, the entrance portico frames the landscape. But once inside one is invited to move around and discover the different views and experiences in the singular spaces of the house. The ceiling follows the inclination of the site towards the landscape and the furniture models the space as in one of the apartments of the Marseille Unité.

The house has a measured space, adjusted to the necessary living equipment, with the division walls being at the same time bookshelves and seats. The bedrooms are merely a space to sleep with mattresses on the floor and no doors, in what was saw as a materialized sign of the customs freedom of the time.

For some critics Vill'Alcina is the last modern house built in Portugal, as it reflects, simultaneously, the modernist culture and the neorealist culture, which promoted an approach to reality in order to understand the modern utopia. Sergio Fernandez was a collaborator of Viana de Lima, a corbusian modernist, but he also participated in the effort for the Inquiry on Portuguese Popular Architecture with a graduation thesis on Rio de Onor. This was a small village - half Portuguese, half Spanish - in northern Portugal, where Fernandez studied intensely not only the local architecture but also the harsh living conditions of the rural population. And Vill'Alcina reveals these two experiences in an almost pure state: its volume is archaic; its spatiality is modern. In a cinematic montage, a rural, telluric house unveils a modern narrative, in a re-setting of the modernist open space. Without this coexistence and tension, the house would be a simple revival, either of the rural tradition or of the modern movement (Figueira, 2008).



Figure 3. Vill'Alcina, Sergio Fernandez, 1974 (Fernando Guerra)

Vill'Alcina is a functionalist building in the dusk of modern architecture but here functionalism means experimental joy. The modern dilemmas of the lacking domesticity and humanity are here happily resolved. The space seems to fit one's measures, minimum but communicative, open but creating a sense of shelter. Maybe this is its biggest legacy: a spatial precision that emotes us, the measure of the human body reverted to the measure of a building, the anxieties of an era compressed into a space (Figueira, 2008).

In cinema the direction is similar. After an initial interest in the city as a place of alienation, has seen in *Os Verdes Anos* and *Belarmino*, the filmmakers of the new cinema sought in rural areas the exits they did not found in the city. The reasons are, firstly, related with the desire to expose a world that was opposite to that of the earlier films, showing that reality was very different from the rural ideal of the dictatorship, and also, as we have seen, this demand for a fresh look at the reality of rural areas was inscribed in a cultural trend, but also politically marked, which had already been undertook by other disciplines.

The tendency to this movement between rural and urban in Portuguese cinema began to be evident in *O Pão*, a documentary by Manoel de Oliveira, in which there is a constant duality between views of urban and rural landscapes. The itinerary around the bread manufacture serves as a pretext to show the abyssal differences between two worlds that often intersect, but that are clearly opposed. The fast pace of the city, mounted in parallel with plans of the industrial bread making process, accentuates the contrast with the slow and rudimentary processes used to manufacture handmade bread.

But it is with *Acto da Primavera* (1962), also directed by Manoel de Oliveira, that a contemporary look on the countryside is confirmed, without the paternalism and ideological prejudices of the past. A particular filmic object that joins the trend of hybridity between fiction and documentary, *Acto da Primavera* portrays the representation of the Passion of the Christ in a Trás-os-Montes village. What initially appears to be a documentary about a particular rural universe, slowly becomes a fiction film on the life of Christ, where the villagers of Curalha assume the role, not only of figurants in the staging that happens every year

around Easter, but also as actors in a fiction film. And Oliveira also explores a duality between two conflicting worlds, opposing to the film's central rurality a sequence of war images edited by Paulo Rocha, who was at the time a collaborator of the Oporto's master. The uniqueness of the film strongly marked the generation of Cinema Novo.



Figure 4. O Acto da Primavera, Manoel de Oliveira, 1962 (Cinemateca Portuguesa)

The second film by Paulo Rocha, *Mudar de Vida*, portrays the anguish of a fisherman who was sent to the Colonial War and ended up staying in Africa for a longer period of time than his mission required. On his return to Portugal he discovers that both the people and the place he left behind, as himself, are no longer the same. His girlfriend married his brother and is now ill; Furadouro, the fishing village where he lived, is dangerously threatened by the sea. This film is a symmetrical work to *Os Verdes Anos*. What was imminently urban in Rocha's first feature, here is uncompromisingly rural. *Os Verdes Anos* was spontaneous,

experimental and a new form of filmmaking in Portugal; *Mudar de Vida* is cerebral in the use of camera movements, photography, dialogues and the mise-en-scène. The criticism to the dead-end environment of the country that one could feel in *Os Verdes Anos*, which was nonetheless represented with a certain amenity, is in *Mudar de Vida* characterized by a profoundly harsh life. Here, as in the Lisbon of the 60s, there is also no choice but to escape. Isabel Ruth's character introduces this possibility to get away; the woman who seeks more than what destiny intended for her, who breaks the rules, even to the point of stealing from the donation box of the chapel. Her occupation as a manufacturing worker is criticized for being too easy, as if the only way to make a living there was inevitably linked to fishing. One of the most striking scenes is filmed in a half destroyed house, a metaphor for the impossible love between the characters of Maria Barroso and Geraldo Del Rey, with Paulo Rocha showing the abyss of this relationship in a setting that literally collapses into the sea.

Uma Abelha na Chuva, 1971, by Fernando Lopes, is a film adaptation of a novel by Carlos Oliveira, which again depicts an oppressive rural universe, marked by silences, misunderstandings, frustrations and conflicts between the characters. It reflects the differences and difficult relations between social classes and it is structured by the intersection of two stories: on one side Maria dos Prazeres and Álvaro Silvestre, the lords of the house, representatives of a disintegrating rural bourgeoisie, and on the other, Clara, the maid, and Jacinto, the coachman. A grey and cold environment insistently marks the film, plunging the characters in an undecided and undefined atmosphere, creating a dreamlike countryside landscape. Between crisis and oppression, frustration and conflict, desire and forbidden love, *Uma Abelha na Chuva* reveals a willingness to innovate aesthetically, an endless quest for deconstructing the narrative itself, through the repetition of scenes without dialogue, the insistence on certain movements that intensify and emphasize the actions of the characters, in a careful and entirely experimental object.

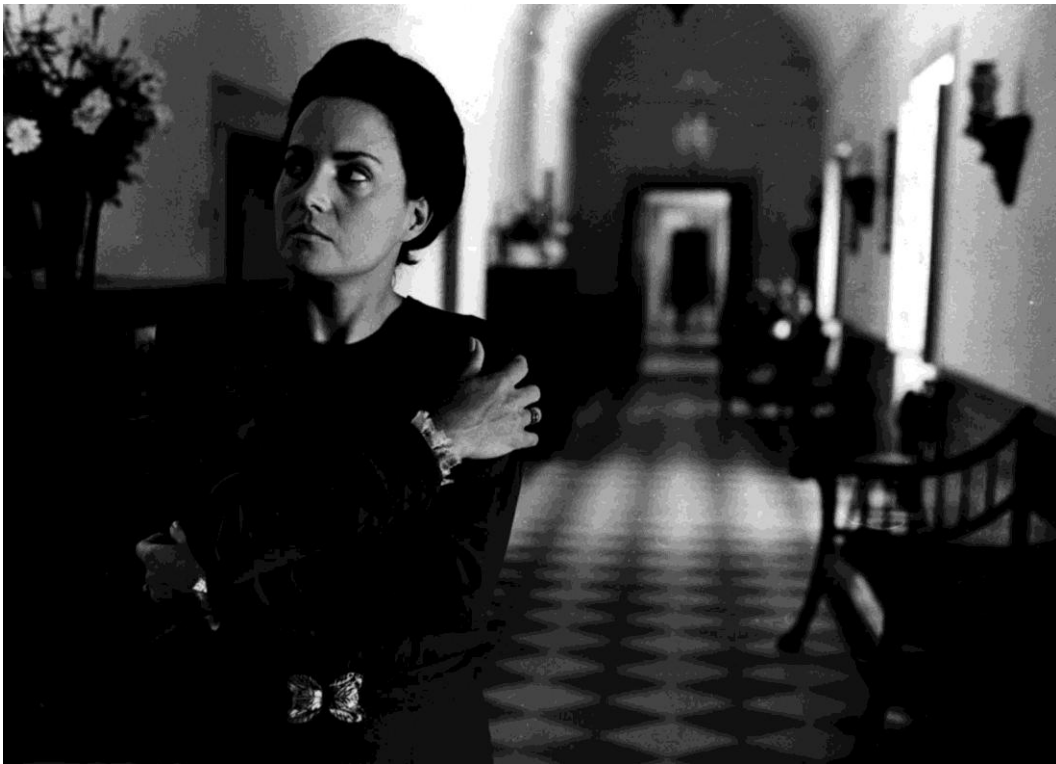


Figure 5. Uma Abelha na Chuva, Fernando Lopes, 1971 (Cinemateca Portuguesa)

What we can hold from these movements between the city and the countryside of Portuguese architects and filmmakers in the 60s is an inevitable drift and an understandable disorientation in regard to the national and international events that marked the profession and society. On one hand everyone aspired to remain faithful to the spirit of their time, producing objects that somehow characterized it. On the other hand, the strong ideological and political boundaries implied exacerbated positions that strongly marked the disciplinary practices. In the 60s both architecture and cinema fought against imposed styles of a fenced regime, looking for new languages and identities, without losing their cultural roots but equally criticizing the legacy of modernity. And it was this generation of architects and filmmakers who took the stage until today, marking the Portuguese cultural landscape of the past fifty years.

Acknowledgments

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References

- Baptista, T. (2008). *A Invenção do Cinema Português*. Lisboa: Tinta da China.
- Figueira, J. (2008). *A Casa do Lado*. In *Só Nós e Santa Tecla* (pp. 57-61). Porto: Dafne Editora.
- Leal, J. (2009). *Arquitectos, Engenheiros, Antropólogos: Estudos Sobre Arquitectura Popular no Século XX Português*. Porto: Fundação Instituto Arquitecto José Marques da Silva.
- Rosas, F. (2008). *As mudanças invisíveis do pós-guerra*. In Mattoso J. (Ed.) *História de Portugal. O Estado Novo* (pp. 128-131). Lisboa: Círculo de Leitores.

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THE TERRITORY OF "AVIEIRAS" STILT-HOUSE VILLAGES IN THE SURVEY ON VERNACULAR ARCHITECTURE: WHAT DOES THE FUTURE HOLD?

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Abstract

This article aims to analyze the approach towards the territory of 'Avieiras' stilt-houses villages, localized along both banks of the Tagus River between Abrantes and Lisbon, in the Survey on Vernacular Architecture in Portugal. The "Survey on Vernacular Architecture in Portugal" (1961) created the basis for scientific research, survey and register of vernacular architecture in whole Portuguese continental territory, except the Azores and Madeira Islands.

The stilt-houses built by the waterside are one of the most ancient typologies of vernacular architecture in Portugal. Vitally-linked to the rivers, they reflect a common building strategy, with common materials and methods which are perfectly matched with nature.

Included in the Zone 4 - "Estremadura", of the Survey on Vernacular Architecture in Portugal, are the stilt-houses of 'Avieiras' villages of the Tagus River, built by the fishing community, coming from a place called Vieira de Leiria found on the Atlantic shore. The roots of these settlements are from the middle of the 19th century. These stilt-houses were built according to traditional techniques of construction using local materials such as wooden branches or cane.

The identity of the 'Avieiras' stilt-house villages is inseparable from the river. Nowadays, these stilt-houses are a unique legacy of the vernacular architecture linked with the rivers landscapes in Europe.

There are several challenges for the stilt-houses of the 'Avieiras' villages given their vulnerability in face of the degradation process. Many of these buildings are now long gone or in a continuous process of changing in terms of architecture, construction materials or morphology of the urban settlement. These changes are caused by the contemporary requirements in terms of comfort and habitability conditions. One interesting point is that a great part of these concerns nowadays with the stilt-houses of Tagus River, were discussed in the 1960's in the Survey on Vernacular Architecture in Portugal.

Keywords: "Avieiras" stilt-houses villages; Vernacular architecture; Survey on Vernacular Architecture in Portugal

Introduction

The vernacular architecture of 'Avieiras' houses is a peculiar study object in the analysis of the evolution and current state of architectural heritage contained in the Survey on "Arquitectura Popular em Portugal"¹, 1961. The importance of these buildings is increased by the fact that they are an example of one of the oldest types of vernacular architecture: the stilt-houses.

All over the world there are examples of wooden houses on stilts over the water. In Portugal, this type of architecture is represented in the 'Avieiras' villages, established along the river banks.

As in all the inhabited territories, these villages were and are still being transformed by simultaneously destructive and constructive effects, which have occurred along the timespace of their existence. The changes reflect the desire of these villages to return to a condition that will allow them to start again, and to play an active and dynamic role in today's society, since fishing has lost its importance.

This paper aims to reflect on the idea of the urgency to preserve and enhance this unique heritage of Portuguese culture, present in the Survey, and that nowadays still remains timely. What is needed is to reach a balance between the fact of being in the presence of a historical witness of Portuguese popular architecture and the necessity of evolving to respond to the needs of residents, users and visitors.

'Avieiros' and 'Avieira' architecture in the Survey

"Avieiros" was the name given to the fishermen that came from a place called Vieira de Leiria, by the people who already lived near to the Tagus River. Due to adverse physical and economic conditions occurring in their homeland in the winter, these fishermen switched from sea fishing to river fishing. 'Avieiros' took part in a major phenomenon of seasonal migration that Portugal witnessed at

¹ "Popular Architecture in Portugal"

the beginning of the 20th century. Entire families joined this movement, sprinkling the banks of the Tagus River with small boats, authentic houseboats.

The 'Avieiras' stilt-houses are the result of the establishing of the fishermen and their community from Vieira de Leiria on the banks of the Tagus River. This fixation led to the need of a permanent house which would be more stable than the boat. Around the 1930s (Smith, 1995), with increasing time spent on the river, 'Avieiros' gradually began to build the small houses made entirely of canes (non cost material, growing free in the banks) which they called "huts" (Barbosa, 1990) on land.

Already fully established and with better economic conditions, the 'Avieiros' started to built the first wooden stilt-houses (Barbosa, 1990). The fishermen began to settle along the Tagus in houses built on the waterline on stilts as a protection against floods and as they used to do in their homeland. Currently, these homes are one of the last witnesses of this type of occupation still in existence in Western Europe.

Examples of "architecture without architects", the 'Avieiras' stilt-houses were built by anonymous builders, including the fishermen themselves or members of the community. They are the product of the relationship between the fishermen and their social, economic and geographic environment. Also as with any type of vernacular architecture, the construction process of 'avieiras' houses is deeply rooted in tradition, particularly in the wooden houses of the Portuguese central seashore. They are the result from the application and development of the techniques and processes used on the seashore adapted to the river environment.

In terms of architecture, the Survey on "Arquitectura Popular em Portugal" is a pioneering work which for the first time raised the characteristics of the original matrix of the 'Avieira' house, and where it's possible to understand its origin in the wooden houses of central Atlantic coast:

- Wooden boards arranged vertically placed over on the floor built over the stilts which measured 2.00 meters tall;

- Wooden stilts or tree trunks;
- Exterior painting with cheerful colors with a predominance of green, red, blue and orange;
- Exterior stairs provide the access directly to the entrance or to a covered balcony located on the facade where is located the entrance;
- Interior usually consists of three divisions, living room and bedrooms whose communications are blocked by curtains. The wooden walls are painted or lined with colored patterns paper; the fireplace is in the corner of the room, without the function of cooking because the kitchen is an outside annex; the bedrooms are symmetrical each with a small window and differently colored (blue for boys and pink for girls).

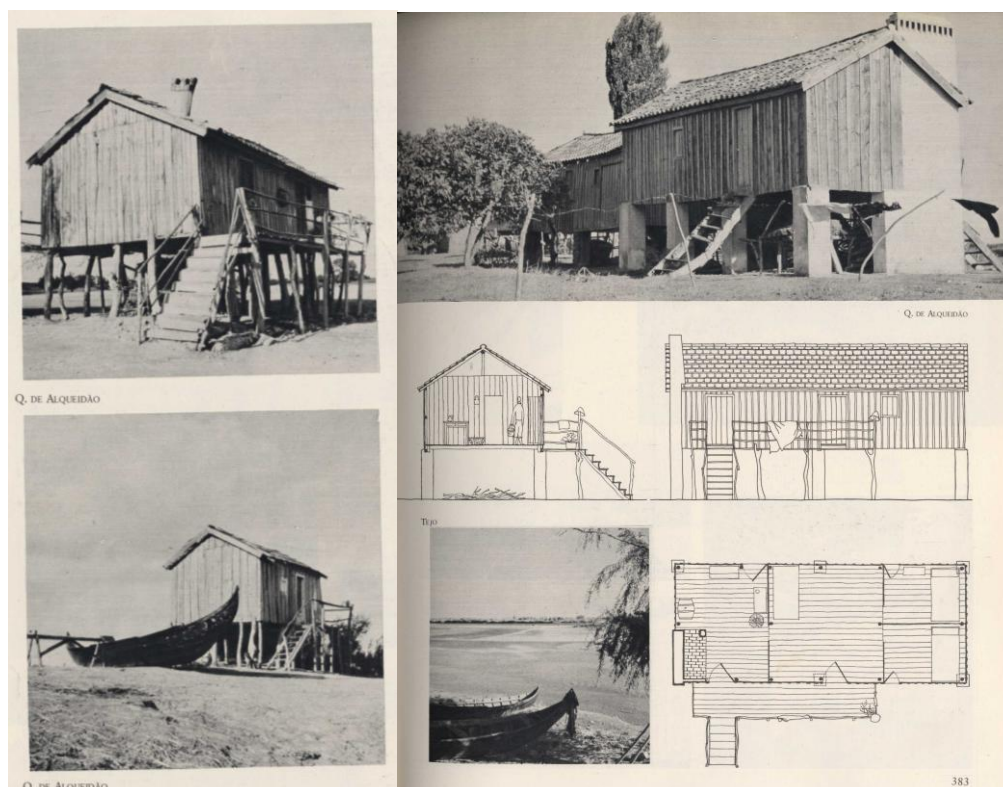


Figure 1. 'Avieira' house in "Arquitectura Popular em Portugal", edition of the Sindicato Nacional dos Arquitectos, Lisbon, 1961.

These houses were entirely built of wood and sometimes appeared isolated, associated with a family; sometimes grouped in two or three buildings, associated with a family or with several family ties; sometimes in urban settlements with several buildings aligned.

The Survey aimed to report these buildings before the transformations that in the case of 'Avieiras' stilt-houses led, sometimes, to their irreparable destruction. This goal proved to be very timely, as currently, much of the heritage represented by these houses is practically transformed or has almost disappeared. Thus, the Survey continues to represent a wealth of information about the buildings in the "*último momento possível para registar em toda a sua plenitude um mundo prestes a desaparecer*"² (AAP, 1987).

Current situation of 'Avieira' architecture compared with the concerns raised in the Survey

Currently, the 'Avieiros' architecture and villages are integrated in a recent project (2009) that aims to elevate the 'Avieira' Culture to National Heritage. This project symbolizes the valuation of this heritage of unique characteristics and a part of the Portuguese history and identity. It also proves the maintaining of some of the matrix characteristics of 'Avieira' architecture in the existing buildings.

The 'Avieiras' stilt-houses are a wealth of information to increase the knowledge from the past, due to the various actions that they are subjected to: sometimes preserved; sometimes abandoned, forgotten and in decline; sometimes successively adapted.

Referring to the wooden architecture, the Survey has emphasized at the time of its realization, that this type of construction began to decrease and be destroyed by the proliferation of new materials. This concern proved to be relevant both in 'Avieiras' houses of the Tagus River and in wooden houses of the Portuguese central seacoast. Currently, there aren't any houses exactly according to the

² "last possible moment to register in all its fullness a world about to disappear."

original matrix entirely of wood. Some have small changes that have proved to be beneficial to their preservation, like the replacing of the stakes by pillars of masonry or concrete and the roof tile. But in the majority of the houses, new materials have replaced the wood construction and annihilated the identity of these examples of the Portuguese popular architecture. In the Portuguese central seacoast, there are few examples of wooden fishermen houses that survived as wooden constructions until today but normally these constructions do not form an urban space because they are "lost" between the constructions of hard materials. In the Tagus River, the 'Avieiras' villages still offer us, as in the case of Caneiras, Escaroupim, Palhota Patacão, these buildings as creators of urban space.

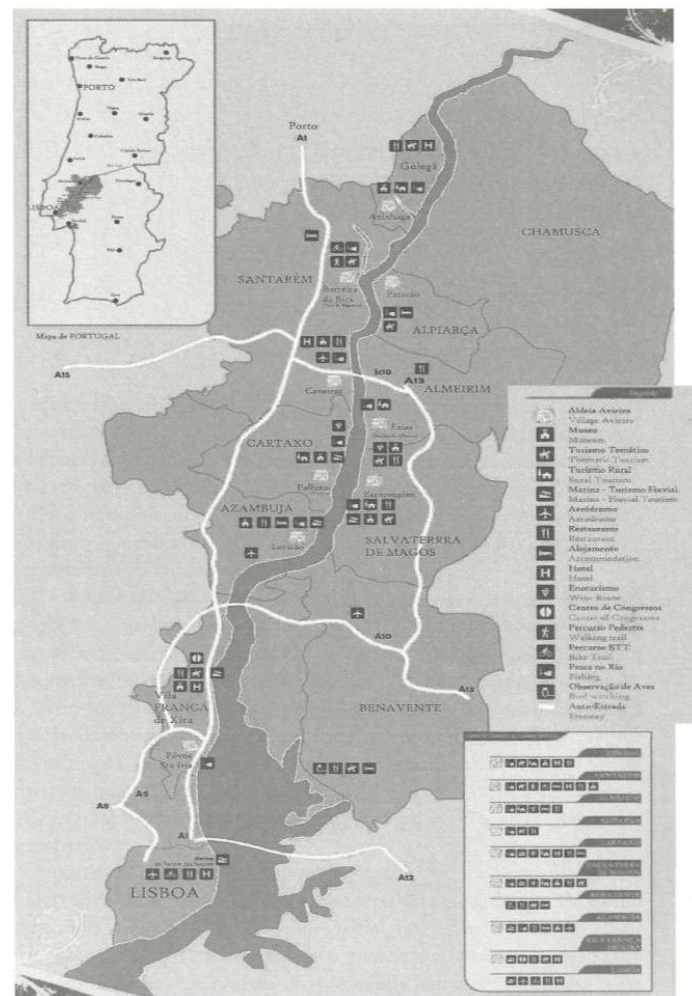


Figure 2. Location of the Avieiras Villages, source: Viana, M. (2008). "A Rota Turística dos Avieiros do Tejo: Uma Experiência Empresarial".

Patação is an abandoned village comprising of two groups of houses in an advanced state of conservation, which is now starting to take its first steps towards rehabilitation. The constructions are mostly of wood and maintain the characteristics of the original matrix, despite the appearance of small fragments of new materials but they don't significantly affect the urban image of the village. In the biggest group of houses, the constructions are aligned along a dike, and the access to the inside is through ramps that start from it.

The 'Avieira' village of Palhota, one of the villages whose buildings were included in the Survey, is a rare example which keeps much of its identity. To this is

added the isolation of the village when compared to others. Many of the characteristics raised in the Survey still remain, although is now starting to show signs of small changes from the invasion of new building materials, such as blinds or marble tiles that persist in affecting the unity of the image of this picturesque village. Generally, the 'Avieira' house of Palhota is built on piles of concrete often capped for storage. The roof is tiled where a masonry chimney arises. The access to the house is made by stairs that lead to a balcony where the entrance is. The interior is organized by a living room and two bedrooms over which the fishermen took advantage to make a storage area.



Figure 3. 'Avieiras' villages of Patacão (left) (Author, 2010) and Palhota (right) (Author, 2011).

The kitchen is outside and comprises of a simple fire protected from the wind or built as an annex of the house. As can be seen, although inhabited buildings remain very similar to those in the Survey, the changes here have proved to be important till now for the preservation of buildings and hasn't affected the unity of the architecture despite the threat to do so.

Other settlements like Caneiras and Escaroupim are increasingly the target of a transformation process that is leading to a progressive loss of its architectural environment. In these villages, having a more urban character, the 'Avieiras' houses have changed by the hands of the residents according to their needs and personal taste.

Both villages, which survived till the present as living places, are formed by two quite distinct groups of houses. One group, with typical 'Avieiras' houses aligned in a street parallel to the river, built when fishing was the main activity of the community. Another group, consisting of houses built with more modern, hard materials, arranged along streets perpendicular to the river that emerged at a time when fishing was no longer the main activity and the source of livelihood of the residents.

The location near to medium urban centers, like Santarém (Caneiras) and Salvaterra de Magos (Escaroupim) gave these villages a bigger prospect of growth and contributed to this dichotomy.

In the case of Caneiras, the oldest group of houses is implanted at the water's edge and consists of two parallel bands of houses aligned with the Tagus River and is built on stilts. The most recent houses lie further inland and they are located on streets perpendicular to the river and have nothing to do with the prototype of 'Avieira' construction. This duality results from a lifestyle divided between fishing and agriculture, the Tagus and the Lezíria. According to the urban growth that characterizes this village there are multiple variations of housing typology. Dimensions, materials, number of floors, the existence of toilets, the presence of the chimney or the type of cooking area, result in multiple differences that reflect the different moments in the development and expansion of the village.

In Escaroupim, like in Caneiras, the rurality usually present in 'Avieiras' villages is being diluted. However, it was also this transformation process that has kept the village alive, adapting the buildings and the urban mesh to the contemporary demands. Escaroupim is considered the most urban village. It is the village with the most equipment. In it we find, for example, a school, amongst other equipment and facilities created to reinforce the relation between the users and the river and to disseminate the avieira culture such as the museum "House of Avieiro", a restaurant, a leisure area and the docks from which it is possible to depart for boat trips along the river.



Figure 4. 'Avieiras' villages of Caneiras (left) (Author, 2010) and Escaroupim (right) (Author, 2010).

In Caneiras and Escaroupim the evolution of the relationship between people and environment produced effects in the inhabited buildings. They suffered transformations with effects sometimes constructive, sometimes destructive. Constructive effects since they are living villages which testify a desire to return to a condition that will allow them to start over again, and to play an active and dynamic role in the contemporary society. Destructive effects, because of the process through which this architectural and urban heritage has been the target of multiple transformations. This process has led to an increasing distortion of the uniqueness of this historical evidence of the popular architecture in Portugal. As the preface of the 3rd edition of the Survey refers "*ventos eufóricos de mudança e de progresso, dominados por uma lógica individualista e desordenada, varreram a terra portuguesa...*"³ (AA.VV., 1987). If they didn't sweep already, they threaten to sweep.

³ "euphoric winds of change and progress, dominated by an individualistic and disorderly logic, swept the Portuguese land..."

Conclusion

From the examples of popular architecture included in the Survey there are few which have survived the decay or the changes to the context in which they arose. 'Avieiras' villages are part of these examples and as such they represent a single legacy of the popular architecture in Portugal. However, if it is so that the 'Avieiras' stilt-houses have mostly disappeared, the other part has been changed or is being changed, with sometimes beneficial and sometimes inadequate and annihilating effects.

Man, environment and building are related in the 'Avieiras' villages in a harmonious and interdependent way, as happens in all popular architecture. "*Formas de exploração da terra, sistemas de locomoção, transporte e aproveitamento de energia, técnicas e materiais de construção*"⁴ (VV AA. 1987) These are related to create the identity of the buildings and urban space.

It is generally considered that the Survey has captured the intrinsic characteristics of these buildings at the best point of their harmonious relationship with the environment. This "*relação tradicional e herdada entre o homem e o meio*"⁵ (AA.VV 2003) – this relation between 'Avieiros' and the sea of their homeland and then the river that gave them sustenance and where they establish an essential witness of human history - evolves just like the buildings that serve as a backdrop. In the 'Avieira' village of Patacão, due to the weakening of fishing activity, an abandon of the village has occurred; in Palhota there are some fishermen who insist on preserving the character of this fishing village; in Caneiras and Escaroupim, although there are some fishermen who maintain their activity, the proximity to cities and the relationship that people have with them is reflected in various stages of evolution of the urban morphology of the village and the characteristics of their buildings (materials, dimensions, types).

⁴ "Forms of exploiting the land, transportation systems, energy transportation and utilization, building materials and techniques"

⁵ "traditional and inherited relationship between man and environment".

The latest edition of the Survey asks "*se o passado que o livro nos apresenta tem algum futuro, e que futuro pode ser esse...*"⁶ (AA.VV, 2003). On the one hand, the Survey asks what to do with the destroyed and abandoned constructions so they can resist. On the other hand, the Survey asks if according to the changes in the lifestyle and the new aspirations of the people, if it is possible to preserve these buildings and adapt them to the new features maintaining some of their intrinsic characteristics and "*a coerência de conjuntos que são verdadeiras lições da arte de construir com economia de meios e em estreita relação com o sítio.*"⁷ (AA.VV, 2003)

Among the guidelines for the future of these buildings, tourism and second-homes are presented in the Survey as possible good valances for the Portuguese popular architecture that has survived since the Survey to the present day, including the 'Avieiras' houses. The same work has other guidelines which has proved to be relevant to the 'Avieiras' villages and should be taken into account during its rehabilitation. One thing which is essential is the creation of multiple activities and interests so these villages do not act as museums, especially in the abandoned cases (Patação); it is fundamental to have the participation of the inhabitants in all actions related to the rehabilitation of their village, since they are the main connoisseurs on their environment; and it is extremely important for the survival of the villages to maintain their historical identity; the approach and interrelationship of these villages with the cities should be taken as an advantage for both.

It is important to ensure the maintenance of the identity of the inhabitants to their village, but it is essential that this action is not too closed and static; it must be open to innovation in order not to incur the risk of making the villages too obsolete, condemning them to disappear.

On the one hand the Survey reveals, in the case of 'Avieira' architecture, a wealth of historical information about their buildings and their unique features, allowing us to understand their evolution; on the other hand, the new editions

⁶ "if the past that the book introduces us has a future, and what future it can be ..."

⁷ "consistency of sets that are real lessons of the art of building with economy of means and in a close relationship with the site"

always wonder about the challenges that the vernacular architecture is facing at the time. It doesn't do this, however, without leaving some fundamental suggestions as to the survival of the few examples of popular architecture reported in the Survey that survives till nowadays.

References

- AA.VV. Associação dos Arquitectos Portugueses (1961). *Arquitectura Popular em Portugal*. Prefácio da 1ª Edição. Sindicato Nacional dos Arquitectos.
- AA.VV. Associação dos Arquitectos Portugueses (1979). *Arquitectura Popular em Portugal*. Prefácio da 2ª Edição. Associação dos Arquitectos Portugueses..
- AA.VV. Associação dos Arquitectos Portugueses (1987). *Arquitectura Popular em Portugal*. Prefácio da 3ª Edição. Associação dos Arquitectos Portugueses..
- AA.VV. Associação dos Arquitectos Portugueses (2003). *Arquitectura Popular em Portugal*. Prefácio da 4ª Edição. Ordem dos Arquitectos.
- Barbosa, L. et al. (1990). "Caneiras, O Homem e o Rio", in *Que Tejo, Que Futuro?*, 2º Vol. Actas do I Congresso do Tejo, Edição da Associação dos Amigos do Tejo, Lisboa.
- Gambóias, J. (2010). Casais Avieiros, paisagens em Evolução, in *Projecto de Candidatura da cultura Avieira a Património nacional*, Folha Informativa n.º1/2010.
- Oliveira, F. & Galhano, F. (1964). *Palheiros do Litoral Central Português*. IAC - Centro de Estudos de Etnologia Peninsular, Lisboa.
- Redol, A. (1942). *Avieiros*. 2.ª Edição, Publicações Europa América. Mem-Martins.
- Salvado, M. (1985). *Os Avieiros nos Finais da Década de 50*. Edição de Autor, Castelo Branco.
- Soares, Maria (1995). Varinos e Avieiros. In: *Navegando no Tejo*, pp.82.
- Viana, Madalena. (2008). *A rota turística dos Avieiros do Tejo: uma experiência empresarial*. Comunicação apresentada no 1º Encontro Nacional da Cultura Avieira realizado em Santarém a 7 e 8 de Novembro de 2008.
- Virtudes, A., Almeida, F. & Navarro, F. (2010). *Aldeias Avieiras: Territórios e Identidades de Uma Arquitectura*, I Congresso Nacional da Cultura Avieira: Cultura Avieira – Um Património, Uma Identidade. Instituto Politécnico de Santarém, Santarém / Salvaterra de Magos.

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