GUIDE FOR VALUE-ADDING CONTEMPORARY ARCHITECTURE AND FURNITURE DESIGN IN VERNACULAR SPIRIT

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Abstract:
The purpose of this study is to embrace regionalism and specific Romanian wood construction methods and create a vital connection between vernacular concepts and new interior design. The methods used in the research are based on field trips, visiting Romanian villages, connecting with the community and determining the degree of presence of traditional wood structures and housing, the transition of vernacular construction typologies in the contemporary context.

The aim of the project is to create furniture with value and meaning which increases with time and through the use of local communities. This type of interior design achieves meaning as a part of the variety of cultures of the local Romanian communities and as a symbolic reflection of the context. The objective of the experimental investigations was to determine specific local characteristics of vernacular architecture and furniture in Romania and specific European countries. The results and conclusions of this investigation also focus upon manifestations of neo-vernacular architecture in national and European context and set the basis for the main value-adding methods proposed in this research.

Key words: vernacular architecture; vernacular furniture; value-adding; rural context; methods; wood.

INTRODUCTION
The vernacular house embodies a complex set of elements of everyday life - occupation, needs and activities of the inhabitants. The traditional Romanian wooden construction is a result of imagination, but also a direct reflection of the needs and the specific lifestyle of several generations. These functional elements have been in an interdependent relationship with the structural ones, along with the change regarding the needs of residents, new solutions had to be found in order to satisfy the inhabitant's needs on both levels. Thus, we can observe links between the spatial layout evolution of vernacular housing (due to functional reasons and specific needs) and the structural developments that made possible the diversification of wooden joints which led to various architectural, functional, and stylistic forms.

The aim of the experimental investigations was to determine specific local characteristics of vernacular architecture and furniture in Romania and specific European countries. The results and conclusions of this investigation also focus upon manifestations of neo-vernacular architecture in national and European context and set the basis for the main value-adding methods proposed in this research.

The originality of traditional Romanian architecture had been exploited in the 19th century on a monumental scale and will continue to inspire romanian architects like Ion Mincu in the creation of a neo-Romanian architectural current which had a profoundly reinterpreted vernacular architectural vocabulary. He believed that he had found the "roots of a windfall" (Curinschi 1981).

Even though the research of vernacular architecture has existed throughout several decades, there hasn't been identified an organised attempt of systematisation of the results concerning this theme, the interpretation and concept transfer of Romanian vernacular architectural elements being present in the last 300 years on a national level with the aim of representing the spirituality of the Romanian population. Italian rationalist architects of Gruppo Sette (Sabatino 2009) stated in 1926 that "tradition does not disappear, but changes appearance." This paper starts from this idea that revolutionized and changed the approach of professionals towards the concept of tradition and vernacular. The aim of the research is to present in a synthetic and visual manner forms of architectural-functional-structural-symbolic evolution of vernacular housing and furniture on a European level in order to obtain strategies of reinterpretation and reintegration of vernacular concepts on a national level. These strategies place vernacular architecture in a new light, making it possible to apprehend traditional architecture as a process of sustainable design with a
range of actions on diverse and multiple levels: the physical (natural-topography, landscape, vegetation, structural, spatial, material-textures) and the spiritual (traditions, customs).

Genesis and definition of vernacular concepts

Vernacular architecture represents a set of values on several levels: historical, aesthetic, social and cultural, and is a direct reflection of the user's talent and building techniques. However, in terms of vernacular heritage protection, relevant research and studies are extremely low in number. In this regard, investigations have been made concerning the evolution of the vernacular concept through the activities of several personalities in this field such as: Christopher Alexander, Hassan Fathy, Kenneth Frampton, Paul Oliver, Dell Upton, Bernard Rudofsky and Amos Rapoport.

The role of tradition in the modernization and globalization era has led to a series of debates in the presence of specialists, architects, designers in recent decades (Ruggiero 2009). Tradition is the mass of cultural, religious, ethnographic values and modernity may be associated with cultural transformation, mobility, social class stratification, a consumer-oriented society (Mitrache 2008). At present, tradition and modernity are no longer seen as two opposite concepts, but ones that coexist, overlapping and influencing each other.

Tradition is the first resource for reintegration, rehabilitation and maintenance of local identity, on regional or national level. Kenneth Frampton claimed in the 80s in his book on critical regionalism that local tradition can be a tool for the creation of identity.

Critical Regionalism is an approach in the architectural field that aims to define space and identity by replacing concepts of uniformity and monotony of the International Style, but in the same time rejects individualism and ornamentation of postmodern architecture. The style of critical regionalism corresponds with a type of architecture that is rooted in the tradition of modern architecture, and is linked to the geographical and cultural context. Critical Regionalism may extend its meaning beyond the field of vernacular architecture. It is a progressive approach to the design process that attempts to mediate between global and local manifestations of architecture (Frampton 1983).

OBJECTIVES AND METHOD

The proposed methodology is based on the findings of the synthesis and experimental research. The characteristic vernacular elements were selected and integrated in the context of contemporary process of architecture and furniture design. These features can also be found in the context of European vernacular, such methodology being applicable beyond the local context. This holistic approach consciously seeks to implement value-adding vernacular elements in any context, only small adjustments are necessary or addition regarding the specific place (regardless of culture, population, etc) (Curinschi 1981).

Wood as a primary building material is a clear reflection of the local communities way of living. Even though the communication of traditional building methods from one generation to the other has had a fragmented evolution, it has managed to adapt itself to the contemporary context due to the collective interest of local communities and their way of understanding life, living and the importance of traditional wood constructions.
Wood can be considered one of the first building materials. So far, it has had a constant and varied utilization concerning built environment with or without a structural role. This aspect is mainly the result of the spread of the wooden material as species around the world, but also due to a series of qualities like: easy processing, light weight and good mechanical characteristics. Even if it can be characterized by a high perishability linked to multiple factors like vulnerability to fire, it still has a wide utilization range in the present.

The first wooden frame structures can be dated back to the year of 200 B.C. (Pănoiu 1977). The first structures were very simple, consisting of branches and/or thin wooden rods connected through wattle work (Lăzărescu 2010) or other joints between larger trunks (Crișan 2003).

Regarding Romanian territory, vernacular construction were simple regarding the structural forms, with some of the wooden pillars buried under the earth, the visible part being covered with planks, wattle and clayey soil. These structural systems diversified in time, leading to the construction typology with horizontal logs resting on stone foundations (Olărescu 2012). From a structural viewpoint, these constructions were made of round pillars embedded in the soil, ensuring the stability of the construction (Păcală 1915).

The research results helped develop a methodology that proposes the following steps: consultation of the (new-created) databases, decision making according to the purpose, drawing guidelines, selection of the sustainable option, functional and stylistic interpretation of the elements according to the assumed aims, direct value-adding. This kind of new approach to the design process has to be seen as a contemporary need, a specific need in a globalized world, and aims at giving answers to specialists in search of value-adding elements of local tradition in their architectural and furniture projects.

The applicability of the proposed methodology in the field of architectural and furniture design in harmony with contemporary requirements was checked by a few projects: a sustainable housing unit and an innovative furniture ensemble designed according to the methodological steps that resulted from the research.

**Steps for value-adding contemporary architecture and furniture design in vernacular spirit**

The proposed methodology is based on the findings of the synthesis and experimental research. The characteristic vernacular elements (see in Figs. 2 and 3) were selected and integrated in the context of contemporary process of architecture and furniture design. These features can also be found in the context of European vernacular, such methodology being applicable beyond the local context.
Fig. 2. Integration of vernacular elements in the process of contemporary architecture.
Fig. 3. Integration of vernacular elements in the process of contemporary furniture.
This holistic approach consciously seeks to implement value-adding vernacular elements in any context, only small adjustments are necessary or addition regarding the specific place (regardless of culture, population, etc).

The stages of the theoretical and experimental research conducted in previous research were based on a holistic approach concerning the following:
- Wood utilization patterns regarding vernacular architecture and furniture;
- Architectural ornaments and furniture;
- Architectural components;
- Manifestations of European vernacular architecture and furniture;
- Manifestations of Romanian vernacular architecture and furniture;
- Effects of the contemporary context upon the vernacular architecture;
- Neo-vernacular architecture and furniture in Europe;
- Neo-vernacular architecture and furniture in Romania.

The methodology is based on the above mentioned research and includes a logical set of steps:

**Cycle I - theoretical stages**

1) Consultation of existing databases, regarding:
   • Current status of vernacular architecture and furniture;
   • Specific elements of vernacular architecture and furniture;
   • Materials used in vernacular architecture and furniture;
   • Volumetric composition, color, facade, solutions of technical and constructive connections between different elements, characteristic joints regarding vernacular furniture;
   • Ornamental characteristics depending on the geographical context.

2) Making decisions regarding the final purpose

3) Selecting the strong/main directions of action:
   • existing geographic and climatic context, taking into account a number of the constants on site (typology of rural settlement - the village plan, valley, cultural-, ethnic-, economic-, social context, etc.);
   • The components and the operation of the household, needs for comfort;
   • Volumetric and specific form of dwelling;
   • Construction materials, color, texture;
   • Orientation, facades.

**Cycle II – practical stages**

4) Detection of the sustainable direction:
   • Selecting from multiple possible optimal variants/feasible options as required;
   • Identification of the optimal measure considering the possibilities and the desired result.

5) Functional and stylistic interpretation of elements
   • Assuming and highlighting the characteristic elements of vernacular architecture and furniture on a holistic level: volumetric orientation, textures, materials (in the case of an architecture project); scale, proportion, structure, materials (in the case of furniture design);
   • Assuming of detail elements such as specific joints, ornaments characteristic local structural features for walls, roof or concerning furniture items.

6) Direct value-adding through:
   • Architectural projects or functional architectural conversion;
   • Projects of organization, reorganization of outer space (decorative and functional) and landscape design;
   • Projects for furniture and other interior and exterior elements.

A value-adding methodology of vernacular elements on European and national level was realized, comprising six stages grouped into two cycles, first with theoretical stages such as consultation of existing databases, decision making, drawing guidelines; the second cycle comprises the practical steps such as selecting the sustainable direction, functional and stylistic interpretation of the elements according to the aims assumed, direct value-adding through architectural and furniture projects.
CONCLUSIONS AND DISCUSSIONS

The upcoming figures (5, 6, 7) contain 3 study cases (two regarding contemporary furniture in neo-vernacular spirit and a house project) which exemplify the application of the proposed methodological steps for value-adding contemporary architecture and furniture. The main concepts that are taken into consideration for reinterpretation are the following: structure (form, aspect, and wooden connections/joints); material (wood species, color, and texture); composition (scale, proportion, and dimensions); ornaments (motifs, technique, and scale).
Application of the proposed value-adding methodology for contemporary furniture, case study 1.

Fig. 5.
Fig. 6. Application of the proposed value-adding methodology for contemporary furniture, case study 2.
Fig. 7.
Application of the proposed value-adding methodology for contemporary architecture, case study 3.

CONCLUSIONS
The research embraces regionalism and specific Romanian wood construction methods and defines a clear connection between vernacular concepts and new interior design process (Fig. 3) concerning Romanian villages, connecting with the community and determining the degree of presence of traditional wood structures and housing, the transition of vernacular construction typologies in the contemporary
context. The social layer of the study has completed the architectural, aesthetic and functional aspect of the analysis with the purpose of offering a more profound approach in the process of identification of traditional characteristics of Romanian architecture and wood construction methods and a guide for integrating them in the present design process. This type of design process achieves meaning as a part of the variety of cultures of the local Romanian communities and as a symbolic reflection of the context.

The differences between the “vernacular” and “modern” design processes are very clear: in the case of vernacular, the production would be singular, crafted and local, whereas the contemporary modern production would be characterized by a serial, industrial, dislocated approach. In order to achieve the wanted result, we need to utilize and rely on the advantages of modern production, but should not forget that the design should reflect the profoundness of a local vernacular concept.

The research results helped develop a methodology that proposes the following steps: consultation of the (new-created) databases, decision making according to the purpose, drawing guidelines, selection of the sustainable option, functional and stylistic interpretation of the elements according to the assumed aims, direct value-adding. This kind of new approach to the design process has to be seen as a contemporary need, a specific need in a globalized world, and aims at giving answers to specialists in search of value-adding elements of local tradition in their architectural and furniture projects.

The newly created instruments and methods for investigating, assessing and addressing critical vernacular architecture and furniture in national and European level contribute to a holistic vision of the vernacular phenomenon. A value-adding methodology of vernacular elements on European and national level was realized, comprising six stages grouped into two cycles, first with theoretical stages such as consultation of existing databases, decision making, drawing guidelines; the second cycle comprises the practical steps such as selecting the sustainable direction, functional and stylistic interpretation of the elements according to the aims assumed, direct value-adding through architectural and furniture projects.

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REFERENCES