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REPORT

by Prof. Dr Arch. Asen Pisarski,

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member of the Scientific Jury, appointed by Order № RD-00011 / 07.01.2022 of the Rector of VFU "Lyuben Karavelov" to conduct a procedure for the defence of a dissertation for the scientific and educational degree "Doctor" in the professional field 5.7. "Architecture, Construction and Geodesy", scientific speciality "Architecture of buildings, facilities, structures and details" with candidate architect Kliment Radoev, PhD student in self-study with a dissertation "Method for Studying of Vernacular Housing Structures and Technologies Worldwide.".

The dissertation presented by arch. Radoev contains 337 pages. It consists of content, presentation in three chapters, conclusion, two appendices, figures - 148 pieces, bibliography with 540 electronic and printed sources, list of the author's publications on the topic - 4 pieces. (2 independent in Bulgarian and 2 co-authored in English).

1. Relevance and significance of the researched problem.

There is a growing interest in vernacular folk construction methods topic in sustainable architecture context and the restoration of the connection with nature in the first decades of the XXI century. An important place in this topic is occupied by vernacular folk houses worldwide, the fruit of centuries of natural evolution. Preserving and using this valuable knowledge of the architecture of vernacular houses is undoubtedly an important task, and the real danger of losing it makes it particularly relevant. In order to preserve, supplement and use this knowledge, it is necessary to organize it in a single classification system.

2. Dissertation goals and objectives relevance and validity

The author's analysis of the existing literary and internet sources finds there are no uniform criteria or an established system for research of vernacular houses or their specific architectural properties and premises for their creation.

The main goal of the dissertation is to develop a scientific and theoretical methodology for collecting, comparing and analyzing information about vernacular houses worldwide in a systematic way and, on this basis, to collect and systematize information about them and create a classification and nomenclature,

The main tasks are logically formulated, the consistent implementation of which would lead to the realization of the set goal:

- Collection of complex information about the architecture of vernacular houses.
- Determining general premises for the existence of a type of vernacular house and common architectural properties, representing its essence.
- Research the significant connections between premises and properties and their grading by importance.
- Creating a system of knowledge a theoretical methodology model for studying vernacular houses.
- Creating a matrix template for research of vernacular houses and a matrix for systematization of knowledge about them.
- Determining types and kinds of houses according to specific properties, and rules for creating a nomenclature of vernacular houses
 - 3. Knowledge degree of the problem state and creative interpretation of the literary material.

The list of cited literature sources is impressive - 540 electronic and printed sources. Their thematic focus is within the research scope and shows the dissertation's basis on a broad theoretical basis.

The critical analysis of the sources conducted in the research demonstrates in-depth knowledge and allows the formulation of work positioning following the set goals.

The used theoretical statements and examples are correctly quoted and interpreted in the text of the work.

4. Correspondence of the chosen methodology and research methodology and the set goal and tasks of the research with the achieved contributions.

The applied scientific methods - analysis and synthesis, comparison and summary - form a complex approach suitable for the research.

The vernacular house is seen as a product of evolution, like living organisms, and this is the basis for applying a fundamentally similar taxonomic classification system. By analogy with the biological world, the ideas of "rank", "category", "species", "type" are clarified and the terms "architectural family", "architectural type", "architectural kind" and "architectural variety" are defined. A system for naming all elements and

categories in the taxonomy has been introduced, and by introducing a nomenclature, it becomes usable for practical use.

5. Scientific and scientific-applied contributions of the dissertation.

The main theoretical contribution to the work is the developed methodology for data collection and classification in a matrix.

A taxonomic system for the classification and organization of vernacular houses worldwide has been established, and a system for naming and nomenclature, providing opportunities for studying the technical properties of vernacular houses for the practical application of knowledge.

Parts of the work that have the character of contributions are data collection on vernacular houses, the premises that created them and their properties, and the world map with vernacular houses around the world, their zoning and origin. An opportunity has been created for mapping the different ranks of vernacular houses.

6. Significance of contributions to science and practice and opportunity for implementation.

Related to modern requirements for energy efficiency and environmental friendliness, the conclusions from the evolutionary processes that created a vernacular house are crucial. The work provides an opportunity to use the vernacular house in a particular area as a reliable source of information in creating a regulatory framework for environmentally friendly construction in the area. Implementing environmentally friendly solutions means taking into account the available raw materials and resources, the right attitude towards the environment and creating a product acceptable to society.

As guidelines for future research, online products have been formulated, developing the possibilities of the developed methodology:

- Creating an "online" system for unambiguous and systematic information collection about vernacular houses.
- Creating complete online maps of the areas of distribution and existence of families, types and species.

7. Evaluation of dissertation publications

The author has 4 publications, of which 2 in English in co-authorship and 2 independent in Bulgarian, 2 participations in scientific conferences, 4 public lectures at foreign universities on the dissertation topic.

8. Reflection in the scientific world - use and citation by other authors, reviews in the scientific press, etc.

No data are presented and such are not known to the reviewer for citations and reviews in the scientific press of the results of the dissertation and related publications.

9. Estimation, recommendations and notes.

I would recommend architect Radoev to fulfil the stated intention of creating an "Online encyclopedia of vernacular houses worldwide", which will initiate the interactive supplementation, updating and use of systematic knowledge in this field.

Conclusion

Given the above, I believe that the presented work "Method for Studying of Vernacular Housing Structures and Technologies Worldwide" has the necessary qualities of a doctoral dissertation, and I offer to the esteemed scientific jury of its author architect Kliment Radoev to be awarded the educational and scientific degree "Doctor".

February 2022



Prof. Dr. Arch. Asen Metodiev Pisarski