

OPINION

By Associate Professor Architect Stela Tasheva, PhD, University of Forestry, Sofia, Bulgaria. in professional direction 5.7. Architecture, construction and geodesy

for awarding the educational and scientific degree doctor., in professional direction 5.7. Architecture, construction and geodesy; to Dr. Arch. Gergana Naskova Stefanova, independent doctoral student in New Bulgarian University, DP "Architecture of Buildings, Structures, Facilities and Details", with supervisor Prof. Arch. Georgi Georgiev, PhD, and a PhD Thesis titled: "The Role of Natural and Artificial Light in Architecture"

General information:

This opinion was prepared based on the order of the Rector of the NBU, N:3-RK-285/26.07.2022.

According to the data in NACID, the first dissertation of arch. Gergana Naskova Stefanova is on the topic "Design through the light of the architectural space", is protected by diploma N: 228 /08.09.2014 from NBU. However, this work was in professional direction 5.7. 8.2. Art. This opinion examines her second dissertation, which is entitled "The Role of Natural and Artificial Light in Architecture." It was developed independently for professional direction 5.7. Architecture, construction and geodesy.

The dissertation consists of 156 pages. They include an introduction, four sections and a conclusion, as well as the Glossary of Terms, Bibliography and List of Illustrations appendices. The submitted abstract in Bulgarian and English correctly reflects the content of the dissertation work.

1. Significance of the researched problem.

In general, natural and artificial light is a fundamental compositional and shaping tool in architectural design. In this regard, scientific and scientific-applied studies of the functional, cultural and aesthetic aspects of light in the solution of a building are always relevant. However, they studies are particularly relevant today: with the growing variety of light sources, the increasingly rich possibilities for their combination, and also for controlling the illumination. The significance of light research in architecture is also confirmed in relation to global topics such as: sustainability, light pollution, etc.

2. Justification of the aims and the tasks in the Phd Thesis.

The main goal declared in the dissertation is: "To prove the connection between the impact of architecture and the use of light as a factor forming the shape and the volume. To systematize compositional principles used by the various masters (architects) and their works." I find the aim consistent with the chosen topic and justified in relation to the theoretical materials developed so far in the field.

3. Correspondence between the chosen methods and the research methodology and the set goal and tasks of the dissertation work.

The dissertation includes a comparative analysis of the approaches of well-known authors-architects regarding the control of light, the materialization in the exterior and the integration in the interior. I find the used approach consistent with the professional direction of the Thesis and also the goal declared.

The studied samples are summarized in tabular form and allow comparison by author, era or construction solution. I consider the methodology to be appropriate and of a heuristic nature, which then allows future research upgrades and developments.

4. Scientific and scientific-applied contributions of the dissertation work (description and evaluation).

After the Introduction, in the First part of the dissertation, architect Stefanova examines the main compositional features of the use of natural and artificial lighting in architecture. In the next (Second) part, known solutions and examples, the work of the builders and designers of the 20th century, are examined from an architectural point of view, and the tabular comparisons are presented in the third part. An analysis of light as an element of the urban environment is available in the fourth part of the development. In the concluding part, the results and contributions of the study are clarified.

I accept the main declared scientific and scientific-applied contributions. In essence, they are related to the scientific novelty and the state-of-the-art of the issue.

In addition, I consider of high importance the addressing, systematizing and publishing data related to the studies of light in architecture (especially from architectural perspective), as well as the discussion about the administrative and legal limitations in practice. I find it helpful to clarify the compositional principles, the material characteristics and the concepts of the authors, as well as to display the comparative tables.

The short terminological dictionary is a suitable appendix to the dissertation work.

5. Evaluation of the publications on the dissertation work: number, nature of the editions in which they were published.

After 2015, 5 publications on the topic of the dissertation have been declared. One of them is an article in the collection "Lighting 2016" of the National Lighting Committee, other 3 are in academic journals of the NBU, Sofia, and 1 is in the proceedings of the International conference "Ville en transformation - défis, (pré)visions, perspectives | Changing Cities: Challenges, Predictions, Perspectives" organized by New Bulgarian University. Four of the publications are in Bulgarian, and one is in French.

I find the attached publications adequately reflect the work on the dissertation and sufficient for its approval.

6. Citation by other authors, reviews in the scientific press, etc.

The works of Gergana Stefanova have been presented in the scientific community and have been discussed at several academic forums. 2 citations of the Stefanova's studies have been declared. These are by Ivanka Dobрева-Dragostinova (in NBU journal) and by Ana Avramova (in "Collection of Studies - materials from the scientific seminar "Color and Education")

I believe that this is sufficient in accordance with the requirements for awarding the PhD.

7. Opinions, recommendations and notes.

The dissertation of architect Gergana Stefanova concerns an important aspect of architectural design as well as the architectural theory. The work is a result of many years of research in the field. Given this, I recommend the author to present her work in refereed and indexed publications in the world wide web in the future.

In addition, I believe that in a future publication of the monograph, additional clarification in the title would be appropriate, given the ambiguity of the term "role" for the common public. It would also be appropriate to include a more detailed justification for the choice of the master architects juxtaposed in the text, for the same reason.

These recommendations, however, in no way belittle the contributions of the dissertation work.

8. In conclusion, I recommend the respected scientific jury to award arch. Gergana Naskova Stefanova with the educational and scientific degree doctor, in direction 5.7. "Architecture, construction and geodesy" for her PhD Thesis: "The Role of Natural and Artificial Light in Architecture."

6.12.2022, Sofia,

Assoc. Prof. Arch. Stela Tasheva, PhD