

REVIEW

By Prof. Dr architect Stela Tasheva, University of Forestry, Sofia

CONCERNING: the materials presented for the competition for acquiring the academic position of associate professor in *Theory and History of Architecture (Digitalization of Architectural Heritage)*, professional direction 5.7 *Architecture, Construction and Geodesy* for the needs of the research group *Ancient Art* at the Fine Arts Department of the Institute of Art Studies – BAS.

In the competition for acquiring the academic position of associate professor announced in State Gazette issue 52 from 18.06.2024 and on the internet page of the Institute of Art Studies with one candidate – Dr architect Dimitrina Popova from the Research Group *Ancient Art, Fine Arts Department* of the Institute of Art Studies – BAS.

1. Short biographical data

Architect Dimitrina Popova graduated in 2000 with a MA in Architecture at the University of Architecture Civil Engineering and Geodesy, Sofia. She defended her PhD “Limits of Interference of Roman Empire by Architecture in Thrace” in 2014 (diploma No. 000480/08.10.2014 of the Institute of Art Studies, BAS). In May 2015, after winning a competition, she started working as a senior assistant at the Institute of Art Studies, BAS, where she has been working until now.

In the period 2011-2016, Arch. Dimitrina Popova is a lecturer at the European Polytechnic University in Pernik, as well as at UASG in Sofia as a lecturer.

In addition, since 2004, she has worked as a designer in various studios, and since 2010 she has been a freelance architect. Four architectural projects have been presented in the current competition for Associate Professor.

2. General description of the submitted materials and assessment of compliance with the minimum national requirements

Dr. arch. Dimitrina Popova participated in the competition with:

- Defended dissertation for the degree of PhD - 1.
- Monograph (main habilitation thesis) - 1.

(Architectural Heritage in Survey Drawings of Nineteenth-Century Houses. Analysis and Digitization of the Architecture Archive of the Institute of Art Studies.) Institute of Art Studies, Bulgarian Academy of Sciences, Sofia, 2024)

- Publication in Scopus and Web of Science indexed edition - 1 issue (Popova, Dimitrina. 2023. Digital Reconstruction of Lost Architectural Heritage in the Case Study of Two 19th Century Houses. Proceedings of the Thirteenth International Conference Digital Presentation and Preservation of Cultural and Scientific Heritage, 13, Institute of Mathematics and Informatics)
- Publications in peer-reviewed journals - 20 items.
- Creative projects 4, leading creative performance 1 issue
- Citations 5, reviews 8
- Participation in scientific projects 4, project leadership 1
- One award in architecture or design competition.

The publications submitted for the competition are in Bulgarian (15) and English (6). All texts are peer-reviewed before publication.

When checking the required scores in the science metrics against the minimum national requirements, it is evident that Dr. arch. Dimitrina Popova exceeds almost twice their mandatory amount.

From the submitted documents and data, it is also evident that the requirements in Annex 2 of the Regulations on the Conditions and Procedure for Acquisition of a Scientific Degree and for Holding an Academic Position at the Institute of Art Studies, BAS are fully met.

It can be concluded that the enclosed references, materials and evidence fully meet the requirements for the acquisition of the academic position of Associate Professor.

3. General description of the applicant's activities

3.1. Scientific and applied activity

All publications submitted for the competition clearly outline the academic profile of Dr. Arch. Dimitrina Popova

First, her current research interests are tied to the digitization of the designed architectural heritage (see the habilitation thesis entitled *Architectural Heritage in Survey Drawings of Nineteenth-Century Houses. Analysis and Digitization of the Architecture Archive of the Institute of Art Studies*. (2024) as well as the articles *Digital Reconstruction of Lost Architectural Heritage on the Case Study of Two 19th Century Houses; Architectural Heritage in a Collection of Architectural Photographs from 1949-1962: Ideology, Rules, Practice; A Visualized Past. Thracian Tomb at Sheynovets Peak near Svilengrad; A Study on Digital Archive Collections of Photographed 19th Century Houses; Three-dimensional Digital Reconstruction of Disappeared Houses and their Spatial Analysis in Virtual Reality on the Example of the Bey House of Tulesko in Berkovitsa; Digital three-dimensional reconstruction of an ancient house in Sungurlare from the architectural archive of the Institute for the Study of Arts; Three-dimensional digital reconstructions on the example of a 19th century house; Digitization of the archive "Architecture" at the Institute of Art Studies - BAS*). Some of the texts also seek a cultural assessment of the projects presented, and even of the forms and evolution of the archive, in the context of the period of its creation and maintenance.

Some of the publications offered for the competition deal with aspects of 20th or 21st century architecture (texts: *The messages in the architectural image of the building of the Bulgarian Academy of Sciences; S, M, L, XL scales in the panel complexes of Sofia; Vernacular Park Architecture Among the Prefabricated Concrete Housings in Sofia, Bulgaria; Homemade Park Architecture among the panel blocks in Sofia; Transformations of the interior of the Palace of Justice in Sofia; The building of the Bulgarian Academy of Sciences- aesthetics and style*), as well as cases of the ancient heritage in the Bulgarian lands (*see. Politics and Aesthetics in the Architectural Image of the Roman Villa; Town Borders of Serdica and Philippopolis before the Walls in Antiquity. Beyond the Borders; Influence of landscape and climate conditions on the urban fabric of Philippopolis in Antiquity; Vitruvius' on the Architecture - transcripts, translations, quotations; Studies on the street movement in the Roman city; Compositional relationships between public buildings, structures and areas in Serdica and Philippopolis in the 1st-3rd centuries*)

I believe that in her publications senior assistant Dr. arch. Dimitrina Popova demonstrates in-depth knowledge both in the chosen areas - architecture of the 20th or 21st century, ancient architecture, and especially in relation to the topic related to the digitization of architectural heritage.

3.2. Teaching and pedagogical activity

In the attached notes and documents for the competition, Dr. Arch. Dimitrina Popova has described and confirmed the hours for courses and exercises in the period 2014-2024. These include lectures in the disciplines *Conservation of Architectural Heritage* and *Aesthetics*, as well as lectures and exercises in *Architecture* at the European Polytechnical University, and exercises in *Architecture* for the specialization SSE at the UASG.

3.3. Extramural activities

The competition documents include an excerpt from the creative work of Dr. Arch. Dimitrina Popova as a designer. These are four architectural projects:

- Design and supervision of 14 outdoor playgrounds in 5 children's facilities and 4 inter-block spaces for children up to 3 years and from 3 to 12 years, Krasna Polyana district, Sofia, 2017.
- Design and author's supervision of a multi-family residential building in Krasnaya Krava, Sofia, 2017. Blagoevgrad, Petar Zografski Str № 6, entrance, building no. A and B., 2017.
- Design of a single-family residential building, cottage area Dragichevo, Pernik district. 2021 г.
- Design of a single-family residential building, Knyazhevo region, Vitosha district, Sofia 2019.

I consider as positive the fact that these achievements have been presented in the competition for the academic position of Associate Professor in the professional field 5.7. Architecture, Civil Engineering and Geodesy, and especially the active relationship between the work of the designer and the development of the researcher, which is characteristic of the architectural specialty. For me, in the declared architectural projects adequate technical developments and appropriate aesthetic solutions have been applied.

I highly appreciate the interactive exhibition-presentation with virtual reality goggles Oculus Quest 2, declared in the materials, demonstrating three reconstructed objects from the architectural heritage that do not exist or are inaccessible in the real environment. This is a creative performance held on 18-19.04. 2024 in Hall 2 of the Institute of Art Studies, in which Dr. Arch. Dimitrina Popova has a leading role.

3.4. Contributions (scientific and scientifically applied)

The research contributions of Dr. arch. Dimitrina Popova is obvious, significant and in line with the academic interests identified so far.

For me, the key value in the main habilitation work declared in the competition - the monograph “Architectural Heritage in Survey Drawings of Nineteenth-Century Houses. Analysis and Digitization of the Architecture Archive of the Institute of Art Studies (2024), lies in the careful, methodical handling of the documents and units in the Architecture Archive, and especially in their systematic presentation and characterization. The monograph contains 224 pages, including a bibliography and brief summaries in English. It is aptly divided into two parts, one relating to the forms of archiving and the other to the discourse of reconstruction. The results and conclusions drawn in these parts complement each other convincingly.

In the same work, a methodology for assessing the completeness and significance of architectural archival collections is approbated, specifically for documents with architectural graphics. In addition, the quantitative values presented in the exposition of the first part also led to the derivation of qualitative parameters of the collection of architectural surveys. At the same time, the sets of drawings, sketches, and perspectives examined in the text are also reconsidered as evidence of the ways in which architectural heritage was preserved by the 1950s.

As far as the second part of the work is concerned, I find the described three-dimensional digital reconstructions of non-existing buildings based on the available archival architectural documentation significant and contributory.

I also consider some other academic and applied contributions of the work to be particularly important, such as the publication of complex data on the development of the academic field of architecture (and urban planning) in the country and in the overall organization of the BAS. Of importance is the introduction to the scientific circulation of new data on the architecture of houses in Berkovitsa, Teteven and Etropole. The information from their architectural surveys was supplemented by arch. Popova with photographs, memories of contemporaries, collected administrative documents about the houses in regional museums.

I accept the contributions declared in the other articles and publications submitted to the competition.

I highly appreciate the participation of senior assistant Dr. arch. Popova in national and international scientific projects, as well as the grants and awards she has won.

4. Assessment of the personal contribution of the candidate

In the materials submitted for the competition, the knowledge of the topics covered is evident, a convincing research approach and author's world view is demonstrated.

I consider the personal contribution of Arch. Dimitrina Popova in the presented publications and works as unquestionable and as fully sufficient in terms of the requirements.

5. Impact of the candidate's scientific publications in the literature (known citations and reviews)

I consider that the publications of Dr. arch. Dimitrina Popova already is well known to the architectural and academic community in the country and has a high potential for citation. In the documents submitted to me, data for a total of 5 citations are presented; all of them are by Bulgarian authors. Two of the citations are in English language scientific journals, one of them is in a journal that is refereed and indexed in world renowned databases of scientific information.

Eight reviews of realized author's products in professional media were also declared.

6. Critical comments

I commend Dr. Arch. Dimitrina Popova's knowledge in the areas she has studied. In my opinion, her future research can be complemented in terms of algorithmizing the processes of three-dimensional reconstruction of building heritage and their integration into research and archival practices. In addition, the concept of the semantics of architectural heritage could be enriched by several works by Bulgarian authors on the perception of the architectural object, the linguistic and communicative features of architectural creativity, and the phenomenology of architecture in general, as well as in relation to the tectonic and semiotic characteristics of architectural spaces. Clarification of some of the terms used, such as "iconicity", would also be appropriate. Building on the research through links to more texts relating to the preservation of movable and immovable cultural values in the country would also be beneficial.

These notes for future research, however, in no way diminish the qualities of the works presented by Arch. Popova.

Therefore, and given the significant, Bulgarian character of her research, my main recommendation to Arch. Dimitrina Popova is to increase her academic production in the future: by including more articles in English and/or other European languages, as well as by submitting more papers to publications refereed and indexed in world-renowned databases of scientific information.

7. Personal impressions

I know Dr. Arch. Dimitrina Popova as a motivated PhD student at the Institute of Art Studies, BAS. After defending her dissertation, she continued her active research at the Institute of Art Studies, RG *Ancient Art*, where she is a respected colleague. For me, in the period she visibly grew both in terms of the scope and depth of the subject matter covered. I believe that she has an obvious research mindset, in-depth knowledge and methodical mind.

In addition, architect Dimitrina Popova is well represented among the architectural colleagues outside the institute.

8. Conclusion:

I find the data provided to me about the candidate in the competition to be adequate and sufficient according to the scientific-metric requirements, the regulations and the rules of the Institute of Art Studies.

In view of the above, I propose that Dr. Arch. Dimitrina Popova be elected as Associate Professor in the professional field 5.7. Architecture, Civil Engineering and Geodesy, for the needs of the RG Ancient Art, Fine Arts Department, at the Institute of Art Studies, Bulgarian Academy of Sciences.

8.11.2024

Reviewer:

Prof. Dr. Arch. Prof. Stella Tasheva.