

STATEMENT

by Assoc. Prof. Boycho Yordanov Boychev, PhD, a member of the scientific jury, approved by order No. Rd-38-113-21.02.2024 of the Rector of Sofia University "St. Kliment Ohridski".

Regarding: dissertation work "Epistemological externalism in mental models", developed by Plamen Nikolaev Chergarov for the acquisition of the educational and scientific degree "doctor" in professional area 2.3. Philosophy, Theory of Knowledge, with supervisor Prof. Aneta Karageorgieva, PhD.

General evaluation of the dissertation work

Plamen Chergarov's dissertation is 213 pages long. Structurally, it consists of an introduction, four main chapters, a conclusion and a bibliography. The bibliography covers 269 sources in Bulgarian and English. Numerous quotations, references, notes and comments are available in the main text.

The Introduction argues for the relevance and significance of the problem levels of the dissertation work and the resulting research motivation of the doctoral student. The interdisciplinary field of research is also outlined: the arguments of psychology and neuroscience, and even primatology are added the epistemological debate of internalism and externalism. In this way, the focus of the dissertation work is to substantiate "... the externalist project in considering mental models as cognitive mechanisms (Summary, p. 4). This orientation is also formulated as the goal of the study: "... to defend epistemological externalism and its ramifications ... as a basic explanatory framework for mental models" (Dissertation, p. 6). On this basis, the tasks of the dissertation were formulated, which were fulfilled in the course of the research: reconstruction of the debate between internalism-externalism; a conceptual analysis of the concept of "model", as a result of which the identity of "mental" and "neuronal" model is assumed to some extent; demonstrating the influence of external factors on the expression of the model and how it functions; showing the presence of an intellectual virtue bound to mental models, which is of an externalist type (Summary, pp. 5-6). The stated methods for achieving the goals and fulfilling the tasks used in the dissertation work are conceptual analysis, interdisciplinary approaches (from the paradigms of cultural anthropology, neuroscience, psychology, etc.), empirical data and analogies.

The first chapter (the largest in terms of text volume – 60 pages) is entitled "Historical overview of knowledge studies from internalism and externalism". It begins with a lengthy

introductory section, even larger than the dissertation's introduction (11 vs. the introduction's 8 pages), in which the essentials of the internalism and externalism positions are clarified. Three paragraphs follow: "Value of Knowledge and Intellectual Virtues," "Justification, Justifying Factors, and the Architecture of Belief," and "The Problem of Infinite Regress and a Response to Externalism" (in the Summary, the third paragraph is "Critique of Externalism and the Problem of Infinite Regress").

The second chapter - "Defining a mental model" (p. 72-101), is dedicated to clarifying the concept of "mental model", understood as "a cognitive structure that enables any other cognitive activity" (Summary, p. 16), which is expressed in the assumption that the mental model, firstly, is a representation, secondly, "is composed of various perceptual and/or semantic elements", thirdly, "...creates a map of the world that allows interaction with the world itself" (Dissertation, p. 84). It goes on to add that the relationship between mental model and neural structure is isomorphic, that "mental models are the only way to make sense out of the clutter of information," leading to the conclusion that the world can only be represented within of the mental model, but with the clarification that most of the world can be ignored at the expense of what enters the model (Dissertation, p. 84). It seems to me that here the PhD student has managed very well to deal with the challenges of conceptualization by refining the references to authoritative researchers with his own line of research. The chapter continues with a number of references and examples, concluding with the acceptance that externalism has greater explanatory power than internalism regarding the cognitive value of mental models (Dissertation, pp. 100-101) and is a preferred framework that can help the understanding of the interaction between the knower and the known (Summary, p. 17). This conclusion naturally leads to a third chapter devoted to the influence of culture on mental models.

The third chapter is relatively short (22 pages), but in it Plamen Chergarov draws attention to the importance of cultural narratives for our behavior and our mental models, which he connects with the thesis that the validity and value of mental models should be considered primarily through an externalist perspective frame.

The fourth chapter is devoted to the impact of technology on mental models, which, he argues, determine the functioning, constitutive nature and content of mental models, without engaging in an analysis of the consequences of this, and which provides for future research.

Chapter Five examines the value of mental models and their place in aretic epistemology. To avoid a bias towards internalism, the PhD student shows that it is not a mandatory framework when it comes to mental processes; on the contrary, with a good set of

examples and references, Plamen Chergarov points to an arectic explanation that is of an externalist type.

The dissertation ends with a Conclusion (pp. 186-192) in which, based on the arguments favoring externalism as a stronger explanatory framework over internalism, the main thesis is deemed defended. The goal and tasks are presented as fulfilled. The doctoral student is right to consider these were achieved in the dissertation. The results are also attained by virtue of the interdisciplinary methods successfully applied in the course of the research.

Evaluation of the candidate's scientific results and contributions

The content of the dissertation and the summary, the reference for the doctoral student's scientific work, the implementation of the individual plan and the Declaration of originality and credibility (according to Art. 27, par. 2 of the Rules of application of The Academic Staff Development in the Republic of Bulgaria Act) convincingly indicate that Plamen Chergarov has a lasting scholarly interest in his chosen thematic field and paradigm, works thoroughly with scientific publications and achievements, is able to conduct his own research, draw reasoned conclusions and achieve meaningful results.

The contributions of the dissertation are expressed in the following:

First, it is the system of conceptual arguments for adopting the explanatory framework of externalism in the direction of epistemic virtues, justification, justifying factors, and knowledge.

Second, the arguments about the influence of culture and technology, which are external to the knower, which is why their explanation must also be in an externalist framework.

Thirdly, the second chapter and the conceptual analysis of the concept of "mental model" in general make a significant contribution.

Fourth, the proposed solution to the infinite regress problem without undermining externalism positions.

Fifth, the grounded notion that arectic reliabilism is appropriate in explaining epistemic virtue as an aspect of mental models.

There is also a contributing point in the recommended research perspectives that Plamen Chergarov gives in the conclusion of the dissertation.

The reference to the scientific contributions reflects them correctly and accurately, without exaggerating them (Summary, pp. 23-24).

The Summary corresponds to the structure and content of the dissertation, and the publications related to the dissertation cover the required number (2 publications) and volume (24 pages in total).

Critical evaluations, remarks and recommendations

I will refrain from critical remarks regarding the specific content of Plamen Chergarov's dissertation, because it is thorough and adequate to the set goals and tasks. However, I do have two notes that are directed at the structure, composition and layout. The first concerns the layout of paratexts, such as chapters and paragraphs. It is true that the main structural elements of the dissertation work are clearly distinguishable, both in the body of the dissertation and in the summary, but nothing prevented them from being called "chapters", as it is actually noted in the summary, but not in the text of the dissertation. Second, even assuming that the Introduction is within the norms for this kind of scholarly work (8 pages), that nameless introductory part of the first chapter (Dissertation, pp. 11-21) could be separated as an independent paragraph, even chapter or to "fit" appropriately into the other structural units of the dissertation.

These remarks do not affect the essence of the research and definitely do not reduce the scientific value of the presented work. They refer to minor "defects" that cannot change my positive assessment of the content of Plamen Nikolaev Chergarov's dissertation.

Conclusion

I believe that the dissertation "Epistemological externalism in mental models", developed by Plamen Nikolaev Chergarov, meets all content, compositional and formal requirements. All the procedures and requirements of The Academic Staff Development in the Republic of Bulgaria Act and the Rules for its application have been complied with.

Based on what was highlighted in the opinion, I give a completely positive assessment of the dissertation work. I take the liberty of proposing to the members of the esteemed scientific jury to vote positively for awarding the educational and scientific degree "DOCTOR" to Plamen Nikolaev Chergarov.

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