

REVIEW

Of the Scientific Works and Scientific Activities of Assoc. Prof. Dr. *Lilia Alexandrova Gurova*, Participant in the Competition for the Acquisition of the *Academic Position “Professor”* in the Professional Direction 2.3. Philosophy by Anguel Stefanov, Corresponding Member of the Bulgarian Academy of Sciences

Assoc. prof. Dr. Lilia Gurova is the only candidate participating in the competition for the acquisition of the academic position “professor”, announced in *DV*, issue 93/26.11.2019, for the needs of the department “Cognitive Science and Psychology” at New Bulgarian University. She takes part in the competition with one monograph (habilitation work), 4 larger essays, published in collective volumes and non-indexed journals, 22 papers and reports published in scientific journals that are referred and indexed, and 24 papers and reports published in other journals.

The monographic book entitled “*Explanation, Understanding, and Inference*” (Sofia: New Bulgarian University Publishing House, 2019) comprises thematically a specific, as well as an interesting and a key territory from the field of philosophy of science and epistemology. This is the task about clarifying the nature of the scientific explanation, on which interesting and seriously motivated discussions are permanently going on in the specialized literature. Using one characteristic expression belonging to academician A. Polikarov, I could say that the theme about scientific explanation in philosophy of science is “a terrain of controversies”. So, the topical character of this book must be pointed to, however this feature is only one out of its all scientific merits.

I can also bring out the fact that the theme about the clarification of the structure, the epistemological pretensions, and the typology of the explanations within science, as well as about the understanding they are called upon to

provide for the object of the explanation, has not yet been extended up to now in its necessary historical and logical completeness to the inquisitive Bulgarian readers. L. Gurova's book fills in namely this literary gap.

I find a further merit of this monograph in the clear language, in which it is presented – and this is something that facilitates even those readers who would like to be acquainted with the contemporary research clarifying the nature of scientific explanations, and who are not specialists in the field of philosophy of science and contemporary epistemology.

A most important thing for a review is but bringing out the theoretical merits of the monographical work that I am going to consider now.

One of them, which is a necessary prerequisite for the success of any scientific book, is the good knowledge of the subject in consideration. In this case when theoretical reconstructions of the different types of explanations in the natural and the social sciences, and also in everyday practice, are investigated, the author has to know their variety in width, as well as their details in depth, with regard to the discovery and presentation of their explanatory potential. I can convincingly say that L. Gurova is a model author in this respect. She demonstrates thorough knowledge of the extant suggestions in the worldwide literature about rational models of the structure and the operative range of the explanations in scientific knowledge.

Another merit of the proposed work is the invisible at first glance, but very important for the reading public author's presence concerning each of the presented discussions of the nature of the scientific explanation. L. Gurova precisely exposes not only mutual criticisms among prominent philosophers, but she introduces by herself specifying speculations in relation to the analyzed models of scientific explanation, as well as in relation to the methodological position of criticizing authors. This can be seen for instance in the whole third chapter from the first part of the book, in which different approaches are being

analyzed towards the theme about explanation that are alternative to the well-known nomological model suggested by Hempel and Oppenheim.

The third merit of the presented work is the proposal of an author's position, which leads the investigation out of the so called by L. Gurova "Hempel's epoch". The new approach is named inferential analysis of the explanation and is presented in the second part of the book. It is characterized by the fact that the accent is not put on modeling of a cognitive-and-logical structure that binds the explanans with the explanandum. Instead, it is substantiated that "A necessary (though not a sufficient) condition an explanation to be accepted as a good one, is for it to add inferential content to the knowledge at our disposal to the present moment. This means that it is expected from every explanation that is a good one to allow inferences to be drawn out on the basis of what we know (or accept that we know), and which were not possible before the presence of this explanation" (p. 94). An interesting view on the nature of scientific explanations has been offered that is different from the attempts at their explication in the framework of the so called "Hempel's epoch". Thus L. Gurova is convincing us that if we start from the natural premise that a good explanation is bringing an understanding about the explanandum (the thing to be explained) then this understanding can be given meaning to as a widening of the inferences, which we could make concerning the features and the behavior of the explanandum. For this reason she names her approach an "inferentialist" one (from the word inference), by comparing it with other models of scientific explanation that bear in their name the same adjective. Another important circumstance is also illustrated in the book that the inferentialist analysis allows the heuristic potential of different types of explanations to be compared.

I can notice in the end that the monograph under review here is a very useful reading for specialists working in different spheres of philosophy of science, as well as for students and inquisitive readers.

The pretension of the Gurova's paper entitled „The Principle Based Explanations Are Not Extinct in Cognitive Science: The Case of the Basic Level Effects“, published in *Philosophia Scientiæ*, 18(3), 2014, 203-214, stays in harmony with the just considered monograph. This pretension is in defense of the claim that the mechanistic explanations in contemporary cognitive science concerning the semantic base of the category presentation of the world have not pushed aside the approaches that construct explanations based on principles. On the contrary, if they are successful, they are so, because they build cognitive details over the attempts at an explanation, exploiting principles. The author demonstrates excellent knowledge of the relevant literature, but also attracts theoretical analysis of her own – for example the defense of explanations based on principles is not bound with the standard deductive-nomological model of scientific explanation.

The content of the paper entitled „On Some Non-Trivial Implications of the View That Good Explanations Increase our Understanding of Explained Phenomena“ (*Balkan Journal of Philosophy*, Vol. 9, Issue 1, 2017) stays in support of the main claim of the already considered monograph. According to this claim the aim of a good explanation is to increase the degree of understanding of the thing to be explained. This is achieved by additional inferences, which could be made on the base of the proposed explanation. This inferentialist approach for the assessment of the scientific explanations has the advantage that it is applicable to different explanatory models, and also gives an extra clarification of some typical difficulties connected to their specificity.

What is the explanatory type of the attempts at psychological explanations based on the so called personality traits is a subject of consideration in the proposed by Gurova 14-th chapter of the collection book M. Massimi et al. (eds.), *EPSA15 Selected Papers, European Studies in Philosophy of Science 5*, 2017, DOI 10.1007/978-3-319-53730-6_14. She sticks to the contention that if these traits are treated as phenotypes, the resulting causal explanations seem

circular. And if traits are construed as genotypes, there is little supporting empirical evidence that they might have a clear causal effect. The view is suggested for this reason that whether the explanations of this type are taken to lie on principles, or personal traits have only descriptive explanatory potential, it depends on the concrete cases.

In her paper “A Reason to Avoid the Causal Construal of Dispositional Explanations” (*Organon F* 24 (4) 2017: 438-455) L. Gurova goes deep into the trials a specific problem to be solved. This is the problem whether dispositional explanations can always be referred to the type of causal explanations. Their reference to this type in general is based on the claim that the dispositions have a causal effect on their manifestations. The author does not reject this claim entirely, but she tries to show that “in some cases at least, it is not a good idea to commit to the causal construal of dispositional explanations“ (p. 439). She supports this view by the argument that under certain circumstances, the common cause assumption is refuted on either theoretical or empirical grounds. For this reason the conclusion has been reached that under certain circumstances, the causal construal of dispositional explanations cannot account for the extra-inferences which these explanations are valued for.

Assoc. prof. L. Gurova has taken part with tenths of reports in the work of international conferences, and she has been invited 12 times as a guest lecturer abroad. She was a coordinator and a participant in 6 international projects. These facts clearly speak of her professional acknowledgement by colleagues philosophers and psychologists all-round the world.

It could be seen from the applied Information for a long-term testimonial for the period 2003/04 – 2018/19 academic years that L. Gurova has enough lecturing work-load in the department “Cognitive Science and Psychology” at New Bulgarian University. She has been given an excellent satisfaction assessment for her lectures by the university students.

I agree with the character and with the content of her contributions in her scientific works presented by Gurova in the required Information.

I have no joint publications with L. Gurova.

Taking into consideration the high scientific quality of her publications, her successful participation in tenths of authoritative international conferences, as well as the high teaching level assessed by her students, I convincingly recommend, and I shall vote with “Yes”, for the academic position “professor” to be given to assoc. prof. Dr. Lilia Alexandrova Gurova in the professional direction 2.3 philosophy.

Sofia, 06.03.2020