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CONCERNS: Review of Muss Alexander Igorevich's thesis

Brussels, February 5th, 2019

THE REVIEW

of a member of the dissertation council on the dissertation of Muss Alexander Igorevich on the topic: "The conceptualization of the model of human in cognitive science" submitted for the degree of Candidate of Philosophy in the specialty 09.00.13 - Philosophical anthropology, philosophy of culture.

Overview of the work

This thesis is an attempt at characterizing the foundations of cognitive science, considered here as a scientific discipline. The problem that the work aims to address is substantial and very well worth investigating, as it is one of the most fundamental issues the philosophy of mind should be concerned with: What is the nature of the human mind, and how do contemporary approaches to it attempt to address it? Here, M. Muss adopts what he describes as a "philosophical anthropology" approach, that is, analytical methods that aim at uncovering, through the writings and thinking of prominent scholars, what the (implicit or explicit) underpinnings of the discipline are. This involves substantial review work as well as critical and comparative analysis.

The document itself is 100 pages long and contains three chapters. In the first chapter, M. Muss embarks on a substantial literature review, seeking to characterize cognitive science itself based on the writings of its proponents. The questions he aims to answer are the following: What are the core concepts subtending cognitive science? What are the limits of such concepts? The exposition begins (section 1.1) with careful remarks about the fact that cognitive science, as such, is not unified. As a field, it sits at the intersection of different approaches to the human mind, exploring sometimes very different questions depending on whether one is a neuroscientist, a philosopher, a psychologist, or a linguist. A first tension appears here, between materialist and dualist approaches. M. Muss also identifies consciousness as the core issue — something that comes as a surprise since consciousness was long rejected by cognitive science as a possible scientific object of interest. The chapter continues (section 1.2) by a systematic (but not complete) overview of the work of many prominent scholars in the field: Dennett, Block, Metzinger, Chalmers, the Churchlands, Searle, Nagel, and so on. Interestingly, but not surprisingly, this section also covers the work of prominent Russian scholars whose work is seldom surveyed in the western literature. This section concludes with the claim that "information" is the core concept of the field, and with a brief critical claim that the sense of unity that cognitive science promotes is perhaps an illusion.

In section 1.3, M. Muss adopts a historical approach, going back to the ideas of Descartes, Bacon, Hume, Comte. Cognitive science is rooted in empirical approaches. Conceptually, there is tension throughout history between physicalist and dualist positions. Some of the proposed ideas cannot be reconciled with each other.

In Chapter 2, M. Muss, based on the wide background set by Chapter 1, aims to characterize the model of a human that cognitive science proposes. He proposes to do that through the archaeological methods proposed by Foucault: Scientific discourse is a human activity and should be analyzed as such, through history, so as to reveal its own contradictions. Cognitive science considers the human mind to be the result of biological evolution, and, as such, to be rooted in matter: "... the nature of man and its consciousness is material" (p. 198). M. Muss then revisits the core concept of "information" in this context, noting its limitations. He then briefly analyses the "hard problem" — the core tension that exists between any materialistic approach to the mind and the fact that consciousness seems to escape such materialistic accounts. Thus, in the conceptualized model of the human proposed by cognitive science remains the huge challenge of correlating the mental and the physical, as well as understanding the function of subjective experience. M. Muss concludes by stating (1) that the conceptualized model of the human in cognitive science fails to go beyond what could be achieved by biology, and (2) that there are challenges associated with the core concept of "information". But he points out that the only alternative are models in which one assumes that mind depends on something else than matter — dualist models. He rejects those in favor of the first.

In Chapter 3, M. Muss proposes a reflection on the opportunities and limitations of the conceptualized model of the human mind as defended by cognitive science. He first overviews external critiques of cognitive science, through the work of authors such as Brentano, Husserl, and Sartre — all authors interested essentially in phenomenology who have pointed out at the limitations of materialist approaches. M. Muss then turns to internal critics of cognitive science, amongst which are thinkers such as Searle, Chalmers, or Varela, pointing out that critical thinking has also emerged from within the discipline itself. Cognitive science is thus limited in different ways: It is based on older ideas that are difficult to map onto contemporary concepts; it is limited by empirical methods; some aspects of the human mind seem to be outside its grasp.

In the final section of this chapter, M. Muss attempts to characterize the model of the human mind that cognitive science proposes. Humans are biological machines that have evolved to survive and can manipulate information. He points out the limitations of such a model — in particular the concept of "information". Modeling humans based on mathematics, as cognitive science aims to do, is both an opportunity and a limitation — the "hard problem" remains intact.

The thesis closes with a conclusion and a summary of the main claims.

General evaluation of the thesis

Overall this a good work in the philosophy of mind. The topic itself is extremely complex and the work is very ambitious in this respect. M. Muss proposes a satisfactory overview of the main claims and historical roots of contemporary cognitive science, as well as a detailed, if often somewhat imprecise, critique of its core claims. One could have wished further reference to important authors in the body of the work — in particular, the work of Margaret Boden, who similarly engaged in an attempt to characterize the discipline. This referee also remains a bit skeptical about the value of the anthropological approach here — it is unclear exactly how the method was applied in the context of the thesis. Another issue is the extent to which M. Muss actually thinks that there is a "transcendental" aspect to the human mind. It is unclear to this referee whether accepting subjective experience as a fact requires one to adopt a transcendental perspective or not. It seems not, but it is unclear whether it is also for M. Muss. But perhaps these uncertainties stem from the complex translation from Russian.

Overall, however, it is clear that this is indeed a Ph.D. thesis in the philosophy of mind. The work is substantial, ambitious, and overall successful. It demonstrates M. Muss's ability to overview and analyze a very large body of work and to subsume its core assumptions. It is useful as a piece of intelligent critique of those core assumptions, and as a solid starting point for further studies.

Thus, the thesis by Muss Alexander Igorevich on the topic: "The conceptualization of the model of human in cognitive science" meets the basic requirements established by Order No. 6821/1 of September 1, 2016 "On the order of awarding degrees in St. Petersburg State University", the applicant Muss Alexander Igorevich deserves the degree of Candidate of Philosophy in the specialty 09.00.13 - Philosophical anthropology, philosophy of culture. Clause 11 of the aforementioned Order by the author of the thesis (the necessity of links to the other's authors in the thesis' text etc.) is not broken.



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