

Author of the dissertation: Andrzej Zabołotny

Dissertation title: *Theological consequences of methodological naturalism in science on the example of the works of Michał Heller.*

Dissertation written under the direction of prof. Ryszard Kleszcz, Ph.D.

University of Łódź, Faculty of Philosophy and History, Institute of Philosophy

Summary

Throughout the history, people have sought to be able to know and understand the world around them, both to gain knowledge and to apply it to their own benefit. The senses and the rational mind were the tools used for this purpose. But there was also the question of the existence of a supernatural realm and the possibility of gaining knowledge through revelation. And a similar issue: can God or gods interact directly, supernaturally, with the material world? The causal closure of the natural world dilemma became increasingly important, as modern science developed and made progress in finding regularities, explanations and deeper understanding of natural processes, without having to appeal to supernatural causes. Methodological naturalism has been accepted as a necessary criterion for legitimate science. It reinforced the conviction that belief in a God directly involved in world affairs belonged to the old, pre-scientific worldview and was untenable.

Since the 1970s, it is Michał Heller's publications that have had a significant impact on the approach to the relationship between faith and science. He is a scientist – cosmologist, physicist, philosopher – and a priest, as well as a popularizer of science. In addition to the scientific work, he considered building bridges between science, philosophy and theology to be his important contribution. It was recognized by receiving the 2008 Templeton Prize for research in the field of spiritual dimensions of life. One of the leading motivations of Heller's work is his fascination with science and its ability to provide maximally complete knowledge of the natural world. Another one was to remove the barriers between the claims of Christian faith and the contemporary scientific worldview.

This is the context, in which this dissertation adopts two research theses:

- Despite the claim that the methodological naturalism of science is merely its worldview-neutral principle, it has a far-reaching impact on theology.

- The attempt to reconcile theism with the dominant scientific worldview as a means of giving credence to Christianity leads to controversial results.

As the scope of this presentation covers some issues in methodology of science, philosophy of science, philosophy of nature, philosophy of religion and theology, general philosophy was chosen as the main area of argumentation. The analytical method of examining the texts of Michał Heller's works in the context of the views of other authors was used to demonstrate the theses set forth here.

The **first chapter** includes an overview of the contemporary understanding of the concept of naturalism in relation to ontology, the methodology of science and epistemology (definitions and ideas of C. Danto, Stanford Encyclopedia of Philosophy, J. Wolenski, J. Figas-Skrzypulec, W. B. Drees, P. Sokołowski, P. Bylica, Z. Zwoliński, T. Maziarka, S. Judycki). Certain types of naturalism allow for the belief in the existence of God, but they decisively deny the empirically detectable, direct activity of supernatural forces in the natural world. The reductionist version of naturalism takes the form of physicalism. The picture that emerges from this analysis reveals a fundamental divergence between the scientific worldview and traditional Christian theism, according to which God is actively and directly involved in dialogue with humans, which includes causing events that contradict the regularity of the laws of nature. This creates a dilemma for the Christian scientist, who – in his scientific work – is limited by a methodology that dictates that he must appeal to naturalistic explanations only. The dissonance between the picture of the world drawn by science and the picture seen from the perspective of Christianity can be a fundamental obstacle on the path of faith or to faith. This gives rise to attempts to overcome this discrepancy, and Michał Heller makes such an attempt.

The main part of the first chapter deals with the views of some philosophers, scholars and theologians, chosen from among many others, who influenced the formation of the worldview in the context of naturalism. Their selection – from the earliest Greek philosophers to the views of the 20th-century Vienna Circle – does not pretend to show a complete historical cross-section, but provides some characteristic examples (Presocratics, Plato, Aristotle, Epicurus, Plotinus, Augustine, Chartres School, Thomas Aquinas, Galileo, Descartes, Newton, Hume, Comte, Vienna Circle).

Chapter two focuses on Michał Heller's views on science and the natural world. According to him, one of the main goals of the philosophy of science is to study its assumptions, of which the one of the mathematical nature of the world and methodological positivism are considered basic. His view of natural philosophy is decidedly limited to its inanimate aspects; he considers biology in the

context of Darwinian evolution, which is part of the evolutionary process shaping the entire universe. With regard to the methodology of science, Heller emphasises methodological naturalism as a critical requirement to remain within the scope of science, at the same time claiming that it is not ontological naturalism. He traces the roots of science back to the ancient Greece, where this Great Intellectual Adventure of Humanity was born. Its key characteristic was relying on human senses and rationality without appealing to supernatural causes. Any such miraculous events would be a threat to the whole scientific project, as they would be inaccessible to the natural research.

The mathematical-empirical method is recognized as the main cause of the success of modern science and in some of Heller's statements it seems to be identified with the scientific method in a general sense. In order for it to be effective, the world must be characterized by mathematicity, which means that the laws of nature can be described as mathematical structures and equations. And this, in turn, entails the adoption of a reductionist program.

For Heller, it is obvious that a scientist cannot appeal to supernatural causes. This is due, among other things, to the principle of the totalitarianism of the scientific method that he adopts: one should never look for explanations of phenomena of the natural world outside the method. Beyond the borders of science is the proper place for questions about rationality, meaning and values. Only there one can one appeal to God as the basis for their existence.

Engaging in such a Great Intellectual Adventure of Humanity is one of Michał Heller's passions. His second desire is to help people of science recognize Christianity as a reasonable intellectual option. Related to this goal, the **third chapter** focuses on the theological implications of methodological naturalism in science, which is also the focus of this dissertation. The claim that there is a God and that he sustains the universe in existence is obvious to Heller. But his perfection as Creator means that his creation does not require intervening corrections, but the entire natural history of the world is God's action, according to the laws of nature. There are no events of extra-natural causality. Adopting the opposite view would mean introducing the concept of a "God of the gaps," offering apparent explanations where science does not yet know the answer. This would be a methodological and theological error. Any biblical text, in which Scripture depicts an event of a miraculous nature, should be explained by the (wrongly simplified) principle of St. Augustine, prescribing in such cases a figurative rather than literal meaning. Such an understanding of divine action, which cannot be reconciled with traditional Christian theism, may harmonize better with the concept of panentheism, which means that the world in some sense exists in God. It motivates Heller to propose a new discipline of "theology of science," whose task would be to look at science

through the eyes of a theologian. Since the scientific picture of the world truly represents natural reality, Christian theology needs to be purged of elements of obsolete imagery, and only then will it be acceptable to modern man who takes the achievements of science seriously.

The content of the **fourth chapter** includes a discussion, and sometimes a polemic, with the views outlined in chapters two and three. Both Polish and foreign authors related to these topics (M. Hohol, Ł. Kwiatek, D. Dennett, D. Lambert, T. Gilson, Aristotle, P. Lenartowicz, A. Van Melsen, R. Kalski, J. Maritain, R. Kazibut, B. Gordon, W. B. Drees, D. Dąbek, W. Sady, A. Bronk, M. Walczak, P. Bylica, A. Lekka-Kowalik, R. Kleszcz, K. Popper, L. Wittgenstein, T. Pabjan, A. Van Melsen, D. Sagan, M. Ruse, J. Woleński, B. Davies, J. Hick, C. S. Evans, C. Meister, J. Tischner, I. Barbour., D. Ratzsch, D. Łukasiewicz, E. McMullin, A. Plantinga., M. Słomka, R. Isaac, J. Polkinghorne, M. Chaberek, O. Pedersen, D. R. Griffin, T. Obolevitch, P. Polak, W. Macek, M. Majewski). This discussion allowed to identify different rhetorical motifs employed by Michał Heller to support his position. Here are some of them. The principle of methodological naturalism is regarded as the fundamental factor in defining the concept of science. Philosophy of nature is limited almost exclusively to the non-biological sphere. Mathematical-empirical method is often understood as the only scientific one. Principle of methodological naturalism is considered as having no ontological consequences. A dichotomy is presented – if we allow for God's direct action in the world, we do not recognize the overall dependence of the world's existence and its laws on him. Any reference to direct divine action is described as introducing the "God of the gaps" concept. The Augustine principle regarding the interpretation of Scripture is used in an oversimplified form, as requiring metaphorical language in every case of conflict with the naturalistic image of the world.

The main theological conclusion, that there is no place for direct divine action in the world of nature which would be empirically observable, is being introduced through a three-step process.

- The principle of methodological naturalism in science allows only naturalistic explanations. But this principle should allow the conclusion, that certain phenomenon or event seems to have non-natural cause. It should be accepted as „transparent” for science and left for other methods to research.
- The principle of scientific method totalitarianism: A scientist should never give up looking for a natural explanation. Still this principle should allow for accepting supernatural events, concerning which the searching for natural explanations would be in vain.

- The „defending the Great Intellectual Adventure of Humanity” principle (or „the principle of completeness of the scientific method”): Any event in the realm of nature must have a naturalistic explanation, no miracles are allowed.

Michał Heller accepts all three principles in his works. So even if the principle of methodological naturalism in science should not have theological consequences, in practise it has, leading to the universe which is causally closed in relation to the realm of supernatural. The only difference between theism and atheism becomes non-empirical. As a result, any attempts to adjust Christianity to such worldview strips it of its empirical realm.

Andrzej Zubołowicz