

INTRODUCTION (*originally in Polish, pp. 23–26*)

Throughout the world, and particularly in Poland, interest in Nicolaus Copernicus (1473–1543) and his achievements reached its zenith in the 1970s – 1973 was exceptional in this regard, as it marked the 500th anniversary of the thinker's birth. These years brought many valuable conferences and publications. However, since then, this interest in Poland has gradually declined. Step by step, the number of competent researchers into the figure and achievements of Nicolaus Copernicus has dwindled. Currently, there is no integrated research group in Poland that professionally deals with this issue. Unfortunately, only a few people do so. There are no young people among them! This creates a fundamental threat: the loss of generational continuity in research. With this, knowledge of the subject, tradition, and the memory of achieved results inevitably disappear. I encountered this problem firsthand when, in the 1990s, I undertook interdisciplinary, specialized research aimed at presenting my own interpretation of the Copernican revolution. (Since 1993, I have systematically presented the results obtained in this field in various forms: at world congresses, in dissertations, articles, and monographs. See the list of my works in the Bibliography.)

In the course of this research, I decided to systematically review the current state of knowledge on Copernicus's achievements. Due to my interdisciplinary interests (in the exact sciences, philosophy, history and philosophy of science), I gave equal weight to statements made by representatives of various disciplines—from Copernicus's time to, and especially, our own. I gradually consolidated my knowledge of the work of serious and recognized scholars of Copernicus's figure and achievements, such as Leopold Prowy, Franz Hipler, Ludwik A. Birkenmajer, Aleksander Birkenmajer, Alexandre Koyré, Jerzy Dobrzycki, Edward Rosen, and Noel M. Swerdlow, as well as controversial scholars such as Jeremi Wasiutyński, Thomas S. Kuhn, and Arthur Koestler. I discovered the achievements of researchers who had already been forgotten, such as Ignacy Polkowski, Artur Wołyński, or even unrecognized ones, such as Leon Koczy.

Thanks to such research, over time I discovered (paradoxically!) a fundamentally new, almost untouched, and fascinating subject of analysis – the history of Copernican research. And although I am employed at the only specialized institute in Poland dedicated to the history of science, known, among other things, for Copernican research, learning this history proved extremely arduous. This was due to three fundamental facts: 1) the absence of continuously operating research groups in my environment dealing with Copernican issues, which would function similarly to numerous teams of, for example, physicists or historians, passing on their knowledge to young aspirants; 2) the lack of adequate funding for the research, which I conducted largely from my own limited resources (as there are currently no mechanisms for financing such research in Poland); 3) the scarcity of contemporary Copernican literature in Polish libraries (it has not been imported into Poland for 25 years).

At a time when civilized countries around the world are proud of their intellectual achievements, and when, for example, the European Union and the United States do so with great gusto, it would be entirely appropriate for Poland to follow these praiseworthy examples and not forget its inalienable duty – the need to constantly recall and explore its intellectual contribution to European and global culture. No one will do this for us on our behalf. This applies particularly to understanding the achievements of one of the world's most famous scientists – Nicolaus Copernicus. Therefore, every effort should be made to restore generational

continuity of this type of research in Poland, encouraging the widest possible range of researchers to undertake creative efforts in this field.

This is precisely the purpose of this book. It is an interdisciplinary scientific monograph. It serves as a general introduction, a prolegomena to contemporary Copernican research, especially interdisciplinary research. It covers, among other things: a) the history of understanding Nicolaus Copernicus's achievements in the field of astronomy and their impact on culture as a whole, b) the history and philosophy of exact sciences, c) the history of ideas, and d) the methodology of the history of science.

The interdisciplinary nature of the issues addressed in this monograph stems from their inherent complexity. To properly understand Nicolaus Copernicus's achievements in astronomy and its impact on culture as a whole, we must strive to understand this scholar's thought, its genesis, and its consequences. Therefore, we must certainly engage with the discipline known as the history of astronomy and, more broadly, the exact sciences, which has thus far focused on the results achieved rather than the method of generating them. This, in turn, is the subject of another discipline, called the methodology or philosophy of science (more precisely, of the exact sciences). But even this is not enough! It is known that the influence of Copernicus's thought extended far beyond the exact sciences themselves, touching on religion, theology, worldview, and so on. However, this is not the end. To consciously pursue, for example, the history of science, we must also engage with the methodology of this discipline.

The monographic nature of the presented work stems from the need to comprehensively present a topic that, although it seems universally well-known and understood, is in fact little-known or poorly known, or even—as I will attempt to demonstrate—unknown at all in some key aspects. All this combined means that many commonly held opinions in this field have an almost mythical character. A clear manifestation of this was the reaction of many educated people to the news that the current monograph would include reflections on understanding the achievements of Nicolaus Copernicus. After all—especially after 1973—everything has long been well-known, so what remains to be explored? Well, contrary to appearances, it turns out that there is a great deal!—as I will attempt to prove in the pages of this book.

The scholarly (methodological, avoiding simplification) nature of this monograph is dictated by the need for in-depth examination of the subject matter. This book's form was influenced by a small number of works. I include the following extensive monographs in this group: L.A. Birkenmajer [1900], I.B. Cohen [1985], A.C. Crombie [1994], E. Grant [1994], L. Koczy [1977], M. Markowski [1971], N.M. Swerdlow, O. Neugebauer [1984], and S. Swieżawski [1966], [1974–1980] vols. I, II, and V. What is particularly valuable in these works is the insight and accuracy of the analyses conducted therein, including the persistent pursuit of historical truth at the expense of cheap popularity.

In this monograph, I discuss the history of the changing ways and fashions of approaching Nicolaus Copernicus's work, placing particular emphasis on demonstrating the diversity of divergent positions. I am aware that I am touching upon an immensely complex topic and that much remains to be done in this field. To derive the greatest possible benefit from this book, it should be studied carefully and with a great deal of openness, allowing the reader to engage with the content presented and, on the other hand, systematically enrich their own understanding of Copernicus's achievements through a critical acceptance of other interpretations. It is particularly worthwhile to analyze and verify the accuracy of the views

presented by individual authors. These views may be erroneous or simplified, which becomes apparent when they are confronted with information contained in sources or when they are compared with other, more in-depth readings.

A crucial role in the book's structure is played by numerous and often extensive quotations from various authors, vividly illustrating theses usually only synthetically presented in the main text. The underlying idea is as follows: These quotations are intended to facilitate the acquaintance of young Copernican researchers with the content and spirit of the statements of many researchers into Copernican thought, without the need to immediately seek out the cited sources (often difficult to access). Furthermore, for those wishing to deepen their knowledge or undertake detailed research, these quotations are intended to encourage them to engage in their own thorough reading of the aforementioned sources. It is important to remember that they are generally very little known! It should be clearly emphasized here that the idea of providing numerous and extensive quotations contradicts the growing tendency to minimize footnotes in scientific publications, which stems from the transfer of standards for popularizing science to scientific research by reducing the scientific style of writing to an essayistic style. This is a flawed practice.

I would like to reiterate here that the primary goal of this monograph is to provide readers with a comprehensive collection of information on the various interpretations of Nicolaus Copernicus's scientific achievements (as well as elements of his biography), based on a review of the extensive literature on the subject. This book aims to stimulate readers to undertake their own fruitful Copernican research, protecting those who are adept at this research from scientific infantilism from the very beginning and opening their eyes to the still unexplored threads of Nicolaus Copernicus's thought.