

## **BOOK REVIEW**

**Dr Mathew Chandrankunnel, CMI, *Ascent to Truth. The Physics, Philosophy and Religion of Galileo Galilei*, Thiruvananthapuram: International Chavara Cancer Research Institute, 2011. ISBN: 978-81922116-0-2. Pages: xxix+545.**

The book entitled *Ascent to Truth: The Physics, Philosophy and Religion of Galileo*, written by Father Prof. Mathew Chadrankunnel is a very valuable outcome of his post doctoral research which the author carried out at the University of Harvard, Boston, USA under Prof. Owen Gingerich. Father Prof. Mathew Chadrankunnel is a philosopher and a theologian, as well as he is a professional scientist who has dedicated much of his life to quantum mechanics and theoretical physics. His focus on the treatment of epistemological and religious questions in his book has been biased by physics.

Based on solid foundations and profound insights into human behaviour, clearly written and effortlessly understandable, the book *Ascent to Truth* would be regarded as an essential contribution to the important problems of both the relation and the debate between cosmology and theology. Father Prof. Mathew Chadrankunnel show that in order to study effectively the science and religion with a critical-scientific focus one must know what science, religion and theology are involved in the problems under study. The book shows viewpoints of the most referential authors in the area of science and religion. Simultaneously, the author is leading us through modern conceptions of physics from Galileo Galilei until modern biotechnology.

The astronomical discoveries of Galileo confirmed the Copernican heliocentric description of the structure of the universe and caused Galileo to abandon the highly praised Aristotle conception of science. In his main work "Dialogue on the two most important systems: Ptolemaic and Copernican," Galileo showed the scientific value of the heliocentric system. He was convinced that the Copernican system is true and made the effort to prove that experimentally. Prof. Mathew Chadrankunnel expressed his conviction that simultaneously Galileo was proving that there does not exist any contradiction between the Bible and Copernican system since their theorems are from two quite different scientific logic orders.

The discoveries of Galileo and Kepler caused changeover to heliocentric picture of the world. Galileo resigned from the insight into the fundamentals of nature. However, he wished to fasten his hypothetical knowledge on the

universe to the Platonic world of ideas. Since only a few theories are characterized by so high level of clarity and definiteness like that of mathematical calculus, therefore the concept of nature seems to be clearly explained. For this reason the modern natural science was accompanied by Platonism. On the other hand, any theory being based on mathematics does not enable us to approach to the relation of man to nature.

The view is generally spread that from the time of Galileo the modern physicists resigned from describing the world in the terms which fall into the categories of ultimate causes. Such methodological changes were forced by the precision of the theory employed by the modern physicists, the theory being based on mathematics. Aristotle applied the concept of the "hypothetical necessity", while the modern physics declares for the "mechanically" acting necessity. Galileo presented the view that the book of nature is written in mathematical language. Whitehead estimated that preferring clarity and definiteness, which from the time of Descartes had been generally accepted method for estimating metaphysical or ontological meaning, was one of the largest mistakes of the modern philosophy.

As it was proved by Father Prof. Mathew Chadrankunnel, Galileo Galilei presenting his scientific outlook deduced from heliocentric assumptions, mainly Copernican, did not abandon in the fundamental questions the Church doctrine of the world creation, since, similarly as the Church, he was tending to present the truth about the universe, but only distanced himself from the Church doctrine in the formal approaching to a subject of scientific inquiries. Therefore, the Galileo's matter of distancing himself from the Church was the problem of the methodological distinctness making impossible the converging of the two positions in cognition theory to the common denominator of explaining the truth.

Pope John Paul II in his declaration dated November 10, 1979 mentioned Galileo's work and expressed words of encouragement to remove the obstacles on the road to the cooperation between scientists in the subject matter of the relation between science and religion. This document initiated the works of the papal interdisciplinary commission entitled to dialogue Science and Religion. The book *Ascent to Truth* by Fr. Prof. Mathew Chadrankunnel is inscribed in this current of scientific inquiring the truth concerning the universe and being discovered within the area of physics as well as of philosophy and theology.

The purpose of the scientific activity of Fr. Prof. Mathew, formulated by himself, is showing the cognitive integrity of science and religion. He wants to achieve this purpose by going back to rudiments of arising the contemporary science which is revealing the new cosmic reality by employing technological inventions and astronomical discoveries, the last being possible due to the mentioned inventions. Galileo formed the contemporaneous conception of science formulating new criteria of both working out the results of experimental investigations and applying mathematics to describing as well as confirming the experimentally observed facts.

Fr. Prof. Mathew Chadrankunnel took an attempt to show the cognitive value of the scientific ideas being pointed out by Galileo and to prove their accordance with the fundamental purpose continuing the theological reflection in the Church, the reflection being revealed in approaching the truth concerning reality. Here, let me recall John Paul II's statement on Science and Religion dialogue that the aim "is precisely to discern and to make known, in the present state of science and within its proper limits, what can be regarded as an acquired truth or at least as enjoying such a degree of probability that it would be imprudent and unreasonable to reject it. In this way unnecessary conflicts can be avoided" (John Paul II, "Discourse" no. 13, para. 2).

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