

Billenberger: John, Protestant Thought and Natural Science; A Historical Interpretation. London: Collins, 1961.

## 1. Pre-Reformation World View:

- 1.1 The Ptolemaic system from Greece put into Aristotelian form and adapted to Christian thought.
  - 1.11 Hierarchical in the spatial as well as philosophical and theological sense. Hell, earth and heaven.
  - 1.12 Planets, moon and sun moved in perfect circular form around the fixed earth.
  - 1.13 Elements - four. Earth formed of earth and water, planets of highest, fire.
- 1.2 Though giving special status to Christianity, this system comprised more of philosophical than of scientific and Biblical concepts.

## 2. Copernicus:

- 2.1 Sought for mathematical harmony, unity and simplicity, but at outset had no intention of revising the basic framework. Found this in placing the sun as the center of planet movements.
- 2.2 Consequences of his theory:
  - 2.21 Spacially the earth no longer occupied a central role and the theologians thought that this undermined their doctrines of uniqueness of man. Their error was in identification of spacial, philosophical and theological.
  - 2.22 It dislodged the comfortable interrelation of space and destiny.
  - 2.23 It confronted man with the anxiety engendered by infinity. The stars were shown in this theory as being at such great distances as to make it almost infinite. Placement of heaven then became a problem as well as God's nearness.
- 2.3 Response to his theory:
  - 2.31 Scientists: There was no real proof for supporting the theory until Galileo and Kepler in the early seventeenth century. It was not a choice between one science and another, or between one philosophy and a scientific view; it was a choice between philosophies, between the Aristotelian-Ptolemaic or the Neo-Platonic-Pythagorean. The former was reconciled with the Christian drama., the later was centered in mysticism and mathematics. Until the time of Galileo, many scientists could reject the Copernican theory with full justification. The response of theologians in this era must be kept in this light.
  - 2.32 Response of the Reformers; Luther, Calvin and Melancthon. They lived in the period in which there was no compelling reason for accepting the Copernican system.
    - 2.321 Problem of Biblical authority and interpretation. These held that Scripture took authority from its Christological centre, from the content of its message. Interpretation was by the Spirit and not all passages were of the same level, but needed to be judged by whether or not they bore witness to or conformed to Christ. They gave a spiritual interpretation of Scriptures and infallibility of text was only subsidiary. This made possible the acceptance of new theories.
    - 2.322 Both Luther and Calvin upheld early science but feared that an undue concern with natural explanations would obscure the ultimate ground of things, and take attention away from the Creator. They held that the aim of all true science could be no other than that of showing forth the marvellous works of Him who is the source and meaning of one's life.

- 2.323 Both rejected the notion that God was confined to heaven when heaven was conceived in restricted, spatial terms. Both separated the space-time fraework from the theological. God was above time and space.
- 2.324 Nothing in their theological thinking necessitated the rejection of new scientific explanation. Yet both rejected the views associated with Copernicus. The reasons for this rejection are: the new science was not yet widely accepted and in so far as they knew of it, it exhibited a spirit which would pr ve doifficult to harmonize with a Biblical understanding. But they did not use Biblical passages to reject the theory. For Melanchthon the decision was exzentially philosophical, the joice of Aristotelian frameworks rather than Neo-Platonic which he felt had been discredited by the ancients.
- 2.325 Several protestant leaders sided with Copernicus including Rheticus and Osiander who undertook publication of the book. The latter in a ~~xxx~~ preface presented it only as a working hypotheses, but did this largely to shield it from greater opposition. Opposition from Protestants was scattered and unorganized. The Catholic church however, put the book on its Index and banned it.
3. Major Periods in the history of scientific advance.
- 3.1 Copernicus to Galileo. No compelling reason for acceptance of Copernican view. The balance was perhaps slightly on the side of rejection.
- 3.2 Galileo to Newton. Here it was still possible to entertain alternative positions, though the weight of the evidence was certainly in the direction of the Copernican view.
- 3.3 Newtonian world-view. Re-introduction of a unified concept of the universe with the basic Copernican position scientifically irrefutable.
4. Rise of a Protestant Scholasticism.
- 4.1 Appst-reformation Scholasticism developed, the philosophical assumptions of which were antagonistic to the philosophy of the new science.
- 4.11 Melanchthon's interest and Aristotle associated with the humanist tradition and his power as the educational leader of the reformation led to a rise in Aristotelianism.
- 4.12 The doctrinal discussions within the reformation itself encouraged a strong revival of philosophy, in which logic, rhetoric and proper and right formulation were central, and which had metaphysical overtones.
- 4.13 The impact of the Italian Aristotilianism on this led to the formation of several fully developed Protestant scholastic systems. In this third stage the metaphysics of Aristotle, rather than his logic and rhetoric, became central. In the protestant controversies on doctrine the basic error of heresy was not considered to be scriptural, but ~~z~~ philosophical and the way to combat them was to use precise philosophically defined terms so show up their error. Poor metaphysics was considered the cause of much heresy. Their judgment of anabaptists and socinians and other groups was that their philosophy was inferior or that they ignored philosophy altogether.
- 4.14 The controversy with Catholicism centered in the interpretation of Aristotle. In this the Protestants, dedicated as they were to the reformation, differed from the Catholic position in two major areas.
- 4.141 In the centrality of faith for justification, the Protestants held to the primacy of scriptures over metaphysics, while the Catholics viewed faith only in metaphysical terms of causation. Protestants emphasised the experiential side.