

often been asserted that he was not acquainted with the views of Aristarchus of Samos regarding the central sun and the condition of the earth as a planet, because the *Arenarius*, and all the other works of Archimedes, appeared only one year after his death, and a whole century after the invention of the art of printing; but it is forgotten that Copernicus, in his dedication to Pope Paul III., quotes a long passage on Philolaüs, Ecphantus, and Heraclides of Pontus, from Plutarch's work on *The Opinions of Philosophers* (III., 13), and therefore that he might have read in the same work (II., 24) that Aristarchus of Samos regards the sun as one of the fixed stars.

for instance, he was acquainted, as may be seen by the beginning of the dedication, with the letter of Lysis to Hipparchus, which, indeed, shows that the Italian school, in its love of mystery, intended only to communicate its opinions to friends, "as had also at first been the purpose of Copernicus." The age in which Lysis lived is somewhat uncertain; he is sometimes spoken of as an immediate disciple of Pythagoras himself; sometimes, and with more probability, as a teacher of Epaminondas (Böckh, *Philolaos*, s. 8-15). The letter of Lysis to Hipparchus, an old Pythagorean, who had disclosed the secrets of the sect, is, like many similar writings, a forgery of later times. It had probably become known to Copernicus from the collection of Aldus Manutius, *Epistola diversorum Philosophorum* (Romæ, 1494), or from a Latin translation by Cardinal Bessarion (Venet., 1516). In the prohibition of Copernicus's work, *De Revolutionibus*, in the famous decree of the *Congregazione dell' Indice* of the 5th of March, 1616, the new system of the universe is expressly designated as "*falsa illa doctrina Pythagorica, Divinæ Scripturæ omnino adversans*." The important passage on Aristarchus of Samos, of which I have spoken in the text, occurs in the *Arenarius*, p. 449 of the Paris edition of Archimedes of 1615, by David Rivaltus. The editio princeps is the Basle edition of 1544, apud Jo. Hervagium. The passage in the *Arenarius* says, very distinctly, that "Aristarchus had confuted the astronomers who supposed the earth to be immovable in the center of the universe. The sun, which constituted this center, was immovable like the other stars, while the earth revolved round the sun." In the work of Copernicus, Aristarchus is twice named, p. 69, b., and 79, without any reference being made to his system. Ideler, in Wolf and Buttmann's *Museum der Alterthums-wissenschaft* (bd. ii., 1808, s. 452), asks whether Copernicus was acquainted with Nicolaus de Cusa's work, *De Docta Ignorantia*. The first Paris edition was indeed published in 1514, and the expression "*jam nobis manifestum est terram in veritate moveri*," from a Platonizing cardinal, might certainly have made some impression on the Canon of Frauenburg (Whewell, *Philosophy of the Inductive Sciences*, vol. ii., p. 343); but a fragment of Cusa's writing, discovered very recently (1843) by Clemens in the library of the Hospital at Cues, proves sufficiently, as does the work *De Venatione Sapientiæ*, cap. 28, that Cusa imagined that the earth did not move round the sun, but that they moved together, though more slowly, "round the constantly changing pole of the universe." (Clemens, in *Giordano Bruno*, and *Nicol. von Cusa*, 1847, s. 97-100.)