CHAPTER 5¹

Reply to Cardinal Bellarmine (1615)²

§5.1 Cardinal Bellarmine's Letter to Foscarini³

[171] To the Very Reverend Father Paolo Antonio Foscarini, Provincial of the Carmelites in the Province of Calabria:

My Very Reverend Father,

I have read with interest the letter in Italian and the essay in Latin which Your Paternity sent me; I thank you for the one and for the other and confess that they are all full of intelligence and erudition. You ask for my opinion, and so I shall give it to you, but very briefly, since now you have little time for reading and I for writing.

First, I say that it seems to me that Your Paternity and Mr. Galileo are proceeding prudently by limiting yourselves to speaking suppositionally and not absolutely, as I have always believed that Copernicus spoke. For there is no danger in saying that, by assuming the earth moves and the sun stands still, one saves all the appearances better than by postulating eccentrics and epicycles; and that is sufficient for the mathematician. However, it is different to want to affirm that in reality the sun is at the center of the world and only turns on itself without moving from east to west, and the earth is in the third heaven⁴ and revolves with great speed around the sun; this is a very dangerous thing, likely not only to irritate all scholastic philosophers and theologians, but also to harm the Holy Faith by rendering Holy Scripture false. For Your Paternity has well shown many ways of interpreting Holy Scripture, but has not applied them to particular cases; without a doubt you would have encountered very great

^{1.} Reprinted from: Maurice A. Finocchiaro, trans. and ed., *The Galileo Affair: A Documentary History*, © 1989 by the Regents of the University of California. Published by the University of California Press.

^{2.} For the historical background, see the Introduction, especially $\S 0.7.$

^{3.} Galilei 1890-1909, 12: 171-72; translated by Finocchiaro (1989, 67-69).

^{4. &}quot;In the third heaven" just means in the third orbit around the sun.

difficulties if you had wanted to interpret all those passages you yourself cited.

[172] Second, I say that, as you know, the Council⁵ prohibits interpreting Scripture against the common consensus of the Holy Fathers; and if Your Paternity wants to read not only the Holy Fathers, but also the modern commentaries on Genesis, the Psalms, Ecclesiastes, and Joshua, you will find all agreeing in the literal interpretation that the sun is in heaven and turns around the earth with great speed, and that the earth is very far from heaven and sits motionless at the center of the world. Consider now, with your sense of prudence, whether the Church can tolerate giving Scripture a meaning contrary to the Holy Fathers and to all the Greek and Latin commentators. Nor can one answer that this is not a matter of faith, since if it is not a matter of faith "as regards the topic," it is a matter of faith "as regards the speaker"; and so it would be heretical to say that Abraham did not have two children and Jacob twelve, as well as to say that Christ was not born of a virgin, because both are said by the Holy Spirit through the mouth of the prophets and the apostles.

Third, I say that if there were a true demonstration that the sun is at the center of the world and the earth in the third heaven, and that the sun does not circle the earth but the earth circles the sun, then one would have to proceed with great care in explaining the Scriptures that appear contrary, and say rather that we do not understand them than that what is demonstrated is false. But I will not believe that there is such a demonstration, until it is shown me. Nor is it the same to demonstrate that by assuming the sun to be at the center and the earth in heaven one can save the appearances, and to demonstrate that in truth the sun is at the center and the earth in heaven; for I believe the first demonstration may be available, but I have very great doubts about the second, and in case of doubt one must not abandon the Holy Scripture as interpreted by the Holy Fathers. I add that the one who wrote, "The sun also ariseth, and the sun goeth down, and hasteth to his place where he arose,"6 was Solomon, who not only spoke inspired by God, but was a man above all others wise and learned in the human sciences and in the knowledge of created things; he received all this wisdom from God; therefore it is not likely that he was affirming something that was contrary to truth already

^{5.} The Council of Trent (1545-63).

^{6.} Ecclesiastes 1:5 (King James Version).

demonstrated or capable of being demonstrated. Now, suppose you say that Solomon speaks in accordance with appearances, since it seems to us that the sun moves (while the earth does so), just as to someone who moves away from the seashore on a ship it looks like the shore is moving. I shall answer that when someone moves away from the shore, although it appears to him that the shore is moving away from him, nevertheless he knows that this is an error and corrects it, seeing clearly that the ship moves and not the shore; but in regard to the sun and the earth, no scientist has any need to correct the error, since he clearly experiences that the earth stands still and that the eye is not in error when it judges that the sun moves, as it also is not in error when it judges that the moon and the stars move. And this is enough for now.

With this I greet dearly Your Paternity, and I pray to God to grant you all your wishes.

At home, 12 April 1615. To Your Reverend Paternity.

> As a Brother, Cardinal Bellarmine.

§5.2 Galileo's Considerations on the Copernican Opinion, Part I⁷

[351] In order to remove (as much as the blessed God allows me) the occasion to deviate from the most correct judgment about the resolution of the pending controversy, I shall try to do away with two ideas. These are notions which I believe some are attempting to impress on the minds of those persons who are charged with the deliberations, and, if I am not mistaken, they are concepts far from the truth.

The first is that no one has any reason to fear that the outcome might be scandalous; for the earth's stability and sun's motion are so well demonstrated in philosophy that we can be sure and indubitably certain about them; on the other hand, the contrary position is such an immense paradox and obvious foolishness that no one can doubt in any way that it cannot be demonstrated now or ever, or indeed that it can never find a place in the mind of sensible persons. The other

^{7.} Galilei 1890–1909, 5: 351–63; translated by Finocchiaro (1989, 70–80).