

## QUESTION AND ANSWER

would be 1,150 days after the setting up of the abomination (see Dan. 8:14) and 1,335 days after the decree of June 145 (see Dan. 12:12).

Incidentally, either of the periods mentioned in Dan. 12:11-12 could be the same as the  $3\frac{1}{2}$  years hinted at in Dan. 7:25 and 12:7 (if 'time' means 'year'), and in Dan. 9:27 (if 'week' means '7 years').

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### BIBLICAL INERRANCY AND GALILEO

*Leo XIII in his encyclical Providentissimus Deus stated that the sacred writers 'did not wish to teach men these truths (that is to say, the inner constitution of visible objects) which would not help any to salvation,' and hence we always insist that the Bible cannot be convicted of formal error in respect of the apparently scientific facts it contains. Why then did the theologians condemn Galileo?*

The simple answer would be that *Providentissimus Deus* was written in 1893 whilst Galileo was condemned in 1633 and that the seventeenth-century theologians were ignorant of the important principle here laid down by the nineteenth-century pope. But to give merely this simple answer would probably create an unjust impression, and in any case the unhappy incident provides a valuable illustration of the constant need for realising the precise import of the truths of faith, when faced by new circumstances.

Three years before the opening of the Council of Trent Copernicus had died as an honoured son of the Church. But he had sowed the seeds of knowledge which in the seventeenth century was to come into conflict with the theologians, a conflict culminating in the condemnation of Galileo. The Ptolemaic system of Astronomy had been unchallenged, a system in which the earth was at the centre of the universe, and around it there revolved in successive order the moon, Mercury, Venus, the sun, Mars, Jupiter, Saturn and the fixed stars. But Copernicus had rejected this geocentric system in favour of the solar system, and it was under the influence of Galileo and Kepler that the majority of astronomers accepted it. The invention of the telescope at the beginning of this century facilitated the making of observations, and in 1611 Galileo was exhibiting the wonders of the heavens, under papal patronage in the gardens of the Quirinal palace.

But this solar system soon met with strong opposition from the theologians, who saw in it a threat to the teaching of the Bible. In 1616 the following propositions were placed before the theologians of the Inquisition : that the sun is the centre of the universe and is immobile ; and that the earth is not the centre of the universe and has both translateral and rotating movement. They came to the following decisions : that the first proposition is philosophically false and absurd ; moreover it is formally heretical, because it contradicts expressly several texts of the Holy Scriptures, according to their proper sense and following the common interpretation of the Fathers and Doctors ; and that the second proposition deserves censure from the philosophical point of view ; from the theological it is at least erroneous.

The affair of Galileo is important and instructive only in so far as it gives us clear insight into the delicate situation that can arise between theology and the sciences. Unfortunately it has in the past been used as a weapon in anti-Catholic apologetic, although, as a matter of fact, the Copernican system had been violently attacked by Luther and Melancthon at the very time when Clement VII was showing himself rather favourable to it ! Such a polemic atmosphere did not lend itself to a calm appraisal of the circumstances, and so the positive lesson was not easily drawn from this incident. But we are now in a more fortunate position, and what interests us is to try to understand why the theologians of the time were disturbed by this system. Being no better instructed in astronomy than any of their contemporaries they could not help but be disturbed. Their faith taught them that the inhabitants of this earth were the crowning glory of God's creation, and that they had been redeemed by the coming of God made man upon this earth. Plainly then, the earth must be the centre of God's universe, and the other planets its adornment. In the account of creation in the first chapter of Genesis, the firmament of heaven was made to serve as a canopy for the earth, and the sun, moon and stars as lamps for its benefit. But any vague feelings of dismay they might have had at seeing the dignity of the earth reduced, were turned into positive and confident opposition by a consideration of Biblical texts which stated the contrary quite clearly : 'The sun rises and the sun goes down, and hastens to the place where it rises' (Sir. 1:5) ; 'Thou didst set the earth on its foundations, so that it should never be shaken' (Ps. 104:5 ; cf. 18:7 ; 19:4-5), and of course, there was the occasion when, through the miraculous intervention of God on Josue's behalf, 'the sun stayed in the midst of heaven, and did not hasten to go down for about a whole day' (Jos. 10:12).

Biblical and consequently theological language had been linked

with the ancient astronomy for a thousand years, and there had been no reason to distinguish between theological truths and the traditional terms in which those truths were conveyed. The appearance of the Copernican system provided the reason, and indeed demanded such a distinction ; but it would be most unreasonable to expect that this should be realised immediately. Individuals indeed were remarkably quick to see the implications ; thus for instance, St Robert Bellarmine in 1615, wrote to Foscarini who had written a book trying to interpret the Biblical texts in accordance with the Copernican system : ‘ I say that if there is a true demonstration that the earth turns, then it will be necessary to show a great deal of circumspection in explaining the passages of Scripture which appear to contradict it, and to say that we do not understand them, rather than to say that what has been demonstrated is false.’ But this degree of perception was naturally not shared by the majority. The theologians who condemned Galileo were right to maintain the truth of faith that the Bible, being the inspired word of God, can teach no error ; they were wrong in concluding that the Bible taught the Ptolemaic system of astronomy, and it was this error which led them to condemn Galileo. But it would be unjust and unreasonable to be amazed that they should make such an error. In discussing the nature of Biblical inspiration and the resulting inerrancy, the impression is sometimes created that our modern teaching on these questions follows quite obviously from the principles. This is not true, and we ought always to insist on the important part that historical circumstances and positive discoveries in the sciences have played in helping us to arrive at a clearer realisation of all that our belief in inspiration implies, and indeed, all that it does not imply. The treasures of God’s revealed truths are only gradually appreciated in all their richness and the Church increases Her appreciation by laborious efforts, which are stimulated and greatly assisted by the difficulties which She is called upon to face. The Galileo incident may well serve to mark the beginning of a long period which proved so fruitful in the growth of this appreciation, precisely because it marked the beginning of a period when the rapid development of the sciences presented so many difficulties of this kind. And perhaps the truth of faith which profited more than any other as a result of this period is the inspiration of the Scriptures.

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