

FIRST PART, QUESTION 68

On the Work of the Second Day (In Four Articles)

We must next consider the work of the second day. Under this head there are four points of inquiry:

- (1) Whether the firmament was made on the second day?
- (2) Whether there are waters above the firmament?
- (3) Whether the firmament divides waters from waters?
- (4) Whether there is more than one heaven?

Whether the firmament was made on the second day?

Ia q. 68 a. 1

Objection 1. It would seem that the firmament was not made on the second day. For it is said (Gn. 1:8): "God called the firmament heaven." But the heaven existed before days, as is clear from the words, "In the beginning God created heaven and earth." Therefore the firmament was not made on the second day.

Objection 2. Further, the work of the six days is ordered conformably to the order of Divine wisdom. Now it would ill become the Divine wisdom to make afterwards that which is naturally first. But though the firmament naturally precedes the earth and the waters, these are mentioned before the formation of light, which was on the first day. Therefore the firmament was not made on the second day.

Objection 3. Further, all that was made in the six days was formed out of matter created before days began. But the firmament cannot have been formed out of pre-existing matter, for if so it would be liable to generation and corruption. Therefore the firmament was not made on the second day.

On the contrary, It is written (Gn. 1:6): "God said: let there be a firmament," and further on (verse 8); "And the evening and morning were the second day."

I answer that, In discussing questions of this kind two rules are to be observed, as Augustine teaches (Gen. ad lit. i, 18). The first is, to hold the truth of Scripture without wavering. The second is that since Holy Scripture can be explained in a multiplicity of senses, one should adhere to a particular explanation, only in such measure as to be ready to abandon it, if it be proved with certainty to be false; lest Holy Scripture be exposed to the ridicule of unbelievers, and obstacles be placed to their believing.

We say, therefore, that the words which speak of the firmament as made on the second day can be understood in two senses. They may be understood, first, of the starry firmament, on which point it is necessary to set forth the different opinions of philosophers. Some of these believed it to be composed of the elements; and this was the opinion of Empedocles, who, however, held further that the body of the firmament was not susceptible of dissolution, because its parts are, so to say, not in disunion, but in harmony. Others held the firmament to be of the nature of the four elements, not, indeed, compounded of them, but being as it were a simple element. Such was the opinion of Plato, who held that element to be fire. Others, again, have held that the heaven is not of the nature of the four elements, but is itself a

fifth body, existing over and above these. This is the opinion of Aristotle (De Coel. i, text. 6,32).

According to the first opinion, it may, strictly speaking, be granted that the firmament was made, even as to substance, on the second day. For it is part of the work of creation to produce the substance of the elements, while it belongs to the work of distinction and adornment to give forms to the elements that pre-exist.

But the belief that the firmament was made, as to its substance, on the second day is incompatible with the opinion of Plato, according to whom the making of the firmament implies the production of the element of fire. This production, however, belongs to the work of creation, at least, according to those who hold that formlessness of matter preceded in time its formation, since the first form received by matter is the elemental.

Still less compatible with the belief that the substance of the firmament was produced on the second day is the opinion of Aristotle, seeing that the mention of days denotes succession of time, whereas the firmament, being naturally incorruptible, is of a matter not susceptible of change of form; wherefore it could not be made out of matter existing antecedently in time.

Hence to produce the substance of the firmament belongs to the work of creation. But its formation, in some degree, belongs to the second day, according to both opinions: for as Dionysius says (Div. Nom. iv), the light of the sun was without form during the first three days, and afterwards, on the fourth day, received its form.

If, however, we take these days to denote merely sequence in the natural order, as Augustine holds (Gen. ad lit. iv, 22,24), and not succession in time, there is then nothing to prevent our saying, whilst holding any one of the opinions given above, that the substantial formation of the firmament belongs to the second day.

Another possible explanation is to understand by the firmament that was made on the second day, not that in which the stars are set, but the part of the atmosphere where the clouds are collected, and which has received the name firmament from the firmness and density of the air. "For a body is called firm," that is dense and solid, "thereby differing from a mathematical body" as is remarked by Basil (Hom. iii in Hexaem.). If, then, this explanation is adopted none of these opinions will be found repugnant to reason. Augustine, in

fact (Gen. ad lit. ii, 4), recommends it thus: "I consider this view of the question worthy of all commendation, as neither contrary to faith nor difficult to be proved and believed."

Reply to Objection 1. According to Chrysostom (Hom. iii in Genes.), Moses prefaces his record by speaking of the works of God collectively, in the words, "In the beginning God created heaven and earth," and then proceeds to explain them part by part; in somewhat the same way as one might say: "This house was constructed by that builder," and then add: "First, he laid the foundations, then built the walls, and thirdly, put on the roof." In accepting this explanation we are, therefore, not bound to hold that a different heaven is spoken of in the words: "In the beginning God created heaven and earth," and when we read that the firmament was made on the second day.

We may also say that the heaven recorded as created in the beginning is not the same as that made on the second day; and there are several senses in which this may be understood. Augustine says (Gen. ad lit. i, 9) that the heaven recorded as made on the first day is the formless spiritual nature, and that the heaven of the second day is the corpo-

real heaven. According to Bede (Hexaem. i) and Strabus, the heaven made on the first day is the empyrean, and the firmament made on the second day, the starry heaven. According to Damascene (De Fide Orth. ii) that of the first day was spherical in form and without stars, the same, in fact, that the philosophers speak of, calling it the ninth sphere, and the primary movable body that moves with diurnal movement: while by the firmament made on the second day he understands the starry heaven. According to another theory, touched upon by Augustine^{*} the heaven made on the first day was the starry heaven, and the firmament made on the second day was that region of the air where the clouds are collected, which is also called heaven, but equivocally. And to show that the word is here used in an equivocal sense, it is expressly said that "God called the firmament heaven"; just as in a preceding verse it said that "God called the light day" (since the word "day" is also used to denote a space of twenty-four hours). Other instances of a similar use occur, as pointed out by Rabbi Moses.

The second and third objections are sufficiently answered by what has been already said.

Whether there are waters above the firmament?

Ia q. 68 a. 2

Objection 1. It would seem that there are not waters above the firmament. For water is heavy by nature, and heavy things tend naturally downwards, not upwards. Therefore there are not waters above the firmament.

Objection 2. Further, water is fluid by nature, and fluids cannot rest on a sphere, as experience shows. Therefore, since the firmament is a sphere, there cannot be water above it.

Objection 3. Further, water is an element, and appointed to the generation of composite bodies, according to the relation in which imperfect things stand towards perfect. But bodies of composite nature have their place upon the earth, and not above the firmament, so that water would be useless there. But none of God's works are useless. Therefore there are not waters above the firmament.

On the contrary, It is written (Gn. 1:7): "(God) divided the waters that were under the firmament, from those that were above the firmament."

I answer with Augustine (Gen. ad lit. ii, 5) that, "These words of Scripture have more authority than the most exalted human intellect. Hence, whatever these waters are, and whatever their mode of existence, we cannot for a moment doubt that they are there." As to the nature of these waters, all are not agreed. Origen says (Hom. i in Gen.) that the waters that are above the firmament are "spiritual substances." Wherefore it is written (Ps. 148:4): "Let the waters that are above the heavens praise the name of the Lord," and (Dan. 3:60): "Ye waters that are above the heavens, bless the Lord." To this Basil answers (Hom. iii in Hexaem.) that these words do not mean that these waters are rational creatures, but that "the thoughtful contemplation of them by those who understand fulfils the glory of the Creator." Hence in the same context, fire, hail, and other like creatures, are in-

voked in the same way, though no one would attribute reason to these.

We must hold, then, these waters to be material, but their exact nature will be differently defined according as opinions on the firmament differ. For if by the firmament we understand the starry heaven, and as being of the nature of the four elements, for the same reason it may be believed that the waters above the heaven are of the same nature as the elemental waters. But if by the firmament we understand the starry heaven, not, however, as being of the nature of the four elements then the waters above the firmament will not be of the same nature as the elemental waters, but just as, according to Strabus, one heaven is called empyrean, that is, fiery, solely on account of its splendor: so this other heaven will be called aqueous solely on account of its transparence; and this heaven is above the starry heaven. Again, if the firmament is held to be of other nature than the elements, it may still be said to divide the waters, if we understand by water not the element but formless matter. Augustine, in fact, says (Super Gen. cont. Manich. i, 5,7) that whatever divides bodies from bodies can be said to divide waters from waters.

If, however, we understand by the firmament that part of the air in which the clouds are collected, then the waters above the firmament must rather be the vapors resolved from the waters which are raised above a part of the atmosphere, and from which the rain falls. But to say, as some writers alluded to by Augustine (Gen. ad lit. ii, 4), that waters resolved into vapor may be lifted above the starry heaven, is a mere absurdity. The solid nature of the firmament, the intervening region of fire, wherein all vapor must be consumed, the tendency in light and rarefied bodies to drift to one spot beneath the vault of the moon, as well as the fact that vapors are perceived not to rise even to the tops

^{*} Gen. ad lit. ii, 1.

of the higher mountains, all go to show the impossibility of this. Nor is it less absurd to say, in support of this opinion, that bodies may be rarefied infinitely, since natural bodies cannot be infinitely rarefied or divided, but up to a certain point only.

Reply to Objection 1. Some have attempted to solve this difficulty by supposing that in spite of the natural gravity of water, it is kept in its place above the firmament by the Divine power. Augustine (Gen. ad lit. ii, 1), however will not admit this solution, but says "It is our business here to inquire how God has constituted the natures of His creatures, not how far it may have pleased Him to work on them by way of miracle." We leave this view, then, and answer that according to the last two opinions on the firmament and the waters the solution appears from what has been said. According to the first opinion, an order of the elements must be supposed different from that given by Aristotle, that is to say, that the waters surrounding the earth are of a dense consistency, and those around the firmament of a rarer consistency, in proportion to the respective density of the earth and of the heaven.

Or by the water, as stated, we may understand the matter of bodies to be signified.

Reply to Objection 2. The solution is clear from what

has been said, according to the last two opinions. But according to the first opinion, Basil gives two replies (Hom. iii in Hexaem.). He answers first, that a body seen as concave beneath need not necessarily be rounded, or convex, above. Secondly, that the waters above the firmament are not fluid, but exist outside it in a solid state, as a mass of ice, and that this is the crystalline heaven of some writers.

Reply to Objection 3. According to the third opinion given, the waters above the firmament have been raised in the form of vapors, and serve to give rain to the earth. But according to the second opinion, they are above the heaven that is wholly transparent and starless. This, according to some, is the primary mobile, the cause of the daily revolution of the entire heaven, whereby the continuance of generation is secured. In the same way the starry heaven, by the zodiacal movement, is the cause whereby different bodies are generated or corrupted, through the rising and setting of the stars, and their various influences. But according to the first opinion these waters are set there to temper the heat of the celestial bodies, as Basil supposes (Hom. iii in Hexaem.). And Augustine says (Gen. ad lit. ii, 5) that some have considered this to be proved by the extreme cold of Saturn owing to its nearness to the waters that are above the firmament.

Whether the firmament divides waters from waters?

Ia q. 68 a. 3

Objection 1. It would seem that the firmament does not divide waters from waters. For bodies that are of one and the same species have naturally one and the same place. But the Philosopher says (Topic. i, 6): "All water is the same species." Water therefore cannot be distinct from water by place.

Objection 2. Further, should it be said that the waters above the firmament differ in species from those under the firmament, it may be argued, on the contrary, that things distinct in species need nothing else to distinguish them. If then, these waters differ in species, it is not the firmament that distinguishes them.

Objection 3. Further, it would appear that what distinguishes waters from waters must be something which is in contact with them on either side, as a wall standing in the midst of a river. But it is evident that the waters below do not reach up to the firmament. Therefore the firmament does not divide the waters from the waters.

On the contrary, It is written (Gn. 1:6): "Let there be a firmament made amidst the waters; and let it divide the waters from the waters."

I answer that, The text of Genesis, considered superficially, might lead to the adoption of a theory similar to that held by certain philosophers of antiquity, who taught that water was a body infinite in dimension, and the primary element of all bodies. Thus in the words, "Darkness was upon the face of the deep," the word "deep" might be taken to mean the infinite mass of water, understood as the principle of all other bodies. These philosophers also taught that not all corporeal things are confined beneath the heaven perceived by our senses, but that a body of water, infinite in extent, exists above that heaven. On this view the firma-

ment of heaven might be said to divide the waters without from those within—that is to say, from all bodies under the heaven, since they took water to be the principle of them all.

As, however, this theory can be shown to be false by solid reasons, it cannot be held to be the sense of Holy Scripture. It should rather be considered that Moses was speaking to ignorant people, and that out of condescension to their weakness he put before them only such things as are apparent to sense. Now even the most uneducated can perceive by their senses that earth and water are corporeal, whereas it is not evident to all that air also is corporeal, for there have even been philosophers who said that air is nothing, and called a space filled with air a vacuum.

Moses, then, while he expressly mentions water and earth, makes no express mention of air by name, to avoid setting before ignorant persons something beyond their knowledge. In order, however, to express the truth to those capable of understanding it, he implies in the words: "Darkness was upon the face of the deep," the existence of air as attendant, so to say, upon the water. For it may be understood from these words that over the face of the water a transparent body was extended, the subject of light and darkness, which, in fact, is the air.

Whether, then, we understand by the firmament the starry heaven, or the cloudy region of the air, it is true to say that it divides the waters from the waters, according as we take water to denote formless matter, or any kind of transparent body, as fittingly designated under the name of waters. For the starry heaven divides the lower transparent bodies from the higher, and the cloudy region divides that higher part of the air, where the rain and similar things are

generated, from the lower part, which is connected with the water and included under that name.

Reply to Objection 1. If by the firmament is understood the starry heaven, the waters above are not of the same species as those beneath. But if by the firmament is understood the cloudy region of the air, both these waters are of the same species, and two places are assigned to them, though not for the same purpose, the higher being the place of their begetting, the lower, the place of their repose.

Reply to Objection 2. If the waters are held to differ in species, the firmament cannot be said to divide the waters, as the cause of their destruction, but only as the boundary of each.

Reply to Objection 3. On account of the air and other similar bodies being invisible, Moses includes all such bodies under the name of water, and thus it is evident that waters are found on each side of the firmament, whatever be the sense in which the word is used.

Whether there is only one heaven?

Ia q. 68 a. 4

Objection 1. It would seem that there is only one heaven. For the heaven is contrasted with the earth, in the words, "In the beginning God created heaven and earth." But there is only one earth. Therefore there is only one heaven.

Objection 2. Further, that which consists of the entire sum of its own matter, must be one; and such is the heaven, as the Philosopher proves (*De Coel.* i, text. 95). Therefore there is but one heaven.

Objection 3. Further, whatever is predicated of many things univocally is predicated of them according to some common notion. But if there are more heavens than one, they are so called univocally, for if equivocally only, they could not properly be called many. If, then, they are many, there must be some common notion by reason of which each is called heaven, but this common notion cannot be assigned. Therefore there cannot be more than one heaven.

On the contrary, It is said (*Ps.* 148:4): "Praise Him, ye heavens of heavens."

Answer that, On this point there seems to be a diversity of opinion between Basil and Chrysostom. The latter says that there is only one heaven (*Hom.* iv in *Gen.*), and that the words 'heavens of heavens' are merely the translation of the Hebrew idiom according to which the word is always used in the plural, just as in Latin there are many nouns that are wanting in the singular. On the other hand, Basil (*Hom.* iii in *Hexaem.*), whom Damascene follows (*De Fide Orth.* ii), says that there are many heavens. The difference, however, is more nominal than real. For Chrysostom means by the one heaven the whole body that is above the earth and the water, for which reason the birds that fly in the air are called birds of heaven^{*}. But since in this body there are many distinct parts, Basil said that there are more heavens than one.

In order, then, to understand the distinction of heavens, it must be borne in mind that Scripture speaks of heaven in a threefold sense. Sometimes it uses the word in its proper and natural meaning, when it denotes that body on high which is luminous actually or potentially, and incorruptible by nature. In this body there are three heavens; the first is the empyrean, which is wholly luminous; the second is the aqueous or crystalline, wholly transparent; and the third is called the starry heaven, in part transparent, and in part actually luminous, and divided into eight spheres. One of these is the sphere of the fixed stars; the other seven, which may be called the seven heavens, are the spheres of the planets.

In the second place, the name heaven is applied to a body that participates in any property of the heavenly body, as sublimity and luminosity, actual or potential. Thus Damascene (*De Fide Orth.* ii) holds as one heaven all the space between the waters and the moon's orb, calling it the aerial. According to him, then, there are three heavens, the aerial, the starry, and one higher than both these, of which the Apostle is understood to speak when he says of himself that he was "rapt to the third heaven."

But since this space contains two elements, namely, fire and air, and in each of these there is what is called a higher and a lower region Rabanus subdivides this space into four distinct heavens. The higher region of fire he calls the fiery heaven; the lower, the Olympian heaven from a lofty mountain of that name: the higher region of air he calls, from its brightness, the ethereal heaven; the lower, the aerial. When, therefore, these four heavens are added to the three enumerated above, there are seven corporeal heavens in all, in the opinion of Rabanus.

Thirdly, there are metaphorical uses of the word heaven, as when this name is applied to the Blessed Trinity, Who is the Light and the Most High Spirit. It is explained by some, as thus applied, in the words, "I will ascend into heaven"; whereby the evil spirit is represented as seeking to make himself equal with God. Sometimes also spiritual blessings, the recompense of the Saints, from being the highest of all good gifts, are signified by the word heaven, and, in fact, are so signified, according to Augustine (*De Serm. Dom. in Monte*), in the words, "Your reward is very great in heaven" (*Mat.* 5:12).

Again, three kinds of supernatural visions, bodily, imaginative, and intellectual, are called sometimes so many heavens, in reference to which Augustine (*Gen. ad lit.* xii) expounds Paul's rapture "to the third heaven."

Reply to Objection 1. The earth stands in relation to the heaven as the centre of a circle to its circumference. But as one center may have many circumferences, so, though there is but one earth, there may be many heavens.

Reply to Objection 2. The argument holds good as to the heaven, in so far as it denotes the entire sum of corporeal creation, for in that sense it is one.

Reply to Objection 3. All the heavens have in common sublimity and some degree of luminosity, as appears from what has been said.

^{*} *Ps.* 8:9.