

QUESTION 68

The Work of the Second Day

The next thing to consider is the work of the second day. On this topic there are four questions: (1) Was the firmament made on the second day? (2) Are there waters above the firmament? (3) Does the firmament divide waters from waters? (4) Are there many heavens, or just one?

Article 1

Was the firmament made on the second day?

It seems that the firmament was not made on the second day:

Objection 1: Genesis 1:8 says, “God called the firmament ‘heaven’. But heaven was made before any of the days, as is clear when it says, “In the beginning God created heaven and earth.” Therefore, the firmament was not made on the second day.

Objection 2: The works of the six days are ordered in accord with God’s wisdom. But it would not befit God’s wisdom for Him to make at a later time (*posterius*) something that is naturally prior. But the firmament is naturally prior to water and earth, mention of which is made before the formation of light, which occurred on the first day. Therefore, the firmament was not made on the second day.

Objection 3: Everything that was made during the six days was formed from the matter that had been created before any of the days. But the firmament could not have been formed from pre-existing matter, since then it would be subject to generation and corruption. Therefore, the firmament was not made on the second day.

But contrary to this: Genesis 1:6 says, “God said, let there be a firmament.” And this is later followed by, “... and the evening and the morning were the second day.”

I respond: As Augustine teaches, in questions of this sort there are two norms to be followed. The first is that the truth of Scripture must be unshakably held to. The second is that when divine Scripture can be interpreted in a number of different ways, one should not adhere to any of the interpretations so exclusively that what he presumes to assert to be the meaning of Scripture might turn out to be proven false by a compelling argument—lest, because of this, the Scripture be exposed to ridicule by non-believers, and lest the way of belief be thereby closed off to them.

Note, then, that there are two possible ways to understand the passage, “The firmament was made ... on the second day.”

In the first way, it is speaking of the firmament in which the stars exist. And on this reading, we must explain the verse in different ways, corresponding to the different opinions men have about the firmament.

For instance, some have claimed that this firmament is composed of the elements. This was the opinion of Empedocles, who nonetheless claimed that this body is incorruptible (*indissolubile*) because its composition involved only ‘love’ (*amicitia*) and not ‘strife’ (*lis*). Others have claimed that the firmament is of the nature of the four elements, not in the sense that it is composed of the elements, but in the sense that it is a simple element. This was the opinion of Plato, who claimed that a celestial body is elemental fire. Still others have claimed that the heavens are not of the nature of the four elements, but are a fifth body, beyond the four elements. And this was Aristotle’s opinion.

Given the first opinion, one could concede without qualification that the firmament was made on the second day, even with respect to its substance. For the work of *creation* involves producing the very substance of the elements, whereas the work of *division* and the work of *adornment* involve forming things out of the pre-existing elements.

Given Plato's opinion, on the other hand, it is wrong to believe that the firmament was made with respect to its substance on the second day. For on this view, to make the firmament is to produce the element fire. But the production of the elements pertains to the work of creation, according to those who claim that matter's not being formed temporally preceded its being formed. For the forms of the elements are the ones that first characterize matter.

A fortiori, given Aristotle's opinion, one cannot claim that the firmament was produced with respect to its substance on the second day, assuming that the six days involve temporal succession. For since the heavens are incorruptible by their nature, they have matter that cannot be the subject of any other form, and so it is impossible that the firmament should be out of matter that has existed at some previous time. Hence, the production of the substance of the firmament belongs to the work of creation [and not to the work of division].

However, according to these last two opinions, there is a type of formation of the firmament that belongs to the work of the second day—just as in *De Divinis Nominibus*, chap. 4, Dionysius claims that the sun's light was unformed in the first three days and was later formed on the fourth day.

On the other hand, if, as Augustine claims, the six days designate only an order of nature and not a temporal succession, then nothing prevents one from claiming, given any of these opinions, that the formation of the firmament with respect to its substance pertains to the second day.

Now the second possible way to understand the passage, "The firmament was made on the second day," is not to think of the firmament in which the stars are fixed, but to think instead of the part of the air in which clouds gather and which is called a firmament because of the density of the air in that region. For as Basil explains, what is dense and solid is said to be a 'firm body', as opposed to a 'mathematical body'. Given this interpretation, nothing follows that is incompatible with any of the above opinions. Hence, in *Super Genesim ad Litteram 2* Augustine, commending this interpretation, says, "I judge this view to be the most praiseworthy. For what it says is not contrary to the faith, and it can be promptly accepted once the proof is presented."

Reply to objection 1: According to Chrysostom, Moses first told in summary what God had done, beginning with, "In the beginning God created heaven and earth," and afterwards explained it part by part. It is like someone saying, "This builder made that house," and then adding, "First he made the foundation, and later he erected the walls, and then he put a roof over it." And so we do not have to understand two different heavens when it says, "In the beginning God created heaven and earth," and when it later says, "On the second day the firmament was made."

It also possible to claim that the heaven said to be created at the beginning is different from the heaven said to be made on the second day. There are different ways to make this claim.

For instance, according to Augustine, the heaven said to have been made on the first day is unformed spiritual nature, whereas the heaven said to have been made on the second day is the corporeal heaven.

By contrast, according to Bede and Strabo, the heaven said to have been made on the first day is the empyrean heaven, whereas the firmament that is said to have been made on the second day is the starry heaven.

Again, according to Damascene, the heaven said to have been made on the first day is a spherical heaven without stars—the philosophers speak of this, calling it the ninth sphere and the first movable thing, which is moved by the diurnal motion—whereas he understands the firmament made on the second day to be the starry heaven.

According to yet another interpretation mentioned by Augustine, the heaven made on the first day is the starry heaven itself, whereas the firmament made on the second day is the region of the air in which clouds gather and which is also called 'heaven' equivocally. And it is in order to signal the equivocation that the text expressly says, "God called the firmament 'heaven'," just as it had previously said, "God

called the light ‘day’” (for ‘day’ is also used to mean a period of twenty-four hours). And, as Rabbi Moses points out, this same practice can be observed in other places.

Reply to objection 2 and reply to objection 3: The replies to these objections are clear from what was said above.

Article 2

Are there waters above the firmament?

It seems that there are no waters above the firmament:

Objection 1: Water is naturally heavy. But the proper place of what is heavy is just down below and not up above. Therefore, there are no waters above the firmament.

Objection 2: Water is naturally a fluid. But, as is clear from experience, a fluid cannot stay still on the surface of a round body. Therefore, since the firmament is a round body, there cannot be water above the firmament.

Objection 3: Since water is an element, it is ordered toward the generation of mixed bodies, in the way that what is incomplete (*imperfectum*) is ordered toward what is complete (*perfectum*). But the place for such mixing is upon the earth and not above the firmament. Therefore, water would be useless above the firmament. But nothing in the works of God is useless. Therefore, there are no waters above the firmament.

But contrary to this: Genesis 1:7 says, “He divided the waters that were above the firmament from those that were under the firmament.”

I respond: As Augustine says in *Super Genesim ad Litteram* 2, “The authority of this passage of Scripture is greater than all the capability of human genius. Hence, whatever sort of waters these were, and in whatever way they were there, we do not at all doubt that they were there.”

However, the question of what sort of waters these are is not answered in the same way by everyone.

For Origen says that the waters above the heavens are the spiritual substances, and this is why Psalm 148:4 says, “Let the waters that are above the heavens praise the name of the Lord,” and Daniel 3:60 says, “Bless the Lord, all you waters that are above the heavens.”

But to this Basil replies in *Hexameron* 3 that these things are said not because the waters are rational creatures, but because “the consideration of them, contemplated thoughtfully by beings with understanding, brings to completion the glorification of their Creator.” Hence, in the same place (Daniel 3) the same thing is said about fire and hail and other things of this sort, which are clearly not rational creatures.

Therefore, one should claim that the waters are corporeal. However, it is necessary to specify in different ways what kinds of waters they are, in accord with the different opinions about the firmament.

For if the firmament is understood to be the starry heaven and is claimed to be of the nature of the four elements, then by parity of reasoning the waters that are above the heavens can be believed to be of the same nature as elemental waters.

On the other hand, if the firmament is understood to be the starry heaven but not of the nature of the four elements, then the waters above the firmament will not be of the nature of elementary waters. Instead, just as, according to Strabo, one heaven is called ‘empyrean’, i.e., fiery, only because of its splendid light (*splendor*), so too the other heaven, which is above the starry heaven, will be called ‘aqueous’ (*aequeum*) only because of its transparency.

Again, if one claims that the firmament has a nature different from that of the four elements, then, as Augustine points out in *Super Genesim contra Manichaeos*, he can still say that the firmament divides the waters if we mean by ‘water’ the unformed matter of bodies and not the element water. For on this view, whatever lies between bodies divides waters from waters.

However, if the firmament is understood to be that part of the air in which clouds gather, then the waters that are above the firmament are those waters which, having been evaporated (*vaporabiliter resolutae*), are elevated above the part of the air from which rain is generated. For it is altogether impossible to claim, as some have (Augustine touches on this view in *Super Genesim ad Litteram 2*), that evaporated waters are elevated above the starry heaven—and this (a) because of the solidity of the heavens, (b) because of the intermediate region of fire, which would consume vapors of this sort, (c) because the place where light and rarified things are carried is under the curve of the moon’s orbit, and also (d) because vapors do not appear to the senses to be elevated even as far as the peaks of certain mountains. What’s more, the reply that the rarefaction of a body goes on *ad infinitum* because bodies are infinitely divisible is groundless. For a natural body is divided or rarified only to a set limit and not *ad infinitum*.

Reply to objection 1: To some it seems that the correct response to this argument is that even though the waters are naturally heavy, they are retained above the heavens by God’s power. But in *Super Genesim ad Litteram 2* Augustine rules out this response, saying, “At this point it is fitting to inquire into how God made the natures of things, and not what He intended to do in them by His miraculous power.”

Hence, one should respond alternatively that, given the last two opinions above about the waters and the firmament, the solution is clear from what has been said. According to the first opinion, one has to posit an order among the elements that is different from the one Aristotle posits, so that certain dense waters surround the earth, whereas certain rarified waters surround the heavens—with the result that those waters are related to the heavens in the same way that these waters here below are related to the earth. Yet another response, as has been explained, is that ‘water’ here means the matter of bodies.

Reply to objection 2: Given the last two opinions mentioned above, the answer here is clear from what was said above.

On the other hand, given the first opinion mentioned above, Basil has two replies. The first is that it is not necessary that everything that appears round on its concave side is also round up above on its convex side. Second, the waters that are above the heavens are not fluids, but are, as it were, firmed up with a glacier-like solidity around the heavens. That is why some call these waters the ‘crystalline’ heaven.

Reply to objection 3: According to the third opinion, the waters above the firmament are elevated as vapor because of the usefulness of rain.

By contrast, given the second opinion, the waters are above the firmament, i.e., above the whole diaphanous heaven without stars. Some say that this heaven is the first moveable thing and that it turns all of heaven with the diurnal motion in order to effect, through the diurnal motion, the continuity of generation—just as the heaven in which the stars exist, through a motion that is in accord with the zodiac, effects the diversity of generation and corruption by approaching and receding and by the diverse powers of the stars.

On the other hand, given the first opinion, the waters are there, as Basil says, to temper the heat of the celestial bodies. As Augustine points out, some take as an indication of this the fact that the star Saturn is the coldest because of its proximity to the higher waters.

Article 3

Does the firmament divide waters from waters?

It seems that the firmament does not divide waters from waters:

Objection 1: There is just one natural place for one body according to its species. But as the Philosopher says, all water is the same in species as all other water. Therefore, waters are not distinct from waters with respect to place.

Objection 2: Someone might reply that the waters above the firmament differ in species from the waters below the firmament.

Against this: Things that are diverse in species do not need anything else to distinguish them. Therefore, if the higher waters and lower waters differ in species, then it is not the firmament that distinguishes them from one another.

Objection 3: It seems that what divides waters from waters is something touched by waters on both sides, like a wall built in the middle of a river. But it is clear that the lower waters do not reach all the way to the firmament. Therefore, the firmament does not divide waters from waters.

But contrary to this: Genesis 1:6 says, “Let there be a firmament made in the middle of the waters, and let it divide waters from waters.”

I respond: If one looked at just the surface of the text of Genesis, he could construct a picture that corresponds to the position of certain ancient philosophers. For some of them claimed that water is an infinite body and the principle of all other bodies. Indeed, one could read the immensity of the waters into the name ‘deep’ (*abyssum*), when it says, “Darkness was upon the face of the deep.” In addition, they claimed that the sensible heaven which we see does not contain all corporeal things under itself, but that there is an infinite body of waters above the heaven. And so one could claim that the firmament of the heaven divides the outer waters from the inner waters, i.e., from all the bodies contained below the heaven whose principle they claimed to be water.

However, since this position is shown to be false by sound arguments, one should not claim that this is what Scripture means.

Instead, consider that Moses was speaking to an uneducated people and, in accommodating himself to their intellectual weakness, he proposed to them only what is manifestly obvious to the senses. Now everyone, no matter how uneducated, perceives through the senses that earth and water are bodies. Air, however, is not perceived by everyone to be a body, since even some philosophers have claimed that air is nothingness, calling what is full of air a vacuum. And so Moses explicitly mentions water and earth, but does not explicitly name air, so as not to propose something unknown to the uneducated. Yet in order to express the truth to those capable of understanding it, he makes room for an interpretation involving air by signifying it as connected to the water, when he says, “Darkness was upon the face of the deep”—which means that a diaphanous body, the subject of light and darkness, is upon the face of the water. So, then, regardless of whether we mean by the firmament the starry heaven or the cloudy part of the air, it is appropriate to say that the firmament divides waters from waters, given either that ‘water’ means unformed matter or that all diaphanous bodies are understood by the name ‘waters’. For the starry heaven divides the lower diaphanous bodies from the higher bodies, whereas the cloudy air divides the higher part of the air, in which rains and similar irruptions are generated, from the lower part of the air, which is connected with water and is understood under the name ‘waters’.

Reply to objection 1: If ‘firmament’ means the starry heaven, then the higher waters are not the same in species as the lower waters.

On the other hand, if ‘firmament’ means the cloudy air, then both waters are of the same species.

And in that case the two places are not assigned to the waters for the same reason; instead, the higher place is the place of the generation of waters, whereas the lower place is the place of rest for those waters.

Reply to objection 2: If the waters are taken to be diverse in species, the firmament is said to divide waters from waters not in the sense that it causes the distinction between them, but in the sense that it is the terminus of both sorts of waters.

Reply to objection 3: Because of the invisibility of the air and of similar bodies, Moses includes all bodies of this sort under the name ‘waters’. And in this way it is clear that there are waters on both sides of the firmament, no matter how ‘firmament’ is understood.

Article 4

Is there just one heaven?

It seems that there is just one heaven:

Objection 1: Heaven is distinguished from earth when it says, “In the beginning God created heaven and earth.” But there is just one earth. Therefore, there is likewise just one heaven.

Objection 2: Everything that includes all its own matter is just one. But heaven is like this, as the Philosopher proves in *De Caelo* 1. Therefore, there is just one heaven.

Objection 3: Whatever is predicated univocally of many things is predicated of them in accord with a single common concept. But if there is more than one heaven, then ‘heaven’ is predicated univocally of many things; for if it were being predicated equivocally, then it would not be proper to say ‘many heavens’. Therefore, if there are said to be many heavens, then there must be some common concept in accord with which they are called heavens. But there is no such ascribable concept. Therefore, one should not say that there are many heavens.

But contrary to this: Psalm 148:4 says, “Praise Him, you heavens of heavens.”

I respond: On this question, there seems to be a disagreement between Basil and Chrysostom. For Chrysostom says that there is just one heaven and the fact that the Psalm says “... you heavens of heavens” in the plural is due to an idiom of the Hebrew language, in which it is customary to signify heaven only in the plural, just as in Latin there are likewise many nouns that lack a singular form. On the other hand, Basil and Damascene, who follows him, claim that there are many heavens.

This disagreement, however, is more verbal than substantive. For what Chrysostom calls ‘the one heaven’ is the whole of the body that is above the earth and waters, so that even the birds that fly in the air are on this account called ‘the birds of heaven’. On the other hand, it was because there are many distinctions to be drawn within this body that Basil posited many heavens.

Thus, in order to understand the division of the heavens, note that there are three ways in which ‘heaven’ is used in Scripture:

Sometimes the name ‘heaven’ is used properly and naturally. Given this usage, ‘heaven’ means a body that is (a) very high (*sublime*), (b) either actually or potentially luminous, and (c) incorruptible by its nature. Accordingly, three heavens are posited. The first is totally luminous and is called the *empyrean* heaven. The second is totally diaphanous and is called the *aqueous* or *crystalline* heaven. The third is partly diaphanous and partly luminous in actuality, and this is called the *starry* heaven; it is divided into eight spheres, viz., the sphere of the fixed stars and the seven spheres of the planets, which can themselves be called eight heavens.

Second, the name ‘heaven’ is used to designate participation in a property of a celestial body, viz.,

(a) height or (b) actual or potential luminosity. It is according to this usage that Damascene posits as a single heaven the entire region from the waters to the orbit of the moon. This he calls the ‘airy heaven’. And so, according to him, there are three heavens: the *airy* heaven, the *starry* heaven, and the other higher heaven, which he understands to be the “*third* heaven” the Apostle reports he was taken up to (*raptus usque*) (2 Corinthians 12:2).

However, since that first heaven contains two elements, viz., fire and air, and since there is a higher and lower region in each of them, Rabanus divides it into four: (a) the highest region of fire, which he calls the *fiery* heaven, (b) the lower region of fire, which he calls the *olympian* heaven because of the height of a mountain that is called Olympus, (c) the highest region of air, which he called the *ethereal* heaven because of its illumination (*inflammatio*), and (d) the lower region of air, which he calls the *airy* heaven. And so when these four heavens are added to the three higher heavens, there are, according to Rabanus, seven corporeal heavens in the universe.

Third, the name ‘heaven’ is used metaphorically. Sometimes the Holy Trinity is itself called ‘heaven’ in this way, because of its spiritual sublimity and light; it is of this heaven that the devil is understood to have said, “I will ascend into heaven,” i.e., into equality with God. Again, sometimes the spiritual goods with which the saints are rewarded are called heavens because of their preeminence, as in Augustine’s interpretation of the passage, “Your reward will be manifold (*multa*) in the heavens” (Matthew 5:12 and Luke 6:23). Again, sometimes the three types of supernatural vision, viz., corporeal, imaginative, and intellectual, are called three heavens; it is with these in mind that Augustine interprets Paul’s being taken up to the third heaven.

Reply to objection 1: Earth is related to heaven as the center to a circumference. But around one center there can be many circumferences. Hence, even though there is one earth, many heavens are posited.

Reply to objection 2: This argument goes through insofar as ‘heaven’ means the universe of corporeal creatures. Given this meaning, there is indeed just one heaven.

Reply to objection 3: As is clear from what has been said, height and some sort of luminosity are common to all the heavens.