

Creation From Nothing

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Nearly all theories of the origin of the universe, from the early philosophers to contemporary scientists, presuppose the existence of matter. Thus they are accounts of the genesis, or generation, of the world rather than its creation. The first to say that the world was made by Mind was Anaxagoras (d. 428 B.C.). He saw that what drew things out of matter that was mixed up to begin with could not be material like it. But he presupposed the matter.

When scientists today talk about the matter of the universe having zero magnitude and infinite density at the beginning, they seem to be running up against the idea of creation out of nothing. It is as though they recognise that the world came from nothing, yet they presuppose the existence of matter. But all matter has extension and no magnitude is quite zero. If there was matter in the beginning, it had a magnitude.

There is a great deal of writing about creation at present, both within theology and in the dialogue between science and religion. This dialogue will only help us to see the truth if it works with a clear concept of creation. Amid all the views that are being put forward, it will surely be useful to look at what Aquinas has to say about creation. His patient analysis of the topic is closely linked with his philosophy of existence. He both drew on Avicenna and worked out his ideas in criticism of the Neoplatonic influences that the Arab philosopher included in his exposition of Aristotle. In what follows, I shall often use the word 'creation' in the verbal sense of creating rather than as a noun standing for the universe.

Before we go any further, what do I mean by matter? I would first say that matter is that out of which things are made. If a thing is not made out of matter it is immaterial. Secondly, matter has a structure which distinguishes it from anything immaterial. Thirdly, matter is the source of energy. Energy goes with matter; forces and electrical currents do not exist on their own. This means that the universe did not merely arise from forces and energies in the beginning; there was something else besides. All power is the power *of* something.

Well, why not suppose that matter always was just there in the beginning, without any need to explain how it got there? Why matter cannot be the origin of everything is shown us by Aquinas, who remarks

that matter in itself is a *passive* principle. Matter does not move unless it is first moved. Passion is an effect of action; there is no passion without action first. Hence matter cannot be the primary cause. St Thomas concludes that, as matter is the first passive principle, it is an effect of the first active principle. It follows that, if matter is not the first principle, it too has a cause and has been made.

The first step towards understanding creation is to consider what sort of action creating is. We may agree that creating is a kind of *making*. But to see which kind of making, we best begin with our own everyday making. When we make things, we presuppose the existence of other things; I cannot make anything out of nothing. Suppose, for example, that I want to paint a picture: I shall require paper, paints and a brush to apply the paints to the paper. All these things have been made out of other things. Paper is made out of wood that comes from trees which have been produced from other trees, going back to the first tree. Paints are made out of minerals, like lapis lazuli, oxides and vermilion. Brushes are made with hair produced by animals produced by previous animals, for example the sable. One thing is made out of another, but we cannot keep on going back for ever in making one thing out of another: eventually we must come back to just making but not out of anything. This is creation. To create is to make out of nothing pre-existent. But there is no making without a maker. So in the beginning we come back to just the Maker or Creator. Creation is the very first making: it is the making of things so that there can be any other making at all. Unless creation, in the proper sense, means to make out of nothing, there is no difference between our way of making and God's. To say that the world is created means that it is not made *out of* anything but only *by* something or someone.

The First of Created Things

This will now help us to understand what St Thomas means when he says that 'the first of created things is existence.'¹ The phrase itself comes from the *Liber de Causis* (proposition 4), which Aquinas recognised to be drawn from the fifth century Platonic writer, Proclus. Existence may be called the first of created things, because creation brought into existence the things which all other making presupposes. St Thomas explains that existence is something created, not as though it were a 'thing', but in the sense that colour is the first of visible things because nothing is seen unless it is coloured.

Existence is also the first of created things, because it is what all things have in common; whatever else they may be, they at least have being in common. It is then a universal effect. A universal effect, St

Thomas says, comes from a universal cause, that is, the cause of all things. The first effect, he says, presupposed by all other effects is existence itself. Thus he describes creation as 'the emanation of all existence from the universal cause'² God himself is 'the universal cause of all existence (*totius esse*).'³

The starting point of Aquinas' teaching about creation is his doctrine that God is subsistent existence set forth in the *Summa* Ia 3, 4, a key article. I give here two of his three reasons. First, God is his existence, because if there were anything in something besides its essence, it would be caused by another; but God is the first efficient cause. Thirdly, everything which has existence but is not its existence is a being by participation, because it gets its existence from another. You can only participate in something that already exists before you. We come to an end of one thing receiving existence from another, to what is existence. The principle that everything that has existence goes back to what *is* existence itself, St Thomas says, comes from Avicenna (*Metaphysics* VIII c.7 and IX c.4).⁴ To say that God is subsistent existence is to say that he is Existence itself. This agrees with the divine name that God gave to Moses: 'I am who am' (Ex. 3,14) or, in the Latin version used by Aquinas and perhaps better, 'He who exists' (*Qui est*).

There can only be one thing that is subsistent existence, St Thomas says, just as there could only be one subsistent whiteness. If something else were also subsistent whiteness, it would have to differ in some way; then it would not be just whiteness. When we say that God is subsistent existence, we also mean that he exists through himself, *per se*. It follows that, as everything which exists through another goes back to what exists through itself, there can only be one source for all existence.

We can see that two further points of St Thomas' derive from this. First, creation is pure action. 'As God is the author of all existence, nothing that has existence is in any way presupposed to his action.'⁵ This is the same point we reached by another path above: in making one thing out of another we come back to just making. Creation is pure action, because there is not yet anything to receive the action. In our making there is passion as well as action. In the forging of a horseshoe there is not just the action of the blacksmith but also the passion of the metal receiving the blows of his hammer.

Secondly, to create is to make out of nothing. The cause of all existence makes things out of nothing, otherwise there is something existent not made by him and he is not the source of all existence.⁶ Although St Thomas held that the doctrine 'the world has a beginning' is something we know by faith, it seems that we can come by reason to see that the world is made out of nothing. There is a logic about creation, given that matter cannot be the first

principle and there is a single source of all existence. It is, however, also stated in scripture: 2 Macc. 7,28 and Rom. 4,17.

As to create is to make something out of nothing, it is to produce the whole substance of a thing. 'Creation is the production of something in its total substance, with nothing of it presupposed.'⁷ When we make things we can give some already existing matter a new form. For example, I make a pot out of clay, but I do not make the clay. Aquinas also makes the reverse point: to create is to produce the total existence of a thing, not just matter.⁸ He rejected the idea that things were made by angels putting forms into bare matter. When a silversmith makes a ring, some silver receives existence as a ring that was formerly not a ring. But when God creates he both brings something into existence and that which receives the existence.⁹ When something is created, St Thomas says, it is no sooner being formed than it has been formed: it is formed and has been formed in one and the same moment.¹⁰ Thus creation is instantaneous.

Creation is also instantaneous, because it is not the changing of anything. Before creation there was not yet anything to be changed; creation is the making of things so that there can be change. We and natural things can only make things by changing what already exists. Natural changes are processes. We only make things by transforming what is already there. Thus there is reaction as well as action, because matter receives our action. It is the same in the way nature produces things, for instance in the way rock is made metamorphic by molten lava flowing over it and heating it. But in creation there is only action, because nothing yet to receive action. Thus scientists do not touch creation itself when they describe what may have happened at the beginning of the world, for they describe a series of reactions. They do not explain how there was anything there to react in the first place. Processes of change, such as may have occurred in the first three seconds, cannot explain the existence of things but presuppose them, because the initial bringing of them into existence was not a change. Also we should mention that when scientists describe how the universe began, they do so by working backwards from the existing laws of nature. But laws do not come about by chance, especially when they are finely tuned as they seem to be. Laws need to be thought up.

St Thomas also notes that matter cannot be the first principle because natural agents only produce things in an *individual*. For example, a human being does not produce human nature itself but human nature in *this* human being. When we take this back to the first human being, or any other natural kind, the question arises where did the first member of the species get its nature from. It was seeing this, Aquinas suggests, that made Plato say it came from something that was

the Human Being itself, the Horse itself and so on. Thus he constructed his Theory of Forms. These Forms, or Ideas, were like the natures (essences) of things, just as Plato thought that the cause of beauty in things is Beauty itself. As the first horse cannot be the cause of its nature, Plato thought the nature preceded and existed on its own as *the* Horse.¹¹ Where this led Plato into the Third Man Argument (there is a horse by which all other horses are horses, but by what is this horse a horse if not by yet another horse?), Aquinas cuts short an unending regression by saying that the cause of each species is quite *other* and there is only one first cause of all the species, not many separate principles like Plato's Forms.

Who Can Create?

Mention of Plato brings us to Aquinas' attitude to Neoplatonism, which he primarily knew through Proclus and Avicenna. He may not have read Plotinus, whom he does not mention. I shall first give a very brief sketch of Neoplatonism. In a typical Neoplatonist scheme, the first being, the One, is beyond all being, because it cannot be like any other being. From the One comes Mind (Nous), and from the Mind Soul, and so on in a descending hierarchy of emanations or intelligences until the lowest of them produces the material world. As mind receives its existence, there is a diversity of potential and actual in it. From this initial diversity, ever increasing diversity can derive until we reach matter. But the Neoplatonist only shifts, without overcoming, the problem of crossing the gap from non-matter to matter.

Neoplatonism was an attempt to resolve the ancient question of how the many came from one. The Platonists rightly saw that everything goes back to one, because the parts of a compound thing require something else prior to it to bring them together; but they did not think that everything comes *immediately* from the One. Their chief concern was to safeguard the complete simplicity and otherness of the One; so they said it was beyond all being. The consequence of this was that the existence of the world could not be directly produced by the First Being; so they required a series of intermediary causes for the creation of the world. St Thomas cut straight through this by boldly asserting that God, far from being beyond all being, *is* Being itself. Thus he opened up the way for analogy, first of all of being, between God and creatures, which the Neoplatonists precluded.

St Thomas also turned the Neoplatonist scheme on its head in two further ways. First, he said that as matter is the most general of things in corporeal creation, far from it coming from the lowest of the emanations it comes from the universal and so highest cause of all.¹²

Secondly, in Neoplatonist schemes, one immaterial being begets the next one down in a series of emanations. But this is impossible, Aquinas says, because the only way that you can bring an immaterial being into existence is by *creating* it, since it is not made out of anything.¹³ No being that has received its existence can create out of nothing, however, because to create is to cross an infinite gap between non-being and being. The distance between non-being and being is greater than that between any two beings that have received their existence, for they at least have being in common. Only something with infinite power can cross an infinite gap and the only being with infinite power is the one whose existence is unlimited because it has not received its existence from another. All this yields us the principle: Nothing created can create, or Creatures cannot be creators. Thus God cannot permit some being to bring about the existence of all beings that exist, as Richard Swinburne thinks.

We may summarise St Thomas' reasons why only God can create as follows:

1. Everything that exists through another goes back to what exists through itself, which is the sole source of all existence: *origo totius esse*.¹⁴
2. Nothing can confer existence on another except in virtue of the First Cause, because it continually depends on God to keep it in existence. It only acts with what power God gives it.
3. Creation is pure action. The only being capable of pure action is one that is pure actuality. This derives from the first of St Thomas' Five Ways (everything possible, which may or may not be, must be preceded by something actual).
4. Created beings only bring new things into existence by changing something already there, but creation is not a change.
5. Infinite power is required to cross the gap from non-being to being; but created things only have finite power, because they have received their existence from another.

Not by Nature but Free Will

In the Neoplatonist scheme of Avicenna, which is the one Aquinas gives, the Primary Being produces the Primary Intelligence. In thinking of itself as actual, the Primary Intelligence produces Soul. In thinking of itself as potential, it produces the body of the heavens. (As actual, because the soul is the source of the body's motion; as potential, because matter by itself is passive unless moved.) Avicenna, and the Neoplatonists, thought that only one can come from one, Aquinas says, because they thought that God acts by necessity of nature. They

reasonably supposed that only one comes by nature from the One, or First Being, that is utterly simple. Thus they required intermediary beings to explain the multiplicity of the world. Nature produces one effect: an acorn only turns into an oak tree; one chemical always reacts in the same way with the same other chemical (copper always dissolves in hydrochloric acid). But St Thomas points out that nothing prevents a multitude coming directly from God, because God acts by knowledge and understanding.¹⁵

The question then arises how God can have many ideas without their impairing his simplicity. Aquinas says that many ideas would detract from God's simplicity if God got his ideas from the multitude of things, as we do. But this is not the case, since God's ideas are the origin of things. His ideas are also identical with himself, and so one, for he is his understanding, which is not anything additional to his existence.¹⁶ Interestingly, Plotinus put the ideas in Mind, not in the One, to save the simplicity of the One.

A multitude of things can also be caused immediately by God, because God acts by intellect. He acts by intellect, because his action is *intrinsic*. It is intrinsic, because his activity is identical with himself, as just explained, and there was nothing external to God before creation.

A firm grasp of this point, that God acts by intellect, also enables him to overcome, or show the way round, the difficulty the ancient Greeks had with the idea of creation; for they said that nothing can come from nothing. But Aquinas points out that everything acts in its way. Since God acts by intellect, which is immaterial, he can produce something from nothing. It is a point that perhaps Aristotle could have grasped, since he recognised that intellect is immaterial, although he had the same difficulty as the other Greeks about something from nothing.

St Thomas observes that understanding does not act except with will. Thus God does not create by necessity of his nature but by free will. By nature, God only begets the divine Word, the complete image of his own nature. The Mind that the One begets is not of the same nature as the One in Plotinus, because it is potential as well as actual.

Aquinas further argues that God creates by free will, not by necessity of nature, because nature has an end, otherwise it is the result of chance. But chance does not account for purpose in nature and the order we see the universe has. An end presupposes knowledge; nature only acts for an end, St Thomas says, if it is directed by an agent willing its ends. Since nature acts in one way (a chemical acts in the same way with another chemical), diversity in nature comes from someone that does not act by necessity of nature but by will. Will is not limited to acting in one way but chooses between various possible courses of

action. Aquinas points out that if the world was not produced by the First Being but some lower intelligence, as the Platonists held, the world would not be the intention of the Creator but of the lesser being.¹⁷ As we have dominion over our actions, how much more God is master of his actions and, therefore, does not act by necessity but free will.¹⁸ God acts by will because he is his own goodness and so does not need other things. As he is his own goodness, he does not act for any further end. He only acts *out of* his goodness, to share it with his creatures.

The doctrine that God does not create by necessity of nature but by free will helps us to see that creation is *good* and thus frees us from pessimistic views of the world that often go with dualism.

The truth, St Thomas thinks, is that the diversity of the world comes from the *ordering of God's wisdom*.¹⁹ Although natural science, especially physics and biology, has made us aware of how much random movement there is, it should not distract us from the enduring regularity and order in the universe that is open for everyone to see. Flowers and animals are for the most part wonderfully well formed. Aquinas notes that things are not only diverse but also *agree*, but one order can only come from one cause co-ordinating everything, not by chance.²⁰

The Divine Ideas

All this has consequences for what we say about God's knowledge, and so about his providence. Since God directs things to an end, he governs and guides them by his providence. But God does not have providence over things unless he knows particulars as well as universals. The view that God only knows universals seems to me clearly against scripture. God knows our thoughts. Unless God knows particulars there is no divinely inspired prophecy about events in history as there is, say, in Isaiah 45,1 about Cyrus, king of Persia. If God does not know particulars, he knows *less* than we do. This point was already made by Aristotle.²¹ God, however, cannot be ignorant of anything we know, or else he would not be most wise.

But here a difficulty arises. The proper objects of the intellect, St Thomas holds, are universal concepts; and a builder does not know a house by his art, he says, but only when he sees a house with his senses. So how can God know individuals? The builder does not produce matter by his art but form in matter. God, however, produces the matter as well as form by his art. So God knows the matter as well as form of things. We know individual things by a likeness received from the thing as it acts on us. So there is a likeness of its form in the mind. But the likeness in God's mind is *factiva* (productive, formative) of things.²² Thus he can know individual things, not just universals. We can see from this why

anyone who does not think that the First Being produced matter will think that God only knows universals. Although Aquinas says that Avicenna's view was that God knows particulars in universals. We see, however, that Providence, which includes knowledge of particulars, goes with creation, God's *direct* making of things.

St Thomas' teaching about creation, which we gather from several of his works, indeed appears pivotal to his thought as it derives from his philosophy of existence and leads to see the goodness of material creation. It also shows us how it is possible to pray that we love God 'in all things and above all things.' We may take this for granted, but it has not always appeared so obvious to a great many. For the tendency has been to think that either God is transcendent or he is immanent, but not both together. The Neoplatonists preserved God's transcendence by cutting him off from the world. Spinoza gives us immanence without transcendence as he makes the world a mode of God's being. It is only possible to love God in all things and above all things if he is both immanent and transcendent. St Thomas holds the two in equilibrium. For God is the source of all existence, which continues to depend on him; yet he is quite other in the way he exists, as he *is* his existence, which no creature is. We can only love God in things if they are good. They are good, because he creates by free will, and so out of love.

- 1 *Summa Theologiae* Ia 45, 4 ad 1.
- 2 *Ibid.* Ia 44, 2 ad 1.
- 3 *Ibid.* Ia 45, 2.
- 4 *De Potentia* 3, 5.
- 5 *Ibid.* 3, 16.
- 6 *Summa Theologiae* Ia 45, 5.
- 7 *Ibid.* Ia 65, 3
- 8 *Ibid.* Ia 45, 4 ad 3.
- 9 *De Potentia* 3, 1 ad 17.
- 10 *Summa Theologiae* Ia 45, 2 ad 3.
- 11 *Contra Gentiles* III c. 69.
- 12 *Summa Theologiae* I 45, 4.
- 13 *De Substantiis Separatis* 59.
- 14 *De Potentia*, 3, 1.
- 15 *Ibid.* 3, 4.
- 16 *Summa Theologiae* Ia 65, 3 ad 2.
- 17 *De Potentia* 3, 15.
- 18 *Contra Gentiles* II, c. 23.
- 19 *De Potentia* 3, 16.
- 20 *Ibid.* 3, 6.
- 21 *Metaphysics* II 4 (1000 b4).
- 22 *De Veritate* 2, 5.