

ST AUGUSTINE & ST THOMAS ON CREATION

God created all things, including time, together at the beginning of time... Yet, as regards their substance, he created them in some measure formless.

St Thomas Aquinas

There is a dilemma in the first chapter of the Book of *Genesis*. Verse 1 says: *In the beginning God created heaven and the earth*. Then, in verses 2 to 31 of the same chapter, creation is revealed as taking place over six days with different elements on each day. In confirmation of what verse 1 has to say, we read in *Sirach* (Ecclesiasticus) 18: 1—*He that lives forever created all things at once*.

The Church, the one interpreter of sacred scripture, ruled on the revelation contained in these and other passages of scripture in 1215 in the definition *Firmiter* of the Fourth Lateran Council: *Firmly we believe and simply we confess that the one true God... by His own almighty power at once (simul) from the beginning of time made each creature from nothing, the spiritual and the corporeal, namely, the angelic and the earthly, and then man* (DS 800). But if creation occurred *at once* (instantaneously), how can it be said to have occurred over six days?

There is a further dilemma between revelation and the results of rigorous scientific investigation. Whether creation occurred instantaneously, or over six days, as *Genesis* chapter 1 says, modern science seems to show that it occurred in a certain sequence which, while roughly in accordance with the sequence revealed in verses 2 to 31, is punctuated, not by days, but by immense periods of time, millions, if not billions of years. Which is right—revelation (creation instantaneously, or over six days), or modern science?

*

*

St Augustine

In his exegesis of *Genesis* chapter 1, St Augustine distinguishes creation ‘in the beginning’ (in verse 1) from what follows in verses 2 to 31, as creation in its inchoate state (*inchoatae creaturae*) called heaven and earth because of what was to be produced from it (*De Genesi ad litteram* 1, 6, 12). Here, says St Augustine, the origin of created being is indicated still in its imperfect and formless state (*in informitate imperfectionis*) (*Ibid* 1, 4, 9). He goes on: [I]t is obvious that everything subject to change is fashioned out of something formless... It is of this formless matter that the inspired writer speaks when he says to God: *Who hast made the world out of formless matter...* (*Wisdom* 11: 18). We must conclude then that this same matter is referred to... in a manner accommodated to unlearned readers or hearers, when before the enumeration of the days it is stated: *In the beginning God created heaven and earth...* (*Ibid* 1, 14, 28). But, he goes on, we must not suppose that unformed matter is prior in time to things that are formed; both the thing made and the matter from which it was made were created together. A voice is the matter from which words are fashioned... [b]ut the speaker does not first utter a formless sound... and later gather it together and shape it into words. Similarly, God the Creator did not first make unformed matter and later, as if after

further reflection, form it according to the series of works he produced... [T]he material out of which something is made, though not prior by time, is in a sense by its origin prior to the object produced (*Ibid* 1, 15, 29).

Thus, St Augustine addresses the dilemma and seeks to resolve it by distinguishing the ontological (the order of reality) from the chronological (the order of time). Things may happen at the same time (*simul*), yet there is an order in which they occur. Almighty God may have created the sea and the fish in it together, yet the sea is prior to the fish in the order of reality. He may have created earth and the plants together, yet the earth is prior to the plants in the order of reality.

St Thomas

St Thomas had the benefit of another and more fundamental distinction in his treatment of the first chapter of *Genesis*, one derived from the *Metaphysics* of Aristotle. In his *Commentary on the Sentences* of Peter the Lombard, St Thomas says this—

[T]hose things which pertain to faith are distinguished in two ways. For some are of the substance of faith per se, as that God is triune and one, and such like; in regard to which no one may lawfully have an opinion otherwise. Hence the apostle, in *Gal.1*, says that if an angel of God should preach a gospel other than what he was teaching, let him be anathema.

But other things [pertain to the substance of faith] per accidens only, namely, insofar as they are dealt with in Scripture, which faith takes to be promulgated under the inspiration of the Holy Spirit. Regarding these things, such as historical matters, they who are not under any obligation to know the Scriptures can be ignorant without danger [to their faith]. In regard to these things, indeed, the saints have diverse opinions, expounding the divine Scriptures in diverse ways.

So, therefore, with regard to the beginning of the world there is something that pertains to the substance of the faith, namely, that the world began to be by creation, and all the saints speak with the one mind in this regard. However, in what way and according to what order it was made does not pertain to the faith except per accidens, insofar as this is dealt with in the Scriptures, whose truth saving by diverse exposition, the saints have handed down in diverse ways.

For, according to Augustine, in the beginning of creation certain things were made in their proper nature through their distinct species, as the elements, celestial bodies, and the spiritual substances; but other things in their seminal reasons only, as animals, plants and men, all of which were produced in their proper natures in that work in which God elaborated nature previously established in those seven days; regarding which work it is said in *John 5: 17: My Father works, and I work, until now.*

Nor in regard to the distinction of things ought one to attend to the order of time, but to that of nature and doctrine. Regarding nature, as the sound precedes the song, in

nature but not in time; and so what are naturally prior, are first brought to mind, as earth before animals, and water before fishes, as with others.¹

Later, in the *Summa Theologiae*, St Thomas developed his thought. Sacred Scripture discloses, he says, three works—

Namely, the work of creation, as given in the words, *In the beginning God created heaven and earth*; the work of distinction as given in the words, *He divided the light from the darkness, and the waters that are above the firmament from the waters that are under the firmament*; and the work of adornment, expressed thus, *Let there be lights in the firmament*. (*Summa Theologiae* I, q. 65).

In the next question he deals with the work of distinction.

God is an agent absolutely perfect; wherefore it is said of Him (Deut. xxxii: 4) *The works of God are perfect*. Therefore the work of His creation was at no time formless... Hence we must assert that prime matter was not created altogether formless, nor under any one common form, but under distinct forms. And so, if the formlessness of matter be taken as referring to the condition of prime matter, which in itself is formless, this formlessness did not precede in time its formation or distinction, but only in origin and nature, as Augustine says; in the same way is potency prior to act, and the part to the whole. (*Ibid* I, q. 66, a. 1).

He concurs with the view of Augustine that God created all things, including time, together at the beginning of time (I, q. 66, a. 4). In question 74 he addresses the seven days of creation.

God created all things together so far as regards their substance in some measure formless. But He did not create all things together, so far as regards that formation of things which lies in distinction and adornment. (I, q. 74, a. 2, ad 2).

In his answer to the previous objection in the same article, he explains what he means by this—

On the day God created heaven and earth, he created also every plant of the field, not indeed in act, but *before it sprung up in the earth*, that is, in potency (I, q. 74, a. 2, ad 1).

And in answer to the fourth objection in the same article he says—

All things were not distinguished and adorned together, not from a want of power on God's part, as requiring time in which to work, but that due order might be observed in the instituting of the world. Hence it was fitting that different days should be assigned to the different states of the world, as each succeeding work added to the world a fresh state of perfection (I, q. 74, a. 2, ad 4).

¹ *Comm. in II Sent.*, d. 12, 1. 1, a. 2. Translation, Dr Don Boland of the *Centre for Thomistic Studies*, Sydney.

A note of clarification—When St Thomas speaks of ‘matter’ he is not using that term in the way we commonly use it. ‘Matter’ is a metaphysical term. It means that indeterminate thing which has no characteristic of its own whatsoever save this, that in communion with substantial form, it results in material substance. When St Thomas speaks of ‘substance’ he is not using that term in the way we commonly use it, as something material, considered amorphously, ignoring its make-up. ‘Substance’ is a metaphysical term. It means ‘that whereto befits be-in-self, or ‘that which stands up by itself’. A tree is a substance; a bird is a substance; a man is a substance; an angel is a substance—each of these things is an instance of ‘be-in-self’. In contrast to substance is ‘accident’, which is not, as in common parlance, an unfortunate happening, but a metaphysical reality. Accident is defined as ‘that whereto befits be-in-other’. Colour, for example, is an accident. It cannot exist by itself, but only in something else, only in some substance. Green cannot exist by itself, but it can exist in a tree; blue cannot exist by itself, but it can exist in the sea. Accordingly, for metaphysicians ‘matter’ and ‘substance’ are diametrically opposed.

When St Thomas speaks of the condition of prime matter, which in itself is formless he is simply insisting that from its nature this thing, matter, is utterly indeterminate. When, later, he says that God created all things together so far as regards their substance in some measure formless he is speaking of the essential constitutive of each of God’s creatures that makes it be what it is, but not yet in act, only in potency.

Almighty God created all things together at the beginning of time *in potency*. That due order might be observed, that each succeeding work should add to the world a fresh state of perfection, He then brought that potency to act in the sequential order indicated in verses 2 to 31. Thus, though God created all things together so far as regards their substance, St Thomas says, he did not create all things together so far as regards that formation of things which lies in distinction and adornment.

A more detailed explanation of the doctrine of potency and act, and of what is meant by prime matter, is set forth as an appendix to this paper.

*

*

In her wisdom Holy Mother Church has ruled on the meaning of the word *yom*, ‘day’, where it appears in verses 2 to 31 of chapter 1 of *Genesis*, in the following question and answer—

Whether in that designation and distinction of six days, in the first chapter of *Genesis*, the word *Yom* (day) can be taken either in its proper sense as a natural day, or in the improper sense of a certain space of time; and whether among exegetes it is permitted to discuss this question freely? Affirmative. (DS 3519)²

In addressing the second dilemma, it is open to exegetes to interpret ‘day’ as a certain space of time rather than a natural 24-hour day. The extent of the ‘certain

² Ruling n. viii of the *Pontifical Biblical Commission*, 30th June 1909.

space of time' is not specified and so, not limited. Exegetes are entitled, then, to accept an interpretation of *Genesis* chapter 1 which accords with the chronological unfolding of the elements of creation while accommodating these immense periods of time. As to any discrepancy in detail between the two, they may rely on the words of Pius XII in the encyclical *Humani Generis* (12.8.1950) that—

the first eleven chapters of Genesis... in simple and figurative language adapted to the mentality of a people of little culture, both state the principal truths upon which the attainment of our eternal salvation depends, and also give a popular description of the origin of the human race and the chosen people. (DS 3898)

Yet a problem remains. For St Thomas goes on, in the extract from his *Commentary on the Sentences* quoted above, to agree with St Augustine's view about the chronological ordering in verses 2 to 31.

Moses, instructing a primitive people about the creation of the world, divided into parts what was made at the same time. Now, Ambrose and other Saints hold that there was an order of time observed in which things were distinguished; and this opinion is indeed more common, and seems to accord better with the apparent literal sense. Still, the previous opinion [of Augustine] is more reasonable and better protects Holy Scripture against the derision of unbelievers, which Augustine teaches (De Gen. I, 19) must be especially heeded: 'the Scriptures are so to be explained as not to incur the ridicule of unbelievers;' and this opinion I find more satisfying.³

But he was not compelled to exclude the possibility of a chronological sequence. After all, he had said that any reference to God requiring time in which to work did not imply a want of power on God's part but that due order might be observed in the instituting of the world, and that it was fitting that different days should be assigned to the different states of the world as each succeeding work added to the world a fresh state of perfection. The metaphysical doctrine does not demand temporal simultaneity between the creation of a substance in potency and the bringing of that potency to act. This can be seen, for instance, in the fertilised ovum and the time that elapses before the potency in that egg can be brought to act in the fully mature human being.

Anyone who reads St Thomas's consideration of the views of the Fathers and Doctors of the Church on sacred scripture will see that he makes every effort to accommodate the diversity of their views and does not disagree without reason—see, for instance, his remark in the *Commentary on the Sentences* quoted above: In regard to these things, indeed, the saints have diverse opinions, expounding the divine Scriptures in diverse ways.

St Thomas, as St Augustine before him, acknowledged a principle which justifies reliance on the evidence manifested in advances in natural knowledge to assist in the interpretation of sacred scripture, namely, that the Christian is bound by the demands of reality no less than by what God has revealed.⁴ What lies behind this

³ *Comm. in II Sent.*, d. 12, q. 1, a. 2. Translation Fr Peter Joseph.

⁴ Cf. my paper *Creation Rediscovered* under the sub-heading *What The Church's Two Greatest Thinkers Have To Say*--http://www.superflumina.org/creation_rediscovered.html

principle has been mentioned, namely: the Scriptures are so to be explained as not to incur the ridicule of unbelievers. It would seem that the concern each expressed in his day over an interpretation of Genesis 1 which required six days for Almighty God to complete the creation of the world was that it would lead an unbeliever to deride God as incapable of accomplishing the task instantaneously.

There was no evidence at the time St Thomas was writing to show a chronological sequence in the appearance on earth of plants, of animals and of man, and hence no need for him to adopt a view different to that enunciated by Augustine on this issue. But the evidence is otherwise today! For the findings of rigorous scientific observation disclose great passages of time between the first appearances on earth of the various elements of God's creation. To avoid the ridicule of unbelievers in the 21st century, then, it is incumbent upon exegetes to look for an explanation which does no violence to Sacred Scripture yet satisfies the reasonable expectations of one who, as St Augustine says, derives his knowledge from most certain reasoning or observation⁵.

St Thomas's use of the doctrine of potency and act to solve the first dilemma permits of passages of time between creation at once (simul) in the beginning when all things were created so far as regards their substance in some measure formless and the work of distinction and adornment when different days [were] assigned to the different states of the world, as each succeeding work added to the world a fresh state of perfection. St Thomas's teaching taken together with the rulings of the Church provide the solution to the second. Moreover, though one can only conjecture at the mechanism whereby Almighty God brought the potency of his creation to act in the chronological sequence indicated, it would seem that the two dilemmas are solved without the need to have recourse to any doctrine of 'theological evolution'.

This being said, it cannot be denied that difficulties remain in reconciling science with revelation: for example, with the passages where Almighty God brings all the animals and birds to Adam to see what he will call them; with the passages relating to the Fall and its effects in mankind and in the natural world; with the passages relating to the Flood and its extent, and those dealing with Noah's preservation in the Ark of male and female of 'every living creature of all flesh' (ex cunctis animantibus universae carnis).

Yet none of these difficulties can justify recourse to a simplistic literal interpretation of the early chapters of *Genesis* which flies in the face of reason and of rigorous scientific investigation—and liable, therefore, to incur the ridicule of unbelievers—and which, more importantly, contradicts the Church's clear directions on their interpretation.

Michael Baker

13th May 2005—*Our Lady of Fatima*

⁵ *De Genesi ad litteram*, i, 19, 39. Cf. my paper *Creation Rediscovered* at http://www.superflumina.org/creation_rediscovered.html

APPENDIX

Potency and Act

[In what follows language is used in a somewhat unusual way. The reason for this is simple. Every discipline has its own terminology and method of using language. So does metaphysics.]

1. A being (which would be better called a 'be-er') is something which exercises the act of 'be', just as a walker is something which exercises the act of 'walk'; and a thinker something, ie, someone (since only a person can think), who exercises the act of 'think'. Each of these categories, 'walk' and 'think' describes a certain perfection (ie, fullness of being under some respect) which is found in some things, and not in others—a tree cannot walk; a dog cannot think. That fullness of perfection in each category is called 'act' from the Latin *actus*, literally, 'does (be) ness'. In his infancy, however, the walker did not yet walk, nor did the thinker think. Yet each was possessed of a character which would enable him eventually to exercise those perfections. That character is called 'potency' from the Latin *potentia*, literally, 'can-be-ness'. This character is something real, not imaginary. It, too, is part of being. This division of being into act and potency is illustrated by the following analysis of the arguments of three Greek philosophers.

2. The Greek Philosophers

Parmenides (c.515-440 BC) argued as follows—

That which is, does not become (because it already is!)

But being is.

Therefore, being does not become; ie, there is no change, no movement; all these are but illusions of the senses.

Heraclitus (c.545-480 BC) argued to the contrary, as follows—

That which becomes, is not (because what is has no need of 'become').

But everything becomes (changes).

Therefore nothing is; ie, nothing does be; reality is pure become, pure change or flux, and there are no stable natures, or things.

Aristotle (384-322 BC) solved the dilemma as follows—

Being embraces not only what is (what does be) ie, act, but also what can be, ie, potency. Against Parmenides, then, it must be argued:

That which is (does be) actually, does not become—conceded.

That which is (does be) potentially, does not become—denied.

This premise failing, his conclusion fails.

Against Heraclitus, too, it must be argued:

That which becomes, is not (does not be)—denied, since being embraces not only that which does be, but also that which can be.

This premise failing, his conclusion also fails.

These issues can be more easily understood by the following illustration using the science of astronomy.

Newton does not become an astronomer—for he is (does be) an astronomer.
Young Jack (a boy) becomes an astronomer, for though he does not be, yet he can be, an astronomer.

A tree does not become an astronomer, for it cannot be an astronomer.

Therefore, there is something real in Young Jack which is not in the tree.

This is not the does-be-ness (act) of astronomy; it is the can-be-ness (potency) of astronomy.

From this it will be seen that potency is not privation—a mere lack of something—but something positive, *real capacity for act*. St Thomas, following Aristotle, says that being is *res quae habet esse*, ‘thing which has be’⁶; or, *res cui competit huiusmodi esse*, ‘thing whereto befits such be’⁷. Being embraces whatever does be or can be. This is why St Thomas says in the *Summa Theologiae*, as quoted above—

God created all things, including time, together at the beginning of time. Yet, as regards their substance, he created them in some measure formless. Thus, on the day God created heaven and earth, he created also every plant of the field, not indeed in act, but *before it sprung up in the earth*, that is, in potency.

3. Now of all the perfections that a thing can enjoy, the most fundamental is that which is expressed in Latin as *esse*, ‘be’, which in English we translate poorly as ‘existence’. For every other perfection, every other act (e.g., walk, talk, live, think, laugh, converse, love) is only such in virtue of the fact that it first exercises the act of ‘be’, ie, it exists. Be (*esse*) is, then, rightly called ‘the act of all acts, the perfection of all perfections’.

4. Definitions

Act is *intrinsic principle of perfection*.

Potency is *intrinsic principle of perfectibility*.

Matter and Form

Everything dependent in regard to its be (ie, everything not God) is composed of potency and act, ie, essence (or nature) and be (existence). In material things, essence is itself composed of potency and act, called matter and form, or, more precisely, prime matter and substantial form.

Substantial form is that which makes the material thing be what it is, whether rock, or tree, fish or fowl or animal, or man. It is that which determines its nature. This

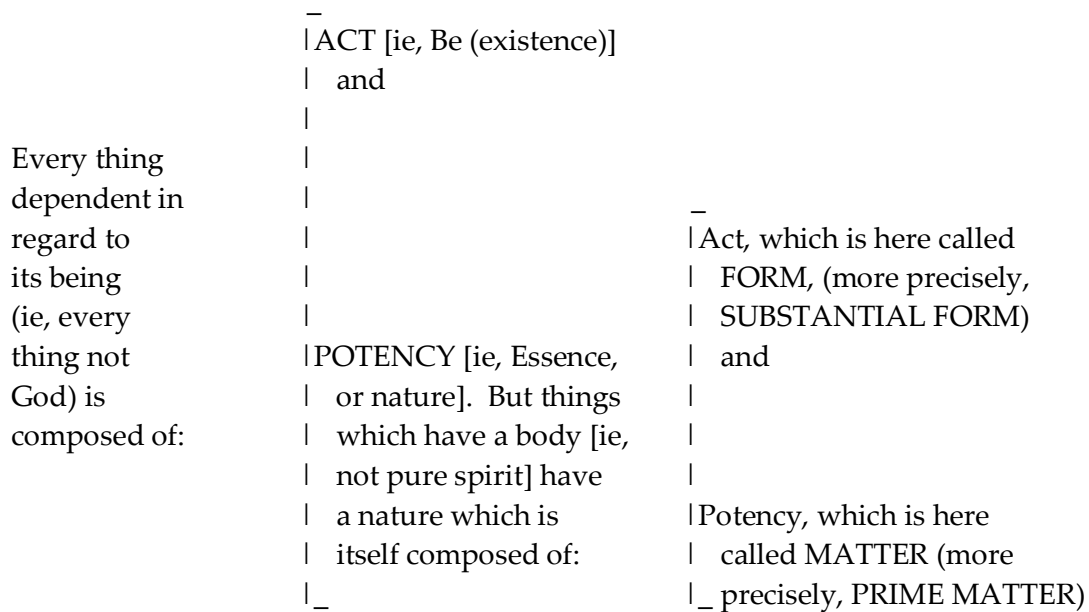
⁶ *In Peryermeneias*, lib. 1, lect. 5, n. 20. The text reads *rem quae habet esse* since the context places *res* in the accusative.

⁷ *Quodlibet* II, q. 2, a. 1, sc. The text reads *rem cui competit huiusmodi esse* since the context places *res* in the accusative.

form is immutable and infallible; it does not change or 'evolve'. It is the act which, received in the potency of matter, determines it to be rock, or tree, fish or fowl or animal, or man.

Prime matter is that which is determined by substantial form to produce the material substance. It is pure potency, pure can-be-ness; of itself utterly indeterminate. Without the limitation and specification of substantial form, it is formless. Yet it cannot exist as such but only as determined by some form; hence St Thomas's teaching quoted above—*The work of God's creation was at no time formless—in the sense that prime matter was first created undetermined by any form.*⁸

These distinctions may be illustrated by the following schema—



⁸ STI, q. 66, a. 1