

Analysis of the First Way

© 2009 by Joseph M. Magee

Aquinas begins showing that God's existence can be proved by reason (apart from Scripture) by offering what he considers the most obvious argument:

The first and more manifest way is the argument from motion.

I. It is certain, and evident to our senses, that in the world some things are in motion.

Aquinas begins with the simple and straightforward observation that some things are moving.¹ For Aquinas, though, 'motion' means more than just a change of location. His example of fire heating wood indicates the sort of motion or change he has in mind. Motion includes the change of any characteristics of a thing: being heated or cooled, changing size or shape or color.

Next, Aquinas explains how such motion or change comes about.

II. Now whatever is in motion is put in motion by another,

Again, Aquinas seems to be stating something obvious, but he is making two important points about every process of change:

1. each one has a cause,
2. the cause is something other than what is changing.

¹ What the starting point of the First Way is, and what Aquinas means by motion, has received a surprising variety of interpretations, notable among which is the 'existential' interpretation the First Way advanced by Joseph Owens and John Knasas. According to this reading, Aquinas is pointing to the *existence* of the characteristic of motion, which must ultimately be explained in Self-Existing Being (which is how Aquinas understands God). For a discussion of the textual warrant for this reading, see William Lane Craig, *The Cosmological Argument from Plato to Leibniz*, p. 168ff.

In short, every motion is caused by something other than what is in motion; thus, as he will conclude later, nothing causes its own process of change. He thinks, though, these points need to be demonstrated, which he does in terms of Aristotle's notions of potency and act. Aquinas explains that a changing thing is in the process of having its potency actualized, and it is being actualized by an external cause, which is itself actual.

Aquinas continues:

a. for nothing can be in motion except it is in potentiality to that towards which it is in motion; whereas a thing moves inasmuch as it is in act.

i. For motion is nothing else than the reduction of something from potentiality to actuality.

ii. But nothing can be reduced from potentiality to actuality, except by something in a state of actuality.

iii. Thus that which is actually hot, as fire, makes wood, which is potentially hot, to be actually hot, and thereby moves and changes it.

Aquinas is here making a logical point about what it means for something to move or change. Motion or change is a process of acquiring a new characteristic. In order to acquire a new characteristic, it must first have the capacity or potency for it, and second, it cannot have it already. A changing thing at once both is not actually what it will be, and yet has the potency to become other than it is.

For wood to catch fire, it has to be capable of burning, and not yet burning. The change or motion of catching fire is the reduction of the wood's potential to burn to the actuality of it burning – passing from being potentially on fire to being actually on fire. Aquinas's main point, though, is that a thing's ability to move or change is grounded precisely in the fact that it is not actually what it will be,

but only potentially so. Wood catches fire only as potentially aflame – actually burning wood does not catch fire or undergo the motion of ignition. (When parts of the wood catch fire from other parts, those parts catch fire only to the extent that they are not already actually on fire, but have the potential to do so.)

For Aquinas, this means that the *cause* of any change must be something *other* than what is changing, yet the cause is active as long as the change is happening.

b. Now it is not possible that the same thing should be at once in actuality and potentiality in the same respect,

i. but only in different respects.

ii. For what is actually hot cannot simultaneously be potentially hot; but it is simultaneously potentially cold.

c. It is therefore impossible that in the same respect and in the same way a thing should be both mover and moved, i.e. that it should move itself.

d. Therefore, whatever is in motion must be put in motion by another.

The change that a thing undergoes cannot be the cause of that very same process of change. While the change results in a new actuality, that actuality is a *result* in what is first potential to it, and so the resulting actuality cannot be the actuality that brings itself about. Wood that is actually on fire does not cause itself to become ignited – a burning match does not set itself on fire. Anything that is changing is being made to change by some other actuating cause.

At this point, Aquinas has shown that a thing in motion (or a process of change) is not the cause of its own motion (changing). The cause is other than what changes. The cause is an actuality prior to

the change which is the effect. He does not require, though, that the prior actuating cause be a motion of the same sort, or a motion at all, as some mistakenly think.² For instance, the cause of heat may be hot, but it may also have some other actuality that brings about heat as an effect. Sometimes the prior actuality is itself another motion or process of change – and this sometimes is a change of the same kind (fire igniting wood) and sometimes a motion of a different kind (friction igniting wood).

But, sometimes the prior actuality is not a motion or process of change at all, but an actuality of a different sort. This occurs in living things, especially animals,³ which is why Aquinas, following Aristotle, calls things which cause their own motion in this way ‘self-movers’. By this he does not mean that their motion is causing itself, but that one part of the living thing is relatively motionless while moving the other parts. Ultimately, it is the soul that is the unmoving cause of the motion of living things. Yet, its activity is nevertheless caused. This kind of causal activity is the subject of Aquinas’s Second Way.

In this First Way, Aquinas continues by considering only the case when the prior actuality causing motion is itself a motion or a process of change.

III. If that by which it is put in motion be itself put in motion, then this also must needs be put in motion by another, and that by another again.

Now, even when the prior actuality is itself a process of change, i.e. a motion, this may be prior in time, for example, when a moving billiard ball causes another one to move. But in this First Way, Aquinas is not simply tracing motion back temporally to an initial motion from which all others followed in sequence. For one thing, although Aquinas did believe that the universe had a first moment

² Cf. Craig, p. 172-3.

³ See Objection 1.

of creation, he is clear that he knows this only through his Christian faith.⁴ He did not think it could be demonstrated from philosophy or science that the present state of the world followed from a temporally first motion. Nor did he think that it could be logically ruled out that the physical universe always existed. In fact, he models this argument after Aristotle who himself argued that the world was eternal yet, nevertheless, has an ultimate cause of its eternal motion.⁵ Aquinas's philosophical proof for a first mover is not an argument for a temporal beginning but applies whether the world has a first moment or not. So, although, in fact, he did think it was possible (though actually not the case) that the world had existed for an infinitely long time, he nevertheless believes it would still require a cause (or series of simultaneous causes) for its eternal succession of motions.⁶ The ultimate cause of motion which Aquinas is seeking to demonstrate is not the cause of the first beginning in time.

Secondly, from his example of a hand moving a stick we know that the causal series he has in mind is not a temporal succession. Rather, he is looking at moving causes which act simultaneously with the process of change they bring about. He calls these causes which act simultaneously "*per se* causes" and says their effects are essentially subordinated, not temporally successive.⁷ Other examples of essentially subordinated series of causes would include a series of interlocking cogs or a train of cars: any system of simultaneous transfer of motion with net energy output.

Furthermore, Professor Christopher Martin⁸ shows that Aquinas seeks to explain any given motion on earth through what Martin (following Peter Geach⁹) calls a 'lumping together' of all the

⁴ Cf. *ST* Ia 46, 2.

⁵ *Meta* XII, 8.

⁶ Cf. *ST* Ia 46, 2 ad 7.

⁷ *Ibid.*

⁸ *Thomas Aquinas: God and Explanations*, p. 126ff.

⁹ "Aquinas" in *Three Philosophers*, p. 113.

motions of the world.¹⁰ Aquinas treats every motion of the world as part of the motion of the whole world, and through this lumping together, the motion of the whole world, and therefore all of the motions within the world, depend on a single universal moving cause.

Aquinas accepted the astronomical and cosmological model of the physical universe that was current in his day, i.e., the model which Aristotle adopted from Eudoxus and which he describes in *Metaphysics* XII, 8.¹¹ This geocentric model saw the earth as the motionless center of the physical universe with the celestial lights – the moon, sun, planets and stars – affixed to great transparent spheres which ceaselessly rotate around the earth in uniform circular motion. This complex scheme explained and predicted the apparent rising and setting of the sun and moon, the variable motion of the planets and the eternal cycle of the stars.

With this model of the physical universe, Aquinas viewed the whole cosmos as a system of essentially subordinated causes being driven by the motion of the spheres. As he says in his *Summa contra Gentiles*, III, 82, “The heaven must be the cause of all the movement in the lower bodies”.¹² He also cites Aristotle in claiming that “Man and the sun generate man.”¹³ In another proof for God’s existence paralleling the First Way he says, “Everything which moved is moved by another, for lower things are moved by higher ones, as elements are moved by heavenly bodies, and these lower ones are

¹⁰ Martin’s considerations, in fact, would render any motion, even celestial motions (see below) as lumped together with the totality of terrestrial motions. But such a universal lumping together would obviate any need for Aquinas to argue against an infinite regress in moving movers, since all moving things (even moving movers) would have been lumped together with moving effects. If all causes which are themselves in motion were lumped together with the motion of the whole created universe, there could be no regress (finite or otherwise) of movers-in-motion since there is only one (lumped-together) motion of the universe. Clearly Aquinas thought a regress was not only possible, but was actually finite. He could not, then, have envisioned the universal lumping together Martin attributes to him, but only a terrestrial one that includes motions on earth.

¹¹ 1073b18ff.

¹² Oportet ergo quod caelum sit causa omnis motus in istis inferioribus corporibus.

¹³ *Phys.* II, 2, 194b14.

acted upon by the higher”.¹⁴ In the next chapter of the same work he says, “We see, for instance, that alterations and generating and corrupting which occur among lower things are explained by the heavenly body as by a first mover, which is not moved by this same kind of movement, as it is ungenerable, incorruptible and unalterable.”¹⁵ It is implicit in the First Way and explicit elsewhere in Aquinas’s writings, that the heavenly spheres are *per se* causes of motion of the whole world, causes which act simultaneously with the motions or changes they bring about. Thus, by lumping together all the motions of the world as constituting the motion of the whole world, Aquinas believes each motion is essentially subordinated to, and simultaneously caused by, the motion of the heavens. Continuing from the First Way:

IV. *But (causes of motion being themselves in motion) cannot go on to infinity,*

a. *because then there would be no first mover, and, consequently, no other mover;*

b. *seeing that subsequent movers move only inasmuch as they are put in motion by the first mover;*

c. *as the staff moves only because it is put in motion by the hand.*

Now, at this point Aquinas is not describing the motion of the whole universe, but the general properties of any series of *per se* causes of motion. (His mention of a first mover, then, is not a reference to God. If it were, Aquinas would indeed be engaged in a circular argument.) Indeed, he is talking about any system of effects essentially subordinated to simultaneously acting causes. Whenever we know that effects are the result of the simultaneous motion of prior causes which are themselves effects of prior moving causes, there must be something driving the motion of the system. For example, a

¹⁴ Videmus enim omnia quae moventur, ab alii moveri, inferiora quidem per superiora, sicut elementa per corpora coelestis, inferiora a superiora aguntur. *Compendium Theologiae* I, 3.

¹⁵ Sicut videmus quod alterations, et generations, et corruptions, quae sunt in istis inferioribus, reducuntur sicut in primum movens in copus coeleste, quod secundum hanc speciem motus non movetur, cum sit ingenerabile et incorruptibile et inalterabile. *Ibid*, I, 4.

series of cogs or train cars which is transferring motion cannot be infinitely long, for there would be no motion or energy to transfer without a first cause and source for the motion supposedly being transferred. “The point here is that in an essentially subordinated series, the only cause that is really moving anything is the first cause. The others are like lifeless instruments.”¹⁶ So Aquinas is arguing that (a) if the universe is an essentially subordinated system of causes, and (b) if no essentially subordinated series of causes can be infinitely long, then (c) there cannot be an infinite number of spheres driving the ultimate motion of the earth. Instead, he concludes:

V. *Therefore it is necessary to arrive at a first mover, put in motion by no other;*

It should be noted that while the first mover is actual, it is not so with the actuality of motion or change since everything in motion would require a cause for that change. Thus, a moving ‘first cause’ could not be first. From the fact that it is *in motion*, it would itself require a mover. Moreover, if all physical beings are subject to motion and change, the first mover is not changing, and so is not physical, but nevertheless active with a non-physical actuality.

Summary

We can now summarize Aquinas’s argument in the First Way:

- I. Things are changing/moving.
- II. Every change is caused by the (simultaneous) activity of something else.
 - a. (Nothing is the cause of its own process of change.)

¹⁶ Craig, p. 174.

- b. (If any part of the world is changing, the world as a whole is changing, and so, the change of the world as a whole is caused by something other than the world (the sphere of the heavens).)

- III. If the activity of the cause is itself a change or motion (which it is in the case of the spheres), then this *per se* effect must be caused by another prior, simultaneous cause.

- IV. In a chain of *per se* or essentially subordinated causes, there would be no last effect (which there is) if something were not driving the whole chain (as first cause). (Since there must be a first initiator of motion in essentially subordinated causes, the chain cannot be infinite.)

- V. Therefore, there must be a First Mover of the whole universe which acts and causes change, but whose causing activity is not a change or motion.

Thus, having established the reality of something – the non-physical, non-moving but actual and active cause of motion, Aquinas identifies it according to what he already knows as a Christian:

VI. *and this everyone understands to be God.*

In looking for the explanation of motion Aquinas agrees with Aristotle that there must be something which is its ultimate cause. Aquinas, however, is a Christian theologian, and is writing a work for beginners in theology. He does not think that this demonstration for the existence of the ultimate cause of motion definitively proves all that Christians believe about God. He merely has shown that there must be some real thing to explain motion, and notes that a Christian will recognize in this cause part of what he means by God. He incorporates this proof into his work of theology, not because he or his readers is uncertain whether there is a God, but because it illustrates a truth about the God he believes in, namely, that reason can demonstrate God's existence based on the existence and nature of motion. The non-Christian (or the Christian for that matter) might question whether the cause whose existence has

been demonstrated is to be identified with God, but such a question does not affect whether the argument has shown that there is something there which explains why things are moving.