Aquinas’ Third Way
Last time we had arrived at the following provisional interpretation of Aquinas’ second way:

1. At least one thing has an efficient cause.
2. Every causal chain must either be circular, or infinite, or it has a first cause.
3. If something were the efficient cause of itself, it would be prior to itself.
4. Nothing can be prior to itself.
5. Nothing is either the efficient cause of itself, or is causally responsible for itself. (3,4)
6. A chain of causes cannot be infinite.

C. There is a first cause. (1,2,5,6)

Our main topic today will be a discussion of Aquinas’ third way. But before moving on to that argument, let’s talk briefly about a way in which the above reconstruction of the second way might be improved, and about a further criticism of the second way.

Last time there was some confusion about the roles of premises 2, 5, and 6 in the argument. One way in which the roles of these premises might be made more clear is by splitting premise 2 up into the following three sub-premises:

- Every causal chain must either be circular or non-circular.
- Every causal chain must either be finite or infinite.
- Every non-infinite, non-circular causal chain must include a first cause.
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These premises might all seem fairly obvious, and Aquinas never explicitly states any of them; but we can think of them as background assumptions needed to make his argument work.

Here’s how the argument might look if we replace premise 2 of the argument from last time with these three separate premises:
1. At least one thing has an efficient cause.
2. Every causal chain must either be circular, or infinite, or it has a first cause.
3. If something were the efficient cause of itself, it would be prior to itself.
4. Nothing can be prior to itself.
5. Nothing is either the efficient cause of itself, or is causally responsible for itself. (3,4)
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1. At least one thing has an efficient cause.
2. Every causal chain must either be circular or non-circular.
3. If something were causally responsible for itself, it would be prior to itself.
4. Nothing can be prior to itself.
5. Nothing is causally responsible for itself. (3,4)
6. There are no circular causal chains. (5)
7. There is a non-circular causal chain (1,2,6)
8. Every causal chain must either be finite or infinite.
9. A chain of causes cannot be infinite.
10. There is a non-circular, non-finite causal chain. (7,8,9)
11. Every non-infinite, non-circular causal chain must include a first cause.

C. There is a first cause. (10,11)
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There’s an obvious sense in which this argument is more complicated than the previous version; it contains 11 premises rather than 6.

But there’s also a sense in which it is simpler; each of the premises, and the steps between premises, is simpler than in the previous version. And it makes explicit all of the assumptions needed to make Aquinas’ argument work.

This argument is valid; so to determine whether it is sound we have to ask whether the premises are true.
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But as we know, not all premises of the argument are on par. Some - the derived premises - are supposed to follow from other premises. Others - the independent premises - are assumptions which are not supposed to follow from anything else.

The important point to get is that to show that the argument is sound, all that we have to do is that (i) the argument is valid and (ii) every independent premise is true. After all, if the independent premises are true, and the argument is valid, then all of the derived premises will be true as well.

The most questionable independent premise is premise 9, the “no infinite causal chains” premise. We discussed some arguments for and against this premise last time.

Let’s suppose that there are no infinite causal chains, and so that premise 9 is true. Can we then declare Aquinas’ argument a success?
Of course, Aquinas thinks that there is a connection between these topics. The last sentence of the second way says:

“therefore it is necessary to admit a first efficient cause, to which everyone gives the name of God.”

This indicates that Aquinas endorses the following assumption:

If there is a first cause, then God exists.

An accurate representation of Aquinas’ argument should therefore include this premise.
1. At least one thing has an efficient cause.
2. Every causal chain must either be circular or non-circular.
3. If something were causally responsible for itself, it would be prior to itself.
4. Nothing can be prior to itself.
5. Nothing is causally responsible for itself. (3,4)
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10. There is a non-circular, non-finite causal chain. (7,8,9)
11. Every non-infinite, non-circular causal chain must include a first cause.
12. There is a first cause. (10,11)
13. If there is a first cause, then God exists.

C. God exists. (12,13)

This is a description of the way that the universe could be, according to which there is a cause of the existence of things which was not itself caused to occur. But would it be reasonable to say that, if this picture of the universe is true, God exists?

It seems not. After all, if this view were correct, what would God be - the event of the Big Bang? The condensed matter which exploded in the Big Bang? Either way, God would have long since ceased to exist. Moreover, these things lack too many of the attributes central to our conception of God - such as, for example, personhood, intelligence, love, and moral goodness.

This gives us another - mercifully, the last - interpretation of Aquinas' second way.

But while this interpretation has the virtue of getting Aquinas' conclusion right, it introduces another independent premise for us to worry about. To be sure that Aquinas' argument is sound - and hence that his conclusion, that God exists, is true - we also need to be sure that premise 13 is true. Is it?

A plausible argument can be given that there is no good reason to believe that this premise is true. Consider, for example, the following (obviously, oversimplified) statement of Big Bang theory of the origins of the universe:

**The big bang**

The first event in the history of the universe was an explosion of an extremely dense collection of particles, with every particle moving apart from every other particle. This event had no cause -- in particular, no intelligent being set it into motion -- and, further, every subsequent event has been an effect of this event.
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At this point, you might be tempted to reply as follows, on Aquinas’ behalf:

OK, so maybe it is possible that the universe began with an event something like what the big bang theory describes. And maybe there really was nothing that caused that event - maybe it was the first event in the history of the universe, and hence was a kind of uncaused cause. Maybe the dense collection of particles always existed.

But that just can’t be the whole story. There must be more to be said, because there is no reason why the big bang had to happen. And if it is possible for the big bang not to have happened, there must be some explanation of why it happened. And God is the only sort of explanation of this sort that makes any sense, because God is the only thing that had to exist.

This sort of argument is in one respect like Aquinas’ second way: it says that God must exist, because God is needed to explain something or other about the universe. But it is different in that it focuses not on temporal distinctions, like the distinction between a first cause and later causes, but rather on the distinctions between things that are and are not possible, and things that had to be the case and things that didn’t.

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The crucial notion for understanding Aquinas’ second way was the notion of an efficient cause of a thing - the cause of a thing’s existence. The crucial notions for understanding his third way are the notions of necessity and possibility.

Let’s begin by discussing what it means for something to be possible. It is important to see that, in this argument, Aquinas is using the word in a very broad sense: something is possible just in case it could have happened - no matter how absurd, or bizarre, it is. So, for example, it is possible that a pink elephant is presently running through south quad, or that a talking donkey will one day be a professor of philosophy at Notre Dame.

It is not possible, in this sense, that there could be a three-sided plane closed Euclidean figure with four angles -- it isn’t just that this scenario would be silly or surprising; on reflection, we can see, on the contrary, that the scenario really does not make sense. In the same way, we can see that it simply could not be the case that I have an object in my office which is bright red and bright green all over. This is what we mean when we say that the scenario is impossible: it could not have been the case.

Once you understand what it means for a scenario to be impossible, you can understand what it means for a scenario to be necessary: a scenario is necessary just in case its opposite is impossible; or, equivalently, just in case it is impossible for that scenario not to be actual.

There’s one more term which will be important to master, not just for understanding Aquinas’ argument, but also for understanding several other arguments which we will be discussing later: contingent. A contingent truth is a truth that is not necessary; and, in general, a contingent claim is one which is possibly true and possible false. So every claim about the world falls into exactly one of the following three categories: necessary, impossible, or contingent.
The crucial notion for understanding Aquinas’ second way was the notion of an efficient cause of a thing - the cause of a thing’s existence. The crucial notions for understanding his third way are the notions of necessity and possibility.

With these terms in hand, let’s look at Aquinas’ argument:

The third way is taken from possibility and necessity, and runs thus. We find in nature things that are possible to be and not to be, since they are found to be generated, and to be corrupted, and consequently, it is possible for them to be and not to be. But it is impossible for these always to exist, for that which can not-be at some time is not. Therefore, if everything can not-be, then at one time there was nothing in existence. Now if this were true, even now there would be nothing in existence, because that which does not exist begins to exist only through something already existing. Therefore, if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus even now nothing would be in existence—which is absurd. Therefore, not all beings are merely possible, but there must exist something the existence of which is necessary. But every necessary thing either has its necessity caused by another, or not. Now it is impossible to go on to infinity in necessary things which have their necessity caused by another, as has been already proved in regard to efficient causes. Therefore we cannot but admit the existence of some being having of itself its own necessity, and not receiving it from another, but rather causing in others their necessity. This all men speak of as God.

This is a complex argument. The easiest way to think about it is by breaking it into two parts.
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This is a complex argument. The easiest way to think about it is by breaking it into two parts.

In the first part, Aquinas argues from the fact that some things exist only contingently to the conclusion that there is some being which exists necessarily.

In the second part, he argues that if there is some being which exists necessarily, then God exists.

We’ll focus our attention on the first half of the argument.
We know what Aquinas is arguing for:

**C. There is something which exists necessarily.**

But what are the premises?

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Aquinas’ argument for the existence of a necessary being.

We find in nature things that are possible to be and not to be, since they are found to be generated, and to be corrupted, and consequently, it is possible for them to be and not to be. But it is impossible for these always to exist, for that which can not-be at some time is not. Therefore, if everything can not-be, then at one time there was nothing in existence. Now if this were true, even now there would be nothing in existence, because that which does not exist begins to exist only through something already existing. Therefore, if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus even now nothing would be in existence—which is absurd. Therefore, not all beings are merely possible, but there must exist something the existence of which is necessary.
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A first premise is clear enough:

There are something things which possibly exist, and possibly do not exist.

i.e.,

1. There are some things which exist contingently.
Aquinas’ argument for the existence of a necessary being.

We find in nature things that are possible to be and not to be, since they are found to be generated, and to be corrupted, and consequently, it is possible for them to be and not to be. But it is impossible for these always to exist, for that which can not-be at some time is not. Therefore, if everything can not-be, then at one time there was nothing in existence. Now if this were true, even now there would be nothing in existence, because that which does not exist begins to exist only through something already existing. Therefore, if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus even now nothing would be in existence—which is absurd. Therefore, not all beings are merely possible, but there must exist something the existence of which is necessary.

We know what Aquinas is arguing for:

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But what are the premises?

1. There are some things which exist contingently.

In a second premise, Aquinas draws a connection between possible nonexistence and nonexistence at some time:

2. If something exists only contingently, then there is some time at which it did not exist.
Aquinas’ argument for the existence of a necessary being.

We find in nature things that are possible to be and not to be, since they are found to be generated, and to be corrupted, and consequently, it is possible for them to be and not to be. But it is impossible for these always to exist, for that which can not-be at some time is not. Therefore, if everything can not-be, then at one time there was nothing in existence. Now if this were true, even now there would be nothing in existence, because that which does not exist begins to exist only through something already existing. Therefore, if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus even now nothing would be in existence—which is absurd. Therefore, not all beings are merely possible, but there must exist something the existence of which is necessary.

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1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

Aquinas’ next sentence begins with the word “therefore”; this is a good indication that he takes what he is saying with this sentence to be something which follows from one or more of the preceding premises, rather than an independent premise. What he says is that if everything can not be - i.e., if everything exists only contingently - then at one time there would have been nothing in existence.

It seems plausible that this is supposed to follow from (2), since each make claims about the relationship between contingency and existence at a time.

3. If everything exists contingently, then at one time nothing existed. (2)
Aquinas’ argument for the existence of a necessary being.

We find in nature things that are possible to be and not to be, since they are found to be generated, and to be corrupted, and consequently, it is possible for them to be and not to be. But it is impossible for these always to exist, for that which can not-be at some time is not. Therefore, if everything can not-be, then at one time there was nothing in existence. Now if this were true, even now there would be nothing in existence, because that which does not exist begins to exist only through something already existing. Therefore, if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus even now nothing would be in existence—which is absurd. Therefore, not all beings are merely possible, but there must exist something the existence of which is necessary.

We know what Aquinas is arguing for:

C. There is something which exists necessarily.

But what are the premises?

1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

3. If everything exists contingently, then at one time nothing existed. (2)

The next sentence considers this possibility -- the possibility that at one time nothing existed -- and draws the conclusion that if at one time nothing existed, then it would be true even now that nothing exists.

4. If at one time nothing existed, then now nothing exists.
We know what Aquinas is arguing for:

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But what are the premises?

1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

3. If everything exists contingently, then at one time nothing existed. (2)

4. If at one time nothing existed, then now nothing exists.

But, of course, this is crazy -- as Aquinas recognizes. Some things do definitely exist now, like you and me. This obvious claim is the 5th and final premise that, I think, can be found in the text.

5. Some things now exist.
Aquinas’ argument for the existence of a necessary being.

2. If something exists only contingently, then there is some time at which it did not exist.

1. There are some things which exist contingently.

3. If everything exists contingently, then at one time nothing existed. (2)

4. If at one time nothing existed, then now nothing exists.

5. Some things now exist.

C. There is something which exists necessarily.

So now we have isolated a bunch of premises:

1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

3. If everything exists contingently, then at one time nothing existed. (2)

4. If at one time nothing existed, then now nothing exists.

5. Some things now exist.

and a conclusion.

Our first question is: do these premises give us a valid argument for the conclusion? This is certainly not obvious at a first glance. A good strategy is to begin by looking at the premises, and seeing whether any two of the premises can be put together to prove a further claim.
1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

3. If everything exists contingently, then at one time nothing existed. (2)

4. If at one time nothing existed, then now nothing exists.

5. Some things now exist.

One obvious place to start is with the last two premises. These seem to be of the form:

if p, then q

and

not-q

So, from these it should follow that not-p -- i.e., that

6. It is not the case that at one time nothing existed. (4,5)

C. There is something which exists necessarily.
1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

3. If everything exists contingently, then at one time nothing existed. (2)

4. If at one time nothing existed, then now nothing exists.

5. Some things now exist.

6. It is not the case that at one time nothing existed. (4,5)

But now look at (3) and (6): these seem to be related in just the way that (4) and (5) were. That is, (3) seems to be a claim of the form

if p, then q

while (6) says that

not q.

So it should follow from these that

7. It is not the case that everything exists only contingently. (3,6)

C. There is something which exists necessarily.
1. There are some things which exist contingently.

2. If something exists only contingently, then there is some time at which it did not exist.

3. If everything exists contingently, then at one time nothing existed. (2)

4. If at one time nothing existed, then now nothing exists.

5. Some things now exist.

6. It is not the case that at one time nothing existed. (4,5)

7. It is not the case that everything exists only contingently. (3,6)

But now think for a second about what (7) says: it says that it is not the case that everything is a contingent being. But that means that it must be true that something is not a contingent being.

8. There is something which does not exist contingently. (7)

C. There is something which exists necessarily.
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7. It is not the case that everything exists only contingently. (3,6)

8. There is something which does not exist contingently. (7)

But this is just another way of stating our conclusion; if there is something that does not exist contingently, that means that it is not possible for it not to exist. But that is just another way of saying that it exists necessarily.

C. There is something which exists necessarily. (8)
So it looks like we have our reconstruction of Aquinas’ argument:

1. There are some things which exist contingently.
2. If something exists only contingently, then there is some time at which it did not exist.
3. If everything exists contingently, then at one time nothing existed. (2)
4. If at one time nothing existed, then now nothing exists.
5. Some things now exist.
6. It is not the case that at one time nothing existed. (4,5)
7. It is not the case that everything exists only contingently. (3,6)
8. There is something which does not exist contingently. (7)

C. There is something which exists necessarily. (8)

Is this argument valid?

The argument as a whole is valid if and only if each of the 5 sub-arguments that make it up are valid. These are:

from 2 to 3
from 4 & 5 to 6
from 3 & 6 to 7
from 7 to 8
from 8 to C

We have discussed the last four of these. But how about the first one: the inference from premise 2 to 3? Is this valid?
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4. If at one time nothing existed, then now nothing exists.
5. Some things now exist.
6. It is not the case that at one time nothing existed. (4,5)
7. It is not the case that everything exists only contingently. (3,6)
8. There is something which does not exist contingently. (7)

C. There is something which exists necessarily. (8)

We have discussed the last four of these. But how about the first one: the inference from premise 2 to 3? Is this valid?

This seems to be analogous to the following inference:

2*. If a person sings sometimes, then there is some time at which that person sings.

--------------------------------------------

3*. If everyone sings sometimes, then there is some time at which everyone sings.

Is this inference valid?

However, one might reasonably think that this is due to a misunderstanding of Aquinas’ argument. One defect in our reformulation of that argument is that premise 1 appears not to be used in deriving any other conclusions or premises; it is playing no role in the argument.
So it looks like we have our reconstruction of Aquinas’ argument:

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Perhaps, even if 3 does not follow from 2, it follows from 2 together with 1.

This would be analogous to the following inference:

1*. There are some people that sing sometimes.
2*. If a person sings sometimes, then there is some time at which that person sings.

--------------------------------------------
3*. If everyone sings sometimes, then there is some time at which everyone sings.

Is this inference valid?

Even if this inference were valid, a separate problem would be that premise (2) does not look clearly true. Can you see why?
1. There are some things which exist contingently.
2. If something exists only contingently, then there is some time at which it did not exist.
3. If everything exists contingently, then at one time nothing existed. (2)
4. If at one time nothing existed, then now nothing exists.
5. Some things now exist.
6. It is not the case that at one time nothing existed. (4,5)
7. It is not the case that everything exists only contingently. (3,6)
8. There is something which does not exist contingently. (7)

C. There is something which exists necessarily. (8)

If (3) were true, then it would seem very plausible that we would have a sound argument for the existence of a necessary being. Premises (4) and (5) each appear to be true, and all of the logical inferences from (3) to the conclusion seem fine.

Unfortunately, it does not seem that Aquinas has given us any good reason to believe that (3) is true.

Aquinas’ general strategy in this argument, however - arguing for the existence of God on the basis of reflection on necessity and possibility - has proven to be quite a popular one. Next week we will begin by discussing the efforts of Gottfried Leibniz, a 17th century German philosopher, to improve on Aquinas.