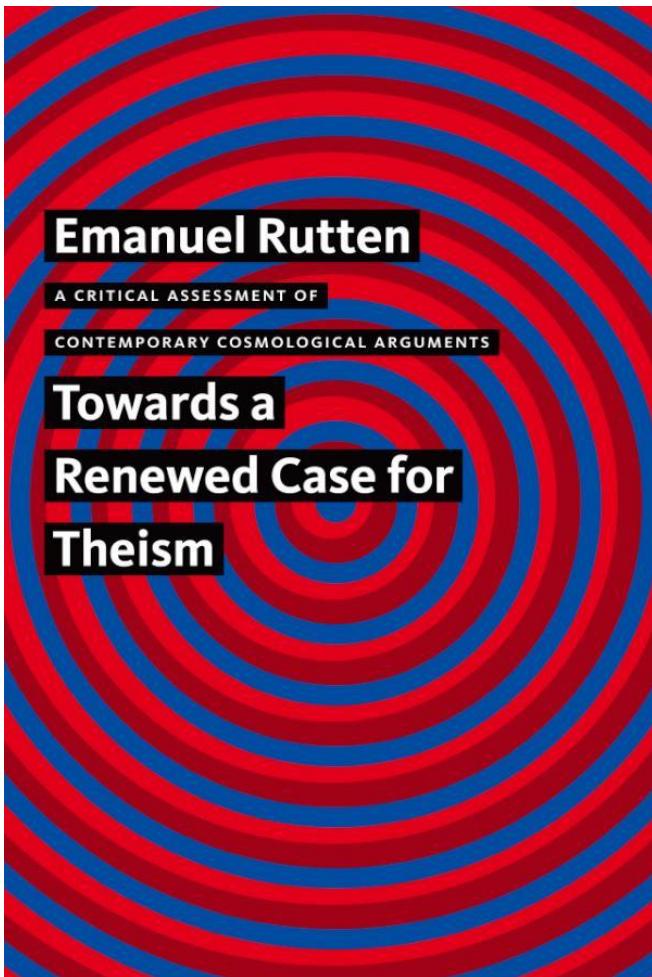


Atomism, Causalism and the Existence of a First Cause



Chapter 6 and 7 of *Towards a
Renewed Case for Theism* (2012)

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A new first cause argument

- Under some highly plausible conditions, **atomism** (i.e., 'every composite object is composed of simple objects') and **causalism** (i.e., 'every object is a cause or has a cause') together imply the existence of a **first cause**.
- It thus follows that one cannot reasonably be both an atomist and a causalist, while at the same time deny that there is a first cause.
- This conclusion is significant, not only because atomism and causalism are both highly plausible as well, but also because many atheistic scientists, naturalists, physicalists and materialists accept atomism and causalism.

I developed this argument more than ten years ago and it is published in chapter 6 and 7 of Towards a Renewed Case for Theism (2012).

Background framework

- The **world** is a collection of objects. So, everything that exists is an **object**, and an object is something that exists.
- Some objects are the cause of another object. So, causation is a relation between two objects: the **cause** and the **effect**.
- Some objects are a part of another object. So, parthood is a relation between two objects: the **part** and the **whole**.
- An object is a **proper part** of another object in case the former is a part of the latter, but the latter is not a part of the former.

Background framework (cont.)

- A **simple** or **atom** is an object that does not have proper parts.
- A **composite** is an object that contains at least one proper part.
- The **sum** of two or more objects is those objects taken together.
- If the sum of some objects is an object, then the members of the sum are called a **composition** of that object. In that case we say that these members **compose** the object.
- An object is **ontologically prior** to a second object, just in case the second object cannot exist without the first object.

Definition of first cause

A first cause is defined as an uncaused cause whose effect is ontologically prior to every other caused object

From this definition it follows immediately that there can be at most one first cause. So, if there is a first cause, it is properly described as the ultimate origin of all other objects

For if there would be two, the effect of the first one would be ontologically prior to the effect of the second one, whereas the effect of the second one would be prior to the effect of the first one – which is impossible since no two objects can be prior to each other.

The first cause argument

1. There are objects,
 2. Every composite is composed of simples (***atomism***),
 3. Every object is a cause or has a cause (***causalism***),
 4. The sum of all caused simples, if not empty, is an object,
 5. A cause is disjoint with its effect,
 6. Every caused composite contains a caused proper part,
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7. There is a first cause (***conclusion***).

Premise 1: There are objects

- This first premise seems to be evident. Surely there are objects.
- The claim that there are objects is so obvious that it is not even clear how to derive this claim from claims that are intuitively more evident than the claim to be argued for.

Premise 2: Every composite is composed of simples (*Atomism*)

- As Quine has it, it is justified to commit ourselves to the ontology presupposed by our **best scientific theories**.
- Since a fundamental level of basic building blocks is presupposed by the best theories of theoretical physics developed in the past few centuries or so, it's justified to commit ourselves to atomism.
- Moreover, in (2012) I offer a deductive **a priori** argument for atomism. This argument is based on the premise that *being* can only originate from composition or from a foundational level – so that, on the premise that composition is ontologically neutral or harmless and hence doesn't introduce *being*, there would be no *being* and thus no objects without a foundational level.

Premise 3: Every object is a cause or has a cause (*Causalism*)

- On this premise something can only exist if it's part of the 'causal fabric' of the world. Something that doesn't take part in the all-encompassing process of causation simply doesn't exist.
- This is constantly confirmed by common experience and by scientific evidence. To be is to be causally efficacious.

Premise 4: The sum of all caused simples, if not empty, is an object

- The caused simples are a *natural kind* for which membership is never unclear. That is to say, it's a *demarcated* natural kind.
- The sum of the caused simples is properly defined. This sum isn't problematic in other ways either. The objects in the sum do not overlap each other. We are just aggregating concrete particulars.
- Hence this sum, if not empty, is best understood as being an *object*, just as the sum of all water molecules in the universe – that is to say, the totality of all water molecules in the universe – is properly understood as being an object as well, namely “the water of the universe”, or “the universe’s water”.

Premise 5: A cause is disjoint with its effect

- The cause is here understood as being the total cause of the coming into being and thus of the very existence of the effect.
- Now, if cause and effect overlap, they would share a common part – so that without the effect the cause doesn't exist.
- But that's impossible, since the cause should not ontologically depend for it's existence on the existence of the effect.

Premise 6: Every caused composite contains a caused proper part

- Suppose all proper parts of a caused composite are uncaused.
- In that case *the sum of* the proper parts – that is to say, the *totality* of the proper parts, the proper parts *taken together*, or the proper parts *counted as one* – is uncaused as well. For sums are ontologically innocent, neutral or harmless.
- But the sum of all caused proper parts just *is* the composite. For, again, sums are ontologically innocent, neutral or harmless.
- It thus follows that the composite isn't caused, which contradicts the fact that the composite is caused.
- Hence the caused composite must contain a caused proper part.

Logical derivation of the conclusion

The argument is **deductively valid**. The conclusion follows logically from the premises. So, if the premises are true, then the conclusion is true as well

A five step logical derivation of the conclusion:

- i. Every caused composite contains a caused simple,
- ii. The sum of all caused simples (*called M*) is an object,
- iii. M is not a cause,
- iv. The cause of M (*called A*) is uncaused,
- v. A is a first cause.

(i) Every caused composite contains a caused simple

- Let C be a caused composite, and take the following procedure:
 - a) Start with object C,
 - b) According to premise (6) it contains a caused proper part,
 - c) If this caused proper part is a simple, then STOP. Else go back to step (b).
- Due to premise (2) of the argument, that is to say, the premise of *atomism*, the procedure must result in a caused simple part of C.

(ii) The sum of all caused simples is an object

- Let M be the sum of all caused simples.
- According to premise (1) there is an object. Premise (3) implies that this object is caused or a cause. So, in any case, there is a caused object. Let's call this object N .
- Object N is simple or composite.
 - If N is simple, then N is a caused simple, and thus M is not empty.
 - If N is composite, then, according to (i), N contains a caused simple, and thus M is not empty either.
- It follows that in both cases M is not empty. So, M is not empty.
- But then premise (4) implies that M is an object.

(iii) Object M is not a cause

- Suppose, for refutation, that M is the cause of an object, say K.
- According to premise (5) object M is disjoint with object K. Thus, K is not a caused simple. Object K is a caused composite.
- From (i) it follows that K contains a caused simple, say K*. K* is a part of M. From this it follows immediately that M and K share K* as a part. But this is contradictory since M and K are disjoint.
- So, the assumption that object M is a cause must be rejected.
- Therefore, object M is not a cause.

(iv) The cause of object M is uncaused

- According to premise (3) object M is caused. Let object A be the cause of object M.
- Suppose, for refutation, that object A is caused.
- From premise (5) it follows that A and M are disjoint. Thus, A is not a caused simple. Object A is a caused composite.
- From (i) it follows that A has a caused simple A^* as part. Thus, A and M share A^* as part, which contradicts A and M being disjoint.
- So, the assumption that object A is caused must be rejected.
- Thus, object A is uncaused.

(v) A is a first cause

- To show that A is a first cause it must be shown that the effect of A (being M) is ontologically prior to each other caused object.
- Thus, let B be a caused object. In that case B is a caused simple or a caused composite. Now, (i) implies that in either case B has a caused simple as part, which is ontologically prior to B.
- Since that caused simple exists only if M exists, M is also ontologically prior to B, and hence A is a first cause.
- If there is a first cause, then, as mentioned earlier, there is exactly one first cause – so A is the ultimate origin of the world.

The ultimate origin of the world is a free conscious being

- The ultimate origin of the world is either information, matter or mind.
- Properties that an ultimate origin of the world necessarily must have
 - The origin of the world must be causally efficacious and actively creative,
 - The origin of the world cannot ontologically depend on anything else and must therefore be radically free,
 - The origin of the world must be simple and not compound. For every multiplicity is ontologically grounded in a more fundamental unity,
 - The origin of the world cannot resemble a structure that allows for all kinds of obvious alternatives. Because otherwise immediately the unanswerable question arises as to why one of those alternatives isn't the origin.
- But then information and matter fall out. Only a radically free consciousness being meets all conditions, so that the ultimate origin of the world is not matter or information, but a free conscious being.
- And such a being is reasonably referred to as God. Thus, God exists.