

A way of thinking of this idea is to consider the relationship of the parent and the child. Without the existence of the parent, the child cannot come into existence. Or, to put it another way, the child is contingent on the parent for its existence.

### Key quote

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 postulate 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. (Aquinas)

Aquinas states that the only possible solution to this dilemma is that something must exist that is unlike everything else in existence – in that it has no beginning and no end, in other words, it has necessary existence. This necessary existence is needed to bring about the existence of everything else. For Aquinas this being was 'God'.

### AO1 Activity

After reading the section on Aquinas' Three Ways, close the book and write down what you consider the main point of each way was.

## The Kalam cosmological argument

From the Arabic word 'to argue or discuss', the Kalam cosmological argument can trace its origins to the work of Islamic scholars in the 9th and 11th centuries of the Common Era. It has been modernised and championed by Christian **apologist** William Lane Craig.

In 1993 Craig stipulated his argument thus:

1. Everything that begins to exist has a cause of its existence.
2. The universe began to exist.
3. Therefore, the universe has a cause of its existence.
4. Since no scientific explanation (in terms of physical laws) can provide a causal account of the origin of the universe, the cause must be personal (explanation is given in terms of a personal agent).

This is a (relatively) straightforward and easy to follow argument. However, in order to answer challenges to the idea that the universe might be considered infinite, Craig developed the following defence to his second point:

- i. An **actual infinite** cannot exist.
- ii. A beginningless **temporal** series of events is an actual infinite
- iii. Therefore, a beginningless temporal series of events cannot exist.

In order to explain this, an example of a library is often referred to: imagine a library with an actually infinite number of books. Suppose that the library also contains an infinite number of red and an infinite number of black books, so that for every red book there is a black book, and vice versa. It follows that the library contains as many red books as the total books in its collection, and as many red books as red and black books combined. But this is absurd; in reality the subset (i.e. red or black) cannot be equivalent to the entire set (i.e. red and black). Hence, actual infinities cannot exist in reality.

### quickfire

- 1.7 What is meant by necessary existence?

### Specification content

The Kalam cosmological argument with reference to William Lane Craig (rejection of actual infinities and concept of a personal creator).

### quickfire

- 1.8 What did Craig state was true for everything that begins to exist?

### Key terms

**Actual infinite:** something that is actually infinite in extent or in extent of the operations performed – it literally has no beginning and no end

**Apologist:** an individual who writes or speaks in defence of a particular cause or belief

**Temporal:** things relating to time

However, critics point out that this is ignoring the fact that there are two types of infinity recognised in standard mathematics – 'actual' and 'potential'. Craig only refers to the impossibility of the first, not the second in his initial argument. Craig responded by recognising that if an actual infinite was impossible, a **potential infinite** confirmed the fact that the universe had a beginning. This forms the second part of his argument.

Craig's Kalam argument is often seen as very confusing, not least because it depends on an understanding of the concepts of infinity that are, in themselves, difficult to grasp. However, in its simplest form it is straightforward and appealing – to such a degree that it has had significant influence in the rational theistic defence against atheistic arguments – especially in the fundamentalist Christian churches of America.

### AO1 Activity

Summary diagram to complete: select the five most important ideas as presented by Aquinas and Craig and explain why they are important to our understanding of the cosmological argument.

## Summary

The Kalam cosmological argument bases itself on the impossibility of the universe being infinite. Once this is agreed, then it is reasonable to ask 'How did it start?' Craig's version posits the requirement for a personal creator.

### Key quote

I think that it can be plausibly argued that the cause of the universe must be a personal Creator. For how else could a temporal effect arise from an eternal cause? If the cause were simply a mechanically operating set of necessary and sufficient conditions existing from eternity, then why would not the effect also exist from eternity? For example, if the cause of water's being frozen is the temperature's being below zero degrees, then if the temperature were below zero degrees from eternity, then any water present would be frozen from eternity. The only way to have an eternal cause but a temporal effect would seem to be if the cause is a personal agent who freely chooses to create an effect in time. For example, a man sitting from eternity may will to stand up; hence, a temporal effect may arise from an eternally existing agent. Indeed, the agent may will from eternity to create a temporal effect, so that no change in the agent need be conceived. Thus, we are brought not merely to the first cause of the universe, but to its personal Creator. (Craig)

### Study tip

Whilst you do not need to be able go into great detail regarding Craig's concepts of infinity, you should be able to show that you understand how his Kalam argument is put together, along with the basic differences (as explained in key terms) of potential and actual infinities.



Is it possible to have an infinite number of red and black books?

### quickfire

- 1.9 What is meant by infinity?

### quickfire

- 1.10 Which movement within Christianity has been particularly supportive of Craig's argument?

### Key term

**Potential infinite:** the potential infinite is something that could continue on, were effort to be applied. E.g. it would be possible to always continue a number line if we wanted to, or we could always come up with a bigger number