

# First Thoughts On Space and Time

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If, in a thought experiment, all physical matter and all energy are removed from the universe, then what remains is the void. Space is that void to its limit, and it defines the boundary of space.<sup>1</sup> If space undergoes continuous expansion, and always from its previous limit, it should hold that space and its limit are finite?

If an object—real or abstract—has, or is given, two or more components, then each component must be smaller than the whole? In considering time, it should follow that past, present and future are finite. Therefore, it should hold that, in combining those finite components, time is also finite.

If time is associated with change, such as during the continuous expansion of space, then time fills the void and its limit. Therefore, to ensure universal change, the void, its limit and time should be thought of as in balanced. That is, all should change concurrently. If time is a discrete entity, that is, if it is independent of the void and of its limit, then what causes that simultaneity?

If the void expands in all directions then, to ensure universal change, time must expand with the void. Therefore, an outwardly-expanding time cannot flow like a river. In addition, if time is confined to the void, ensuring all change within, then, what does the outer edge of the limit of space—hence, time and the expanding void also—expand into?

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<sup>1</sup> Although they are not physical things, they can be conceived of.