Theoretical physicists have recently described themselves as aspiring to a ‘theory of everything’. But more than two centuries ago Kant offered in the Dialectic of his *Critique of Pure Reason* a systematic diagnosis of a certain kind of transcendental illusion about absolute totalities, an illusion to which we are prone whenever we try to think about the world as a whole. I propose to look afresh at Kant’s thought and ponder its implications for contemporary cosmological theorizing, and, conversely, to ask whether modern science can throw any light on his dark musings.¹

### 6.1 Theoretical reason and Kant’s first antinomy

In the Introduction to the Transcendental Dialectic, Kant describes the operation of our faculty of reason. He tells us that it has a valid use in seeking to organize and unify our scientific knowledge of the world:

> in inference reason endeavours to reduce the varied and manifold knowledge obtained through the understanding to the smallest number of principles (universal conditions) and thereby to achieve in it the highest possible unity. (A305/B361)

Later on, Kant remarks that human reason is by nature architectonic, in that it regards all our knowledge as belonging to a possible system (A474/B502). But he holds that the systematizing use of our reason has a distinctive way of leading us astray. If we have explained a fact p by another fact q, we may then seek to explain q by some further condition r, and so on: as Kant puts it, ‘the condition of the condition must be sought whenever practicable.’ But we tend to assume that there must be
an endpoint to this process, and Kant offers a grand-sounding formulation of this assumption behind our naïve thinking:

the principle peculiar to reason in general, in its logical employment is: – to find for the conditioned knowledge obtained through the understanding the unconditioned whereby its unity is brought to completion. (A307/B364)

What he seems to have in mind is an ultimate premise which can serve to explain everything else, but does not itself need explanation, or can be shown not to be susceptible of any further explanation: that is, not just an unexplained explainer, but an inexplicable explainer – perhaps even a self-explanatory explainer.

However, to search is not necessarily to find: people can look for something that does not exist (like the Yeti), or even for something that cannot exist (e.g., a geometrical construction to square the circle). Kant goes on to say:

this logical maxim can only become a principle of pure reason through our assuming that if the conditioned is given, the whole series of conditions, subordinated to one another – a series which is therefore itself unconditioned – is likewise given, that is, is contained in the object and its connection. (A307–8/B364)

Yet he finds this assumption deeply problematic, as we will see below.

At the beginning of the Antinomies chapter, Kant claims that our naïve reasoning leads us into apparently contradictory claims. (Much of the discussion in this lengthy chapter can be understood without appeal to what comes earlier in the *Critique*, and Kant himself once said in a letter that it might have been better to start the book with the Dialectic.) In this chapter I will focus on the First Antinomy. Here are the contradictory propositions, with a brief summary of the arguments for them that Kant presents.

**Theses:**

(A) *The world has a beginning in time:* for otherwise there would have been infinitely many events before the present, but an infinite series ‘can never be completed through successive synthesis’ (A426/B454).

(B) *The world is limited in space:* for if one is to think of an infinite whole ‘the successive synthesis of the parts of an infinite world must be