Intelligent design is an idea with a history going back at least to the late seventeenth and early eighteenth centuries, when Deists, especially, were moved by the seeming clockwork precision of the universe as described by Newton to infer the existence of a clockmaker God with an intelligence equal to the cosmic task of creation and design. Just as old are critical philosophical commentaries on design arguments, the most famous from the eighteenth century being David Hume’s mocking attack in his posthumously-published *Dialogues Concerning Natural Religion* (London, 1779).

Two features of design arguments impressed Hume. The first was that, since design arguments are arguments by analogy, they are, like all analogical reasoning, inductive arguments. That means that, at best, they confer on their conclusions only a high probability and not the necessity that one finds in the rigorous deductive proofs of Euclid’s geometry. Does induction suffice as a demonstration of God’s existence through His works? The second feature that impressed Hume was the arbitrary and persuasive choice of analogies upon which design arguments are grounded. See the universe as being like a watch and the inference to an intelligent designer God is inviting. But why that analogy rather than another? In the *Dialogues*, Hume’s spokesperson, Philo replies to Cleanthes’ defense of the design argument by suggesting that one could just as well focus on features of the universe that make it like an animal body or a vegetable, from which one could then infer that, like an organism, the universe must be the product of generation or vegetation, rather than reason and design. Absent a prior and independent commitment to the existence of a designer God, one could, thus, with equal reason infer that the universe was the product of sexual union between a cosmic mother and father or of the kind of budding whereby various plants, yeasts, or viruses reproduce.

Other questions loom larger when considering the kinds of design arguments popular today. Consider first that while design inferences are perfectly sensible, indeed, essential in various mundane settings, as in ordinary detective work, their employment in a cosmological setting or in the context of discussions of human origins is a riskier business. The main reason is that, in these extramundane settings, the major premises of a design argument are drawn not from unvarnished observation of the world, as when Holmes noted the hound that did not bark, but from what are typically theoretically sophisticated scientific descriptions of the world, as in the cosmological fine tuning argument.

Why is this problematic? It’s because of the contingency of those theoretical accounts. According to what philosophers of science call the “pessimistic meta-induction,” any current theory is likely to turn out, in future, to be false or at least seriously limited in scope. There is no reason to think that inflationary cosmology will be any exception to this rule, in spite of impressive and growing evidence in its favor. I’m old enough to remember a day when it had not occurred to anyone to think of the universe as having its origins in a cosmic explosion followed by expansion. When I was young, the steady-state model was the accepted wisdom. For two-hundred and fifty years, Newtonian mechanics could claim evidential warrant just as impressive as that attaching to the inflation model. But we now know that Newton was wrong. We don’t know, now, how inflationary cosmology will turn out to be wrong or of limited scope, but that it will seems to be the lesson of history. One might well be puzzled by a theology that dares to rest conclusions about fundamental aspects of religious doctrine on such a fragile, contingent, scientific foundation.

Even were it not for the contingent character of our theories, another question arises. If one is to take the major premises of a design argument from our current best science, is it not incumbent upon us to accept the whole of what that science tells us about such things as the place of intelligent human life in the cosmos? It is surely a striking fact about our current best cosmological models—if it is a fact about them—that intelligent life would have been impossible had the values of various cosmological parameters differed
from their current values by a few thousandth’s of a decimal. But some of those same cosmological models also imply that the universe will develop in such a way as to become, in future, radically inhospitable to intelligent human life. If the fine tuning needed to make our corner of the universe home to intelligent life now is part of a cosmic design, then so too are all aspects of the cosmology in question. So was it the designer’s intention to create a universe in which for just the briefest tick of the cosmic clock intelligent human life could appear, only to be followed by cosmic aeons of emptiness? From such a more comprehensive point of view, the emergence of intelligent human life could hardly appear to have been the main goal of the enterprise.

Design arguments in the context of theories of human origins raise a similar question. First, as an aside, note the irony in the fact that the Darwinian story of human origins, a story introduced in part precisely to show how random variation with selection can imitate design, is now, instead, itself invoked as a premise in a design argument. Now it is not the individual human species that is the product of evolution that is held up as evidence of design, but the very evolutionary process that produced the human species that is taken as evidence of design. The natural process whose discovery Darwin thought obviated the need for assumptions of design is now said by the proponents of intelligent design itself to require the assumption of design.

But, as in the cosmological context, so too in the context of evolutionary stories of human origins one has to buy all of the science, not just some of it. Evolution has worked so as to produce intelligent human life. But the Darwinian story tells us that species fitness is always relative to an environment. When the environment changes, species adapted to it—if they cannot accommodate the changes—either evolve into new species or go extinct. From the Darwinian point of view, environmental change is largely a matter of external contingencies, not something implicated by the theory itself. Darwinian evolution does not predict mass extinctions consequent upon a giant meteoroid’s striking the earth at the end of the Cretaceous period, because it knows nothing of solar system dynamics. But it does predict that, if environmental change is drastic enough, extinction is possible or even likely. So, what if the environment to which the human species is adapted changes drastically, say as a result of another meteoroid impact, human-induced global climate change, or all-out nuclear war? Poof! No more human beings, the point being that, if one accepts the whole package, then, in this context too, it no longer appears as though the emergence of intelligent human life was a designer’s main goal.

I can see only one way around objections to design arguments based on the contingency of the theories providing the major premises. It would be to argue that, though theories come and theories go, any theoretical description of the universe that can claim the status of science must describe the universe in terms of some principles of order. What specific order is ascribed to nature might change as theories change, but order will be part of any scientific description of the universe, and so the conclusion still holds that from the order thereby described, design should be inferred. But am I alone in thinking that this maneuver trivializes the design argument, making it true by definition? Moreover, one would think that the specifics of the order described could make a difference to the conclusion one draws about causes. As Hume pointed out, if the order one discerns is like that of an artificial contrivance like a watch, then an intelligent designer as cause is suggested. But if the order is like that found in the plant and animal worlds, then sexual congress or vegetative reproduction is the cause suggested. And today one might add that, if the order described is like that of crystalline structure, then self-assembly in accord with fundamental structural principles (bonding angles, etc.) suggests itself as the cause.

The believer may rightly be enjoined to seek and find in nature the traces of a divine intelligence’s creative activity. If there is a designer God, then at least the main features of his blueprint should be inferable from the nature built according to that plan. By his fruits ye shall know him. But design arguments wrongly turn the arrow of implication in the opposite direction, holding that, if there is order in nature, then a designer God must be responsible for that order. Such might well be the origin of order, but it is a plain fact that order arises in other ways too. Some order is the product of other order, as in crystal formation. Some order is biological in origin, as with the magnetite in Mars rocks that some think was produced by magnetotactic bacteria. And some order is, like it or not, the product of chance, as when, on average, one roll of the dice in every thirty-six yields a perfect pair of snake eyes.