How did the universe originate? Today, the dominant answer among scientists is the “Big Bang” theory. According to this theory, there was a time in the distant past when all the matter in the universe was concentrated at an extremely dense point — squeezed into it, one might say. Subsequently, an enormous explosion occurred, hurling these basic particles in all directions at a gigantic velocity. Eventually this process formed atoms and molecules; later, stars were formed along with all the rest of the universe as we know it. According to the Big Bang, the age of the universe is finite.

Scientists believe that the Big Bang theory is superior to all previous accounts of the universe’s origins. However, surely one who hears of this theory must wonder: What made the universe spring into being? After all, no physical causes, and not even space or time, existed at the time of its birth. In response to this question, some religious thinkers have conjectured that the Perfect Being, God, in His limitless wisdom, surveyed all possible worlds — an infinite number of them — and picked to make actual the one that has the properties most desirable to Him.

This argument has been taken seriously even by confirmed atheists. Consider, for instance, John Maddox, a former editor of the prestigious journal Nature. In 1989, Maddox claimed that the Big Bang hypothesis is unacceptable because it does not permit a scientific discussion of the universe’s physical origins. Instead, it would impose upon us the “absurd idea” that the current state of the universe has to be explained by religion.

The possibility of supernatural explanations of the world seems to many a real threat to the principle that the spiritual and the material must be kept strictly apart. To illustrate: Scientists were once baffled by where the sun obtains the immense amount of energy it radiates. The problem was solved only when thermonuclear fission was discovered. But before that discovery, it never occurred to any physicist, not even religiously committed ones, to invoke God’s will as an adequate explanation of how the sun could violate the principle of the Conservation of Energy. This is not because the notion of “divine powers” is ridiculous as Maddox would have it. Rather the problem is that “it is God’s will” is a vacuous “catch-all” explanation.

A catch-all explanation is one which could account for a hypothesis, but equally well could account for the denial of the same hypothesis. Thus, before the advent of the theory of nuclear fusion, if a scientist claimed that “it is God’s will” adequately
explains why the sun fails to decrease in energy, as physics demands, we would object, arguing as follows: If the sun were to violate the principle of Conservation of Energy in a different way, e.g., the sun’s energy neither decreased not remained constant, but kept increasing with time, the same scientist could offer the same explanation, i.e., “it is God’s will” that the sun behaves in this peculiar way. But his suggestion would amount to a vacuous, catch-all explanation.

Do we then have to resign ourselves to the idea that if we answer the question “What caused the Big Bang?” by saying “it was the Almighty’s decree,” this represents a vacuous, catch-all explanation? Upon closer inspection it should become clear that in this particular case an explanation in terms of God’s will would be legitimate. For there is a fundamental difference between explaining phenomena within the universe as God’s will and explaining the very existence of the universe as His will.

Let me clarify. If the universe did not exist, or if it existed, but were chaotic, it would not be astonishing and no explanation would be called for. Moreover, in every other case, no matter how long an adequate explanation eluded scientists, there is a hope that eventually, with further advances in our knowledge, one will become available. However, in the case of phenomena such as the Big Bang it is clear that such an explanation is out of the question. Why? Because there could not have been any physical causes before the birth of the physical universe. When it comes to the origin of the universe, such an explanation should not be regarded as vacuous. Hence, a religious explanation is in order.

It should be noted, paradoxically, that the believer has a stronger reason than the non-believer for resisting the admission of theological elements into the natural world. Numerous leading cosmologists — regardless of their attitude towards religion — have marveled at the fabulous ingenuity that was necessary to engineer a universe such as ours. Starting from nothing but elementary particles and simple basic laws, we end up with this gigantic, lavish, endlessly complex, variegated, yet stable and well-functioning system. In a series of fascinating and accessible books, Paul Davies, a distinguished physicist, refers to the practically limitless alternative assemblies of initial particles that could not produce this result. Consequently, the prior probability of the Big Bang occurring and producing our unique universe purely by accident is vanishingly small.

For the religious individual, all these astonishing aspects of nature serve as a confirmation that the universe was planned by an infinitely intelligent and powerful Being. Only a Divine Being could devise and implement a startlingly simple set of laws which, on their own, are capable of ensuring the smooth running of the universe without ever needing refurbishing, servicing or tuning up. Therefore, to claim that in order to generate some desirable phenomenon, at some stage this magnificently devised set of laws required outside help in the form of a new divine decree, would deal a serious blow to the idea that the glory of the Almighty is manifested through the smooth running of the universe.

Are we then to deny that miracles ever take place? The answer is no. The purpose of miracles, however, is not to correct some fault in the workings of nature. Rather, their function is to jolt a Pharaoh or the worshippers of the Baal out of their contrived defense mechanism and awaken them to the need for a more searching inspection of their motives. In fact, there are numerous instances in which our sages expressed their qualms about the desirability of miracles. For example, in [Talmud Bavli] Shabbat 53b we are told about a man who lost his wife and could not afford a wet nurse for his infant child. Subsequently, a miracle took place and his body underwent a change so that he was capable of nursing the child. Abaye — whose preeminence is reflected by the fact that the entire Talmud is often referred to as “the arguments of Abaye and Raba” — remarked: “How inferior that man must have been that nature’s order had to be changed on his behalf.”

As already noted, in the distant past miracles were necessary to induce a willingness to probe more deeply into one’s suppressed motives. The great majority of people were unable to comprehend that the existence of our universe is more mind-boggling than any other miracle. The first Rebbe of Gur, Reb Yitzchok Meir, once remarked: “It would indeed be evil if in our time we were in such a position as to require that miracles be shown to us.” The Rebbe used the term “in our time,” presumably to affirm that through the great advances in scientific knowledge, every open-minded individual should be aware that the universe did not emerge through random processes.

It is important to realize that no so-called theistic proof, including the one presented in this essay, is entirely conclusive. At best, such a proof could be called “highly persuasive.” But the proofs still serve an important function. As famously asserted by Rabbi Elchonon Wasserman, agnosticism or atheism is a result of self-deception. Emunah [faith] is so natural and is so deeply implanted in each one of us, that only through self-induced blindness is it possible to deny it; wishful thinking is liable to produce blinders and prevent one from recognizing suppressed innate beliefs. The avoidance mechanism is generated by the reluctance to subordinate oneself to the restrictions and commandments of Hashem and to the idea of accountability to a Superior Being. Through wishful thinking, people may repress the beliefs implanted in their hearts. The function of proofs like the argument from the Big Bang theory is to draw people’s attention to the plausible arguments in support of emunah and thus jolt them into a willingness to delve into the inner recesses of their mind, and see the difference between their true and contrived beliefs.