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MAIMONIDES' DOCTRINE OF CREATION*

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Maimonides' Guide of the Perplexed¹ is among the most influential works ever written in religious philosophy.² It occupies a unique place in Jewish religious thought. While the majority of subsequent Jewish thinkers have criticized what they understood of Maimonides' text, they have often felt obligated to struggle with his contentions. This obligation constitutes the highest expression of respect in Jewish philosophy.

The Guide also is unique in its complexity.³ Most authors clarify their intentions. In Maimonides' case the opposite is true; Maimonides intended the Guide solely for students who were committed rabbinic Jews, who had attained a professional knowledge in rabbinic texts, and who had a sound intellectual foundation in what were then regarded as the standard texts in general science and mathematics. At the same time, Maimonides feared that

*This article was composed on a Temple University Faculty Research Fellowship during the summer of 1991.

¹Originally called Dalālat al-Hā²irīn, this text has been translated into many languages. Some better-known translations are: Moses Maimonides, Moreh Nevokhim (trans. Shmuel Ibn Tibbon; Vilna: Funk, 1904) [Hebrew]; idem, Moreh Nevokhim: Dalālat al-Ha²irīn: Maqor ve-targum (trans. Yosef Qafaḥ; Jerusalem: Mosad ha-Rav Quq, 1972) [Hebrew]; idem, Dalālat al-Ha²irīn: The Guide of the Perplexed (trans. Salomon Pines; Chicago: University of Chicago Press, 1963) [English]; idem, Le guide des égares (trans. Salomon Munk; 3 vols.; Paris: Franck, 1856–1866) [French].

²For example, Maimonides' *Guide*, together with Averroes' commentaries on the works of Aristotle, were the major sources that Thomas Aquinas used to translate the Christian view of the universe into an Aristotelian schema. Similarly, the *Guide* played a major (although often negative) role in forming the beliefs of Spinoza.

³Cf. Leo Strauss, Persecution and the Art of Writing (Glencoe, IL: Free Press, 1952) 38–94; and Salomon Pines, "How to Begin to Study The Guide of the Perplexed," in Maimonides, Guide (trans., Pines) xi-lvi. While my reading of the Guide is influenced by Strauss, I do not advocate what is commonly called his "esoteric" interpretation. In this context, see Isadore Twersky, Introduction to the Code of Maimonides (Mishneh Torah) (New Haven/London: Yale University Press, 1980) as a corrective to Strauss' interpretation.

others, lacking both the commitment and the training he required, would be attracted to the work because of his political and religious stature in world Jewry. His concern was that their ignorance would cause them to misunderstand what he said and that their lack of commitment would lead them to misuse their reading. Hence, more important to him than communicating what he wanted to say to those qualified was to prevent the unqualified from misusing the *Guide*. How successful Maimonides was in saying what he wanted to say is a matter of scholarly debate.

Maimonides called the subjects with which he was concerned "secrets." This article deals with the current scholarly debate about one of these—namely, his theory of creation. My thesis is that Maimonides was able to affirm this rabbinic dogma only by placing it beyond the limits of scientific knowledge. I argue not only that he states this explicitly, but that this view is in fact the most coherent interpretation of everything else that he says about creation in the Guide.⁴ First, I examine the text itself. My conclusion will be that Maimonides adopted a Platonic interpretation of creation, not because that is what reason demands, but because it is the most literal interpretation of scripture. Second, I attempt to defend this assertion against different interpretations offered by contemporary scholars of the Guide.

MAIMONIDES' COSMOGONY IN THE TEXT OF THE GUIDE OF THE PERPLEXED

Having demonstrated that God exists, is one, and is incorporeal,⁵ Maimonides set out to prove that angels exist and to demonstrate how the universe was created.⁶ In the course of this demonstration, Maimonides noted that Aristotle rejected the Pythagorean view that the motions of the spheres produce sound.⁷ Although he did not mention it by name, Maimonides may also have had in mind Plato's theory of celestial harmony in the *Timaeus*.⁸ In any case, Maimonides explicitly associated this view with certain, unnamed statements of the "sages" (hakhamim). His intention was to show something about the relationship between rabbinic tradition and science in dealing with cosmology: the early rabbis accepted and repeated certain judgments about the heavens, based on reasonable scientific opinions of their times. However, where Maimonides could demonstrate these opinions to be false, as the Aristotelians did in the case of the Pythagorean thesis of heavenly sound, he rejected the judgment of the

⁴Creation is discussed directly in Maimonides, Guide 2.2-28.

⁵Ibid., 1.71–2.1.

⁶Ibid., 1.2-12.

⁷Ibid., 2.8.

⁸Plato Timaeus, 35b. Also cf. Plato Respublica 617b (The Myth of Er).

rabbis. Implicit in this discussion were two ideas about the relationship of reason and revealed tradition: first, rabbinic opinions can be rejected when they conflict with scientific knowledge, and second, scientific opinions can be employed to explicate religious doctrines.

After stating that there is no inherent conflict between the cosmology he summarized and the teaching of the Hebrew scriptures, and after presenting a summary of the theory of divine overflow as a model for causal influence, Maimonides turned from cosmology to cosmogony. He listed four opinions about the origin of the universe. He identified the first as the belief of "all who believe in the Law of Moses"—the Jewish people. Law of Moses and the Jewish people. Maimonide this opinion, the universe was "absolutely nonexistent" (haheeeder ha-gamur) and God brought it into existence by an act of "will" (rason) and "volition" (hefes). Maimonides explained that this statement means that God created the world "from no-thing" (mi-lo davar). This leads to the conclusion that even time itself was created. Furthermore, Maimonides identified this opinion as a "basis" (yesod) of the Torah, second in importance only to the belief that God is one.

The second opinion is that of the "philosophers," which Maimonides associated with the view described in Plato's *Timaeus*. ¹³ The crucial difference between Plato and the Torah view is that in the *Timaeus* the universe was not generated out of "no-thing" and that before creation it was not absolutely nonexistent. Maimonides cited no other disagreement between this opinion and the Torah view. In other words, both opinions seem to affirm that God brought the universe into being through an act of will and volition.

⁹Maimonides, Guide 2.11.

¹⁰Ibid., 2.12.

¹¹Ibid., 2.13; this opinion will be referred to as "the Torah view" from now on.

^{12&}quot;... time itself being one of the created things. For time is consequent upon motion, and motion is an accident of what is moved." (Maimonides, Guide 2.13, p. 281; page references when necessary are from Pines's translation of the Guide.) Note that later on in the Guide Maimonides often says that according to this view the universe was "created in time" (e.g., ibid., 2.17, p. 298). Clearly these two statements are contradictory. Admittedly I am simplifying Maimonides' position, but my reason for preferring Guide 2.13 is that this reading is more coherent with everything else Maimonides says about his Torah view than is Guide 2.17. Furthermore, Guide 2.13 speaks directly about this view, whereas in the later passages the reference is a single line allusion to this position in the context of a direct discussion of the Aristotelian eternity/necessity account of creation. It is possible to reconcile the two contrasting claims by understanding the second set of passages as meaning that in contrast to the Aristotelian view, the Torah view could loosely be called "creation in time" in the sense that the universe has an origin, albeit that the origin, strictly speaking, does not occur in time

¹³Ibid., 2.13, pp. 282-84.

The third opinion is that of Aristotle and his followers. ¹⁴ It denies that the universe was generated. Existence (nimsa²) as such cannot be generated. Consequently, if anything at all exists, then there must always be something that exists. The same judgment applies to matter (homer). Furthermore, the Aristotelians maintained that it is not possible for the universe to come into existence through an act of will and volition. A consequence of divine unity is that God is in no way subject to change. Hence, either God always wills something or he never wills it, and if he always wills it then it is not proper to call it an act of will. Rather, it would be more accurate to say that the "it," in this case the existence of the universe, follows necessarily from God's essence.

The final opinion which Maimonides associated with Epicurus, asserts that the universe came about through chance (miqreh). This view was not just that of Epicurus; it was the dominant account of the universe found in the writings of most of Plato's predecessors in Greek science, as well as the claim of the Greek and Roman atomists who succeeded both Plato and Aristotle. Through chance does not mean what today we would call "by accident." Rather, the claim of these philosophers was that the universe was generated through a motion of "conjunction and separation," the governing principles of which are purely mechanical. What Maimonides had in mind here is the following claim: the random motion of elementary particles produced collisions that in turn resulted in a vortex motion. Within the vortex, like particles combined and unlike particles separated. The denser compounds, meeting greater resistance to their random motion, became concentrated at the center of the vortex. Conversely, less dense compounds meeting less resistance spread out along the periphery of the vortex. Quali-

¹⁴Ibid., p. 284.

¹⁵Ibid., p. 285.

¹⁶Multiple versions can be found in Greek and Latin science. Of these the most important were written by the sixth-century BCE Miletians (viz., Thales [624–546 BCE], Anaximander [610–545 BCE], and Anaximenes [died ca. 525 BCE]), Heraclitus (540–475 BCE), Empedocles (ca. 500–430 BCE), Anaxagoras (ca. 488–428 BCE), the atomists [Leucippus of Miletus (332–262 BCE), Democritus of Abdera (ca. 460–370 BCE), Epicurus of Samos (341–270 BCE), and Lucretius (ca. 95–55 BCE)], the Stoics [Zeno of Cition, Cyprus (ca. 332–262 BCE), Chrysippus of Soli, Cilicia (ca. 280–207 BCE), and Posidonius of Apamea, Syria (ca. 135–51 BCE)], Aristarchus of Samos (310–230 BCE), Archimedes (287–212 BCE), Seneca (ca. 3 BCE–65 CE) Plutarch (ca. 46–120 CE) and Ptolemy (ca. 150 CE). Cf. Marshall Claggett, Greek Science in Antiquity (London: Collier Macmillan, 1955); Benjamin Farrington, Greek Science (Harmondsworth, Middlesex: Penguin, 1944–1949); Olaf Pederson and Mogens Phil, Early Physics and Astronomy (New York: American Elsevier, 1974); George Sarton, Introduction to the History of Science (Baltimore: Carnegie Institute of Washington, 1927); and Gregory Vlastos. Plato's Universe (Seattle: University of Washington Press, 1975).

¹⁷Maimonides, Guide 2.14.

tative differences in the present universe are explained by mechanical laws that govern the ratio of elements in a compound. Differences in the elements are reducible to their different densities, and differences in density are a consequence of the rotation of the original vortex.

Maimonides treated this view less seriously than he did the first three. In fact, the chapter only designates three opinions. This fourth view appears as an afterthought in Maimonides' summary at the end of the chapter. What seems to separate it from the other three is that its believers "have no knowledge of the existence of God." 18

The issues involved in these four opinions are the following: (1) Has the universe always existed, or was there a time at which it came into existence? (2) Can the universe be said to have an origin in some nontemporal sense? (3) Does God play a role in the origin of the universe? (4) Given that God does, what kind of role is it? (5) Do the principles that account for the origin of the universe involve intention (kavanah), necessity (hiyuv), chance (miqreh), or some combination of those? (6) What was the nature of the universe prior to its origin?

Concerning the first question, the Torah view and Aristotle both claim that the universe always existed. Since, as Maimonides explicitly said, creation out of absolutely nothing entails that time itself is something created, creation cannot take place in time. In other words, according to these two views it is impossible to claim that there was a time before which there was no universe whatsoever. While both the Platonic and Epicurean views could entail a temporal origin to the universe, in fact neither does. Both Plato in the *Timaeus* and the Hellenistic atomists, as Maimonides presented them, claimed that their principles provide a conceptual model for understanding the present universe; they did not give a historical account of how the universe began. Consequently, none of the four opinions mentioned actually claims that there was a time before which the universe did not exist. Similarly, in answer to the second question, all four views are attempts to give a nontemporal explanation of the universe's origin.

The third question, regarding God's role in the origin of the universe, points out the critical difference between the Epicureans and all of the others. According to the fourth opinion, the origin and nature of the universe can be explained by mechanical principles without any reference to a deity. Again, what "chance" means is that there are only material principles. None of the alternatives considered denies that such principles are necessary. Rather, the issue is whether they are sufficient. What the views of the Torah, Plato, and Aristotle share is that a sufficient account of the

¹⁸Ibid., 2.14, p. 285.

origin and nature of the universe requires in addition to efficient causes a kind of causal activity that is appropriate to deity. Maimonides judged the error of the so-called Epicurean position to be too evident to require consideration in his *Guide*.

The first real issue is the fourth question above: given that God does bring the universe into existence, what kind of role does he play? According to the Torah view, he brings the universe into existence by an act of will and volition; according to Aristotle, God acts from necessity. In Plato's case, the way that God generates the world is analogous to the way that a potter works with clay or a smith with iron. ¹⁹ The similarities and differences between these three views will be further examined.

The fifth question raises the critical issues involved in the fourth question: although there never has been a time at which there was no universe, clearly the universe did not merely happen; its existence was determined by God. Did this determination occur through an act of will, by necessity, or by some other means? Again, the Torah view's answer is will, Aristotle's necessity, and the two claims seem to be mutually exclusive.

The disagreement itself cannot be clear until these alternatives are clarified. Related to them is the sixth and final question: given that the universe has in some sense a beginning, what can be said about it prior to its origin? The Torah view says that there was absolutely nothing, while, according to Maimonides, both Plato and Aristotle denied this possibility. In Maimonides' words, the Torah view says that before creation the universe was "absolutely nonexistent" (ha-he-der ha-muhlat), whereas for Plato and Aristotle what comes to be can only come to be "from some-thing" (mi-davar).

The lines separating creation from "something" and from "nothing" are not as sharp as they might at first appear to be. Greek literature gives us two ways to say "out of nothing." Something could be said to come into existence either $\dot{\epsilon}\kappa$ τοῦ μὴ ὄντος ("out of what is no entity") or $\dot{\epsilon}\kappa$ τοῦ μὴ εἶναι ("out of what is not"). These two expressions may function as synonyms or they may be used to express alternatives between being something and nothing. $\dot{\epsilon}\kappa$ τοῦ μὴ ὄντος could be used to characterize something that exists but is not a substance. Similarly, $\dot{\epsilon}\kappa$ τοῦ μὴ εἶναι could describe something that does not exist, but, because it is a thing, is something. For example, in the first case, $\dot{\epsilon}\kappa$ τοῦ μὴ εἶναι could legitimately of a relation, while in the second case, $\dot{\epsilon}\kappa$ τοῦ μὴ εἶναι could apply to Pegasus.

Out of these two ambiguous Greek terms developed six Arabic, four Hebrew, and six Latin ways of saying "out of nothing." The Arabic expres-

¹⁹Ibid., 2.13, p. 283.

sions are mina al-m^cdūm ("from the lacking"), min lays ("from [an is] not"), la min shay² ("not from a thing"), min la shay² ("from no thing"), min la wujūd ("from no existent"), and ba^cda al-²adam ("after [or, according to] the lack"). The Hebrew idioms are me-²ayin ("from [an is] not"), mi-lo davar ("from no thing"), mi-lo meṣiy²ut ("from no existent"), and ²aḥar ha-he^cder ("after [or, according to] the lack"). Finally, the Latin translations are ex non esse ("out of [an] is not"), ex nihilo ("out of nothing"), non ex aliquo ("not out of some[thing or other]"), ex non existente ("out of no existent"), post non esse ("after [or, according to] [an] is not"), and non fit ex aliquo ("is not made out of some[thing or other]").

The relations of historical influence from the distinctions in any of these languages into the others are sufficiently complex that prima facie linguistic expression alone is insufficient to provide any insight into what a medieval philosopher meant when he denied that the universe was created out of something.

Maimonides examined in detail the arguments of Aristotle and his followers for an eternal universe created by God through necessity.²⁰ He attributed four directly to Aristotle and another four to his followers. Maimonides contended that even Aristotle did not consider these arguments to be demonstrations; that is, they do not show that this account is necessarily true. Rather, Aristotle's only intention was to show that of the various contemporary opinions about the origin of the universe this eternity/necessity account is the most reasonable and logically the most probable. Maimonides' own position was that in this case proof lies beyond the limits of human reason uninformed by revelation or authentic religious tradition rooted in revelation.²¹ Reasoning is a process of drawing inferences from premises, but it cannot on its own provide the initial premises. For people like Aristotle, who were neither prophets nor heirs to a true prophetic tradition, the only available source of first premises was sense experience. From sense experiences it is possible to draw valid conclusions beyond experience about the sensible world, but this domain is limited to the sublunar world. What is true of an observed part of this world can be extended to the whole of it, because in this case the part and the whole have the same nature. It is not logically necessary, however, that the universe in its entirety has the same nature as the sublunar world. Further-

²⁰Ibid., 2.14, 15, 17-23. Maimonides also considered a set of arguments by an unnamed group of his contemporaries (ha-'aharonim) whose position he identified, in Guide 2.21, as Aristotelian. While these philosophers explicitly affirm that the universe was created with intention (kavanah), Maimonides argued their so-called purpose was really Aristotle's necessity.

²¹Ibid., 2.16.

more, it need not be the case that the specific nature of an entity after generation is the same as it is prior to its generation. Hence, even if it were valid to infer something about the nature of the universe as such from a single sphere within the universe—the sublunar world—it does not follow that the laws that govern generation after the universe comes into existence are applicable prior to that generation. Specifically in terms of Aristotelian physics, the state of being of an entity when it is actual is not identical with its state of being when it is potential. For example, the nature of a potential human being when it is a "feminine seed" differs radically from its nature when it becomes a child.²² This is the fatal logical flaw in every Aristotelian argument if it is intended to be a demonstration. Each demonstration makes an inference from true claims based on observation in the sensible world to claims about the universe in its entirety and its origin. However, the inference is invalid.

In contrast, Aristotle himself understood these arguments in a more limited way. Given that we know nothing about the universe as a whole, it is not impossible that the universe has the same nature as its constituent domains; it is better to draw an inference from what is known than from what is unknown, from a reasoned truth than from an imagined fantasy. Hence, without any alternative source of truth, it is most reasonable to base opinions about the universe as a whole on analogies to the scientifically known nature of the sublunar world. However, Maimonides presented two distinct arguments that prove even this inference invalid.

The first²³ is based solely on the logic of the claim, and the second²⁴ is based on astronomical observations. First, if the universe came about in the way that Aristotle claimed, the existence of the universe is a necessary effect of the nature of God as a necessary being. To say that God's necessary being entails necessarily that the universe exists is comparable to saying that the definition of a triangle entails necessarily that the sum of its internal angles are 180°. The same notion of cause and effect applies in both cases. Yet nothing in the sensible world is caused in this way. Contingent entities, because they are contingent, merely happen to bring about all sorts of effects. Hence, no valid inference, even one the force of which is merely probable, can be made from contingent effects produced by contingent entities to the necessary effects of a necessary being.

Second, observed celestial phenomena seem to defy any kind of structural explanation. There does not seem to be any reason for heavenly objects to rotate from east to west rather than from west to east, or to have

²²Ibid., 2.17.

²³Ibid., 2.19, p. 303.

²⁴Ibid., pp. 306-7.

their specific different angular velocities. Nor does there seem to be any reason why different spheres contain their exact, but different, numbers of bodies.²⁵ The issue here is not merely that we do not yet know enough to explain these concrete peculiarities. Rather, Maimonides' claim was that, based on what we know and do not know, the most reasonable inference would be that there is no necessity for these phenomena. Furthermore, there would be no way to demonstrate why the circuits of the spheres are epicycles or eccentric rather than simple circles.²⁶ Aristotle's basis for claiming necessity was that it is the most reasonable assumption from what we know. Maimonides replied, however, that, given the apparent arbitrary nonuniform distribution of objects within spheres as well as the apparent arbitrary vector characteristics of their motions, the most reasonable assumption would be that, contrary to Aristotle's premise, the heavens are not governed by necessity.²⁷

The problems inherent in both arguments are avoided if we opt for the Torah view. Furthermore, it is more reasonable to infer that the present multiplicity in the universe is derived from a single agent who acts with purpose through will than to deduce complexity from the nature of a source that is essentially simple.²⁸ In other words, based on Aristotle's own methodology and independent of any consideration of revelation or authentic religious tradition, Maimonides reached the conclusion that there can be no scientific (i.e., certain) knowledge of creation, and that the notion that the universe originated through a purposeful act of divine will is the most rational belief based on empirical data. Again, the universe exists either by intention, by necessity, or by chance. In the light of specific quantitative peculiarities of the observed heavens, necessity is unreasonable.²⁹ Aristotle provided a valid demonstration that chance is the least reasonable alternative.³⁰ Therefore, the universe came into existence for a purpose intended by a willing agent.

²⁵Specifically Maimonides noted that there seems to be no way to demonstrate why spheres need to be located within spheres rather than existing independently of each other in space, why ten stars should be clustered together in the eighth sphere while other spheres contain only a single globe, or why these celestial bodies should have different areas. (Ibid., pp. 309–10)

²⁶Ibid., 2.24.

²⁷"Everything that Aristotle said about all that exists from beneath the sphere of the moon to the center of the earth is indubitably correct,... [but] everything that Aristotle expounds with regard to the sphere of the moon and that which is above it is, except for certain things, something analogous to guessing and conjecturing." (Ibid., 2.22, p. 320.)

²⁸Ibid.

²⁹Ibid., 2.19 and 22.

³⁰Ibid., 2.20.

It should be noted that Maimonides called the view he affirmed that of the Torah. However, the manner by which he affirmed it does not significantly differ from the opinion of Plato. While Maimonides started out considering four views, he eliminated consideration of the Platonic view. The standard assumption is that this second opinion, identified as the view of the "philosophers," was reduced to the Aristotelian eternity thesis. However, that is not what the text of the Guide says. Maimonides merely stated that he was not going to consider every philosophical position but instead would focus his analysis solely on the Aristotelian arguments.³¹ He did assert that both the Platonic and the Aristotelian theories shared the claim that the universe is eternal and not temporally created.³² Yet we already have noted that insofar as the Torah view claims that time itself is part of creation, it also claims that creation cannot take place in time. Furthermore, eternity is not the only major distinguishing characteristic of the four opinions listed. Equally important is how the world was created. In this respect there are three and not four alternatives listed, and the Platonic view is identifiable with the opinion of the Torah view rather than with Aristotle's. Consequently, while Maimonides did not explicitly say so and in fact his language suggests otherwise, the so-called "Torah view" does not exclude the Platonic view. Maimonides admits as much later in the Guide.³³

The Guide discusses the role of revelation in a case where judgments are made about central religious questions that are in principle indemonstrable.³⁴ We have already noted Maimonides' main conclusions. First, no correct interpretation of scripture will contradict a known scientific truth. If revelation encompasses all truth, then reason is a tool to determine revelation. Therefore, were it the case that any particular opinion about creation was demonstrated, including the necessity/eternity view, scripture could be interpreted to conform with it.³⁵ In fact, Maimonides' claim was even stronger. In this case such an interpretation would be a religious obligation. A specific example is the question of divine attributes.³⁶ The literal interpretation of scripture is that God has a body. However, since this belief is known with certainty to be false, the interpretation is inadmissible. To read scripture literally in this case is actually idolatry. Hence, with respect to

³¹Ibid., 2.14, p. 285.

³²Ibid.

³³Ibid., 2.27.

³⁴Ibid., 2.23, 25-28.

³⁵Ibid., 2.25.

³⁶Maimonides himself (Ibid., 2.25, p. 327) contrasted what scripture says about creation in time with divine corporeality.

divine attributes, a nonliteral reading of the Torah is a basic religious principle. Literalism is not to be tolerated.

Second, there are truths accessible through revelation that go beyond the limits of the domain of rational knowledge. Creation is one example. While reason leads to the conclusion that the so-called creation-in-time view is the most probable opinion about the universe as a whole, it does not lead to certain knowledge. From this perspective the Guide once again considers three options: those of the Torah, Plato, and Aristotle. This time the Epicurean view is excluded and the Platonic opinion is considered independent of the Aristotelian eternity view. Here the views of both Plato and the Torah stand in direct opposition to the doctrine of an eternal universe. The Torah view is advocated because it is the literal interpretation of scripture. Maimonides presented two arguments in its support. First, the eternity view cannot be demonstrated. Hence, an alternative view is permissible. Second, if the universe is a necessary effect of the divine nature, then there can be no miracles, and the reality of miracles is one of the "foundations of the law."³⁷ Hence, to interpret creation in agreement with the Aristotelian theory is prohibited. In other words, any doctrine that logically entails another doctrine that "destroys a foundation of the law"38 must be rejected. However, this principle is clearly secondary to the first. In respect to the Aristotelian theory. Maimonides wrote:

On the other hand, the belief in eternity the way Aristotle sees it... destroys the Law in its principle, necessarily gives the lie to every miracle, and reduces to inanity all the hopes and threats that the Law has held out, unless—by God!—one interprets the miracles figuratively also, as was done by the Islamic internalists; this, however, would result in some sort of crazy imaginings.³⁹

If the universe exists by necessity, then there can be no miracles. If there are no miracles, then there is no basis to believe in divine reward for observing the law and divine punishment for disobeying it. If divine providence does not apply to the law, then people will not obey it. If people do not obey the law, then the law will be destroyed. Hence, the Aristotelian view is prohibited. This argument assumes, however, that the view is not demonstrable. If it were known to be true, then it would be obligatory to interpret scripture's account of creation in conformity with it. If scripture

³⁷Ibid., p. 328.

³⁸Ibid.

³⁹Ibid.

were so interpreted, then the doctrine of miracles also would have to be interpreted. While there could be no miracles in the sense of direct acts of divine intervention that are exceptions to the general rule of natural law, they could be affirmed in some other less literal sense and in this way the law could be preserved. However, such interpretations would be, to say the least, forced—they would be "crazy imaginings." None of this extreme and creative mental manipulation is necessary with regard to a mere logical possibility, particularly an opinion that is not even the most reasonable one.

At this point Maimonides noted that none of the religious problems entailed by the Aristotelian opinion applied to the Platonic view and that the only reason for following the Torah view instead was that it is the literal sense of scripture.⁴¹ By inference Maimonides provided a third principle, subordinate to the first two, for interpreting the law. Given three alternative views, all of which are logically possible, but only one of which entails concepts that would endanger obedience to the law, that one is prohibited while the remaining two are permissible. Of the remaining two, the one that admits the more literal interpretation of scripture is to be preferred. By implication, however, in this case the more literal interpretation is not required. In other words, while the Torah view is preferable, the Platonic opinion is a permissible interpretation of scripture. As Maimonides' subsequent discussion in Guide 2.26-28 shows, all that is at stake in religious terms is that a purposeful view of the universe be affirmed over a purely mechanistic one. From this perspective both the Epicurean principle of chance and the Aristotelian principle of cosmological necessity are prohibited, but either a Platonic or a Torah teleological account is permissible. In fact, in the light of early rabbinic midrash⁴² and Ecclesiastes,⁴³ a Platonic interpretation would be preferable, since it would be more literal than the so-called Torah interpretation.

It might be argued that Maimonides believed that the Platonic view is better suited to determine the true interpretation of creation in Genesis. Both the Torah and the Platonic opinions easily fit the Genesis account of creation. On the other hand, there are some traditional Jewish texts that can be more easily read in the light of the *Timaeus* than by the Torah view. Maimonides explicitly mentioned a few of them. He noted that the rabbis stated in the midrash that both the divine throne and the souls of the virtuous are created and imperishable. Other midrashim claimed that additional created entities existed before the creation recounted in Genesis.

⁴⁰Ibid.

⁴¹Ibid., pp. 328-29.

⁴²Ibid., 2.26-27.

⁴³Ibid., 2.28.

These preexistent entities included paradise, hell, the heavenly sanctuary, the Torah, heaven, earth, the deep, fire, and the great garment.⁴⁴ Maimonides did not mention these texts, but there can be little doubt that he was aware of them. Furthermore, the account of creation in Genesis 1 lists a number of uncreated entities. These are earth, water, darkness, tohu, vohu, the deep, and the wind of God. It is not too difficult to find related passages in scripture that mention the creation of each of these entities, but that is not the point. Rather, the most literal interpretation of the single most important biblical text about creation is more in accord with the Platonic interpretation than it is with what Maimonides called the Torah view. To summarize, the true account of creation cannot be demonstrated, the Platonic interpretation (in contrast to the Aristotelian) does not entail any conceptual problems for the viability of Jewish law, and it (in contrast to the Torah view) facilitates the most literal reading of biblical and rabbinic texts on creation. Maimonides' conclusion should therefore have been that the law requires an interpretation of Genesis 1 in conformity with the principles of something like Plato's Timaeus.

MAIMONIDES' COSMOGONY IN CONTEMPORARY SCHOLARSHIP

From the previous textual analysis we may conclude that Maimonides ought to have interpreted (and may actually have interpreted) the requisite rabbinic belief in God's creation of the universe in terms of the cosmic schema of Plato's *Timaeus*. The basis for this interpretation is not that it is what science and philosophy demand. Rather, this interpretation provides the most coherent literal reading of what the Hebrew scriptures say.

Students of medieval Jewish philosophy will recognize that this conclusion differs significantly from what other contemporary scholars in the field have argued. Warren Zev Harvey claimed that under the pressure of the dictates of reason Maimonides secretly affirmed Aristotle's view. Herbert Davidson also believed that Maimonides held a hidden position that is a consequence of reason rather than revealed tradition. According to Davidson, however, the scientific cosmogony affirmed is Platonic, not Aristotelian. Finally, Marvin Fox denied that Maimonides had any secret

⁴⁴Maimonides (ibid., 2.26) noted this object in the name of Rabbi Eliezer as a source of perplexity.

⁴⁵Warren Zev Harvey, "A Third Approach to Maimonides' Cosmogony-Prophetology Puzzle," HTR 74 (1981) 287–301.

⁴⁶Herbert Davidson, "Maimonides' Secret Position on Creation," in Isadore Twersky, ed., Studies in Medieval Jewish History and Literature (2 vols.; Cambridge, MA: Harvard University Press, 1979) 1. 16–40.

belief about creation.⁴⁷ Rather, Maimonides—affirming what he believed to be the standard rabbinic interpretation of the Hebrew scriptures, and opposing both the Platonic and the Aristotelian scientific traditions—accepted the extreme interpretation of creation as generation out of absolutely nothing whatsoever. I shall now use the above textual analysis to critique the arguments of these scholars.

Herbert Davidson

Davidson argued that Maimonides affirmed a Platonic interpretation of creation as a consequence of reason rather than revelation. Based on the previous discussion, I do not think that his interpretation is impossible, but I do not believe that there is sufficient textual support for his conclusion. At best all that can be concluded is that whatever Maimonides actually believed, he ought to have affirmed a Platonic interpretation of creation.⁴⁸

My major objections to Davidson's analysis are the following: (1) He argued that, at the beginning of his discussion of creation, Maimonides equated the Platonic and Aristotelian positions. ⁴⁹ My contention is that he merely set aside the Platonic view to focus attention on the will vs. necessity issue. (2) Davidson believed that Maimonides' affirmation of a universe that has no temporal beginning is "secretly embraced." ⁵⁰ I have argued that, based on what Maimonides explicitly says about the creation of time, it is no secret. Furthermore, by rejecting the notion of an eternal universe, Maimonides meant that the universe was generated, even if the act of creation is not itself temporal. (3) Contrary to Davidson, Maimonides' objection to the eternity view was not that necessity is incompatible with free choice. ⁵¹ Maimonides argued rather that this schema cannot admit direct intervention by God to generate unusual acts contrary to the normal course of events. Even that was not his main objection, since he admitted the possibility of a different inter-

⁴⁷Marvin Fox, "Creation or Eternity: God in Relation to the World," in idem, ed., Interpreting Maimonides: Studies in Methodology, Metaphysics, and Moral Philosophy (Chicago/London: University of Chicago Press, 1990) 251–96.

⁴⁸In fact this is what Levi Ben Gershon (Gersonides) concluded in Treatise 6 of *The Wars of the Lord* (Riva di Trento: n.p., 1560 and Leipzig: Lark, 1866). Cf. Gad Freudenthal, "Cosmogonie et Physique chez Gersonide," *REJ* 145 (1986) 295-314; Jacob J. Staub, *The Creation of the World According to Gersonides* (Chico, CA: Scholars Press, 1982); and Charles Touati, *La Pensée Philosophique et Théologique de Gersonides* (Paris: Minuit, 1973).

⁴⁹Davidson, "Maimonides' Secret Position on Creation," 21.

⁵⁰Ibid., 22.

⁵¹Ibid., 29.

pretation of miracles. Rather, his concern was that such a view could undercut people's willingness to obey revealed law. It also is true that another foundation of the law is the existence of human choice, but that issue is irrelevant here. In any case, while there might be some connection between creation and the dogma of human choice (behirah 'enošit), free choice (behirah hofšit) is never an issue.

Lawrence Kaplan⁵²

Harvey argued that Maimonides really believed in Aristotle's view. Harvey's interpretation of Maimonides' position on cosmology presupposed Lawrence Kaplan's analysis of Maimonides' position on prophecy.⁵³ Hence, before I can discuss Harvey, I must say something about Kaplan.

Kaplan's essay was a critical interpretation of what Maimonides meant when he introduced his discussion of the different views of prophecy by saying that the "opinions of people concerning prophecy are like their opinions concerning the eternity of the world or its creation in time."54 He listed the views on creation as (C1) that of the law of Moses (i.e., the Torah), that says (to paraphrase Kaplan's summary) the universe was created in time out of nothing, (C2) that of Plato, who believed that the universe was created out of eternal matter, and (C3) that of Aristotle, who believed in an eternal universe that was not created. The different views on prophecy are (P1) that of the masses,⁵⁵ who believe that there are no preconditions for prophecy because God may choose anyone he wills to choose, (P2) that of the Aristotelians, who believe that anyone with the appropriate degree of mental and moral excellence will become a prophet, and (P3) that of the law of Moses. What P3 says is a matter of dispute. Kaplan noted that most modern scholars interpret it as a kind of synthesis of P1 and P2 that says that prophecy presupposes both the appropriate human excellences (as P2 stipulates) and an act of divine will (as P1 stipulates).⁵⁶ Kaplan

⁵²The writing of this section was motivated by an address at the 1990 Annual Meeting of the Academy of Jewish Studies by Roslyn Weiss, entitled "Torah without Revelation: A New Approach to Maimonides on Creation." She was kind enough to share with me a written draft of her as yet unpublished essay.

⁵³Lawrence Kaplan, "Maimonides on the Miraculous Element in Prophesy," *HTR* 70 (1977) 233–56. Harvey, "A Third Approach," 288–89, 293, 298–99.

⁵⁴Maimonides, Guide 2.32, p. 360.

⁵⁵Or, in Harvey's translation ("A Third Approach," 290), "the vulgar."

⁵⁶The modern scholars whose positions Kaplan discussed are, most notably, Zevi Diesendruck, Isaac Husik, and Harry Austryn Wolfson.

interpreted all medieval commentators as presenting yet another position—that while (as P2 stipulates) everyone with the appropriate excellences should become prophets, and (contrary to P1) no one else can prophesy, God may withhold prophecy from those who are qualified. Kaplan himself favored a modified version of the medieval interpretation over the modern one. According to Kaplan, P3 affirms the possibility of miracles (in opposition to the Aristotelian position), but that in fact everyone qualified for prophecy receives it (in agreement with P2).⁵⁷

Kaplan concluded that what Maimonides meant when he said that the possible positions on creation and prophecy are analogous (i.e., "are alike") is that there is a one-to-one correspondence between each set of positions (i.e., each position on creation is correlated with a single position on prophecy so that they entail each other). Hence, if it can be determined which opinion Maimonides held from one set, what he believed from the other set can be logically deduced. Kaplan concluded that C1 and P3 are mutually entailed, as are C2 and P1, and C3 and P2. He then argued that Maimonides believed in the Kaplan interpretation of P3, which entails that Maimonides also believed in the Aristotelian claim that the universe is eternal and (by implication) not subject to creation.⁵⁸

I have two major objections to Kaplan's analysis of the *Guide*. First, he seems to have misinterpreted P3. Second, he may have misunderstood what Maimonides meant when he said that the views on creation and prophecy are analogous.

My reading of Maimonides' interpretation of the law of Moses on prophecy suggests that Maimonides argued that while moral and intellectual excellence are necessary conditions for prophecy (in opposition to P1), they are not sufficient conditions (in opposition to P2). Instead, only the combination of human excellence and divine will constitute sufficient conditions for prophecy.⁵⁹ This is in effect the position that Kaplan attributed to Zevi Diesendruck, Isaac Husik, and Harry Austryn Wolfson. Kaplan devoted only one paragraph to refuting this interpretation.⁶⁰ He merely quoted Isaac Abravanel to say that on this analysis there is no difference between the view of the Aristotelians and the view of the law. However, how they differ is apparent from the previous discussion. It seems to me that the source of Kaplan's (and Abravanel's) misreading of Maimonides' text is the

⁵⁷Kaplan, "Maimonides on the Miraculous," 249-52.

⁵⁸Ibid., 250–56.

⁵⁹Cf. Maimonides *Guide* 2.32–33, 36–38, esp. 2.36.

⁶⁰Kaplan, "Maimonides on the Miraculous," 236.

failure to distinguish between necessary and sufficient conditions of an event, 61 and the assimilation of these two categories as "causes." 62

Second, it seems clear that Maimonides did not intend to claim that the set of opinions on creation and the set of opinions on prophecy are isomorphic. To begin with, the two sets do not have the same number of elements. While there are three opinions on prophecy, as we have seen above, there are four opinions on creation. Kaplan (and Harvey as well) do not list the position attributed to Epicurus. More significantly, the associated beliefs in Kaplan's analysis are not mutually entailing. There is no logical reason why it could not be the case that God created the world in time out of nothing (C1) and that God could either make anyone a prophet (P1), make everyone qualified a prophet (P2), or make some (but not all and only those) who are qualified to be prophets (P3). The same can be said even if the universe was created out of eternal matter (C2), or is eternal

⁶¹There are many cases in Kaplan's essay where he should have distinguished between necessary and sufficient conditions. For example, he claimed that the interpretations of both the medieval and modern commentators are untenable because "Maimonides is not speaking of God's withholding prophecy but of God's granting prophecy" (ibid., 244). However, this is a difference of no significance. Because human excellence is a necessary and not a sufficient condition for prophecy, God must do something for someone to be a prophet, but there is nothing he must do to prevent someone from being a prophet. By not willing someone qualified to be a prophet, God withholds the prophecy. However, to "withhold" is an absence of action, not an action, and hence, as such, does not violate the principle that "God leads man to perfection" (ibid., 242). No one has ever claimed that God must do everything to perfect everyone or everything. If that were the case, then everyone or everything would be God, since to the extent that they are not God they are not perfect. Cf. Ibrahim Ibn Daud, The Exalted Faith 2:6:2 202a11-203a2 of Solomon ibn Lavi's Hebrew translation copy, Mich 57, Bodleian Library, and my commentary on it in Norbert M. Samuelson and G. Weiss, eds., The Exalted Faith of Abraham Ibn Daud (Cranbury/London/Mississauga: Associated University Presses, 1986) 241-42.

⁶²A second problem with Kaplan's interpretation is his understanding of what Maimonides and other medieval Jewish philosophers meant by "miracles." He took the term "miracle" to mean, as it often does in a modern context, an event "brought about by the direct will of God" (Kaplan, "Maimonides on the Miraculous," 234) that is contrary to the laws of nature. (Also note Kaplan's use of the concept of miracles in his discussion of Shem Tob and Efodi on p. 247.) However, I think that this is not what Maimonides meant. Rather, for him (and everyone else in this tradition), a miracle is an event witnessed to and interpreted by a prophet to have profound significance for understanding how God functions in the world. Rather than being an event that is contrary to the laws of nature, it is an event that uniquely verifies that the laws of nature are expressions of divine will. This interpretation of what a miracle is does not affect the main line of my argument with either Kaplan or Harvey, so there is no reason to present it here. However, I have argued for this interpretation in connection with Rosenzweig's analysis of the traditional concept of miracles, in Norbert M. Samuelson, "Halevi and Rosenzweig on Miracles," in David R. Blumenthal, ed., Approaches to Judaism in Medieval Times (BJS 54; Chico, CA: Scholars Press, 1984) 157–72.

and uncreated (C3). In other words, the two sets are logically independent. There may, however, be some analogy between the two. Most notably, both lists involve rabbinic and philosophical alternatives and deal with fundamental matters of Jewish faith concerning which Maimonides claimed there are opinions but not knowledge. These similarities are sufficient to constitute the analogy of which Maimonides spoke.⁶³

Warren Zev Harvey

While Harvey accepted Kaplan's argument that the sets of beliefs about creation and prophecy are isomorphic (i.e., there is a one-to-one logical correspondence between the members of each set), he rejected the specific way that Kaplan ordered the particular views. Harvey argued that the way that Maimonides himself listed the positions in fact expresses the correspondence. The world was created out of nothing in time (C1) if and only if prophecy is solely a matter of divine will (P1); creation is an atemporal act (C2) if and only if moral and intellectual excellence are the sole conditions for realizing prophecy (P2); and the universe is eternal and uncreated (C3) if and only if God may withhold prophecy from those who are qualified (P3).⁶⁴

⁶³Other points of comparison between the two sets also seem likely. For example, in both sets there are positions attributed to the Aristotelians (C3 and P2) and to the law of Moses (C1 and P3). Furthermore, as Harvey has shown convincingly ("A Third Approach," 292), within each set one view can be read as a qualification of another view. For example, P3 is a qualification of P2—not everyone qualified for prophecy receives prophecy; and C2 is a qualification of C3—not everything is subject to generation and corruption, i.e., while everything within the universe is subject to change in time, the universe (everything that is, including prime matter) is eternal, and therefore creation is not a temporal act.

⁶⁴Harvey, ("A Third Approach," 289-300). Harvey's argument for the entailment of C1 and P1 seems to involve a misunderstanding of the term "supernatural" that parallels Kaplan's apparent misunderstanding of the term "miracle." Maimonides explicitly stated that a motive for rejecting the Aristotelian opinion on cosmogony (C3) is that it excludes the possibility of miracles. However, Harvey did not take this to be a serious objection to C3, because Maimonides also stated (Guide 2.25, p. 328; 2.29, pp. 345-46) that the view of the Torah on prophecy (P3) "need not be taken as referring to a supernatural miracle" (Harvey, "A Third Approach," 291), and that, according to Guide 2.25, it is possible to interpret miracles in such a way as to be coherent with "Aristotle's theory of eternity" (Harvey, "A Third Approach," 291 n. 15). The implication of this footnote is that Harvey believes that a miracle is something supernatural in the sense that it contradicts a law of nature. However, as we have already stated, this is not what Maimonides meant by a miracle. If such an act is "supernatural," it is not in the sense of being unnatural; rather, it is an act that goes beyond human nature. Clearly a prophet is seen to do something beyond human nature—he has a disposition to act in a way that human beings who are less than prophets are not able to do. In this sense prophets, because they can prophesy, naturally are superhuman. Similarly, humans, because

Harvey's strategy was to argue positively that Maimonides held what he called the Aristotelian view (C3), rather than arguing negatively against the other two alternatives. However, he did adopt one argument against the Platonic view (C2) from Kaplan. Harvey believed that Kaplan argued "decisively"65 against C2 when he said that the Platonic view entails that the heavens be subject to generation and corruption, which further entails that there exists no "rational, natural order." 66 However, none of these entailments holds. The Platonic universe is no less eternal than the Aristotelian. As we have already seen, time itself is an object of creation, which means that the dimension of time extends to everything within the universe, but not to the universe as a whole.⁶⁷ The heavens are within the universe, and therefore subject to time. However, as the universe is eternal, the domain of time within the universe may be infinite, that is, without beginning or end. Furthermore, there is no logical reason why something within the universe (e.g., the heavens) could not persist within endless time without change. Even if the heavens were subject to change, that fact in itself would not entail that there was no fixed natural order, since such change could follow natural laws that are as invariable as the laws that Maimonides believed applied to all of the changing things within the sublunar world. Maimonides clearly argued that the laws of the superlunar world are not the same as those of the sublunar world,⁶⁸ but nowhere did he suggest that there is not a different set of laws that govern the heavens.⁶⁹

Although Harvey did not believe that it is possible to prove what was Maimonides' true position on cosmogony, he did claim that the following factors make the Aristotelian position the most likely. First, Maimonides' proofs of the existence, unity, and incorporeality of God⁷⁰ in the *Guide* 2.1–2 presuppose the Aristotelian position. However, Harvey seems to have misstated Maimonides' arguments for God. The argument does not begin in

they can reason, naturally are super-animal, and animals, because they can initiate their own locomotion, are super-mineral. Furthermore, as we have seen above, Maimonides' qualification about interpreting the biblical witness in a nonliteral way is to establish the viability of the Platonic position of eternal creation (C2), and not the position of the Aristotelians (C3).

⁶⁵ Harvey, "A Third Approach," 292.

⁶⁶Kaplan, "Maimonides on the Miraculous," 250, 253.

⁶⁷Harvey ("A Third Approach," 293) in fact granted that there is no logical incompatibility between the claim that the universe is created and the claim that it is eternal.

⁶⁸I take this to mean that Maimonides limited the validity of Aristotelian science to Aristotle's *Physica*, to the exclusion of both *De caelo* and *Metaphysica*.

⁶⁹In fact, it would be obvious to any Aristotelian that the laws are different. For example, whereas natural motion in the sublunar world is rectilinear, natural motion in the heavens is circular.

⁷⁰Henceforth this threefold claim about God will simply be referred to as "God."

2.1, but rather in 1.73. Maimonides argued that either the universe is eternal (in the sense of C3) or created (in the sense of either C1 or C2); if we assume that it is created, we may demonstrate God. This is the argument in 1.73–76. Similarly, if we assume that the universe is eternal, we may also demonstrate God. This is the argument in 2.Introduction and 2.1.⁷¹ The premise of the whole argument is neither that the universe is eternal nor that it is created; rather, it is that these two alternatives encompass all possibilities.⁷²

Second, Maimonides stated that many believing Jews affirmed the eternity of the world.⁷³ Maimonides' interpretation of the first verse of Genesis also established that creation is not a temporal act. This interpretation, however, is just as consistent with the Platonic position as it is with the Aristotelian thesis.

Harvey's key argument was his third and final one.⁷⁴ He argued that on careful analysis there is no conceptual difference between Maimonides' and Aristotle's descriptions of necessity, divine will, and purpose. Hence, there is no basis for Maimonides' explicit denial of an Aristotelian cosmogony (C3). Maimonides' major objection to C3 is that it entails necessity, which is logically incompatible with divine will and purpose. A consequence of God's oneness, however, is that all attributes of God are identical. For example, to say that God has will means the same as saying that God has wisdom. Hence, Maimonides' analysis of divine unity "effectively strips the concept of God's will of any cognitive meaning." The same judgment applied to divine purpose, because all attributes predicated of God are absolutely equivocal with attributes predicated of anything else. Furthermore, there are specific texts within the *Guide* where Maimonides affirmed divine necessity. The same is a supplied to divine unity the same is a supplied to divine purpose, because all attributes predicated of God are absolutely equivocal with attributes predicated of anything else. Furthermore, there are specific texts within the *Guide* where Maimonides affirmed divine necessity. The same is a supplied to divine unity the same is a supplied to divine unit

What is problematic in this argument should be clear from my previous analysis of the relevant texts in the *Guide*. Harvey missed the point of why Maimonides distinguished between divine will and purpose, on one hand, and necessity, on the other hand. Neither Aristotle nor Maimonides believed that the universe is totally determined. Both granted that absolute

⁷¹Harvey ("A Third Approach," 296) identifies the text as Guide 2.1-2.

⁷²The form of argument employed here is a *modus tollens*, that is, (1) either A or B; (2) if A, then C; (3) if B, then C; (4) therefore, C. In this case, A = the world is created; B = the world is eternal; C = God. Cf. Norbert M. Samuelson, "Comments on Maimonides' Concept of Mosaic Prophecy," *Central Conference of American Rabbis Journal* 18 (1971) 9-25.

⁷³Maimonides, Guide 2.26. For Harvey's discussion, see "A Third Approach," 296-97.

⁷⁴Harvey, "A Third Approach," 297-98.

⁷⁵Ibid., 297.

⁷⁶Ibid., 297 n. 40. Cf. Maimonides, Guide, 2.13, p. 284.

determinism extends only to the level of the species; at the level of the spatial/temporal particulars, there is indeterminism. Similarly, both agreed that even particulars have causes. Aristotle, however, understood all particular events in terms of principles of chance, whereas Maimonides understood human particular events in terms of divine will and purpose. Therefore, Harvey ought not to have concluded from Maimonides' analysis of divine attributes that this difference is insubstantial. What is at stake here is not anything about the nature of God; rather, the issue is what kind of causes explain particular events. As we learn from Plato's *Timaeus*, necessity is associated with chance, which in turn is associated with what Aristotle called mechanical or efficient causes. To Given Maimonides' analysis of the nature of God, a universe that exists by necessity can be explained completely by these kinds of causes. In other words, there is no need for what Aristotle called formal or teleological causes. The consequence of this view is that the universe has no purpose. The consequence of the state of the st

In the end the purpose of the universe is at stake in Maimonides' defense of creation. Both Aristotle's (C3) and Plato's (C2) cosmogonies affirm that the origin of the universe is an atemporal, eternal divine activity. Similarly, both affirm cosmologies in which time is endless within the universe, the universe itself is eternal (i.e., not subject to temporal modification), and for every event there are both necessary and sufficient conditions. However, Maimonides saw precisely what Spinoza would see centuries later, namely, that Aristotelian cosmogony logically entails a universe the very existence of which is attributable to chance, with the consequence that (as is true of modern science) knowledge consists solely in determining mechanical causes for events. It is this consequence of C3 that Maimonides found to be objectionable. He did not reject this position on the grounds of reason, but because the notion of a purposeless universe is in fundamental conflict with the kind of universe presupposed in all of the Hebrew scriptures. The cosmogony of the Timaeus (C2) enabled him to adopt a world view that was consistent both with what can be known in science through reason and

⁷⁷In the Timaeus necessity (ἀνάγκη) is intimately associated with spontaneity (τὸ αὐτόματον), nature (φύσις), and chance (τύχη). Its complement, however, is associated with design (τέχνη) or more literally, with what requires "skill" and "craft." Cf. Plato Timaeus 47e–48e; Francis MacDonald Cranford, Plato's Cosmology (Indianapolis: Bobbs-Merrill, n.d.) 165; Plato Leges 10; Aristotle Physica 2.4–6; Aristotle Metaphysica A3–10, B2; and Friedrich Solmsen, Aristotle's System of the Physical World: A Comparison with his Predecessors (Ithaca: Cornell University Press, 1960) 102–17.

⁷⁸I suspect that Spinoza read Maimonides in much the way that Harvey did and that this misreading of Maimonides' position is at the heart of Spinoza's affirmation of mechanical necessity and denial of purposive causation in his *Ethics*.

with what is the most literal, coherent reading of the revealed scriptures of the Torah.

Marvin Fox

Fox thought that Maimonides had a definite position on creation that is not esoteric, that is contrary to the stated positions of both the Aristotelians and the Epicureans, and that is affirmed ultimately because of the evidence of scripture. In this reading he and I are in agreement. However, in opposition to my conclusions, Fox claimed that Maimonides believed that his affirmed dogma of creation out of nothing includes creation in time and excludes the cosmological model of the *Timaeus*.

Concerning creation in time, the critical text against Fox is the Guide 2.13, p. 281, where Maimonides explicitly says that time is created.⁷⁹ If time is an object of creation, then the act that produces this object cannot itself take place in time. Concerning Maimonides' rejection of Plato's view, Fox's critical text against me⁸⁰ is the Guide 2.13, pp. 283-84, where Maimonides says that Plato "does not believe what we believe." In other words, Fox may reasonably claim that Maimonides rejected Plato's view. My response is to offer an alternative reading of the passage in question. In the Guide 2.13 Maimonides introduced the different positions to be considered. Here the pedagogic intent was to make the alternatives sharp and clear. Consequently, he simply identified Plato's position as an example of those views that say that the world was created "from a thing."81 In contrast. Maimonides said that "we believe" that it was created la min shav³ ila ba^cd al-³adam al-mutlaq,⁸² which literally means "not from a thing, but according to the absolute lack." At this early stage of the discussion, Maimonides' statement of Plato's position is clear and straightforward; it is this sharply drawn position that he rejected. 83 However, Plato need not, and probably, ought not, be interpreted so simplistically. As Maimonides cryptically noted later,84 Plato and Genesis can be interpreted to be in agreement, that is, they both claim that God created the universe out of a

⁷⁹See n. 12 above.

⁸⁰ Fox. "Creation or Eternity." 290.

^{81&}quot;min shay" in the original; "me-davar" in Ibn Tibbon's Hebrew translation.

^{82&}quot;lo me-davar 'ela ahar ha-he'der ha-muhlat" in Ibn Tibbon's Hebrew translation.

⁸³In fact Maimonides (*Guide* 2.13, p. 283) explicitly said that at this stage of the argument he is oversimplifying the alternatives, "The people belonging to this sect [who affirm a Platonic view] are in their turn divided into several sects. But it is useless to mention their various sects and opinions in this Treatise."

⁸⁴Ibid., 2.25, pp. 328-29.

prime matter that is not a thing.⁸⁵ In fact this is the move that Gersonides would make explicitly in his account of creation.⁸⁶

Finally, a word about how Maimonides understood the relationship between reason and revelation is in order. With the exception of Fox, all of the critics seem to believe that Maimonides was faced with sets of opposing faith commitments—those of scientific reason (expressed in the writing of the Platonists and/or the Aristotelians) and those of revealed tradition (expressed in the Hebrew scriptures with their rabbinic commentaries) between which he had to make choices. This opposition, however, is false. Maimonides believed that both sets of writings expressed differing but valid ways for human beings to strive to discover truth. Fox claimed that for Maimonides this commitment consisted in affirming a "dialectical tension" between "diverging" beliefs, necessitated by the incongruent results of the two sources.⁸⁷ On this interpretation Maimonides could live with belief in what he recognized to be incoherencies in thought. The preceding analysis of Maimonides' doctrine of creation suggests another model for this dialectic that can be best described (in the language of John Rawls) as "reflective equilibrium."88 Maimonides' goal was to discover what is true and what is right. To attain this end, neither independent exercise of human reason nor obedience to a tradition is sufficient. For Maimonides the path to wisdom was an asymptotic process of interpreting things through reason and texts as they are inherited from tradition. Of course, Maimonides knew that human beings cannot reach this end as long as they remain human. To paraphrase Hermann Cohen, Maimonides' deity of truth and goodness stands fixed as the messianic ideal towards which we, guided by universal reason and particular traditions, in act and in thought, direct our lives.⁸⁹

^{85&}quot;Prime matter" is not the same thing as the "existent matter" that Maimonides (Guide, 2.13, p. 283) discussed.

⁸⁶Levi Ben Gershon (Gersonides), *The Wars of the Lord*, Treatise 6. Cf. n. 48 above. ⁸⁷Marvin Fox, "Maimonides' Method of Contradictions: A New View," in idem, *Interpreting Maimonides*, 67-90.

⁸⁸ John Rawls, A Theory of Justice (Cambridge, MA: Harvard University Press, 1971).
89 Cf. Steven S. Schwarzschild, "Moral Radicalism and 'Middlingness' in the Ethics of Maimonides," Studies in Medieval Culture 11 (1977) 65-94, reprinted in Menachem Kellner, ed., The Pursuit of the Ideal: Jewish Writings of Steven Schwarzschild (Albany: SUNY Press, 1990) 137-60.