

23. *The Incoherence of the Philosophers,* On the Eternity of the World

[1] *Differentiating the Received View.* The philosophers differ concerning the world's eternity, but the opinion upon which the majority of them, modern and ancient, have settled is to claim that it is eternal. It has never ceased existing together with God (exalted is He!) but is His effect and is concurrent with Him, not being temporally posterior to Him but [exists together with God] in the way that the effect is concurrent with the cause, such as light is concurrent with the Sun. Also the Creator is prior to it like the cause is prior to the effect, namely, essentially prior and prior in rank but not in time.

[2] That the world is generated and created in time is referenced in Plato.¹ Some of the [philosophers] subsequently interpreted away his [literal] words, denying that he believed in the world's temporal creation.

[3] At the end of Galen's life, in the book titled *What Galen Believes to Be Opinion*, he reached a deadlock on this problem, not knowing whether the world is eternal or temporally created. He may have shown that it could not be known—not because of a

deficiency on his part, but owing to the inherent difficulty of this problem itself for [human] intellects. This, however, is something of a deviation from the standard view of all of them, which is simply that [the world] is eternal, and in general that it is wholly inconceivable that something temporal should proceed immediately from something eternal.

[4] *The Presentation of Their Proofs.* If I were to digress to describe what has been conveyed in order to exhibit their evidence and what has been mentioned in rejecting it, I would fill many pages on this problem; however, there is no good in lengthening the discussion. So let us omit their proofs that are arbitrary or weak fancy, which any one with reason can easily resolve, and limit ourselves to presenting [the proofs] that leave a strong impression on the mind and that can give rise to doubt even for those of outstanding reason; for by the most feeble [of proofs] one can produce doubt in the weak.

[5] [. . .] [*Their Strongest Proof.*] They claim that the procession of the temporal from the eternal is absolutely impossible. [That is] because when we posit the eternal but not, for example, the world's proceeding from it, then it does not proceed precisely, because there is no selectively determining factor for the [world's] existence, but rather the world's existence would be a pure possibility. So if [the world] temporally comes to be after that, then a selectively determining factor must either come to be anew or not. On the one hand, if a selectively determining factor does not come to be anew, then the world remains purely possible just as it was before. On the other hand, if a selectively determining factor comes to be anew, then who is the creator of that selectively determining factor, and why did it temporally create now and not earlier? The question concerning the temporal creation of the selectively determining factor still stands.

[6] In brief, when the states of the eternal are similar, then either nothing exists from it or [something]

From *Classical Arabic Philosophy*, tr. Jon McGinnis and David C. Reisman (Indianapolis: Hackett Publishing Company, 2007). Reprinted by permission of the publisher.

1. Al-Ghazālī is referring to the creation account presented in Plato's *Timaeus*. Within the ancient and medieval worlds there was a debate about what Plato's true position was. Speusippus and Xenocrates, Plato's successors at the Academy, thought that Plato's eternal *demiurge*, or God, was causally, but not temporally, prior to creation. The Middle Platonists Plutarch and Atticus in contrast maintained that Plato thought that the world was created at some first moment in time. The great Neoplatonist Proclus criticized this latter interpretation of Plato in a work *On the Eternity of the World*, which was in its turn criticized by the later Neoplatonist John Philoponus in his *Against Proclus*. Both works were available in Arabic translation.

exists perpetually, for it is impossible to distinguish the state of refraining from the state of commencing.

[7] Its independent verification is to ask, "Why did [the Creator] not temporally create the world before [the moment] of its creation?" It can neither be attributed to His inability to create temporally nor to the impossibility of the temporal creation. Indeed, that would lead either to a change in the Eternal from being unable [to create] to having the power [to create], or to the world's changing from being impossible to being possible, both of which are absurd. It cannot be said that there had been no previous wish and thereafter a wish came to be anew. Also it cannot be attributed to lacking an instrument, which thereafter came to exist. In fact, the nearest one can imagine is to say, "[The Creator] did not will its existence," in which case it must be said, "[The world's] existence came to be because He came to will its existence after not willing [it]." In that case the will would have been temporally created, but its temporal creation in Him is absurd, because He is not that in which temporally occurring things inhere, and [the will's] temporal creation is neither in Him nor makes Him One Who wills.

[8] Let us set aside speculating about the substrate of [the will's] creation. Does not the difficulty concerning the origin of [the will's] creation still stand, namely, from whence is it created and why was it created now but not earlier? Was its being created now not due to God? If there can be a temporal event without a creator, then let the world be a temporal event that does not have a Maker, otherwise what is the difference between one temporal event and another? Also, if it is created by a creation of God, then why did He create now and not earlier? Was it because of an absence of an instrument or power or intent or nature? But then why, if that [absence] is replaced with existence, was it created? The very same difficulty returns! Or is it owing to the absence of the will? But then the will would need a will and likewise the first will, [resulting] in an infinite regress.

[9] Thus, it has been independently verified by absolute argumentation that the procession of the temporal from the eternal without the change of something pertaining to the eternal, whether a power, instrument, moment, intent, or nature, is absurd. To assign a change of state [to the eternal] is impossible,

because that temporal change would be like any other, the whole of which is absurd. Inasmuch as the world exists and its temporal creation is impossible, its eternity is necessarily established.

[10] This is the most imaginative of their proofs. In general, their discussion concerning the rest of the metaphysical problems is poorer than their discussion concerning this problem, since here they exploit certain sorts of imagination that they cannot in the others. Because of that we have treated this problem, the strongest of their proofs, first.

[11] The refutation comes from two fronts.

[12] The first of them is to ask, By what means would you [philosophers] censure one who says, "The world is temporally created by means of an eternal will that made necessary [the world's] existence at the moment at which it came to exist; [the world's] nonexistence continued to the limit up to which it continued, and the existence began from whence it began; before the existence it was not something willed and so owing to that was not created, but at the moment at which it was created, it was willed by the eternal will and so owing to that was created"? What precludes this belief and would render it absurd?

[13] It might be said that this is self-evidently absurd, because the temporal is something necessitated and caused. Just as it is impossible that there is something temporal without a cause and what necessitates it, [so likewise] it is impossible that what necessitates should exist, having been complete in the conditions, principles, and causes for its necessitating, such that no awaited thing remains at all, but then what is necessitated is delayed. Quite the contrary, the existence of what is necessitated is necessary when there is the realization of what necessitates with the completion of its conditions. The absurdity of its delay is tantamount to the impossibility that the temporally necessitated exists without what necessitates [it].

[14] Before the world's existence, the one who wills, the will, and its relation to the one who wills [all] existed, and neither did the one who wills, nor the will, nor some relation that did not belong to the will come to be anew, for all of that is to change. So [the rebuttal continues], how did that which is willed come to be anew, and what prevented [its] coming to be anew earlier? The new state is no different from

the previous state with respect to some factor, state of affairs, state, or relation. In fact, the states of affairs were just the same as they were [before]. Therefore, what is willed would not have existed but would have remained the same as it was. But [on the present view] the willed object comes to exist! What is this, but the most extreme absurdity?!

[15] The impossibility of this type is not only in what necessitates and what is necessitated necessarily and essentially, [continue the philosophers], but also in the customary and conventional; for if a man were to pronounce [the legal declaration] divorcing his wife and the separation were not to occur immediately, then it is inconceivable that it would occur later, because the pronouncement is made a cause of the [divorced] status by convention and accepted practice. So the delay of the effect is unintelligible unless the divorce is linked with the coming of tomorrow or the entrance into the house, and so it does not occur immediately. It will occur, however, with the coming of tomorrow or the entrance into the house, for he has made it a cause in relation to some awaited thing. So since it, that is, tomorrow or the entrance, is not present at the moment, the occurrence of what is necessitated [must] await the presence of what is not present. So what is necessitated does not occur unless something has come to be anew, namely, the entrance or the presence of tomorrow. Even if he were to want to delay what necessarily results from the [legal] declaration without [making it] conditional on an event that is not [presently] occurring, it would be unintelligible, despite the fact that it is conventional and that he makes the choice with respect to the details of the convention. So if we cannot posit this [delay] by our own desire, nor make it intelligible, then how can we make it intelligible with respect to essential, intellectual, and necessary necessitations?

[16] Concerning customary things, what occurs by means of our intention is not delayed after there is the intention along with the intention to do it, except by some obstacle. So if the intent and power are realized and the obstacles removed, then the delay of what is intended is unintelligible. The former is conceivable only in the case of resolve, because the resolve is insufficient for the action's existence. In fact, the resolve to write does not occasion writing so long as there is

not also a renewal of the intention, that is, the renewal of the state to act reemerges in the human [at the time he does write].

[17] If the eternal will has the same status as our intention to act, then, unless there is an obstacle, it is inconceivable that what is intended should be delayed and that the intention should be earlier [than the act]. So an intention today to carry through [with some action] tomorrow is intelligible only by way of resolve. If the eternal will has the same status as our resolve, then that [alone] is insufficient for the occurrence of what is resolved; rather, at the time that [what is resolved] is made to exist, there is inevitably a new intentional reemergence, in which there is an admission that the Eternal changes. Moreover, the very same difficulty remains concerning why that emergence or intention or will (or whatever you want to call it) was created now and not earlier. So it still remains [that] a temporal event is either without a cause or there is an infinite regress.

[18] The gist of the discussion reduces to the necessitating thing's existing with the conditions for [the necessitated effect] completed and no anticipated thing remaining, and yet what is necessitated is delayed, and delayed for a period of time whose beginning the imagination cannot even fathom—indeed, a thousand years would not even be a drop in the bucket—and then all of a sudden the necessitated thing pops up without anything's coming to be anew or some condition being realized. This is simply absurd!

[19] The response is to ask whether it is through the necessity of reason or inference that you [philosophers] know that an eternal will that is related to a certain thing's temporal creation (whatever that thing should be) is impossible? According to your own logical terminology, do you know the connection between these two terms [i.e., “eternal Will” and “temporal creation”] through a middle term, or without a middle term? If, on the one hand, you maintain that there is a middle term, which is the way of inference, then it must be made obvious. If, on the other hand, you maintain that that [connection] is known necessarily, then how is it that those at odds with you do not share your view about its being known [necessarily]? [And why is it not the case that] no land contains the school of thought that believes in the world's temporal cre-

ation by an eternal will, when [in fact] there are innumerable [lands whose people believe in creation]? Undoubtedly they do not stubbornly disregard [their] intellects while possessing the knowledge. Thus, it is incumbent [upon you] to construct a logical demonstration that shows the impossibility of that, since in all of what you have stated [you have shown] only improbability and analogy with our resolve and will. On the one hand, [the analogy] is imperfect; for the eternal will is not analogous with temporal intentions. On the other hand, probability taken simply is not enough [to show that the world is eternal] without a demonstration.

[20] It might be said, "We do know by the necessity of reason that what necessitates with the completion of its conditions is inconceivable without there being what is necessitated, and the one who allows [otherwise] is showing contempt for the necessity of reason."

[21] We ask, What is the difference between you and your opponents when they say to you that we necessarily know the inconsistency of the claim, "A single entity knows all the universals without that [knowledge] requiring multiplicity, and without the knowledge being something additional to the entity, and without the knowledge being made multiple despite the multiplicity of objects known"? This is your position concerning God's reality, but with respect to us and to what we understand, it is inconsistent in the extreme! But you will say, "Eternal knowledge is not to be compared with temporal [knowledge]." Now there is a group among you who was aware of the inconsistency of the above and so said that God only knows Himself, in which case He is what intellects, the intellection and the object of intellection, and the whole is one. What if one should say that the unification of intellection, what intellects, and the object of intellection is necessarily impossible, since it is necessarily absurd to suppose that the world's Maker does not know what He makes? If the Eternal knows only Himself (may He be greatly exalted above your claim and the claim of all those who distort the truth), then He simply will not know what He makes.

[22] In fact, we would not be overstepping the requirements of this question to ask by what means would you censure your opponents should they say that the world's eternity is absurd, because it comes

down to affirming an infinite number of rotations of the celestial sphere, whose units are innumerable, while simultaneously [affirming that those units are divisible into] sixths, fourths, and halves? For the sphere of the Sun completes its rotation in one year, whereas it takes the sphere of Saturn thirty years; thus Saturn's rotations are three-tenths those of the Sun. Also Jupiter's rotations are one-half of one-sixth [i.e., one-twelfth] those of the Sun, for it completes a rotation in twelve years. Moreover, Saturn's number of rotations would be infinite, just as is the Sun's; nevertheless, [Saturn's] would be three-tenths [of the Sun's]. In fact, the infinite number of rotations of the sphere of the fixed stars, which takes thirty-six thousand years to complete a single rotation, would be equal to the infinite number of the Sun's eastward motions, which are [completed] in but a day and night. Should one say that this is something whose impossibility is known necessarily, how would you dispose of his claim?

[23] Indeed, one might ask whether the number of these rotations is even, odd, both even and odd, or neither even nor odd. If you say either that they are both even and odd or that they are neither even nor odd, the falsity [of this claim] is known necessarily. If you say that they are even, in which case the even would become odd by one unit, then how could what is infinite be lacking one unit? If you say that they are odd, in which case the odd would become even by one unit, then how could it lack that single unit by which it would become even? Thus, the claim that [the number of rotations] is neither even nor odd becomes incumbent upon you. If it is said that even and odd are attributed only to the finite but are not attributed to the infinite, we reply that a totality composed of units that has a sixth and tenth, as previously mentioned, and yet even and odd is not attributed to it, is known to be false necessarily without reflection. So by what means do you disassociate yourselves from this?

[24] [The philosopher] might say that the locus of the error is in your claim that [the heavenly rotations] are a totality composed of units; for these rotations are nonexistents. [They are] either past, and so they no longer exist, or future, and so they do not yet exist, whereas "totality" indicates presently existing things, but in this case there is nothing existing [such as to be a totality].

[25] We say that number divides into the even and odd, and it is impossible that what is numbered should lie outside of [this division], regardless of whether it is something that continues to exist or perishes. So when we posit a number of horses, we must believe that [the number] is either even or odd, regardless of whether we suppose [the horses] to be existing or nonexistent. If they cease to exist after existing, this proposition does not change.

[26] Moreover, we say to them that it is not impossible according to your own principles that there are presently existing things that are individuals varying in description and [yet] are infinite, namely, the human souls separated from the body by death, in which case they will exist without even and odd being attributed to them. So by what means do you censure the one who says that the falsity of this is recognized necessarily just as you claimed that the eternal will's association with creating temporally is necessarily false? This opinion concerning the soul is the one that Ibn Sīnā chose and perhaps is Aristotle's position as well.

[27] It might be said that the truth lies with Plato's opinion, namely, that the soul is eternal and one and divided only with relation to bodies, but when they are separated from [the bodies], they return to their source and are united.² We say that this is most atrocious, most repugnant, and most deserving of being believed to be contrary to the necessity of reason. For we ask: Is Zayd's soul the very same soul as 'Amr's or is it different? If it is the very same one, then it is necessarily false, for everyone is aware of himself and knows that he is not some other individual. If it were the very same, then the two would be the same with respect to the things they know, which are essential attributes of the souls, entering along with the souls into every relation. If you say [Zayd's and 'Amr's souls] are different and divided only by the association with bodies, we say that the division of the individual who has no magnitude with respect to bulk and quantitative magnitude is absurd by the necessity of the intellect. So how will the individual [soul] become two—in fact a thousand—and thereafter return and become one!?

2. See Plato, *Meno* 81a–e; *Phaedo* 81e–82b; and *Republic* 617d–621d.

Indeed, this is intelligible concerning what has bulk or quantity, such as the water of the sea, which divides into streamlets and rivers and then returns to the sea, but as for what has no quantity, how could it be divided!?

[28] The whole of our intention is to make clear that [the philosophers] have neither undermined the belief of those who oppose them concerning the eternal will's relation to creating temporally, except by the pretension of necessity, nor have they disposed of the one who invokes necessity against them in those issues that are opposed to their belief, from which there is no escape.

[29] It might be, [the philosopher complains], that this turns against you in that God was able to create the world before He did by a year or several years owing to His infinite power. It is as if He bided His time, not creating, and then created. Is the [temporal] extent of [His] refraining either finite or infinite? If you say, on the one hand, that it is finite, the existence of the Creator goes back to the finite beginning. On the other hand, if you say that it is infinite, then there would have been a period during which an infinite number of possibilities had elapsed.

[30] We say that in our opinion duration and time are created, and we shall explain the true nature of the answer to this when we dispose of their second proof.³

[31] If [the philosopher] asks by what means would you deny one who refrains from invoking necessity and proves [the impossibility of an eternal will's temporally creating the world] in another way, namely, that moments of time are indiscernible with respect to the possibility that the will has a preference for [one of] them [over the others]. So what is it that distin-

3. The philosophers' second argument for the eternity of the world and al-Ghazālī's refutation of it are not translated here; however, the philosophers' argument is much like that outlined in the immediately preceding paragraph, 29. Al-Ghazālī's response was to say that since time is among the things that God creates, it is inappropriate to ask about the time when God was not creating. The philosophers have been misled by the estimative faculty, continued al-Ghazālī, into assuming that since one can imagine something only as existing in time, whatever exists must be in time.

guished one determinate moment of time from what was before or after it, when it is not absurd that what is willed should be earlier and later? In fact, with respect to white and black and motion and rest, you [theologians] yourselves say that the white is temporally created by the eternal will, but the substrate is [just as] receptive to black [as] it is to receiving white. So why does the eternal will prefer white over black? What is it that distinguished one of the two possibilities from the other with respect to the will's having a preference for it? We [philosophers] know necessarily that something cannot be distinguished from its like except by some specific property. Now if [some specific property] were possible, then the temporal creation of the world would be possible. [In fact], however, the possibility [of the world's] existing is just like the possibility [of its] not existing, and the aspect of existing, which is like the aspect of not existing with respect to possibility, would be specified without any specific property. If you [theologians] say that it is the will that specifies, then the question arises about the will's specifying: "Why did it specify [it]?" If you say that why-questions do not apply to the eternal, then let the world be eternal and do not seek its Maker and cause, because why-questions do not apply to the eternal.

[32] Next, [continues the philosopher's objection], if one allows that it is by chance that the eternal [will] specified one of the two possibilities, then it is at the pinnacle of improbability to say that the world is specified by some specific design when it could have been according to some other design instead of [the one it in fact has], and so its occurring as such would be said to be by chance. Just as you said that the will specified one moment to the exclusion of another, it [would have specified] one design to the exclusion of another by chance. If you say this question is not necessary because it arises for whatever He wills and refers to whatever He has power over, we say, "No! Quite the contrary, this question is necessary because it does refer to any moment and is necessary for whoever differs from us concerning [whether there is] any power over [something]."

[33] We respond that the world came to exist when it did and according to the description [with] which it came to exist and in the place in which it came to exist only by will. The will is an attribute whose charac-

ter is to distinguish something from its like. If this were not its character, then one would settle content with the power; however, since the power's relation to two contraries is equal, and there must be something that specifies one thing from its like, it is said that, in addition to power, the Eternal has an attribute whose character is to specify one thing from its like. So asking, "Why did the will specify one of two things?" is just like asking, "Why does knowledge require comprehending the object of knowledge as it is?" The answer is because knowledge is equivalent to an attribute whose character is this, and so in similar fashion the will is equivalent to an attribute whose character is this. In fact, its very essence is to distinguish one thing from its like.

[34] [The philosopher] might say that affirming an attribute whose character is to distinguish one thing from its like is unintelligible. Nay, it is outright contradictory; for the sense of one's being like [the other] is that it cannot be distinguished from [the other], whereas the sense of being distinguished is that it is not like [the other]. One should not erroneously suppose that two black things in two locations are like one another in every respect, since this one is in one location while that one is in another location, and this is necessarily the distinction. Nor are two black things at two moments in time in a single location like one another absolutely, since this one is separate from that one with respect to the moment of time. So how can one be indiscernible from [the other] in every respect? When we say two black things are similar to one another, by [being similar to one another] we mean with respect to the blackness as something related to the two, specifically [as something black] not absolutely. Otherwise, if the location and time were one [and the same] and nothing different remained, then neither two black things nor their being two would be intelligible at all. This is independently verified [in] that the expression "will" is a metaphorical expression derived from our will, but it is inconceivable of us that we distinguish one from its like. Quite the contrary, if immediately before a thirsty person there were two glasses of water indiscernible in every respect in relation to his desire, he would not be able to take one of the two; rather, he would take only what seems to him superior or easier to lay hold of or nearer to his right

side (if his habit is to move the right hand) or some other such cause, whether hidden or obvious, otherwise distinguishing one thing from its like is altogether inconceivable.

[35] The response comes from two fronts.

[36] The first concerns [the philosopher's] claim that this is inconceivable. Do you recognize it as something necessary or as an inference? It is impossible to invoke either one of these. Also your likening [the eternal will] with our will is an imperfect analogy comparable to the analogy concerning knowledge. God's knowledge is distinct from our knowledge with respect to the issues that we have established. So why would the distinction with respect to [our and the eternal] will be improbable? In fact, it is just like one who says that it is unintelligible that there is a being who exists neither outside the world nor inside of it, nor is connected nor disconnected [from it], [simply] because we do not intellectually grasp it regarding ourselves. [The philosopher] may respond that the former is the work of your estimative faculty, whereas intellectual proof has led those who are intellectually endowed to affirm the latter. So by what means do you [philosophers] deny whoever says that intellectual proof leads to affirming an attribute of God (may He be exalted!) whose character is to distinguish one thing from its like? If the name "will" does not correspond with [this attribute], then give it some other name; for there is no quibble over names, and we have used it only on the sanction of the divine law. Otherwise "will" is something imposed by language in order to designate whatever concerns an object of wish, whereas with respect to God there is no object of wish. Only the meaning is intended, not the utterance.

[37] Moreover, we do not concede that regarding ourselves that is inconceivable.⁴ So [let] us posit two indiscernible dates immediately before someone who is hungrily looking at them but is incapable of taking both. He will take one of them necessarily through an attribute whose character is to specify one thing from its like. Everything you mentioned concerning specifications of superiority, proximity, or facility of access,

we determine, by supposition, to be absent, but the possibility of taking remains. You have two options: either (1) to say that the indiscernibility in relation to his desires is wholly inconceivable, which is fatuous given that the supposition [of the date's indiscernibility] is possible; or (2) to say that when the indiscernibility is supposed, the hungrily longing man would always remain undecided, staring at the two [dates] but not taking either of them simply by willing, but choosing to stand aloof from the desire, which is also absurd, whose falsity is known necessarily. Thus, anyone investigating the true nature of voluntary action, whether directly or indirectly, must affirm an attribute whose character is to specify one thing from its like.

[38] The second manner of objection is for us to say that in your own school of thought you do not dispense with specifying one thing from another; for [according to you], the world came to exist from its necessitating cause according to some specified design similar to its opposite. So why was it specified with some aspects [and not others], when there is no difference in the impossibility of distinguishing one thing from its like, whether with respect to [voluntary] action or what is entailed naturally or by necessity?

[39] You might say that the world's universal order cannot but be according to the manner that came to exist. If the world were either smaller or bigger than what it presently is, then this order would not be complete, and the same is said of the number of the celestial spheres and planets. You maintain that the large is different from the small, and that the many are distinct from the few concerning what is willed of it, and so they are not alike. Quite the contrary, [the philosopher continues], these are different, except that the human [cognitive] faculty is too weak to grasp the aspects of wisdom concerning their magnitudes and their differentiations. The wisdom is grasped only concerning some of them, such as the wisdom concerning the inclination of the sphere of the Zodiac from the equator, and the wisdom concerning the apogee and the eccentric sphere. Frequently, the underlying reason is not grasped concerning them, but their differing is recognized. It is not unlikely that one thing is distinguished from its opposite because of the thing's relation to the order. Moments of time, however, are absolutely similar vis-à-vis possibility and order, and one

4. I.e., it is not inconceivable that the human will can distinguish indiscernibles.

cannot claim that if [the world] were created after or before it was by one instant that the order would be inconceivable; for the similarity of the [temporal] states is known necessarily.

[40] We say that even though we could oppose you in a similar way with respect to the [temporal] states—since there are those who said that [God] created [the world] at the moment that was most suitable for its creation—we shall nonetheless not content ourselves with this comparison. Instead, on the basis of your own principle, we shall require you to specify [one thing from its like] in two situations concerning which no difference can be assigned. One is the difference of direction of the motion of the [celestial spheres], and the other is assigning the position of the pole with respect to the motion along the [Zodiacal] belt [i.e., ecliptic motion].

[41] The illustration of the pole is that the heaven is a sphere rotating around two poles as if the two remained fixed. The sphere of the heavens is something whose parts are similar (for it is simple) and especially the outermost celestial sphere, which is the ninth (for it is wholly without stars). Also, [these spheres] are moved⁵ around a northern and southern pole. Now we say that there are no two points among the points, which in [the philosophers'] opinion are infinite, that cannot be conceived as being the pole. So why have the northern and southern points been assigned to be poles and to remain fixed? Why does the line of the [Zodiacal] belt not pass through the two points [and continue on] until the pole returns to two opposite points on the [Zodiacal] belt? If there is a wisdom concerning the magnitude of the heavens' largeness and its shape, then what is it that distinguishes the location of one pole from another so that the one was assigned to be a pole and not any of the other parts and points, when all the points are alike and all the parts of the sphere are indiscernible? From this there is no escape.

[42] [The philosopher] might say that perhaps the position that corresponds with the point of the pole is

distinct from the others by a special property that accords with its being a location for the pole so that it remains fixed. So it is as if [the position of the pole] does not move from its place, space, position (or whatever names are applied to it), whereas the celestial sphere's remaining positions do exchange their position relative to the Earth and the [other] spheres by rotating. Now the pole's position remains fixed, and so perhaps that position was worthier of remaining the fixed position than the others.

[43] We respond that in this there is an open acknowledgment of the natural dissimilarity of the parts of the first sphere, and that [the first sphere] is not something whose parts are similar, which is contrary to your own principle, since one [of the principles] by which you proved that the heavens are necessarily spherically shaped is that the naturally simple is something similar [throughout] without dissimilarity. Now the simplest figure is the sphere (for the quadrangle, hexagon, and the like require projecting angles and their dissimilarities, which only results from something in addition to the simple nature). Even though [your response] is contrary to your own standard view, it still does not ward off the necessary consequences following from it; for the question concerning that special property arises, since [there is still the question of] whether the rest of the parts are susceptible to that special property or not. If, on the one hand, [the philosophers] say, "Yes," then why does the special property specify one from among the similar things? If, on the other hand, they say, "That [special property] is only with respect to that position, and none of the others is susceptible to it," we say that the remaining parts, inasmuch as they are a body receptive to the forms, are necessarily similar. That position [of the pole] is no more deserving of that special property [than the others] by simply being either a body or a heaven. Indeed, this sense is common to all the rest of the parts of the heaven. Inevitably, [God's] specifying it is either by fiat or an attribute whose character is to specify one thing from its like. Otherwise it is just as proper for [the theologians] to claim that the [temporal] states are indiscernible with respect to the susceptibility of the world's occurring at [one of] them as it is for their opponent [to claim] that the parts of the heaven are indiscernible with respect to the susceptibility of the

5. The text's specific claim that there are *two* things moved probably refers to what has an apparent westward motion, namely, the outermost sphere, and what has an apparent eastward motion, namely, the rest of the spheres.

thing (*ma'nā*), on account of which the position's remaining fixed is more fitting than the position's changing. From this there is no escape.

[44] The second necessity is to assign a direction to the celestial spheres' motion; some of [the spheres] move from east to west, whereas others move in just the opposite direction, despite the indiscernibility of directions. What is their cause, when the indiscernibility of directions is just like the indiscernibility of moments of times and are without difference?

[45] It might be said that if everything were to rotate in one direction, then neither would the relative positions of [the stars and planets] vary, nor would the stars' relations [to one another] as trine, sextine, in conjunction,⁶ and the like come to be. Instead, everything would have a single relative position that never varies, but these relations are the principle of coming to be in the world.

[46] We say that we are not clinging to [the position] that the difference of the motion's direction does not exist. Quite the contrary, we say that the outermost celestial sphere is moved from east to west and that which is below it [is moved] in the opposite direction. Now whatever can cause it to happen in this way can cause it to happen in the opposite way, namely, that the outermost celestial [sphere could] be moved from east to west and the opposite for what is below it, in which case there would be the dissimilarities. The motion's direction, setting aside its rotating and being opposite, is indiscernible. So why is one direction distinguished from another that is its like?

[47] If they say, "The two directions are opposites and contrary so how could they be indiscernible?" we say that this is just like one who says that priority and posteriority with respect to the world's existence are contraries, and so how can one invoke their similarity? They allege, however, that one knows the similarities of moments of time by relation to possible existence and to any benefit supposedly thought to exist. But in like fashion one knows the indiscernibility of the

spaces, positions, places, and directions by the relation to the motion's susceptibility and any benefit that is associated with it. So if they are allowed to invoke difference despite this similarity, their opponents are allowed to invoke difference concerning [temporal] states and design as well.

[48] The second objection against the principle of their proof is to say that you [philosophers] regard the temporal creation of a temporal event from an eternal improbable, and yet you [must] inevitably admit it; for there are temporal events in the world and they have causes, but if temporal events were based on temporal events infinitely, there would be an absurdity, which is simply not a belief of an intelligent person. If [an infinite causal chain] were possible, then you could dispense with admitting a Maker and establishing a necessary existence as the basis of the possibles. When temporal events have a limit at which their causal chain terminates such that that limit is the eternal, then, according to [the philosophers' own] principle, the possibility of a temporal event's proceeding from an eternal is inevitable.

[49] It might be said, "We do not find a temporal event's proceeding from an eternal improbable. What we in fact find improbable is that a first temporal event should proceed from an eternal, since there is no difference between the very moment of the creation and what was before it with respect to selectively determining the aspect of existence, which does not [differ] inasmuch as it is a present moment, an instrument, a condition, a nature, a wish, or any other cause. When the event is not the first, it is permitted that it proceeds from [an eternal] when there is the creation of some other thing, such as the preparedness of the receiving substrate and the presence of the fitting moment, and whatever is analogous to this.

[50] We say that the problem concerning the occurrence of the preparedness, the presence of the moment, and whatever is renewed, still stands: either there is an infinite causal regress or it terminates in an eternal from which the first temporal event results.

[51] It might be said that the matter's receptivity to forms, accidents, and qualities is not at all something temporally coming to be. The qualities that temporally come to be are the motion of the celestial

6. That is to say, when the aspect of two bodies is 120 degrees, 60 degrees, or 180 degrees between each other, respectively.

spheres, I mean the rotation, and the renewal of their relational attributes such as being trine, sextine, and quadrate,⁷ that is, the relation of some of the parts of the celestial sphere, stars, and planets to one another, and the relation of some of them to the Earth. Examples are the occurrence of ascending and descending, passing from the highest point of elevation, remoteness from the Earth by the star or planet's being at apogee as well as proximity by its being at perigee, and its inclination away from some celestial or terrestrial zones by their being in the north and south. This relation [of the heavenly bodies] follows necessarily because of the rotation, and so the rotation necessitates it. As for the temporal events encompassed within the sublunar realm, namely, by the appearance of generation and corruption, mixing and separating, as well as the alteration of one attribute for another in the elements, all of those are temporal events depending upon one another in an extended ordering of differences. In the end, however, the principles of their causes terminate at the celestial rotation and the stars and planets' relation to one another and to the Earth.

[52] From all of that, [claims the philosopher], it results that the perpetual, eternal rotation is the reason for all temporal events. The movers of the heavens' rotation are the souls of the heavens; for they are alive in a way comparable to our souls in relation to our bodies, but their souls are eternal. So of course the rotation that they necessitate is also eternal. Since the states of the soul are uniform because [the soul] is eternal, the states of the motions are also uniform, that is, they rotate eternally.

7. That is to say, when the aspect of two bodies is 120 degrees, 60 degrees, or 90 degrees between each other, respectively.

[53] Thus, [continues the philosopher], it is inconceivable that the temporal proceeds from the eternal, except through an intermediate everlasting rotation that is similar to the eternal in one way; for it is perpetually everlasting. In another way, however, [the rotation] is similar to the temporal; for each of its posited parts was temporally created after they were not. So inasmuch as [the rotation] is temporal through its parts and relations, then it is the principle of temporal events, whereas inasmuch as it is everlasting, similar to the states [of the soul], it proceeds from an eternal soul. So, if there are temporal events in the world, there is inevitably rotation, but there are temporal events in the world, and so everlasting rotation is established.

[54] [In response] we say that this lengthy [discourse] does not improve your situation; for the rotation that is the basis [of all temporal events] is either temporal or eternal. If it is eternal, then how does it become a principle for the first temporal events? If it is temporal, then it depends on another temporal event, and there will be an [infinite] causal chain. You maintain that in one respect it is similar to the eternal and in another respect it is similar to the temporal; for it is permanent [and] renewed, that is, it is permanently renewed and renewed permanently. But we ask, "Is it a principle of temporal events insofar as it is permanent or insofar as it is renewed?" If it is insofar as it is permanent, then how is it that something [that exists] at some moments and not others proceeds from something permanent that has similar states? If it is insofar as it is renewed, then what is the cause of its renewal in itself? It would need another cause, and there would be an [infinite] causal chain. This was [our] goal, to establish the necessity [of a temporal event's proceeding from an eternal].