AVICENNA ON CAUSAL PRIORITY

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A. INTRODUCTION

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In *Metaphysics*, IV, 1, of his *al-Shijā*' (Healing), Avicenna (Ibn Sinā) (d. 1037) gives an extensive discussion of the concept of priority. He entitles his chapter, "On the Prior, the Posterior and on 'Coming into Existence,' tal-hudāth). The term, al-hudāth, which does not occur again in the chapter, refers to the longest discussion in it, on the priority of the efficient cause to its necessitated effect. For Avicenna, the efficient cause does not precede its effect in time, but only "in existence" (fī al-wujūd). The chapter is largely devoted to explaining and defending this concept of "ontological" priority.

Avicenna begins with the introductory comment (p. 163, lines 4-6):

Since we have discussed the things that in relation to existence and unity stand as species, it behooves us to discuss the things that in relation to these two stand as properties and necessary accidents. We will begin first with the things belonging to existence and of these with priority and posteriority.

It is clear from the wording that this "Porphyrean" way of putting things is only an analogical manner of speaking. (Existence for Avicenna is not a genus.) It serves, however, to remind us of the metaphysical setting of the discussion. In an earlier chapter, Avicenna declares that the subject matter of metaphysics is the existent inasmuch as it exists. He then explains that metaphysics is concerned with the attributes and concomitants (lawāḥiq) of existence qua

existence,⁵ referring specifically to priority and posteriority as being among such concomitants.⁶

This preliminary statement is followed (p. 163, lines 7-9) by a broad definition of "priority" and "posteriority," followed, in turn, by an explanation of various general meanings of these terms (p. 163, line 9 - p. 164, line 11) — a discussion that leans heavily on Aristotle's statements in Categories, 12, and Metaphysics, V, 11. Avicenna then introduces the concept of ontological priority, of which he distinguishes two types. The first (p. 164, lines 12-17) is the type where the prior is a necessary condition for the existence of the posterior, but does not necessitate it. The example given is the number one: it is a necessary condition for the existence of plurality, but does not necessitate it. Avicenna's discussion is basically Aristotle's in Categories, 12, 14a 29-35, though the terminology is somewhat different.

The second type of ontological priority is the one where the prior is both the necessary and necessitating condition for the existence of the posterior-its cause. This is the longest discussion in the chapter (p. 164, line 18 - p. 169). Although the treatment goes considerably beyond Aristotle, it nonetheless has a basis in his Categories. In Cateaories, 12, 14^b 10-20. Aristotle speaks of those things the existence of each of which implies the existence of the other. He argues, in effect, that if one of two such things is in some manner the cause of the other, then it is reasonable to call it prior by nature. To illustrate this, he points to the relation between a fact, the existence of a man, and the true statement about it. Although the true statement and the existence of the man reciprocally imply each other, it is the man's existence that is in some sense the cause of the truth of the statement. Here we have a basic idea that underlies Avicenna's analysis, namely, that two things may mutually imply the existence of each other, one, however, being the cause of the other and as such ontologically prior.

Avicenna, however, does not use Aristotle's example. Moreover, he stresses another related feature in Aristotle's causal theory—the simultaneity of cause and effect (Metaphysics, V, 2, 1014^a, 20 f.). Avicenna's concern is with the priority of "the essential efficient cause" to its neces-

sitated effect. Unlike accidental and preparatory causes, which, for him, precede the effect in time, the essential cause does not. Hence he is largely concerned with explaining and defending the sense in which the essential efficient cause is prior to its effect when (a) both coexist in time and (b) the existence of the one can be inferred from the existence of the other.

Now both these points were criticized by medieval Islamic theologians, particularly those belonging to the school of al-Ash^cari (d. 935). Avicenna, it is true, makes no explicit reference in this chapter to these theologians. But the indications are that he has their criticisms in mind. Hence, by way of introducing his discussion of causal priority, we will say something brief about these criticisms and also about Avicenna's counterposition, relevant to his argument in this chapter, which he expresses in other parts of his al-Shijā'.

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The Ash^carites did not deny that there are observable events we habitually regard as causes and effects that are temporally simultaneous. But, as we shall shortly indicate, these for them are not real causes and effects of such causes, 10 Again, they did not deny that the existence of the cause can be inferred from the existence of the effect. For they held that all existents other than God are originated in time and that it is self-evident that whatever is originated requires an originator. This was their premise for proving the existence of God. Rather, they denied (a) that the real cause and its effect must coexist and (b) that the existence of the effect can be inferred from the existence of the cause. To them, both these points are the consequences of a theory of natural causation which they rejected. This is the theory that causal action proceeds as the necessary consequence of the agent's nature or essence. Adherence to this theory leads to the doctrine of the world's eternity-the supreme example of the coexistence of cause and effect. For if the eternal agent produces the world by the necessity of his eternal essence, then the effect, the world, must be eternal.

For the Ash^carites a doctrine of an eternal world meant the denial of the divine attributes of life, will, knowledge, and power. According to these theologians, all causal action proceeds from the attributes of will and power of a living, knowing being. In reality, all causal action consists in the direct, voluntary creative acts of God. The observable events we habitually regard as causes and effects are only concomitant events, all directly created by God. Their regular association is not necessary in itself, being merely a habit $t^c\bar{a}dat$ decreed by God. The world is created $ex\ nihilo$ at a finite temporal moment in the past. Its finitude is eternally decreed by the divine will. The world is willed as an act that "is delayed" $t^cal\bar{a}\ al\ tar\bar{a}kh\bar{t}$, as al-Bāqillānī puts it."

This theological position was buttressed by arguments, two of which are pertinent to Avicenna's discussion of causal priority. The first and better known of the two is the empirical argument that the observing of regularly associated events does not prove necessary causal connection. This argument finds its most forceful expression with al-Ghazālī (d. 1111), who came after Avicenna. But its basic ingredients are found in earlier Ash^carite writings, particularly in al-Bāqillānī (d. 1013). The second lesser known, but very pertinent to Avicenna's discussion, is also found in al-Bāqillānī. But let us begin with the first argument.

Avicenna himself affirms that the observation of regularities in nature does not show necessary causal connection. He, however, argues that with the observation of such regularities there is always "a hidden syllogism" that if the regularities were due to accident or coincidence they would not have continued always or for the most part. He then concludes that the source of these regularities is the inherent causal natures in things. This is an epistemological argument that has a background in Aristotle (Physics, ii, 196b 10-16). Avicenna, however, has a metaphysical argument to show not only that every contingent existent is caused, but that its existence is necessitated. This is the argument which is more directly related to his discussion of causal priority. It is found in Metaphysics, I, 6, of his Shifa 15 and can be paraphrased as follows:

All existents other than God are in themselves only possible: in themselves they can exist or not exist. But such possibles do in fact exist. Something outside their natures must have thus "specified" them with existence rather than nonexistence. This is their cause. Now, suppose there is an existent, "A," that in itself is possible but which has been brought into existence by a cause, "B." "A", though in itself is only possible, must become necessary through "B" and "with respect to it." If it were not, then with the existence of "B" and in relation to it, "A" would remain possible. But since it exists, then some other cause "C" must be supposed to have specified it with existence; and if "A" is not rendered necessary through "C," then we would have to suppose yet another cause "D" and so on ad infinitum. But an infinity of such causes - even if allowed would not specify "A" with existence. Since "A" exists, and thus has been specified with existence rather than nonexistence, then it must have been rendered necessary through "B."

In this argument, the starting point is the contingent effect. Given a contingent existent, it is argued that its existence becomes necessary through its cause. Avicenna here is not merely asserting that every contingent must have a cause, but that it is necessitated by its cause. This becomes clear in the chapter on priority, where he offers an argument which is essentially the complement of the above. In this complementary argument, Avicenna also speaks of the contingent effect. But his emphasis is on the cause. He tries to show that, given the cause tall causal conditions being fulfilled), the effect necessarily follows. It is thus that as long as the cause exists, the effect must exist. Implicit in this argument is that—barring impediments—the effect cannot be delayed after the existence of the cause. Cause and effect coexist in time.

The second Ash^carite argument challenges the theory that the cause can be "a nature" that necessitates the effect and that cause and effect must coexist. This lesser known argument is given by al-Bāqillāni as an objection to those who maintain that the world has been produced by the four eternal natures and is hence eternal. Referring to such a nature, he asks:16

If the nature is pre-eternal and post-eternal and the thing generated by it is likewise pre-eternal and post-eternal, then why is it more proper for one of the two to necessitate and cause the other than it is for the effect to be the cause and ground?

As we shall shortly see, Avicenna reports a version of this argument as an objection directed specifically against his own causal theory and answers it in detail.

Avicenna's version of the argument and his answer to it are not, however, restricted to natural causes. Thus he holds that the determining factor fulfilling the causal condition for the necessitation of the effect need not be "a nature." It may be "a will" or a human passion. At first sight this statement seems to contradict what he says elsewhere about human voluntary agency. In the Demonstration of the logical parts of the al-Shifā' he states that when the causal power is natural and the recipient of the action is present, the effect cannot but follow. But, he goes on, this is not the case when the cause is one of the human "technical, voluntary, or appetitive" powers. For such powers may exist with the recipient of their action without the effect having to follow. 17

A resolution of this difficulty is suggested by *Meta-physics*, IV, 2, where Avicenna differentiates between two meanings of "will." The first is "a will that [simply] inclines [the soul towards action]" *(irāda mumīla)*. The second is "a decisive will *(irāda jāzima)*, namely, the resolution (al-ijmāc) that necessitates the motion of the organs." In the chapter on priority, Avicenna seems to be speaking of a will in the second sense, one that is already activated, so to speak.

Avicenna's concluding and longest part of the chapter divides naturally into three parts. The first (p. 164, line 18-p. 165, line 14) is an explanation (that includes an appeal to reason) of what is meant by the second type of ontologial priority, vividly illustrated by the example of the hand moving a key (p. 165, lines 4-9):

The mind is not repelled at all by our saying, "when Zayd moved his hand the key moved," or "Zayd moved his hand,

then the key moved," but is repelled by our saying, "when the key moved, Zayd moved his hand," even though the mind rightly says, "when the key moved, we knew that Zayd moved his hand." The mind with respect to the temporal coexistence of the two movements, assigns a priority to one, a posteriority to the other. For it is not the existence of the second movement that causes the existence of the first, but it is the first movement that causes the existence of the second.

The second part (p. 165, line 9 - p. 167, line 5) affirms, first of all, that properly speaking cause and effect must coexist. It then discusses some of the conditions that must obtain for the effect to follow from the cause. It is here that we have the complementary argument to the one in *Metaphysics*, I, 6, discussed in Part 2 above, to show that an efficient cause (when the causal conditions are fulfilled) must produce its effect. The wording of Avicenna's discussion makes the argument at certain points very difficult to follow. As we read him, he seems to be arguing as follows:

If, for example, C is something that by itself is sufficient to cause E, then E follows necessarily the existence of C, or, as Avicenna puts it, so long as the cause exists, the effect exists. If, on the other hand, C has only the possibility of generating E and E only the possibility of being the effect of C, this would be insufficient for the generation of E. One many conclude, however, that since the generation of E and its nongeneration are equally possible, then E would at one time exist with C and at another not exist with it. Assuming this to be the case, let us take the instance in which E exists with C. This existence cannot be due to C alone, since E's existence from C and its nonexistence are equally possible. Reason compels us to conclude that some state. B, has been introduced to account for the distinction between the existence of E with C and its nonexistence. This B, then, necessitates the distinction, and when added to C forms in combination with it the cause. That Avicenna here is thinking partly in terms of human agency is indicated by his reference to this added state, B, as "a will, a desire, an anger or some nature that has come into existence, and so on." He then concludes this section by affirming that when the causal conditions obtain

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the effect follows necessarily from the cause and coexists with it.

In the third part (p. 167, line 16 - p. 169, line 3), Avicenna reports an objection to his analysis and then answers it in detail. This is the objection which has strong affinities with al-Bāqillāni's argument. It is as follows (p. 164, lines 6-8):

If each of two things are such that if one exists, the other exists, and if one is removed from existence, the other is removed, the one is not the cause, nor the other the effect, since neither has the better claim to be the cause than the other.

Avicenna begins his answer by pointing out an ambiguity in the conditional, "if one exists, the other exists." This, he explains, can mean one of four things:

- (a) if either cause or effect exist in external reality, then the existence of the other must occur in external reality;
- (b) if either cause or effect exist in external reality, then the existence of the other in external reality must have occurred;
- (c) if either cause or effect exist in the mind, then the other must exist in the mind;
- (d) if cause or effect exist in external reality, then it becomes evident to the mind that the other must have existed either (i) in reality or (ii) in the mind.

Of these alternatives, he argues, only (c) is entirely true. (a) is false as regards the effect, (b) false as regards the cause, while only (d) (i), not (d) (ii), is true. As for the removal of either cause or effect from existence, it is only when the cause is removed that the effect is removed. When the effect is removed, we know that this is because the cause has been removed. He then concludes (p. 169, lines 9-13):

It is not conjunction which rendered one of the two existents necessarily the cause so that neither has the better claim to be the cause than the other, since with respect to conjunction they are on a par. Rather, they differ because we supposed that the existence of the one is not rendered necessary through the other, whereas in the case of the second, just as we supposed its existence to be with the other, likewise, we supposed it to be through the other.

B. TRANSLATION

On the Prior, the Posterior, and on Coming into Existence¹⁹

[Introductory statement: p. 163, lines 4-6]

Since we have discussed the things that in relation to existence and unity stand as species, it behooves us to discuss the things that in relation to these two stand as properties and necessary accidents.²⁰ We will begin first with the things belonging to existence and of these with priority and posteriority.

[A general definition of priority and posteriority: p. 163, lines 7-9]

We say: Although priority and posteriority are predicated in many ways, these, in an equivocal manner, almost unite in one thing, namely, [in the fact] that to the prior, inasmuch as it is prior, belongs something not possessed by the posterior and that nothing belongs to the posterior unless it [also] exists for the prior.

[The popular meaning of priority and posteriority: p. 163, lines 9-14]

What is prior to the popular mind is the prior in place and time, where being prior and 'before' pertains to things that have order. Thus [the prior] in place is that which is closest to a determinate starting-point. It would thus have [the characteristic] of coming after the starting-point where its own successor does not, the [latter] succeeding the starting-point after the first had already succeeded it. The same applies also to time in relation to a present 'now' or some 'now' supposed as a starting-point—although it would be a different starting-point in the past and in the future, as you know.

[Other usages of the terms, 'prior' and 'posterior': p. 163, line 15 - p. 164, line 11]

The term, 'before', and [the term], 'after', were then transferred from this to apply to whatever is closest to a

determinate beginning. This priority in terms of order could be in things by nature in the way body is prior to animal relative to substance and the positing of substance as a principle, but this would differ if the individual²¹ is made the principle. The same applies to the nearest to the first mover as, for example, the boy who is before the man.²² It could also be in things, not by nature but either [(a)] in some art as in musical tone where if you take high pitch as the starting-point the priority would be other than the one where low pitch is so taken, or [(b)] by chance or coincidence in whichever way it occurs.²³

The term, 'prior', was then transferred to other things: the excelling and the virtuous, ²⁴ also the foremost even if not in virtue, were made prior. The very meaning was then made akin to the determinate starting-point. Hence, whatever one thing has of this meaning which the other does not, the other possessing nothing which is not possessed by the first, the former was made prior. For the preceding belongs to the category of possessing what the second does not have and where whatever belongs to the second belongs to the first and more so. It is in this way of viewing things that they made prior the one who is served and the leader. For choice befalls the leader, not the person led. It only befalls the follower inasmuch as it has befallen the leader, so that the former moves at the leader's choosing.

[The first type of ontological priority: p. 164, lines 12-17]

They then transferred this to that which is considered in this way with respect to existence. They thus made the thing that has existence first prior to [a] second [thing] even if the second may not have existence and would only have it after it had belonged to the first. An example of this is the [number] one. For it is not a condition for the existence of the one that plurality should exist, whereas it is a condition for the existence of plurality that the one should exist. This is not a matter of whether or not the one bestows existence on plurality, but only that it is needed so that through the combination of it plurality would have existence.²⁵

[The second type of ontological priority: (a) its definition; p. 164, line 18 - p. 165, line 9]

Then after this it was transferred to the coming-to-be of existence in another way. For if there are two things and the existence of one is not from the other—its existence being rather from itself²⁶ or from a third thing—but the existence of the second is from the first so that it [derives] from the first the necessary existence which it has neither from nor in itself, having in itself only possibility; allowing, [that is], the assumption that the first is such that as long as it exists it follows as a necessary consequence of its existence that it is the cause for the necessary existence of the second; then [when all this obtains], the first is ontologically prior to the second.

For this reason the mind is not repelled at all by our saying, "when Zayd moved his hand, the key moved," or, "Zayd moved his hand, then the key moved." but is repelled by our saying, "when the key moved, Zayd moved his hand," even though [the mind] rightly says, "when the key moved, we knew that Zayd moved his hand." The mind, with respect to the temporal coexistence of the two movements, assigns a priority to one, a posteriority to the other. For it is not the existence of the second that causes the existence of the first, but it is the first movement that causes the second.

(The second type of ontological priority: (b) the causal conditions that must obtain; p. 165, line 9 - p. 167, line 5.]

It is not improbable²⁷ that as long as a thing exists, it follows necessarily that it is a cause of [another] thing. In reality a thing cannot be such that it is rightly a cause of [another] thing unless the latter coexists with it. If a condition of its being a cause is its very self,²⁸ then as long as its very self exists, it is a ground and a cause for the second's existence. But if the condition of its being the cause is not its very self, then itself by itself is something from which it is possible for a thing to be generated and possible for it not to be, neither alternative having precedence over the other.

Similarly with that which is generated: it is likewise something that has the possibility of existing or of not existing. It is not inasmuch as its existence is possible that it exists. Nor is it by virtue of the fact that the other has the possibility of generating it that [the other] bestows existence. This is because a thing's being generated by that which has the possibility of generating it is not due to the fact that the former has such a possibility. For its very being possible is not sufficient for a thing's coming into being from it. If its very being possible to generate it, even though not sufficient, [obtains], then the thing would exist with it at one time and not exist at another, the relation [of the cause] to that which exists and that which does not exist being, in the two states, one and the same. The state made distinct by the [thing's] being [as opposed to] its non-being does not include the distinction29 of something by reason of which the effect, in conjunction with the possibility of its being generated by the cause, would exist, in a manner that renders [such a state] different from the state of the nonexistence of the effect from the cause, in conjunction with the possibility of its being generated by the cause. Hence the effect's relation in being from the cause to its existence or nonexistence would be one and the same. But that whose relation to a thing's existence from it and its nonexistence is one and the same has no greater claim to be the cause than not to be. Indeed, sound reason necessitates that there should be a state that differentiates between a thing's existence and nonexistence from it.

If this state also necessitates this distinction, then if this state occurs to the cause and exists, then the "entity" and what has joined it together become the cause. Prior to this, the "entity" was the subject of causality and the thing that appropriately could become the cause. [Prior to this], that existence would not have been the cause, but rather an existence which when another existence is added to it, their combination would form the cause. The effect would then proceed from it necessarily regardless of whether [the added existence] is a will, a desire, an anger, some nature that has come into existence, and so on, or some external thing awaited for the existence of the cause. If, then, it

becomes such that it is appropriate for the effect to proceed from it and if no causal condition is left unsatisfied, the effect must necessarily exist.

Hence with the existence of its cause, the existence of every effect is necessary and the existence of its cause necessitates the existence of the effect. The two exist together in time, eternity, or whatever, but are not together with respect to the attainment of existence. This is because the existence of the former does not derive from the existence of the latter. Thus to the former belongs an attainment of existence not derived from the latter's attainment, while to the latter belongs an attainment of existence deriving from the attainment of the former. As such, the former is prior with respect to the attainment of existence.

The second type of ontological priority: (c) an objection and a reply to it; p. 167, line 6 - p. 169, line 14.]

Someone, however, may say: If each of the two things are such that if one exists, the other exists, and if one is raised from existence, the other is raised, then one is not the cause, nor is the other the effect, since neither has the better claim to be the cause in existence than the other.

We will reply to this without, however, looking into the implied meaning of this proposition. For it is not the case that when either one of the two exists, the other exists, without distinction and difference. This is because "if" must mean either: [(a)] that the existence of each if realized necessitates in existence itself that the other should exist: [(b)] that if the existence of either is realized then it follows necessarily from [this] in existence that the existence of the other must have occurred; [(c)] that if the existence of either occurs in the mind, then the existence of the other must occur to the mind; [(dl]) that if the existence of either has occurred, then it follows as a rational necessity that the other must have occurred either in existence or in the mind. For the expression, "if," in such contexts is equivocal, sophistical.

We say: The first [alternative] is false and not admitted. For it is [only] one of them, namely, the cause, which [is

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such | that if it occurs, that the occurrence of the otherafter being possible-follows necessarily from it. Regarding the effect, its occurrence does not necessitate the occurrence of the cause; rather, for the effect to occur, the cause must have occurred.

As for the second alternative, this would not be true, [first of all], as regards the cause. For, if the cause exists, it does not follow necessarily that the effect would have come into existence by itself or without the cause. This is because if it had occurred, it would not have been necessitated in existence by the occurrence of the cause since33 the cause would have existed and that other would have occurred without need of [its] existence—unless by "occurred" is not meant what has [just] been [said],34 conjunction being sufficient.35 This [secondly], would not be true as regards the effect in two respects. [(1)] Because the cause, although it itself has been realized, it has not been so [realized] as a necessary consquence of the occurrence of the effect. [(2)] The second is that the existence of the thing which has already occurred cannot be necessitated by the occurrence of something supposed to be occurring, unless one does not mean by "occur" what it [normally] signifies.

Regarding the last two alternatives, the first of them is correct. For it is possible to say: "If the cause exists in the mind, it is a rational necessity that the effect of which the former is its essential cause should exist in the mind"; also, "if the effect exists in the mind, the existence of the cause must likewise exist in the mind."

As for the second [of the last alternatives], which is the fourth part, of it [this much] of what you say is true, namely, that if the effect exists, the mind testifies that there has been realized for the cause an existence that has necessarily been completed so that the effect has come to exist. The cause could well be in the mind after the effect, not only in time.36 But the last part of these two that belong to the fourth alternative need not be necessarily true for the reason you know.

The same applies with respect to removing [cause and effect]. For if we remove the cause, we really remove the effect; but when we remove the effect, we would not have

removed the cause, but would [simply] have known that the cause in itself has been removed so that the removing of the effect has become possible. For when we suppose the effect raised, we suppose that which is necessary to suppose to be potentially with it, namely, that its removal was possible. And if removing it was possible, it was possible through the removing of the cause first. Hence to remove and affirm the cause is to remove and affirm the effect. [respectively]. The removing of the effect is a proof for the removal of the [cause] and its affirmation proof for the affirmation of the causel.

To return to where we left, we say in solving the perplexity: It is not conjunction which rendered one of the two [existents] necessarily the cause so that neither has the better claim to be the cause than the other, since with respect to conjunction they are on a par. Rather, they differ because we supposed that the existence of the one is not rendered necessary through the other, whereas in the case of the second, just as we supposed its existence to be with the other, likewise, we supposed it to be through the other. It is in this way that this problem should be ascertained.

[A remark on the question of which is prior, potentiality or actuality, linking this chapter with the next: p. 169, lines 14-17.1

What is [still] perplexing in this connection is the question of potentiality and actuality, which of them is prior and which more posterior. For knowing the answer to this is one of the important matters relating to the knowledge of priority and posteriority; also because potentiality and actuality are themselves among the accidents and adjuncts of existence, being things that must be known when knowing the states of absolute being.

NOTES

^{1.} Ibn Sinā (Avicenna), al-Shifā: al-Hāhiyyā t (Metaphysics), edited by G. Anawati, S. Dunyā and Z. Zāvid, revised and introduced by L. Madkur, 2 vols. (Cairo, 1960), vol. I, pp. 163-69. This work will be abbreviated in the notes as $Ild hiy u\bar{u} t$.

^{2.} On the other hand, the active participle of the verb, hadatha,

"occur," "to come into existence," used adjectivally occurs once (p. 166, line 15). It is used to qualify the substantive, tab^c , "nature," in the expression, tab^c $h\bar{u}dith$, "a nature that has come into existence."

Avicenna draws a distinction between al-hudūth al dhāti, "essential coming into existence," and al-hudūth al-zamāni, "temporal coming into existence." Ibn Sinā, al-Najāt (Cairo, 1938), p. 233; see also the complementary discussion in Hāhiyyāt, vol. II, pp. 266-67; and G.C. Anawati, "Hudūth al-Āam," Encyclopedia of Islam, 2nd edition (in progress), vol. III, p. 548.

He defines $al\cdot hudith$ as "coming into existence after non-existence." In the case of "essential coming into existence," however, the relation of "being after" nonexistence, of "posteriority," al-bacdiyya, is not a temporal one; it is a posteriority in essence, not in time. This is because all existents other than God are contingent, in themselves only possible. Each and every such existent derives its existence from something else. Its essence does not include existence, the essence acquiring existence "after nonexistence, from an external cause. But the cause does not precede the effect in time. This applies to all existents other than God, whether they are eternal (for example, the celestial intelligences, souls and spheres, and the world as a whole) or particular temporal events finite in duration (the particular motions of the heavenly bodies and the particular events in the sublunary world of generation and corruption). Temporal events, however, in addition to being preceded "essentially" by nonexistence, they are also preceded "temporally" by nonexistence. Hence they represent instances of al-huduth al-zamani, "temporal coming into existence," as well as at huduth at-dhati.

It is al-hadath al-dhāti of all existents other than God that is the more fundamental for Avicenna. It is here that he differs from the Islamic theologians tal-mutakallinān) who maintained that all existents other than God are originated in time and that in being originated in time they require an originator, God. In the Najāt (pp. 243-44), Avicenna explicitly criticizes such theologians, arguing that in the case of those contingent existents that are preceded by nonexistence in time, it is not this temporal precedence of nonexistence that demands that they have a cause. For a cause has no efficacy in nonexistence. Rather, it is their being in themselves only possible that demands their having a cause, the cause coexisting with them.

Hence the term hadnth is a key term in the controversy between Avicenna and medieval Islamic theologians. Its presence in the heading of the chapter on priority is an indication that he has the theologians in mind in his discussion of the nature of the priority of the efficient cause to its necessitated effect.

3. "The things that in relation to existence and unity stand as species" are substance, quantity, and quality, discussed in *llāhiyyāt*, 1, 1-3, III, 4 & 7. In *llāhiyyāt*, I, 2 (p. 13, lines 12-17) Avicenna writes: "The primary subject of this science [i.e., metaphysics] is the existent inasmuch as it exists. The questions sought in it are the things that follow it

simply inasmuch as it exists, without further condition. Some of these things belong to it as though they are species, for example, substance, quantity, and quality... others as special accidents, for example, the one and the many, potentiality and actuality, the universal and the particular, the possible and the necessary."

Avicenna does not tell us explicitly whether priority and posteriority "stand in relation" to existence as properties or necessary accidents. These, however, are relations and relations are regarded as accidents than in this chapter on relations mentions only temporal priority.

- 4. See note 3 above.
- 5. Ilāhiyyāt, I, 4, p. 25ff, and note 4 above. We have avoided translating laceāḥiq as "consequences" (which the Latin translation suggests), since this carries with it the notion of following necessarily.
- 6. In *Hāhiyyāt*,, p. 26, lines 13-16, Avicenna writes: "We will make clear the discussion of 'principle' and 'beginning'; then the discussion of priority, posteriority, and coming into existence *tal pudāthi* [see note 2 above]. . . . For these and their like are the concomitants of existence qua existence."
- 7. For a comment on Aristotle's usage, see J.L. Akrill, Aristotle's Categories and De Interpretatione London, 1963), p. 111.
- 8. For a discussion of Avicenna's theory of essential (efficient) causation, see M.E. Marmura, "Ghazali and Demonstrative Science," Journal of the History of Philosophy 3, 2 (Oct. 1965): 185-86. Dhāt, however, does not always refer to the essence or nature, but sometimes to an entity. See note 29 below.
- 9. The inclusion of the term al hadath in the title, discussed in note 2 above, is one strong indication; another is the objection against his theory which he reports and answers which has a parallel in the Tamhid of the Ash'arite al-Bāqillāni, as we shall shortly indicate.
- 10. There is, however, the status of the human power tal-qualrar which, for the Ash'arites, exists only with the act it accompanies, not before it. Human power, will, and act, however, are for the Ash'arites all hawādith, temporal events created directly by God. Whether in this theory the created human power has genuine causal efficacy (at least in part) seems questionable. See M.E. Marmura, "Causation in Islamic Thought," Dictionary of the History of Ideas, ed. Philip P. Wiener (New York, 1973), vol. I. pp. 286-89. If it has, then for the Ash'arites there would be among temporal events instances of the coexistence of genuine causes and their effects. But whether the created human power in Ash'arite doctrine has genuine efficacy is doubtful.
- 11. Al-Bāqillāni, *Kitāb al-Tamhid*, ed. Richard J. McCarthy (Beirut, 1957), p. 36, line 7. For Averroes' use of this term, see Ibn Rushd (Averroes). *Tahājut al-Tahājut*, ed. M. Bouyges (Beirut, 1930), pp. 7,9, for example.
 - 12. Al-Bāqillāni, al Tambid, pp. 43-44.
 - 13. Hāhiyyāt, I, I, p. 8.

- 14. Ibn Sinā (Avicenna), al-Shijā': al-Burhān tDemonstration), ed. A.E. Afifi, revised by I. Madkūr (Cairo, 1956), p. 95. This work will be abbreviated in the notes as $Burh\bar{a}n$.
 - 15. Hāhiyyāt, p. 37 ff.
 - 16. Al-Bāqillāni, al-Tamhid, p. 48 (paragraph 67).
 - 17. Burhān, p. 298.
- 18. Hāhiyyāt, p. 174; also, Ibn Sinā, Al-Isahārāt wa al-Tanbihāt, ed. J. Forget (Leinden, 1892), p. 52.
 - 19. Ilāhiyyāt, IV, 1, pp. 163-69.
 - 20. See note 3 above.
- 21. Al-Shakhş, probably in the sense of an individual person, rather than an individual instance, a particular.
- 22. The first mover seems to be the source of generation. In the medieval Arabic version of Eustathius (and others) of Aristotle's Metaphysics quoted by Averroes in his great commentary, Metaphysics 1018^b 20 reads as follows: "It is said before' in motion [to] that which is nearest to the first mover as, for example, the boy who is before the man in motion." Averroes' comment is as follows: "Aristotle means by the first mover the first generator of man; this is because the boy is nearer to the first generator than the man." Ibn Rushd, (Averroes), Tidsir mā Ba'd al-Tabi'a, ed. M. Bonyges, 3 vols. (Beirut, 1938, 1942, 1948), vol. II, p. 572.
 - 23. Cf. Aristotle, Metaphysics, V, II, 108-14.
- 24. Al-Fāḍil, "the virtuous," which sometimes carries with it the idea of being learned. The discussion has a basis in Categories, 12, $14^{\rm b}$ 4-6.
- As we have noted earlier, this derives from Categories, 12, 14^a 29:35.
- 26. As in the case of the Necessary Existent, God.
- 27. Fa lā yaboud, literally, "it is not remote."
- 28. It is possible to translate *nafs dhātihi* as "its very essence." But apart from "essence." $dh\bar{a}t$ means "self." or "an existing entity."
- 29. More literally, "There is not in the state made distinct by its being [as opposed to] its non-being the distinction. . . . " This entire sentence is a good example of how involved Avicenna's style can be.
 - 30. Dhāt, see note 28 aboye,
- 31. Avicenna is probably referring to what the argument implies regarding the repudiation of the concept that there are natural causes or, at least, causes that necessitate their effects. See my article, "Ghazali and Demonstrative Science," p. 98, n. 65.
- 32. The emphasis here is on extramental as contrasted with mental existence.
 - 33. Reading idh, as given by some manuscripts, instead of idhā, "if."
- 34. Namely (on our reading of the text), that the occurrence of the effect is necessitated by the occurrence of the cause. For other possible interpretations, see note below.
 - 35. Lākin tughni al-muqārana, "but conjunction suffices." In five of

the manuscripts, tughni is omitted, in which case the sentence beginning with "unless" would either read, "unless by 'occurrence' is not meant 'what has passed', but only 'conjunction,' " or, "unless by 'occurrence' is not meant what has been [said], but only 'conjunction,' " It is also possible that the word tughni should read yu' nā, "what is meant," yielding translations similar in meaning to the above two in the note.

36. Since the mind is inferring the existence of the cause from the existence of the effect, the effect may be prior in the mind not only in time, but "logically," in the way the premise of an argument is prior to its conclusion.