

AL-GHAZĀLĪ'S SECOND CAUSAL THEORY IN THE 17th DISCUSSION OF HIS *TAHĀFUT*

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In the 17th Discussion of his *Tahāfut al-Falāsifa* (*The Incoherence of the Philosophers*),¹ the Islamic theologian al-Ghazālī (d. 1111 A.D.) focuses attention on the relation between those observable things habitually regarded as causes and effects. Is this relation or connection a necessary one? Al-Ghazālī begins by denying any such necessity, offering a strictly epistemological argument to support his denial. In so doing, he explicitly affirms (a) that inanimate things have no causal action and (b) the Ash'arite doctrine that causal action resides exclusively with God, whose acts are always voluntary. All happenings, according to this doctrine, are the creation of God, either directly or through the mediation of His angels.²

Early in the Discussion, al-Ghazālī makes it quite clear that he is reporting and rejecting two different versions of the philosophers' necessitarian causal theory. His argument denying necessary causal connection is directly concerned with the first of these, the version that attributes necessary causal action to observable things. The second version, however, confines such action to the celestial principles. These principles act by necessity, their action being further conditioned by the receptive potentialities of the things they act on. Accordingly, a miracle whereby a prophet placed in a fiery furnace survives unscathed is impossible.

Al-Ghazālī, rejecting this second version also, argues for the possibility of such a miracle in two ways. He first of all reaffirms the Ash'arite position that all events are the

voluntary creation of God, poses an objection to this doctrine, then vigorously answers the objection. Secondly, he suggests and develops an alternative causal theory. This second theory, however, introduces in part and with certain modifications a view of natural causation which al-Ghazālī had earlier rejected. Al-Ghazālī's style of arguing is such that it is not readily apparent whether in introducing this second theory he is abandoning the Ash'arite doctrine—as his critic Averroes (Ibn Rushd) (d. 1198 A.D.) suggests⁴—or not. Again, in the 20th Discussion, referring back to both theories, al-Ghazālī states that both are possible, giving an impression that his position as to which of the two is true is an agnostic one. What then is al-Ghazālī's position regarding the second causal theory?

It is this exegetical problem which is our concern in this paper. As has been remarked in a recent article, this second causal theory has not been given the attention it deserves.⁵ To give perspective to the place of this theory in the *Tahāfut*, we will begin by saying something about the relation of the 17th Discussion to the rest of this work. We will then give more detail of the context in which the theory occurs in the 17th Discussion.

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The 17th Discussion is the first of the final four Discussions that with a short preface constitute the second part of the *Tahāfut*. This second part, unlike the first, which is metaphysical, is devoted to the natural sciences.

In approaching the 17th Discussion, two things in particular must be kept in mind. The first is that in the first part of the *Tahāfut* there is persistent criticism of the concept of causal necessitation, mainly as applied to God, that complements the epistemological approach of the 17th Discussion. Again and again, particularly in the first three Discussions, al-Ghazālī attacks and rejects the doctrine that God's acts proceed by necessity from His very essence or nature. The divine act, he insists, is voluntary. For the divine act to be voluntary, he argues in effect, the eternal attributes of life, will, power and knowledge must be additional to the divine essence, not identical with it. Otherwise

the divine act becomes essential, proceeding as the necessary consequence of the divine nature. Al-Ghazālī's position in all this is characteristically Ash'arite. Only a living, knowing, willing being can be an agent, he argues in the 3rd Discussion, declaring quite emphatically that what is inanimate has no action.⁶ In the same Discussion he also gives his example of the finger's movement in water to illustrate the Ash'arite occasionalist doctrine that explains all change as a series of creations after non-existence enacted voluntarily and directly by God.⁷ The second thing to remember is that despite al-Ghazālī's epistemological argument in the 17th Discussion, his motive throughout remains theological: to show that certain miracles deemed impossible by the Islamic philosophers are in fact possible. His position on miracles requires some further comment.

In the Preface to the second part of the *Tahāfut*,⁸ al-Ghazālī discusses two types of miracles, one type rejected as impossible by the philosophers, the second accepted and accounted for by them. The type they reject consists of miracles that contradict their theory of a world order of causally necessitated events. They thus deny, al-Ghazālī tells us, the literal truth of Qur'anic accounts of such miracles as the changing of Moses' staff into a serpent and the raising of the dead, interpreting these accounts metaphorically. The miracles they accept, he then goes on to explain, include the two kinds of prophetic revelation that involve the prophet's imaginative faculty and theoretical intellect, respectively.⁹ They also include the prophet's ability—through the exercise of the power of his practical soul—to summon storm, rain, and the like. For, as al-Ghazālī explains, the philosophers maintain that just as the ordinary human soul affects one's own body, its power in the prophet can become so strong that its influence transcends the body to cause atmospheric changes in temperature and movement of air that in turn cause storms, earthquakes, and the like.

Al-Ghazālī does not deny the possibility of accounting for this type of miracle in this way, stating that "this is among the things that may belong to prophets."¹⁰ Since the philosophers' explanation of miracles based on a theory of

influence involves in part their casual theory, al-Ghazālī's statement seems inconsistent. Moreover the Ash'arite position which he defends elsewhere attributes the miracle to divine action, not to the power of the prophet.¹⁰ It should be pointed out, however, that when al-Ghazālī holds that something is possible, this does not commit him to maintaining that it is true. This will become clear when we discuss his position regarding the two causal theories. But it is also suggested by the 17th Discussion, where the question of whether the miracle is brought about by the power of the prophet or by God is raised. Without denying the possibility that the miracle could be produced by the prophet's power, he declares that it is more proper to attribute it to God, a statement that seems to reflect his own belief.¹¹

3

Al-Ghazālī begins the 17th Discussion with the declaration that the connection between what is habitually believed to be a cause and its effect is not a necessary one. If any two things are distinct, he argues in effect, and provided that neither the affirmation or negation of the one entails the affirmation or negation of the other,¹² then the existence or non-existence of the one does not make it necessary for the other to exist or not to exist. After giving examples of observable things normally regarded as efficient causes and effects, he argues that their connection "is due to the prior decree of God who creates them side by side, not due to its being necessary in itself."¹³ It is hence within God's power, he continues, to create any one of these concomitant things without the other. In declaring all this, it should be noted, there is nothing tentative or hesitant. Al-Ghazālī asserts the Ash'arite view explicitly and positively.

Al-Ghazālī then illustrates his denial of necessary causal connection between observable things with the example of the contact between fire and cotton. Again, al-Ghazālī asserts quite explicitly that it is possible for such a contact to take place without the cotton being burnt and that it is possible for the cotton to turn into burnt ashes without contact with fire. He then introduces two positions opposed to this view.

The first claims that the burning is caused by the fire alone, which is an agent by its very nature, not by choice. Thus if it meets a receptive substratum, it is impossible for it not to act according to its nature. This claim al-Ghazālī denies:

The one who enacts the burning by creating blackness in the cotton, disintegration in its parts, and by making it tinder and ashes is God (exalted be He), either directly or through the mediation of His angels. As for fire, which is inanimate, it has no action.¹⁴

One notes that al-Ghazālī reaffirms what he had argued for in the 3d Discussion that what is inanimate has no causal action.

Al-Ghazālī then gives his argument that observation does not prove that it is the fire which causes the burning of the piece of cotton in contact with it. Observation only shows that the burning occurs at the juncture of contact; it does not show that the burning occurs through or by the fire. He points out that the philosophers themselves in certain instances, for example, when explaining the birth of the fetus, hold similar views. They thus maintain that the new life occurs when the sperm is placed in the womb, but is not caused by it, the agent being God acting directly or through angelic mediation. To show how easy it is to mistake a concomitant event for the real cause, he then gives the hypothetical example of the blind man whose sight is suddenly restored and who at first thinks that the cause of his seeing is the opening of his eyes, to realize later on when darkness falls that the cause was light. Al-Ghazālī also attributes to certain philosophers the view that the real cause of sight in the eye is "the giver of forms," a celestial principle, the appearance of the sun, the healthy pupil, and the colored object being only preparatory causes. "With this," he concludes, "the claim of those maintaining that fire is the agent of burning, bread the agent of satiation, medicine the agent of health and so on, becomes false."¹⁵

In refuting the first position, al-Ghazālī has prepared the way for explaining the second. Those upholding this position admit that temporal events emanate from celestial principles, but maintain that the preparation for the reception

of the emanated forms comes about through the observed mundane causes. These principles, however, cause the events necessarily, that is, the events "proceed from them necessarily and by nature, not by way of deliberation and choice."¹⁶ The actions of these principles are further conditioned by the different receptive dispositions of the substrata they act on.

Al-Ghazālī writes:

If this, then, is the case, [they argue], how is it conceivable if we assume a fire with its [proper] quality and suppose two similar pieces of cotton that come into contact with it in the same way that one of them should burn but not the other, when there is no voluntary choice [in the agent]?¹⁷

It is because of this, al-Ghazālī goes on, that the philosophers reject the miracle of a prophet placed in a fire remaining unburnt. Al-Ghazālī then answers this rejection in two ways. The first is to deny that the celestial principles act by necessity, stating that he had already refuted this in the 1st Discussion of the *Tahāfut* (where, it should be remembered, he argues at length to show that the will by definition is that quality that chooses one exact similar from another).¹⁸ "If then," he writes, "it is established that the Agent creates the burning when the piece of cotton contacts the fire through His will, it becomes rationally possible for Him not to create the burning when the contact takes place."¹⁹

Al-Ghazālī, however, makes the opponent give a counter argument to this:

This leads to the commission of repugnant impossibilities (*muḥālāt shanīʿa*). For if one denies that the effects follow necessarily from their causes and relates them to the will of their Creator, the will also having no specific course—but [a course] that can vary and become multifarious—then let each of us allow the possibility of his being in the presence of ferocious beasts, raging fires, high mountains, or enemies ready with their weapons to kill him, but that he does not see them because God does not create for him vision [of them].²⁰

Al-Ghazālī makes the opponent go on in this vein, giving further vivid examples of such "repugnant impossibilities" (*muḥālāt shanīʿa*).

In answering this objection, al-Ghazālī defends the Ashʿarite causal theory, giving an occasionalist interpretation of human knowledge. His commitment to the Ashʿarite causal theory in this defense is quite evident:²¹

If it were established that that whose existence is possible is such that there cannot be created for man knowledge of its non-existence, then these impossibilities would necessarily ensue. We are not, however, rendered skeptical by the illustrations you have given because God created for us knowledge that He did not enact these possibilities. We did not claim that these things are necessary. On the contrary, they are possibles that may or may not occur. But the continuous habit of their occurrence repeatedly, one time after another, fixes unshakably in our minds the belief in their occurrence according to past habit. . . .

If, then, God disrupts the habitual [course of nature] by making such [a thing occur] at a time in which disruptions of habitual [events] take place, these cognitions [of the non-occurrence of such unusual possible events]²² slip from [men's] hearts and God does not create them. There is therefore nothing to prevent a thing from being possible, within the capabilities of God (exalted be He), that by His prior knowledge He knows that He would not do it at certain times—despite its possibility—and that He creates for us knowledge that He will not create it at that time.

Hence in [all] this talk [of theirs] there is nothing but sheer vilification (*ta laṣṣa fī hādha al-kalām illā tashnīʿ mahḍ*).²³

With this defense of the Ashʿarite causal theory and the reference to the philosophers' argument against it as being sheer vilification (*tashnīʿ mahḍ*), we will now turn to al-Ghazālī's second way of showing how the miraculous survival of a prophet cast into a deadly fire is possible. It is in arguing for this that he suggests a second causal theory.

4

Al-Ghazālī's opening sentence introducing the second causal theory contains two key expressions that demand special attention. Al-Ghazālī writes:

The second way—in which there is deliverance from these vilifications (*al-tashnīʿat*)—is for us to concede (*tan nusallim*) that fire is created in such a way that if two similar pieces of cotton came into contact with it, it would burn both, making

no distinction between them, if they are similar in all respects.²⁴

The first of these expressions is *al-tashmī'at* "vilifications," the plural of *tashmī'*. Van Den Bergh in his English version seems to have misread this expression for *shanā'āt*, the plural of *shanā'a*, translating it as "reprehensible consequences."²⁵ This translation makes al-Ghazālī tacitly admit precisely what in fact he denies. Averroes also fortifies this misunderstanding when, intentionally or not, he uses the term *shanā'a* in commenting on this passage:

When Ghazali saw that the doctrine that things have neither special qualities nor special forms from which the acts proper to each existent necessarily proceed is exceedingly repugnant (*fi ghāyat al-shanā'a*) and contrary to what man rationally thinks, he conceded [its falsity] in this discourse.²⁶

The second expression is *an nusallim*, "for us to concede," or "for us to admit."²⁷ Now this is a logical term. It relates to the class of statements, *al-musallamāt*, the admitted statements, discussed in such detail by Avicenna, for example.²⁸ These are the statements admitted in argument for a variety of reasons, not always because they are believed to be true. Al-Ghazālī, who also discusses these statements in his logical writings, early in the *Iḥhāfut*, referring to certain of the philosophers' scientific theories, says: "Let us concede all this to them, dialectically or out of conviction" (*fa-l-nusallim lahum jamī'a dhālika jadalan aw ʿtiqādan*).²⁹ In other words, when al-Ghazālī says that the second way of answering the philosophers is to concede to them a certain view, this does not necessarily mean that he is conceding it out of conviction. He may be doing it simply for the sake of argument.

Now whether or not al-Ghazālī makes this concession out of conviction, he certainly presses his second argument to show the possibility of miracles, which the philosophers reject. His discussion can be divided into four parts:³⁰ (1) the argument for the possibility of a miracle that involves impeding the natural act—now allowed—of an inanimate thing; (2) an explanation of the type of miracle involving the sudden change from an inanimate state to an animate one; (3) a

discussion of the role of the prophet that introduces the concept of preponderance to explain the occurrence of a miracle; (4) a discussion of nature's uniformity in terms of the concept of preponderance and the theory that receptacles have specific dispositions for the reception of specific acts. This last part develops the theory of dispositions, discussing the talismanic art and indicating the diversity and wondrous propensities—beyond human ken—to receive varied forms.

Turning to the first part, we have already quoted al-Ghazālī's concession that if fire touches two similar pieces of cotton it will burn both indiscriminately. In so doing, he now allows one of the two philosophical views he had discussed earlier and rejected, namely, that (a) inanimate things have causal action and that (b) this action proceeds as the necessary consequence of their very nature.³¹ He allows it, however, with the important qualification that the divine act remains voluntary. God now is omnipotent in the sense that He can intervene directly in the natural course of events, not, however, to change the nature of things, but to interpose impediments that causally thwart their action. Thus a prophet thrown in the fire can be miraculously saved if God either creates something which limits the influence of fire to its own body or something like tale which shields the prophet from its influence.

In the second type of miracle, God intervenes to accelerate the process of change in the world.

Similarly, the raising of the dead and the changing of the staff into a snake are possible in this way, namely, that matter is receptive of all things. Thus earth and the rest of the elements change into plants, plants—when eaten by animals—into blood, blood into sperm. Sperm is then placed in the womb and is created into an animal. [All] this, in accordance with habit, takes place in a lengthy period of time. Why then should the opponent deem it impossible that it lies within God's powers to rotate matter through these stages in a time shorter than has been known? And if this is possible in a shorter time, there is no limit restricting shorter periods. Thus God accelerates these powers in their actions and by this that which is a miracle for the prophet (peace be with him) is realized.³²

Having introduced the prophet into the picture, al-Ghazālī

discusses his role. The section is almost a parody of Avicenna's argument to prove prophethood in the *Metaphysics* of the *Shifā'*.³³ We note, however, that al-Ghazālī carefully avoids the necessitarianism of Avicenna's account, introducing and using Avicenna's concept of preponderance³⁴ in a probabilistic rather than a determinist way. We also notice that when it comes to the question of whether the miracle is produced by the prophet's soul or by a celestial principle, al-Ghazālī, after an initial dialectical retort, states that it is more proper for both theologians and philosophers to attribute the miracle to God. While this agrees with the Ash'arite doctrine of miracles, it is not clear why al-Ghazālī thinks that it is also proper for the philosophers to make this attribution. One suspects that al-Ghazālī has in mind those philosophers who maintain that all real actions proceed from the celestial powers, the terrestrial activities concomitant with them being merely preparatory causes. The discussion of prophethood is as follows:

If it is said, "does this proceed from the prophet's soul or from some other principle at the suggestion of the prophet (peace be with him)?" we answer: What you have admitted as regards the possibility of the coming down of rain, or hurricanes and the occurrence of earthquakes through the power of the prophet's soul, does [such an event] come about from the prophet or from some other principle? What we say [in answer to your question] is the same as what you say [in answer to ours].

It is, however, more fitting for both you and us to relate this to God (exalted be He), either directly or through the mediation of His angels. The time meriting its appearance, however, would be when the prophet's attention is wholly directed to it and when the order of the good, so that the order of the revealed law may endure, becomes specifically dependent on its appearance. All this gives preponderance to the side of [the] existence [of the miracle], the thing in itself being possible, the principle endowing it benevolent and generous. It would only emanate from [the principle], however, if the need for it becomes preponderant and the order of the good becomes specifically dependent on it. And the order of the good becomes specifically dependent on it only if the prophet is in need of it to prove his prophethood in order to spread the good.

All this is consistent with what they say and a necessary consequence for them as long as they bring up the topic [of

the doctrine they subscribe to, namely), of the prophet's special endowment with a specific characteristic differing from the customary [characteristic] of men. For the measure of such special endowments cannot be ascertained by the mind. Why, then, with all this, must one disbelieve what has been widely transmitted and which the religious law has stated [must be] believed?³⁵

Al-Ghazālī uses next the concept of preponderance in explaining nature's uniformities—for example, the reason why "wheat has never sprouted from barley and apples never grew from the seed of pears."³⁶ Introducing a concept of suitability (*munāsaba*), he explains that from the sperm of a horse only a horse is created "inasmuch as its creation from the horse is more necessitating of preponderance (*tarjāh tarjīhan*) because of the suitability of the equine form."³⁷ He discusses further the theory of dispositions making certain references to the philosophers that remind us that he is developing his explanation in terms of what the philosophers hold. He states that the disposition of things to receive forms "differ due to things unknown to us—it being beyond human power to know them—since, according to [the philosophers] forms do not emanate from the angels by whim of appetite or haphazardly."³⁸ Again, he writes: "Dispositions are varied, their principles according to [the philosophers] being the configuration of the stars and the differing relations of the heavenly bodies that move them"³⁹ On the basis of this theory of dispositions, he refers us to the talismanic art which a philosopher like Avicenna included in a subdivision of the natural sciences.⁴⁰ He then concludes his exposition of the second causal theory as follows:

If, then, the principles of dispositions are beyond enumeration, the depth of their nature beyond our ken, there being no way for us to ascertain them, how then can we know that it is impossible for a disposition to occur in some that allows their transformation in phase of development in the shortest [possible] time so that they become prepared to receive a form that they were never prepared for previously, and that this should not come about as a miracle? The denial of this is only due to our lack of capacity to understand, lack of familiarity with the exalted beings, and unawareness of the secrets of God (praised be He) in creation and nature. Who-

ever studies inductively the wonders of the sciences will not deem what is told of the miracles of the prophets (peace be on them) in any way remote from the power of God (exalted be He).⁴¹

5

In his exposition of the second causal theory, al-Ghazālī writes with earnestness and ardor. One is also impressed by his striving towards completeness in the sketching of it. As we have seen, after arguing for the possibility of two different kinds of miracles, he discusses in metaphysical terms—carefully avoiding, however, Avicenna's necessitarianism—the role of the prophet in all this and offers an explanation of nature's uniformity. He then argues that the philosophers' own theory that the receptive dispositions in terrestrial things are caused by the motions of the stars makes the range of possible divine action (in terms of these dispositions) beyond human comprehension. Looking at the wonders of the natural sciences alone will show that the miracles reported by the scriptures are not "in any way remote from the power of God," he concludes.

Al-Ghazālī's exposition of the second causal theory leaves one with a strong first impression that this is a theory in which he genuinely believes. Whether or not such an impression can withstand the test of closer examination, this much is certain: al-Ghazālī is exploring the bounds of a theory which he deems possible. This is fully confirmed in the 20th Discussion, in his reply to one of the philosophers' arguments against the doctrine of bodily resurrection, where he explicitly refers to both causal theories—the Ash'arite and the second—as possible.⁴² Let us then turn to this argument:

The philosophers maintain that the doctrine of bodily resurrection entails that the decomposed body would have to undergo an evolutionary ascending process before it could be revived. (The implication is that this does not take place.) In his answer, al-Ghazālī does not deny that such developmental change in the body would have to antecede its revivification. He insists on this. It can occur, he goes on to argue, either in a moment or in a lengthy period

of time. The real issue, he then adds, is whether such a transformation is achieved directly by divine power, or through the mediation of some cause. He writes:

Both these are possible for us (*'indānāt*), as we have stated in the first discussion of the [section on the] natural sciences in the discussion of [God's] decreeing the flow of the habitual [course of events], where we stated, [first of all], that the things conjoined in existence are not connected by way of necessity, but that the habitual [uniformities] can be disrupted so that these [miraculous] events come about through the power of God (exalted be He) without the existence of their causes. As for the second (possibility), we say: this comes about through causes but not on the condition that the cause is a familiar one. Rather, within the arsenal of [divine] capabilities there are wondrous and strange things, unknown to us, that would be denied by one who supposes that nothing but what he experiences exists.⁴³

Al-Ghazālī then goes on to repeat and enlarge on some of the things he had said in the 17th Discussion regarding the occult arts and the extent of divine capabilities.

What concerns us here is the assertion that both theories are possible. But "both possible" in what sense? Does al-Ghazālī mean that they are compossible? There is not compelling reason or textual indication for believing that he is committing the error of thinking that they are. The two theories are mutually exclusive—one denying causal efficacy in inanimate things, the other affirming it.⁴⁴ Now, al-Ghazālī, as we shall see, defines the possible in purely logical terms, as that which is not self-contradictory. Hence, since he holds that both theories are possible, he must mean that each viewed independently of the other is internally consistent. Whether or not al-Ghazālī errs in this is a different matter.⁴⁵ Our concern is with what he believes. Rightly or wrongly he believes that each individually is possible.⁴⁶

There is also another sense in which both these theories are possible for him, namely, that each individually represents a possible alternative answer to the philosophers' causal theory that rejects the possibility of certain kinds of miracles. For, as he tries to show, each in its different way denies the philosophers' premise militating against the pos-

sibility of these miracles. This is the premise that God acts by necessity and that He cannot directly intervene in the terrestrial realm to disrupt an order of necessary, connected events.

It should be noted that from the point of view of the primary purpose of the *Tahāfut*—about which we will be saying something shortly—al-Ghazālī does not have to show that either theory is true. All that he needs to show is that each individually (a) is logically possible and (b) constitutes a possible alternative to the philosophers' denial of the possibility of certain miracles. In other words, to show that each one is possible in both senses of the term is sufficient to refute the philosophers. But while this is perfectly true and al-Ghazālī, by implication, says as much, one must guard against the error of concluding that al-Ghazālī's position regarding the question of which of the two theories is true is therefore an agnostic one. Such a conclusion does not follow. Moreover the indications in the *Tahāfut* that al-Ghazālī subscribes to one of the two theories and not the other are quite positive and are confirmed by a complementary theological work. Before we can properly show this, however, we must first turn briefly to al-Ghazālī's declared intention for writing the *Tahāfut* and to the complementary theological work just mentioned. This in turn will allow us to illustrate one of the ways al-Ghazālī argues in the *Tahāfut*. Although taken from a different Discussion, the illustration, as will become apparent, is relevant to the exegetical problem at hand in the 17th.

6

In introducing his *Tahāfut*,⁴⁷ al-Ghazālī declares that his intention is simply to refute the philosophers, not to affirm or defend any particular doctrine. After repeating the same idea at the conclusion of the 1st Discussion, he announces that after completing the *Tahāfut* he hopes to write a book "in which we will devote ourselves to affirmation, just as we have devoted ourselves in this book to destruction."⁴⁸ The work that fulfils this purpose, written shortly after the *Tahāfut*, is his *Iqtisād fi al-ʿItiqād* (*The Golden Mean of Belief*), al-Ghazālī's most comprehensive work in dogmatic theology (*kalām*).⁴⁹

As intended, the *Tahāfut* remains primarily a work of refutation, of destruction. Nonetheless, in the very process of refuting the opponent, al-Ghazālī also affirms and defends opposing views.⁵⁰ Some of these affirmations are made categorically, quite clearly expressing doctrines al-Ghazālī himself upholds.⁵¹ Others are not so explicit and it is not immediately clear whether or not al-Ghazālī is simply stating them for the sake of argument. Still, many of these cohere with the former to form an identifiable dominant counterposition to the philosophers, which, not surprisingly, is Ashʿarite. (Averroes' repeated references in his own *Tahāfut* to al-Ghazālī's arguments as Ashʿarite are not without foundation in the text.)⁵² On the other hand, as with the second causal theory, there are instances where (a) al-Ghazālī defends a non-Ashʿarite position, and where (b) it is not immediately obvious whether he does this out of conviction or simply to confute his opponents. A very instructive example of this occurs in the 20th Discussion, in the first of two debates over the question of bodily resurrection, to which we must now turn.⁵³

The philosophers maintain that any supposition of bodily resurrection must entail one of three doctrines. The first, held, as we are told, by some Islamic theologians,⁵⁴ denies the concept of the soul as an immaterial substance, identifies a human being with his physical body, and regards life as an accident that inheres in it. Death occurs when God ceases to create the accident, life. According to one version of this doctrine, this results in the total annihilation of both life and body. Resurrection hence means the recreation anew of both life and body. According to another version, however, the body at death is not annihilated, but simply disintegrates into earth. Resurrection thus means the recreation anew of life and the reforming of the body from the earth into which it has decomposed. The second and third doctrines are similar to one another, both affirming the existence of the soul as an individual, immaterial, and immortal substance that at death separates from the body. The former doctrine, however, insists that bodily resurrection means that the soul rejoins the body reformed from

the very earth into which it had decomposed. The latter theory does not insist on this, allowing the possibility that the soul may join a body reformed from any earth whatsoever.

After describing these three doctrines, the philosophers then attempt to show that each leads to contradictory consequences. They then conclude that bodily resurrection is impossible. In answering the philosophers, al-Ghazālī chooses to defend only one of these doctrines, this being sufficient for his purpose of refuting them. Quite unexpectedly, however, the doctrine he chooses to defend is not the first, the theological, but the third:

The objection is to say: "With what [argument] would you deny someone who chooses the last alternative, maintaining the view that the soul endures after death, it being a self-subsisting substance?" For this does not contradict the revealed law. On the contrary, the revealed law points to this in the utterance of God (exalted be He): "Do not reckon that those killed in the way of God are dead; they are living with their Lord, provided for, rejoicing. . . ."⁵⁵ and in the saying of the prophet (peace be on him): "The spirits of the righteous are in the crops of green birds that hang beneath the Throne."⁵⁶

We notice that the opening sentence of al-Ghazālī's defense of the third doctrine does not commit him to it. In fact, all that he strives to show is that, contrary to what the philosophers maintain, this doctrine does not lead to contradictory consequences and is hence possible. Nonetheless he goes on to give a cogent point-by-point answer that carries with it a note of conviction, particularly as his logical defense is introduced—as we see in the above passage—by scriptural quotations supporting the doctrine. One is left with the impression that this is a doctrine in which he believes. The *Iqtisād*, however, shows that such an impression is utter illusion. For al-Ghazālī gives a spirited defense of the theological doctrine, the first of the three described in the *Tahāfut*, not the third. Then, referring to the third, he writes:

We have treated this problem of [bodily resurrection] in detail in the *Kitāb al-Tahāfut*, adopting in refuting [the philosophers'] doctrine [the view] that affirms the immortality

of the soul—which according to them has no position in space—and that allows the resumption of its management of the body, regardless of whether such a body is the same as the [original] human body or not.

This, however, is a consequence [we made logically incumbent on them to accept] that does not agree with what we believe in *ṭwa dhālika ilzāmūn lā yuwāfiqū mā' na' taqīdhu*. For that book was written for the purpose of refuting their doctrine, not for the purpose of establishing true doctrine.⁵⁷

Here we have a clear instance in the *Tahāfut* where al-Ghazālī fervently defends a doctrine which—as we learn from the *Iqtisād*—he does not believe to be true, defending it simply for the sake of refuting the opponent. Hence, in the absence of an explicit commitment to a theory in the *Tahāfut*, al-Ghazālī's ardor and cogency in its defense are no guarantee that he holds it to be true. This must be borne in mind in the attempt to determine which of the two causal theories defended by al-Ghazālī in the 17th Discussion he upholds.

7

Which then of the two causal theories does al-Ghazālī actually uphold? The weight of the evidence, as we shall now try to show, points clearly to the Ash'arite, not the second. The *Iqtisād*, as we shall indicate, corroborates this. Some of the evidence has already been presented in parts 3 and 4. To recapitulate then, there is first of all the way in which each of the two theories is introduced. As we have indicated, the second causal theory is not introduced because of any admission on al-Ghazālī's part that the philosophers' objections to the Ash'arite theory have been effective. On the contrary, in answering them he dismisses them as no arguments at all, as being tantamount to sheer vilification (*tashnī' mahḍ*). It is in order to avoid being subjected to such vilification that he would answer them in another way. When, in introducing this second way, he concedes to the philosophers their premise regarding the causal action of a natural element like fire, this does not necessarily mean that he concedes it out of conviction. The most natural way to read the text here is that al-Ghazālī concedes it dialectically, for the sake of argument. This is supported by

sections in the exposition of the second causal theory where al-Ghazālī argues in terms of what the philosophers hold, not necessarily in terms of what he maintains.⁵⁹

This is very different from the way al-Ghazālī introduces the Ash‘arite causal theory. He does not introduce it dialectically, as an answer to an objection, for example. He begins the 17th Discussion by announcing it. It is a declaration of his belief:

The connection between what is habitually believed to be a cause and what is habitually believed to be an effect is not necessary for us (*‘indunā*). But, [with] any two things where one is not the other and where neither the affirmation nor negation of the one entails the affirmation or negation of the other, the existence or non-existence of the one does not render either the existence or non-existence of the other necessary; for example, the quenching of thirst and drinking, satiety and eating, burning and contact with fire. . . . For the connection of [all these things] is due to God’s prior decree, who creates them side by side, not due to its being necessary in itself.⁶⁰

A key expression in the first sentence is the Arabic *‘indunā*, “for us,” “with us,” “according to us.” Nowhere in the exposition of the second causal theory do we encounter this expression or an equivalent explicit utterance indicating that this is a theory he holds. Nor do we find in it unequivocal categorical statements to the effect that God actually acts in this or that way. What statements we do find are to the effect that it is conceivable that God can act in this or that way. This, again, is in sharp contrast to the exposition of the first causal theory. For in addition to the initial declaration quoted above, we meet other categorical assertions in the discussion that follows. We are thus told in no uncertain terms – not as a concession in argument – that when fire touches a piece of cotton, it is God, not the fire, who “enacts the burning by creating blackness in the cotton, disintegration in its parts, and by making it tinder or ashes.”⁶¹ For the inanimate, al-Ghazālī declares once more as he had done in the 3rd Discussion, has no causal action. Again, in answering certain objections to the Ash‘arite causal theory, he gives in categorical terms his occasionalist account of human knowledge.⁶²

It could be argued, however, that the evidence is not conclusive since it is conceivable for al-Ghazālī to have changed his mind, embracing the second causal theory, abrogating thereby what he had affirmed earlier. This, one could go on to argue, may not be evident from the way the second theory is introduced; but it is conveyed by the exposition itself, by its earnestness, by al-Ghazālī’s careful avoidance of necessitarianism in his discussion of prophecy and by his striving for completeness in outlining the theory. All this cannot be simply “for the sake of argument.”

The persuasiveness of this argument, however, is extremely weakened by the example from the 20th Discussion we pointed out in part 6 where al-Ghazālī fervently and cogently defends a doctrine in which he does not actually believe. As we have concluded from this example, in the absence of an explicit commitment to a theory in the *Tahāfut*, earnestness and cogency in its defense are no guarantee that al-Ghazālī holds it to be true. As we read the text, there is no explicit commitment by al-Ghazālī to the second causal theory. To our mind, however, what makes this argument totally implausible is the concluding section of the 17th Discussion that immediately follows the exposition of the second causal theory. For here, within the context of a discussion of the meaning of the term “impossible,” the question of al-Ghazālī’s denial of necessary causal connection is raised again, criticized by the philosophers, and defended by al-Ghazālī. If he had in fact just abandoned the denial of necessary causal connection by embracing the second causal theory, why would he raise the matter at all? But let us for the moment consider the text. Immediately after al-Ghazālī’s exposition of the second causal theory, the philosophers argue as follows:

We help you by maintaining that every possible thing is within the power of God (exalted be He) while you help us by maintaining that whatever is impossible is not within [divine] power. There are things whose impossibility is known, while there are things which the mind confronts undecided, judging them neither to be impossible nor possible.

Now, then, what, according to you, is the definition of the impossible? If in the final analysis it comes down only to the combining of negation and affirmation in the same thing,

then [go ahead] and say, "in the case of two things, where one is not the other, the existence of the one does not require the existence of the other," and say that God (exalted be He) can create a will without the knowledge of the object willed and create knowledge without life; that He can move a dead man's hand, seating him, and with the hand write volumes and engage in crafts, the man being all the while open-eyed, staring ahead of him, but not seeing and having no life and no power over [what is being done]. All the ordered acts would thus be created by God (the exalted) together with the moving of his hand, the motion coming from God (the exalted). By allowing the possibility of this, the distinction between the voluntary and spasmodic movement ceases. The well-designed would no longer prove either the knowledge or the power of the agent.

God, moreover, ought then to be able to change genera. He would thus change substance into accident, knowledge into power, blackness into whiteness, sound into smell, just as he had been able to change the inanimate into animal, stone into gold, and there will follow as necessary consequences innumerable impossibilities.⁶³

The thrust of this argument is that if al-Ghazālī confines his definition of impossibility to "the combining of negation and affirmation in the one thing," maintaining on the basis of this his denial of necessary causal connection, then he must admit a number of things that are manifestly impossible. In his reply, al-Ghazālī shows that this does not follow. Some of the things mentioned by the philosophers as absurd are absurd precisely because they conform with his strictly logical definition of impossibility⁶⁴—the very definition that allows him to deny necessary causal connection. Thus, for example, he argues, the combining of blackness and whiteness is impossible because "by the affirming of the form of blackness in a substratum we understand the negation of whiteness and the existence of blackness. Once the negation of whiteness is understood from the affirmation of blackness, then [clearly] the affirmation of whiteness [simultaneously] with its negation becomes impossible."⁶⁵ Again, "we understand by the will the seeking after something known [to the willer]. If then a quest is supposed without knowledge, there would be no will; and this entails the denial of what we understood [by will]."⁶⁶ Change is transformation, the rotation of form over matter,

of accident over substance. Changing the inanimate into animal, al-Ghazālī continues, is an instance of this transformation. Contrary to what the philosophers intimate, it is not similar to the change of one genus into another. The change of genera is impossible because—as in the case of accident and substance—there is no common matter underlying the different genera. Without an underlying common matter, there can be no transformation.⁶⁷

On the other hand, al-Ghazālī goes on to argue, some of the things held to be impossible by the philosophers are in themselves possible. Moreover they do not lead to the consequences claimed for them by the philosophers:

As for God's moving the hand of the dead man, setting him up in the form of a living person who is seated and writes so that through the movement of his hand ordered writing ensues, [this] in itself is not impossible as long as we attribute [all] events to the will of a choosing being. One only disavows it because of the continuous custom of its opposite occurring. Your statement that the proof from the well-designed act for the knowledge of the agent ceases is not true. For the agent in this instance is God (the exalted), who is the performer of the well-designed act and the knower of it.

As for the statement that the difference between the spasmodic movement and the voluntary movement ceases, we say: We apprehend [this difference] in ourselves. For we have perceived in ourselves a necessary distinction between the two states and have given expression to this distinction by [the term], "power." We thus know that each of what occurs of the two possible alternatives is in a different state, namely, the bringing into existence of a motion with the power over it in the one circumstance, and the bringing into existence of a motion without the power in the other. If, however, we look at another person and perceive many ordered motions, there occurs to us knowledge of his power. For these are cognitions which God creates according to the customary course [of events] by which we know the existence of one of the two possible alternatives and by which we do not prove the impossibility of the other alternative, as we have previously said.⁶⁸

It is on this note that the 17th Discussion ends. The language of the passage is Ash'arite through and through. Among other things it reiterates the standard Ash'arite answer to the criticism that the doctrine that all human

acts are created by God erases the distinction between the voluntary and spasmodic movement, an answer we encounter in Ash'ari's *Luma'*.⁶⁹ The entire last section gives us no reason to suppose that the introduction of the second causal theory marks a change of mind on the part of al-Ghazālī, representing an abrogation of his earlier affirmation of the Ash'arite causal doctrine. If anything, this section is a reaffirmation of it.

Finally, the *Iqtisād* confirms that al-Ghazālī upholds the Ash'arite causal doctrine. This is the one work, other than the *Tahāfut*, in which al-Ghazālī discusses causation at some length. As we have also stated, it is a work closely related to the *Tahāfut*. Significantly, we do not find in the *Iqtisād* any mention of the second causal theory. Al-Ghazālī concentrates on rejecting the Mu'tazilite doctrine of generated acts (*tal-tawallud*),⁷⁰ which he identifies with the necessitarian causal theory of the philosophers.⁷¹ We also find in the *Iqtisād* another theological motive for his denial of natural causes and his attribution of all happenings to divine causal action. This has to do with the doctrine of *al-ajal*, the predestined term of life of an individual human being.⁷² The Islamic theologians debated the question of whether, for example, a man when decapitated dies by the action of the sword or because of his *ajal*. Al-Ghazālī argues that death is caused by God at the predestined time. The action of the hand lowering the sword, he explains, represents a series of events, of accidents (*a'rāq*), accompanied by another series of accidents, the separation of parts in the victim's neck. Death, another concomitant event occurring at a certain juncture, however, is created by God. In his discussion of this problem al-Ghazālī's declares the Ash'arite explanation to be the true one.

8

If then, as we have tried to show, the causal theory in the *Tahāfut* to which al-Ghazālī subscribes is the Ash'arite, why did he introduce the second? The answer, as we see it, is that it is introduced as an additional refutation of the philosophers' denial of the possibility of certain miracles. Al-Ghazālī in effect is saying that even if, for the sake of

argument, we grant the philosophers their premise that a natural inanimate element like fire has causal efficacy—provided we maintain that God's acts are voluntary—we can still show that the miracles deemed impossible by them are possible. Al-Ghazālī may also have in mind those Muslims who do not reject natural causation, to provide them with an alternative theory that does not commit them to the philosophers' denial of certain miracles. This would explain in part the care he takes in outlining the theory, particularly his avoidance of necessitarianism. This, however, is surmise.

Although introduced, as we have argued, for the sake of refuting the philosophers, not as an expression of what al-Ghazālī himself holds, the second causal theory remains of philosophical interest in its own right and reflects the kind of thinking on causal matters in medieval Islam. One can profitably discuss the philosophical issues raised by it in terms of the way Averroes or others have interpreted it, even if, as we see it, al-Ghazālī's intention in introducing it has been misunderstood.

NOTES

1. Al-Ghazālī, *Tahāfut al-Falāsifa*, ed. M. Bouyges (Beirut, 1927); abbreviated hereafter in the notes as *TF*.
2. That God acts through angelic mediation may seem contrary to the notion that causal action resides exclusively with God. The point, however, is that initiative and power are entirely God's, the angels only doing His bidding. Moreover the very act of the angel, as the act of any "servant" of God, is created by God. See, for example, al-Buqillānī, *al-Tamhīd*, ed. Richard J. McCarthy (Beirut, 1957), pp. 303-324; for a reference to angels, p. 306, lines 5-7.
3. Ibn Rushd (Averroes), *Tahāfut al-Tahāfut*, ed. M. Bouyges (Beirut, 1930), p. 537. This work will be referred to in the notes as *TF*.
4. William J. Courtenay, "The Critique of Natural Causality in the Mutakallimūn and Nominalism," *The Harvard Theological Review* 66.1 (January 1973): 85.
5. *TF*, pp. 96-103.
6. *Ibid.*, pp. 107-109.
7. *Ibid.*, pp. 368-76.
8. This is Avicenna's theory. For a discussion of it, see F. Rahman, *Prophecy in Islam* (London, 1958), pp. 31-54; M.E. Marmura, "Avicenna's Psychological Proof of Prophecy," *Journal of Near Eastern Studies* 22.1 (1963): 49-56; also the Arabic and English introductions to: Ibn Sīnā, *Fī*

Iḥbāt al-Nubuwwāt (On the Proof of Prophecies), ed. M.E. Marmura (Beirut, 1968).

9. *TF*, p. 275, lines 12-13: *wa anna dhālika yakūnu li al-anbiyā'*, translatable also as "that this is among the things that belong to prophets." This translation, however, makes al-Ghazālī hold the view that the miracle is brought about by the power of the prophet to be a fact. As we will point out shortly, the 17th Discussion clearly indicates that this for al-Ghazālī is only a possibility, that he shows preference to the view that it is God who creates the miracle; this is also suggested by his critique of the philosophers' theory of prophecy in the 16th Discussion (*TF*, pp. 261-267).

10. See, for example, al-Juwaynī, *al-Ishād* (Cairo, 1950), pp. 308-309; al-Ghazālī, *al-Iqtisād fī al-Itiqād*, ed. I.A. Çubukcu and H. Atay (Ankara, 1962), pp. 195-96. These references will be abbreviated as *Ishād* and *Iqtisād*, respectively.

11. *TF*, p. 280, lines 3-4.

12. At first sight, this provision seems to assume the point at issue. Al-Ghazālī, however, wants to set aside those necessary concomitants which are not causally related. Thus, for example, he wants to exclude such a spatial relationship between two things as one being above the other or to the right of it, where it follows necessarily that the other is below it or to the left of it (*Iqtisād*, p. 222). More fundamental than this is the relation between the attributes. In *TF*, p. 223, lines 9-10, he states that "will entails knowledge necessarily" (*al-irāda tataqamman al-ilm darūratan*). In *Iqtisād*, pp. 97, 223, he speaks of one attribute being a necessary condition—but not a cause—of the other (the attribute of life being a necessary condition of the attributes of will and knowledge.) Hence what seems to be uppermost in al-Ghazālī's mind is the Ash'arite doctrine of divine attributes where each attribute is distinct from the other and not identical with the divine essence, yet all necessarily coexisting and some being a necessary condition for the existence of others. See *Iqtisād*, p. 135 and *TF*, p. 107.

The provision indicated above has been missed in some of the English translations of this passage, where there appears to be a misunderstanding of the syntax of *TF*, p. 277, lines 2-4. For a comment on the syntax of this passage, see M.E. Marmura, "Ghazali and Demonstrative Science," *Journal of the History of Philosophy* 3, 2 (October, 1965): 187, n. 23.

13. *TF*, p. 378, lines 1-2.

14. *Ibid.*, p. 278, line 13-p. 279, line 2.

15. *Ibid.*, p. 281, lines 7-9.

16. *Ibid.*, p. 281, lines 12-13.

17. *Ibid.*, p. 282, lines 8-10.

18. *Ibid.*, pp. 37-46.

19. *Ibid.*, p. 283, lines 6-8.

20. *Ibid.*, p. 283, line 9-p. 284, line 3.

21. *Ibid.*, p. 255, lines 7-12 and p. 286, lines 6-11.

22. Al-Ghazālī had given examples of this in the paragraph we omitted translating, namely, *TF*, p. 286, lines 1-11.

23. This sentence is omitted in S. Van Den Bergh's translation of Averroes' *Tahāfut al-Tahāfut*. For reference to this work see n. 25 below.

24. *TF*, p. 286, line 12; p. 287, line 2.

25. Averroes' *The Incoherence of the Incoherence*, trans. S. Van Den Bergh, 2 vols. (Oxford, 1954), I, p. 326.

26. *TF*, p. 537; also S. Van Den Bergh, II, p. 182, note on I, 326.7.

27. Cf. Van Den Bergh, I, p. 326, and S.A. Kamālī's translation of al-Ghazālī's *Tahāfut al-Falāsifa* (Lahore, 1957), p. 191.

28. Ibn Sīnā (Avicenna), *al-Ishārāt wa al-Tanbihāt* (Vol. I; Logos ed. S. Dunya (Cairo, 1953), pp. 389-414; see also Ibn Sīnā's *al-Shifā': Logic V: Demonstration*, ed. A.E. Affifi (Cairo, 1956), pp. 75-76.

29. *TF*, p. 15, lines 1-5.

30. *Ibid.*, p. 286, line 12-p. 288, line 3; p. 288, lines 3-10; p. 288, line 11-p. 290, line 1; p. 290, line 1; line 1-p. 292, line 1.

31. There seems to be a curious shift in the argument here. It must be remembered that the position he is supposed to be answering is one that maintains that causal efficacy belongs only to the celestial principles that act by necessity, not to mundane principles that only have receptive capacities. In his answer, however, al-Ghazālī seems to be making his "concession" to the position that maintains that terrestrial, inanimate natural things have causal action.

32. *TF*, p. 288, lines 3-10.

33. Ibn Sīnā, *al-Shifā': al-Hābiqūn* (Metaphysics), ed. C.A. Anawati, S. Dunya, and S. Zayd, revised by I. Madkur (Cairo, 1961), II, pp. 441-43.

34. *Ibid.*, p. 377.

35. *TF*, p. 288, line 11-p. 290, line 1.

36. *Ibid.*, p. 290, lines 6-7.

37. *Ibid.*, p. 290, line 5.

38. *Ibid.*, p. 290, line 10-12.

39. *Ibid.*, p. 290, line 14-p. 291, line 1.

40. Ibn Sīnā, "Aqsām al-'Ulūm," *Tis' Rusūf* (Cairo, 1908), p. 111. This seems to be al-Ghazālī's source for his summary of the philosophers' classification of the sciences in *TF*, pp. 268-70, in the Preface to the second part of the *Tahāfut*.

41. *TF*, p. 291, line 7-p. 292, line 1.

42. *Ibid.*, pp. 366-75.

43. *Ibid.*, lines 6-12.

44. The two theories are incompatible despite a common feature, namely, that God can intervene at will to disrupt the uniform course of natural event. The nature of the disruption enacted by God according to each of the two theories, however, is very different. It is very different precisely because each theory contradicts the other on the question of whether inanimate things have causal agency. According to the first

theory, the miracle consists in God's creating one event without its normal concomitant, according to the second in His creating an impediment that disrupts the action of a natural cause or else accelerates the natural course of events.

45. The problem arises with al-Ghazālī's assertion in the 3d. Discussion (*TF*, pp. 96-103) that when in Arabic a verb of action has an inanimate thing as subject (for example, "fire burns," "the sword cuts," and so on — *TF*, pp. 100-101) the usage is strictly metaphorical. Inanimate things have no causal action, since such action is only attributable to a living, willing, knowing agent (*Ibid.*, pp. 96-97).

Is then this absence of real agency in inanimate things a contingent fact or does it follow from the definition of "act?" If the second alternative is the case—and this is what al-Ghazālī seems to maintain—then a statement affirming that fire burns would not be simply false but self-contradictory. How then can a theory that affirms that inanimate things have casual action be possible? Al-Ghazālī does not go into this question or even hint at it.

46. That al-Ghazālī "believes" that the two theories are possible—though, as we have tried to show, not necessarily "compossible"—is conveyed by his saying that both are possible "for us," or "according to us," (*indānā*, an expression we will be referring to again in part 7 in discussing the opening statement of the 17th Discussion. See note 60.

47. In the third of the four short Prefaces to this work: *TF*, p. 13, lines 9-13.

48. *Ibid.*, pp. 77-78.

49. The title given in the *Tahāfut* is *Qawā'id al-'Aqā'id* (The Principles of Belief), a title subsequently given by al-Ghazālī to his short treatise in Ash'arite dogmatics that forms the second book of his voluminous *Ihḡā'*. It is, however, the *Iqtisād*, written shortly after the *Tahāfut* and before the *Ihḡā'* that is thematically closest to the *Tahāfut* and the work that complements it. Van Den Bergh in his translation has gone so far as to substitute the title *Iqtisād* for *Qawā'id*. See Van Den Bergh I, p. 65 and II, p. 53, note 65. 5. For a comment on this, see G.F. Hourani, "The Chronology of Ghazālī's Writings," *Journal of the American Oriental Society* 79, 4 (October-December 1959): 228, note 15. See also M. Bouyges, *Essai de Chronologie des Oeuvres de al-Ghazali*, edited and updated by Michel Allard (Beirut, 1959), pp. 33-34, 111.

50. For a discussion of some aspects of al-Ghazālī's method of refuting the philosophers, see M.E. Marmura, "The Conflict over the World's Pre-eternity in the *Tahāfuts* of al-Ghazālī and Ibn Rushd" (Ph.D. dissertation, Department of Near East Studies, University of Michigan, 1959), p. 2 ff.

51. Conspicuous instances of these occur in the 17th Discussion, as we will indicate in part 6. The following are some other examples:

"According to us (*indānā*) duration and time are created." (*TF*, p. 36, line D).

"We say: The world exists, in the way it exists, with the qualities it

has, and in the place where it is through the will. The will is an attribute whose characteristic is to differentiate between one similar thing and another." (*Ibid.*, p. 57, lines 9-11).

"We shall show [later on] that the circular motion [of the heavens] is not suitable to be the principle of temporal events. For all temporal events are created *ex nihilo* by God, initially *lfa innā jamū'a al-hawāditha makhliqatun li al-lāhi ibtidā'ant*." *Ibid.*, p. 50, line 11-p. 51, line 12).

"We say: 'Agent' denotes someone from whom action proceeds with the will to act by way of choice and with the knowledge of the object willed." (*Ibid.*, p. 96, lines 11-12). This last quotation is the opening statement of the first part of the 3d Discussion.

52. Look under *ash'ariyya* in Index A of *TF*, p. 602.

53. *TF*, pp. 356-64.

54. The doctrine seems to have been held by al-Ghazālī's teacher, the Ash'arite al-Juwaynī and, as we shall see, by al-Ghazālī himself. See al-Juwaynī, *al-Irshād*, pp. 371-74 and *Iqtisād*, pp. 214-15.

55. *TF*, p. 363, lines 8-12.

56. *Qur'ān*, III, 163.

57. *Iqtisād*, p. 215, lines 1-4.

58. See note 23.

59. See notes 37, 38.

60. *TF*, pp. 277-78.

61. *Ibid.*, p. 278, line 12-p. 279, line 1.

62. *Ibid.*, pp. 285-86.

63. *Ibid.*, pp. 292-93.

64. Al-Ghazālī gives a fuller definition of logical impossibility: "The impossible is not within any power. The impossible consists in [simultaneously] affirming and denying a thing, affirming the more specific while denying the more general, and affirming two things while negating one [of them]. What does not reduce to this is not impossible and what is not impossible is within [divine] power" (*TF*, p. 293, lines 5-7). In Discussion 1, part 4, al-Ghazālī argues that possibility is a judgment in the mind that does not require an existent that it must describe. *TF*, p. 70 ff.

65. *Ibid.*, p. 293, lines 7-11.

66. *Ibid.*, p. 203, line 13-p. 249, line 1.

67. Although in this section (p. 293, line 5-p. 295, line 3) al-Ghazālī uses Aristotelian language to explain change, this does not necessarily commit him to Aristotelian ontology. The Ash'arite al-Bāqillāni (d. 1013 A.D.) in his proof of God's existence uses parallel language to explain change; see his *al-Tambūh* p. 41, par. 41; see also p. 17, par. 28 for a definition of substance. One also notes that apart from the terms "matter and form," al-Ghazālī uses the terms "substance" and "accident," used by the Ash'arites but in an atomistic and occasionalist non-Aristotelian sense.

68. *Ibid.*, p. 295, line 3-p. 296, line 6.

69. *Al-Ash'ari, Kitāb al-Luma'*, ed. and trans., R.J. McCarthy (Beirut,

1953), pp. 41-42 and 59-60 in text and translation, respectively.

70. *Iqtisād*, pp. 59-99; see also M. Fakhry, *Islamic Occasionalism* (London, 1958), p. 61 ff.

71. *TF*, p. 377.

72. See W. Montgomery Watt, *The Formative Period of Islamic Thought* (Edinburgh, 1973), p. 92.

73. *Iqtisād*, p. 244, line 8.