

THE CONFLICT OVER THE WORLD'S PRE-ETERNITY IN
THE TAHAFUTS OF AL-GHAZĀLĪ AND IBN RUSHD

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INTRODUCTION

In his Tahāfut al-Falāsifah (The Collapse of the Philosophers),¹ written in A.D. 1095, al-Ghazālī undertook to refute twenty of the central theories of the two Islamic Aristotelians, al-Fārābī (d. A.D. 950) and Ibn Sīnā (Avicenna) (d. A.D. 1037).² He presented their arguments in a clear and accurate manner and then proceeded to object to them, raise every possible answer to his objections he thought the Philosophers could have given, and answer these in turn. His book, in essence, is a series of dialogues, often intricate in structure and argument. The first theory discussed is the Philosophers' theory of the world's pre-eternity. This is the longest and most detailed discussion in the book. It consists of four parts. Each part examines one of four proofs the Philosophers give to prove the world pre-eternal. (In the Tahāfut these parts are simply named "proofs." In order not to confuse the in-

¹Some scholars translate "tahāfut" "incoherence." For a discussion of the meaning of this term see Léon Gauthier, La Théorie d'Ibn Rochd (Averroès) sur les Rapports de la Religion et de la Philosophie (Paris: Ernest Leroux, 1909), p. 99, and Louis Gardet, "Raison et Foi en Islam," Revue Thomiste (April, 1938), p. 343. We shall refer to the following edition of al-Ghazālī's Tahāfut: Al-Ghazālī, Tahāfut al-Falāsifah, ed. Sulaymān Dunyā (2d. edition, rev.; Cairo: Dār al-Ma'ārif, 1955). This text will be abbreviated "TF."

²The Aristotelianism of these two philosophers was informed with Neo-platonism. Al-Ghazālī tells us that he is refuting Aristotle as understood and accepted by these two: TF, pp. 63-64. He does not include in his criticism the earliest of the Muslim philosophers, al-Kindī, who rejected the theory of the world's eternity. "Philosophers" with a capital "P" in this study will refer to al-Fārābī and Ibn Sīnā and no one else.

dividual proof with the discussion that follows it we shall name each part, i.e., each proof and its discussion, a "debate.")

Al-Ghazālī's primary aim was simply to prove in his Tahāfut that, contrary to what the Philosophers claimed, they had proved none of their metaphysical theories. In his attack on their doctrine of the world's pre-eternity, however, as we shall see when we discuss the first debate, he goes beyond this point and tries to prove not only that the Philosophers have not proved the world's eternity, but that the world's pre-eternity is a self-contradictory theory. At the conclusion of his Tahāfut, furthermore, al-Ghazālī leveled a legal charge at the Philosophers. He charged them with irreligion (kufr), punishable by death, for three of the doctrines they upheld. The first of these doctrines was the theory of the world's pre-eternity.³ Thus, for al-Ghazālī, this theory was both logically impossible and doctrinally false.

Al-Ghazālī's attack on philosophy was answered nearly a hundred years later by Ibn Rushd (Averroes) on the legal as well as the philosophical level. Ibn Rushd wrote his legal defense of philosophy, Faṣl al-Ma'āl,⁴ in A.D. 1178. In this small treatise Ibn Rushd argues that philosophy and religion do not conflict, that as a matter of fact religious law commands the class of people who have the capacity to do philosophy to pursue it, and that the charges of irreligion leveled at the Philosophers by al-Ghazālī have no legal justification.

³TF, pp. 293-95. The other two doctrines were the Philosophers' theory of the soul that denied bodily resurrection and their theory of God's knowledge that according to al-Ghazālī's understanding of the theory, denied God's knowledge of particulars.

⁴For the full title and its meaning see chapt. vi, n. 1.

In his philosophical defense of philosophy, Tahāfut at-Tahāfut,⁵ written between A.D. 1180 and 1185, Ibn Rushd quotes al-Ghazālī's Tahāfut paragraph by paragraph and criticizes it. Ibn Rushd writes from the strict Aristotelian position. He not only criticizes al-Ghazālī but often subjects the Philosophers to severe criticism when they deviate from the true Aristotelian position as Ibn Rushd sees it. But his attack is mainly on al-Ghazālī. He defends the theory of the world's pre-eternity with great vigor. Although in his defense he sometimes criticizes the Philosophers for their non-stringent arguments, he is in the main in agreement with them, shares their conclusions that the world is necessarily eternal, and, as we shall attempt to show, their metaphysical premises.

For al-Ghazālī, the only alternative theory to the theory of a pre-eternal world is the theory of creation ex nihilo at a finite moment in the past from the present. This theory, for al-Ghazālī, entails no logical absurdity and is doctrinally true. Yet creation ex nihilo, as Ibn Rushd correctly points out, is not literally found in the Qur'ān. Moreover, there is no explicit statement in the four debates that gives us al-Ghazālī's reasons for regarding the alternative theory, the theory

⁵The edition of the Arabic text we shall refer to is the following: Averroes, Tahafut at-Tahafut (L'Incohérence de l'Incohérence), ed. Maurice Bouyges (Bibliotheca Arabica Scholasticorum, Tome III; Beyrouth: Imprimerie Catholique, 1930). References to this text will be abbreviated "TT." References will often be made to the following English translation: Averroes, Tahafut at-Tahafut (The Incoherence of the Incoherence), tr. Simon Van Den Bergh with an Introduction and notes (2 vols.; E.J.W. Gibb Memorial New Series XIX; London: Luzac & Co., 1954). This work will be abbreviated "VB." The first volume of this work consists of the introduction and the translation; the second volume, of the notes. Page numbers of TT are furnished in the margin of the first volume of VB.

of a pre-eternal world, as irreligious. Why then does al-Ghazālī attack the theory of the world's pre-eternity with such vehemence and at such length as both logically absurd and doctrinally untrue?

The reasons, though not explicit, are implicit in the debates themselves. For, and this is what we shall undertake to demonstrate in this study, the conflict between al-Ghazālī and his opponents is a conflict of irreconcilable metaphysical premises. We are not encountering any Kantian antinomies here. Each party in the dispute in reality argues from a set of assumptions different and contrary to the other. Al-Ghazālī's attack on the doctrine of a pre-eternal world is an attack on a metaphysics alien to the Qur'ān. For his opponents argue from the Aristotelian concept of God. This God acts by necessity. His acts are further determined by the intrinsic nature of things outside Him. He actualizes in ways prescribed by the nature of things. Nor does such a God act directly on the world of generation and corruption; He acts through a series of intermediary essential causes. It is from such premises that the Aristotelians deduce their theory of an eternal world. It is these premises that are irreligious for al-Ghazālī.

The God of the Qur'ān is an omnipotent, personal God. To preserve this concept of God, the Ash'arite theologians formulated their occasionalist metaphysics. God is all-powerful and His acts are voluntary. He does not act by necessity and nothing outside Him determines His acts. The world is utterly contingent and totally dependent for every moment of its existence on His direct voluntary acts. Everything in the world is directly acted upon by God who causes all change and movement. There is no necessary causal connection in the world.

Now, in theology, al-Ghazālī was an Ash^carite. Yet he explicitly denies in his Tahāfut that he writes from any specific metaphysical position. His purpose, he maintains, is simply to refute the Philosophers and not to set forth any doctrine. These claims, however, do not stand the test. A scrutiny of al-Ghazālī's Tahāfut, as we shall show in our first chapter, will reveal that al-Ghazālī's work abounds with metaphysical assumptions of his own which when extracted exhibit an identifiable metaphysical view, that of Ash^carite occasionalism. It is this occasionalism, we shall proceed to demonstrate in our analysis of the debates, that underlies al-Ghazālī's attack on the Philosophers, and it is this occasionalism that is in conflict with the Aristotelianism of the Philosophers and Ibn Rushd. For here, in these metaphysical and logical arguments, al-Ghazālī attempts to ward off from Islam that which is alien. He does so by rejecting his opponents' premises and supplanting them with premises taken from a metaphysics designed to preserve the Qur'ānic view of God and the world.

Ibn Rushd attacked Ash^carite occasionalism severely:⁶ Ash^carite metaphysics, which denied the universe necessary order, denied the author of such a universe wisdom. Such a metaphysics cannot embody the scriptural view.

But Ibn Rushd was uncertain whether his arguments would persuade the non-philosopher. Ash^carism was gaining acceptance. Philosophy was on the defensive. To defend philosophy by showing the inconsistencies of Ash^carism might not suffice and we find Ibn Rushd in his Faṣl al-Maḡāl resorting to a second line of defense in defending the theory of the

⁶See Majid Fakhry, Islamic Occasionalism and Its Critique by Averroës and Aquinas (London: George Allen & Unwin Ltd., 1958).

world's pre-eternity, resorting, that is, to the art practiced by his fellow philosophers, contemporaries like Maimonides, and predecessors like al-Fārābī,⁷ of concealing the real discrepancies between his views and those of his opponents. Thus in Faṣl al-Maqāl Ibn Rushd strove to minimize the differences between the Ash'arite view of the world's origin and the Aristotelian. The essential metaphysical differences pertaining to the nature of God and the world, implied in these different theories, he glossed over. Instead, he articulated and stressed accidental similarities. His words, taken uncritically, are persuasive. But taken at their face value, they blur our understanding of the real issues involved in the dispute over the problem of creation. Taken uncritically, they will not help us understand the crises in Islam caused by the incursion of Greek metaphysics in its midst. Hence we shall conclude our study by critically examining Ibn Rushd's legal defense of the theory of the world's pre-eternity in Faṣl al-Maqāl in the light of our analysis of the four debates in the Tahāfuts.

The four debates divide evenly into two parts. The first two debates revolve mainly around a conflict of premises pertaining to the nature of God, the cause; the second two debates revolve around arguments that pertain in the main to the nature of the world, the effect. The first debate is the longest and structurally the most complex. We find it necessary to devote two chapters to it, II and III. Chapter II will deal with the arguments of al-Ghazālī and the Philosophers. Chapter III will

⁷ See Leo Strauss, Persecution and the Art of Writing (Glencoe, Illinois: The Free Press Publishers, 1952).

take up Ibn Rushd's answer to al-Ghazālī's criticisms. In the discussion of the rest of the debates we will discuss the three parties in the dispute in one and the same chapters. Chapter IV will deal with the second debate. The third debate is very short and we shall discuss it with the fourth debate in Chapter V.

CHAPTER I

THE METAPHYSICS UNDERLYING AL-GHAZĀLĪ'S ARGUMENTS

If the purpose of our study is to demonstrate that the conflict between al-Ghazālī and his Aristotelian opponents over the problem of the world's creation is essentially a conflict of irreconcilable metaphysics, it is necessary, first of all, to establish that al-Ghazālī in his Tahāfut does argue from a specific metaphysical position. For al-Ghazālī is emphatic and explicit in declaring that the purpose of his Tahāfut is to refute the Philosophers and not to set down theories of his own. Thus in his third Introduction he maintains that he writes "only as one who demands¹ and denies, not as one who proclaims and affirms."² His purpose is even more explicitly stated at the end of the four debates concerning the eternity of the world in the past where al-Ghazālī writes:

In this book we are only committed to upset their doctrine We do not go out of our way to attack from any specific point of view
As for the true doctrine we shall devote to it a book after

¹I.e., demands proof.

²TF, p. 68. Al-Ghazālī wrote the traditional religious preface, al-khutbah, and four short Introductions in which he explains the purpose of his work. The preface and the four introductions are omitted in the Tahāfut of Ibn Rushd.

All translations are my own unless indicated otherwise.

the completion of this work³. . . wherein we will engage in construction just as we have devoted ourselves in this book to destruction.⁴

Yet, a scrutiny of al-Ghazālī's Tahāfut will show, that despite these proclamations, and despite the fact that al-Ghazālī continues to be negative in tone, bent on destroying rather than constructing, the book abounds with metaphysical assertions that are defended by al-Ghazālī, and that these, when extracted, exhibit an identifiable metaphysical position. One can with justice insist that al-Ghazālī does not live up to his proclamations. But one must also consider the context in which these metaphysical assertions occur, and the function they perform. They are often a very part of his method of refuting. A scrutiny of this method will reveal how they occur as an integral part of his method. Hence, a brief examination of al-Ghazālī's method of refutation in the Tahāfut is necessary.

A. Al-Ghazālī's Method

Al-Ghazālī indicates in his fourth Introduction how he intends to refute the Philosophers.⁵ He will turn against them their own weapon,

³The book mentioned is Qawā'id al-ʿAqā'id (The Principles of Belief). Such a work exists incorporated as the second book of his theological work Ihyā' ʿUlūm ad-Dīn (The Revivification of the Sciences of Religion). Van Den Bergh in his translation changes the title to al-Iqtisād fi-l-ʿitiqād (The Golden Mean of Dogmatics) and argues in a footnote that the mention of the former work in the Arabic text is an error probably on the part of the copyist. Whether Van Den Bergh is justified in changing the titles is a debatable point. But it is true that the Iqtisād contains more metaphysical doctrine and that it belongs to the same period of writing as the Tahāfut. See VB, p. 68, n. 5.

⁴TF, p. 109; TT, p. 68.

⁵TF, pp. 70-71 (Omitted in TT).

logic. He will demonstrate that in their metaphysics⁶ they have proved none of their theories, that they have been able to fulfill none of the conditions of demonstrative proof set down in their acknowledged works on logic. Demonstrative proof demands the fulfillment of two conditions: the truth of the "substance of the syllogism" (māddat al-qiyās) and the correctness of the "form of the syllogism" (ṣūrat al-qiyās).⁷ These expressions are explained to us by al-Ghazālī in his Maqāsid al-Falāsifah:

The substance of the syllogism consists of the premises. If these are true and certain, the conclusions are true and certain. If they are false, the conclusion will not be true.⁸ If they are conjectural, the conclusions are not certain.⁹

Al-Ghazālī then goes on to give the analogy of the gold ring that must possess the "substance" gold, and the circular "form" to be a genuine gold ring. The "form" of the syllogism consists of its various figures, (al-ashkāl). Thus to maintain that the Philosophers have not fulfilled the conditions for the correctness of the form of the syllogism simply means that their syllogistic reasoning from premises accepted or conceded,¹⁰ has not been correct. Al-Ghazālī does engage throughout his

⁶The term used is "ʿilm al-ilāhiyyāt" (Divine Science) which was used synonymously with "metaphysics" or "first philosophy." See al-Ghazālī, Maqāsid al-Falāsifah (Cairo: al-Maṭbaʿah at-Tijāriyyah bi-l-Azhar, 1936), Part II, p. 4.

⁷TF, p. 70 (Omitted in TT).

⁸Al-Ghazālī is concerned with scientific demonstration, not simply logical validity. Still, the above statement is erroneous.

⁹Al-Ghazālī, Maqāsid al-Falāsifah, Part I, p. 45.

¹⁰Often al-Ghazālī concedes premises simply for the sake of argument and proceeds to show the invalidity of the conclusions drawn from these premises which he does not necessarily accept. A good case in point comes in his criticism of the Philosophers' emanative theory of creation. There in a sarcastic tone, he grants the Philosophers their "silly," literally "cold" premises, and then proceeds to show the invalidity of the conclusions they draw from these premises.

Tabāfut in attempts to show the faulty reasoning of the Philosophers.

But al-Ghazālī's fundamental attack is not so much on the "form" of the Philosophers' proofs, as on their "substance." It is the metaphysical premises of the Philosophers that he rejects either as uncertain or false, and it is in his rejection of these premises that he often puts forth opposing metaphysical views. A case in point is the method he adopts in his refutation of the first proof of the world's eternity.¹¹ Al-Ghazālī rejects implicitly some of the premises of the proof by denying the conclusion. He posits the contradictory of the conclusion and demands that the Philosophers disprove it with a syllogism. This, they are unable to do. They can only claim that the falsity of this counter-statement is self-evident. But, and this is a fundamental point in al-Ghazālī's method, what is self-evident must be universally recognized as such.¹² The falsity of his counter assertion is not universally acknowledged. The contradictory of the Philosophers' conclusion correctly derived from their premises has not been disproved; it is possible. Hence, the premises cannot be certain. Uncertain premises yield only opinion, ẓann. The Philosophers' metaphysical premises, hence, are, contrary to what they claim, opinion and not knowledge.¹³ Knowledge, by definition, is certain.¹⁴

¹¹TF, p. 80; TT, p. 7. Our second chapter will deal in detail with this proof and its rejection by al-Ghazālī.

¹²TF, p. 84; TT, p. 13.

¹³TF, p. 62 (First Introduction; omitted in TT).

¹⁴This distinction between opinion and knowledge, emphasized by Plato in the Theaetetus, was recognized by the Muslim thinkers. Ibn Sīnā, for example, defines knowledge as "the belief that a thing is of such a nature that it is impossible for it to be otherwise." A.M. Goichon, Lexique de la Langue Philosophique d'Ibn Sīnā (Paris: Desclée de Brouwer. 1938), p. 379.

It must be stressed that al-Ghazālī's expressed purpose in the Tahāfut is not to banish reason from religious endeavors. He condemns the Philosophers for not fulfilling the requirements of strict demonstration; he does not condemn logic. On the contrary, he states explicitly that logic is relevant to knowledge related to God:

Yes, when the Philosophers say that logic must be mastered, this is true. But logic is not used by them alone.¹⁵

The theologians also, he adds, use logic for proofs about God. Al-Ghazālī himself, in his other works, attempts proofs for God's existence.¹⁶

The science par excellence that yields certitude is mathematics, al-Ghazālī insists. But mathematics is as irrelevant to metaphysical argument as it is irrelevant to philology and medicine.¹⁷ Hence, contrary to what the Philosophers might claim, their metaphysical theories are not mathematically demonstrable:

If their divine sciences,¹⁸ like their mathematical sciences, were perfect in proof, pure of conjecture, they would not have disagreed amongst themselves.¹⁹

Al-Ghazālī, however, does not only reject many of his opponents' premises as uncertain, he sometimes rejects some of their premises as

¹⁵TF, p. 71 (Fourth Introduction; omitted in TT).

¹⁶In his Revivification of the Sciences of Religion, for example, al-Ghazālī gives in a general manner the argument from design to prove God's existence, and in a more rigorous fashion, a proof from the phenomena of change that the world was created out of nothing; and from this conclusion he infers the existence of God - a creation out of nothing causally implies a creator. Al-Ghazālī, Ihya' 'Ulum ad-Dīn (16 vols.; Cairo: Maṭba'at Lajnat ath-Thaqāfah al-Islāmiyyah, (1356 AH.)), I, 124.

¹⁷TF, p. 70 (Fourth Introduction; omitted in TT).

¹⁸Supra, n. 6.

¹⁹TF, p. 63 (First Introduction; omitted in TT).

false. The Philosophers identify the Aristotelian term "cause," (sabab) with the Qur'ānic term for God's activity, "act" (fi'1) and build their arguments on this identification. As we shall shortly point out, al-Ghazālī rejects such a premise as false and bases his rejection on linguistic grounds.

Hence, as a result of his method of attacking the premises of his opponents, he often affirms opposing premises of his own as will be shown in specific examples as we proceed with this discussion. The conflict becomes essentially a conflict of basic metaphysical premises. It is in this conflict that al-Ghazālī's metaphysical position emerges: it is not presented systematically. His metaphysics can be extracted and its close affinity to the metaphysics attributed to Kalām as reported, for example, by Maimonides, can be shown.²⁰ Moreover, we shall attempt to show in our analysis of the debates concerning the world's creation, how this metaphysics underlies al-Ghazālī's arguments. Without cognizance of this metaphysics, in its opposition to the metaphysical premises that underlie the arguments of the Philosophers, the arguments lose not only much of their theological and philosophical significance, but often their logical intelligibility: for the arguments of all the disputing parties abound with hidden metaphysical premises.

B. The Metaphysical Categories at Issue

The key concepts around which the conflict of metaphysical premises revolves are the concepts of "possibility" (imkān), "necessity" (darūrah), and "causality" (sababiyah or 'illiyvah).

²⁰Maimonides, The Guide for the Perplexed, tr., M. Friedländer (2d. ed. revised; New York: Dover Publications, 1956), pp. 120-133.

The "possible" (al-mumkin) is used throughout the Tahāfut in various senses. For example, in the first proof of the Philosophers, it is used in the sense of the "probable."²¹ In the third debate it is used as a name for the world.²² In the fourth debate, the Philosophers insist that the primary meaning of the "possible" is the "potential."²³ Against this al-Ghazālī argues that "possibility" is only a judgment of the mind.²⁴ These meanings of "possibility" will be treated fully in our analyses of the last two debates. Here, we will discuss a further use of the term "possible," crucial in articulating the metaphysical conflict; and this is the sense of the "possible" as the "contingent" as elaborated in Ibn Sīnā's metaphysical system.

Ibn Sīnā's theory of the "possible" in the sense of the "contingent" is central to his metaphysical system. Al-Ghazālī subjects this theory to a severe criticism in the Tahāfut. He does not reject all aspects of Ibn Sīnā's theory of the possible. He accepts part of it, and this part is central to al-Ghazālī's own metaphysical outlook. A brief outline of Ibn Sīnā's theory, is therefore necessary.

Ibn Sīnā's definition of the "possible" has two parts.²⁵

²¹TF, p. 76; TT, p. 4. This meaning is explicitly brought out by Ibn Rushd who in his comments distinguishes between the possible that is more likely to happen than not, the possible that is less likely to happen than not, and the possible that has equal chances of happening.

²²TF, p. 104; TT, p. 97. This is a source of confusion in the proof.

²³TF, pp. 105, 107; TT, pp. 100, 108.

²⁴TF, pp. 106, 108; TT, pp. 103, 110.

²⁵Ibn Sīnā is defining a characteristic of things and not propositions about things. The relation between the metaphysical and the logical we will discuss shortly. In the above exposition we will maintain Ibn Sīnā's manner of speaking.

The first part is "al-mumkin fī dhātih," "the possible in itself," or, more accurately, "the possible in its 'essence!'" "Dhāt" is the philosophical Arabic term for "essence." Moreover, Ibn Sīnā in this theory, is concerned with the relation between essence and existence. "The possible in its essence" applies to anything which when dissociated from other things related to it, can exist or not exist. Neither its existence nor its non-existence is self-contradictory. There is nothing in the "essence" of "the possible" that necessitates its existence. From a knowledge of what the thing is, we cannot infer that it is.

The second part of the definition is "al-wājib bi ghayrih," "the necessary through another." The "another" is the essence of another existent. Thus, though "the possible" is that whose existence is not necessitated by its essence, it is necessitated by the essence of another existent. Heat, for example, is in its own essence, only possible. But its existence is necessitated by the essence of an existing fire. An existing fire produces heat necessarily and essentially.

Ibn Sīnā classified all²⁶ existents, excepting God, under the category of things that are in their essence only possible, but necessary through the essence of another existent. God alone is the existent necessary in His own essence. This, for Ibn Sīnā is necessarily so, for, and this is Ibn Sīnā's proof for God's existence, if every existent in the world must be necessitated by the essence of another existent, then

²⁶This includes the eternal heavenly bodies, their souls and intellects. Moreover, these, though eternal, depend necessarily for their "existence" on God. In this Ibn Sīnā's Neo-Platonism is evident. These are eternal emanations from the One. Ibn Rushd, as we shall see, insists that the eternal existents, but necessarily dependent on God for their eternal movement.

an infinite number of existents each necessitating another and in turn each necessitated by a different "other" will occur. Since this is a chain of existents, the series would be both infinite and actual. But the actual infinite, for Ibn Sīnā who follows Aristotle in this, is impossible. Therefore, the series must terminate in an existent whose essence and existence are identical, God.

Al-Ghazālī accepts implicitly the first part of the definition as applying to everything in the world. But he rejects utterly the second part of the definition and its application to the world. Nothing is necessitated by anything else. God is not an existent necessary in His essence; God transcends such concepts as "possible" and "necessary."²⁷

It is the second part of the theory, then, that al-Ghazālī attacks, and it is in this attack that his counter metaphysics emerges. Moreover, it is in this part of the theory that the Philosophers' concept of essential necessary causality is involved. The existence of one thing is "necessitated" by the "essence" of another existent. The "essence" here is real, not nominal, and the "necessity" is ontological, as well as logical. In this the Philosophers followed their master, Aristotle.²⁸ Al-Ghazālī who attacks the concept of necessity as a character of objective reality attacks the very foundation of Aristotelianism and is very much in harmony with modern empirical schools.

²⁷It is possible to affirm God's existence and deny the necessity of such an existence, al-Ghazālī argues. TE, p. 132; TT, p. 196.

²⁸"Scientific knowledge and its object differ from opinion and its object in that scientific knowledge is commensurately universal and proceeds by necessary connexions, and that which is necessary cannot be otherwise." (Italics my own.) "Posterior Analytics," i 88b 30, tr. G.R.G. Mure, The Basic Aristotle, ed., Richard McKeon (New York: Random House, 1941), p. 110.

In Ibn Sīnā's theory of essential necessary causation there are two principles that must be distinguished. The first is that no existent with the exception of God is uncaused. The second is that whatever is caused is necessarily caused. It is necessarily caused because the existent that is the cause must by its very nature produce the effect. Fire by its very nature causes the cotton to burn. If there is no impeding cause, and the cotton is in contact with the fire, the cotton must burn. To deny the burning would be to utter a contradiction. A further consequence of the theory of essential necessary causation is that cause and effect are simultaneous. The priority of the essential cause to the effect is logical and ontological, not temporal. The Philosophers admit the existence of causes that precede their effects in time, but these are the accidental causes, not the essential.

Now al-Ghazālī accepts the principle that everything other than God is caused, but with a very important qualification. There is no chain of natural causes. Every change in the world is caused by God's voluntary act directly, or sometimes through the mediation of His angels. Natural existents have no causal efficacy. It is not fire that burns the cotton when it is in contact with it. It is God who produces the burning on the occasion of the contact.

The principle that the existent that is a cause, causes by the necessity of his nature, al-Ghazālī denies. God, the sole cause, does not act because by definition He must act. God's acts are voluntary and beyond the scope of human rationalizations. Moreover the effect need not be simultaneous with the cause. God can will at the present the occurrence of something at a future date, and His will at the present is sufficient cause for the future effect.

The theory of essential necessary causation is the fundamental premise for the Philosophers' proofs based on the nature of God for the world's eternity. For, if God creates by the necessity of His nature, and if His nature is eternal and changeless, then the effect must proceed eternally from God. Just as the sun cannot but give light, God cannot but cause the world.²⁹

For al-Ghazālī this is blasphemy. For, not only is this a limitation on God that deprives Him of freedom, but it also makes of God an inanimate being. For only the inanimate are said to act by the necessities in their nature and not through volition. Hence, if al-Ghazālī can prove that the world's eternity has not been proven, then he would have demonstrated that the theory that God acts through the necessity in His nature is not a necessary principle. Al-Ghazālī, as we shall see, goes beyond this and attempts to prove the theory of an eternal world not only unproven, but false.

Al-Ghazālī's critique of causal necessity pervades his Tahāfut. But we will have to choose those arguments that are most directly relevant to this problem and where the issues are explicit. Al-Ghazālī's critique of the Philosophers' concept of cause can be divided into two parts. The first is his critique of the Philosophers' concept of God as cause, and this is found in the first part of the book that generally deals with problems that pertain to the nature of God.³⁰ The second is his critique of natural causality in the second part of the book which generally treats those theories in the natural sciences, including psy-

²⁹ TF, pp. 186-87; TT, p. 427.

³⁰ TF, pp. 76-219; TT, pp. 3-508.

chology, that have bearing on Muslim belief.³¹ We will discuss al-Ghazālī's attacks on the Philosophers' concepts of God as cause, and cause in nature with the purpose of extracting al-Ghazālī's own opposing metaphysics.

C. Extracting Al-Ghazālī's Metaphysics

God As Cause

For his emanation theory of creation Ibn Sīnā adopted Qur'ānic terms such as "origination" (ibdā'), "production" (ṣun'), "genesis" (takwīn) - terms interpreted by the Ash'arites as referring to creation ex nihilo - assigning each term to a specific stage in the emanative process.³² "Genesis" (takwīn), for example, referred to the last emanation, the sublunary sphere, the world of generation and corruption. Here, "takwīn" meant nothing more than "transformation"³³, the formal changes substances undergo. The process as a whole is eternal. The terms borrowed from the Qur'ān had little to do with their original meaning.³⁴ The term "agent" (al-fā'il) in its most general meaning was identified by Ibn Sīnā with God, the first cause, the necessary and sufficient condition of all being, whose existence is necessary in itself,

³¹TF, pp. 220-298; TT, pp. 509-588.

³²For a detailed discussion of Ibn Sīnā's use of these terms see A.M. Goichon, La Distinction de L'Essence et De L'Existence d'Après Ibn Sīnā (Paris: Desclée de Brouwer, 1937), pp. 244-59.

³³Ibid., p. 246.

³⁴Louis Gardet, La Pensée Religieuse d'Avicenne (Paris: Librairie Philosophique J. Vrin, 1951), p. 67. This is obvious since Muhammad was no Neo-platonic philosopher. From this it does not follow, however, that the Ash'arites did not add their own interpretations of the meanings of these terms.

and who by nature necessitates all other existents.

Al-Ghazālī rejects this identification of "agent" with "cause." In view of the fact that al-Ghazālī maintained that in his Tahāfut he was not espousing any school of thought, it must be stressed that in his rejection of Ibn Sīnā's metaphysics al-Ghazālī does voice opposing views that are thoroughly Ash'arite. God for the Ash'arites is an agent, not a cause. "Agent" is a term applicable to a living, willing, knowing, person. An agent does not create or act because of any necessity. He does not create "by nature" (bittab).³⁵ This concept of agent is the basis of Ash'ari's proof for God's existence.³⁶ Al-Bāqillānī, his prominent successor, in his Tamhīd argues that the world cannot be eternal, that it must have a creator, that this creator must be a living, willing, knowing agent; and in a lengthy argument, ardently insists that God does not act through any necessity in His nature.³⁷ Al-Ghazālī reproduces similar proofs for creation ex nihilo and for God's existence in his Qawā'id al-'Aqā'id.³⁸

In his Tahāfut al-Ghazālī allots a lengthy discussion, the third,³⁹

³⁵ The Ash'arites are sensitive about this point not only because the Philosophers upheld this theory, but also because it was a belief advocated by many of their rival theological school, the Mu'tazillāh. See Ibn Ḥazm, Kitāb al-Fisal, (5 vols.; Cairo: al-Matba'ah al-Adabiyyah fī Miṣr al-Qadīm, 1317 A.H.), III, pp. 55, 58.

³⁶ Al-Ash'ari, Kitāb al-Luma', edited and translated by Richard A. Jarchy (Beyrouth: Imprimerie Catholique, 1953), pp. 6-7 in Arabic text, 6-8 in English translation.

³⁷ Al-Bāqillānī, at-Tamhīd, ed., M.M. Khudayrī and A.A. Abu Rīdah (Cairo: Dār al Fikr al-'Arabi, 1947), pp. 44, 47-48, 52-56.

³⁸ Al-Ghazālī, Ihya' 'Ulūm ad-Dīn, I, 181-82.

³⁹ TF, pp. 120-140; TT, pp. 147-262.

for this issue. He strives to show the Philosophers' confusion in their synonymous use of the terms "agent" and "cause," their misuse of the term "creation" when they apply it to an eternal world, and the inconsistencies in their emanative theory of creation. Each of these topics is treated individually.

a. The Meaning of "Agent."⁴⁰

Al-Ghazālī argues that the meaning of "agent" (al-fā'il) entails the idea of will and the knowledge of the thing willed. Hence, it is applicable only to animate beings. The Philosophers' use of agent for God is wrong, because to them God creates necessarily and has no will. The Philosophers' sense of "agent" applies only to inanimate things. For whereas every agent is a cause, not every cause is an agent. "Agent" is "cause" in a special sense only.

To this the Philosophers respond by asserting the contrary view that "agent" and "cause" are synonymous terms. A cause or agent is defined simply as that which is the necessary condition for the existence of something else, regardless of whether it is voluntary or natural. To say "voluntary" agent is not to express a tautology, and to speak of a non-voluntary agent does not involve a self-contradiction.

Al-Ghazālī rejects their assertion. If their definition is true, then such statements as "matter has no action; only animals are agents," cannot be true, when these as a matter of fact belong to the class of "well known universal true statements" (al-kulliyāt al-mashhūrah as-

⁴⁰TF, pp. 121-124; TT, pp. 150-161.

sādiqah).⁴¹ When agency is sometimes attributed in discourse to the inanimate, this is sheer metaphor. Such attribution, taken literally, is false.

The Philosophers challenge al-Ghazālī's argument by appealing to correct Arabic usage.⁴² For, the Philosophers proceed, "the Arabs say: 'fire burns; the sword cuts; snow cools . . .'" In these examples of correct Arabic, agency is attributed to the inanimate.

To this al-Ghazālī responds that the above examples are examples of the use of metaphor. Proof of that is that in the case when a man kills another by throwing him into a fire, one does not say that the fire killed the man. The act of killing is attributed to the man who did the killing. Fire is merely the immediate cause; the man who killed is the agent.⁴³

⁴¹This class of statements, al-Ghazālī explains, is accepted conventionally and universally. The Philosophers, he goes on, trace its source to intuitive necessary knowledge. Examples given: "lying is disgraceful; prophets ought not to be tortured." Al-Ghazālī, Maqasid al-Falasifah, I, 50. Ibn Sīnā in his psychological works speaks of "the wide-spread well-known opinions" (al-ārā' adh-dhā'i'ah al-mashhūrah) which are known by the rational soul in both its practical and theoretical functions. Ibn Sīnā, Ahwāl an-Nafs, ed., Fuad Ahwani (Cairo: dar Ihya' al-Kutub al-'Arabiyyah, 1952), p. 63.

⁴²Appeal to correct Arabic was common and necessary amongst theologians and lawyers for interpreting the Qur'an. A good example of such appeal is in al-Ash'ari, al-Idārah 'an Usūl ad-Diyanah, tr., Walter C. Klein (New Haven, Conn.: American Oriental Society, 1940), p. 57.

⁴³The problem of whether to attribute agency to "things" arose with the Mu'tazilites in their ethical and legal investigations. If one shoots another man with an arrow, the initial release is the act of the man, but then the arrow follows natural laws. Is the flight of the arrow still an act of the man? For an excellent treatment of the problem see Majid Fakhry, "The Mu'tazilite View of Free Will," The Muslim World, XLIII, 2 (April 1953), pp. 95-109.

b. The Meaning of "Act" and "Creation."⁴⁴

If one accepts the Philosophers' account of the world and its relation to God, argues al-Ghazālī, the world cannot be the act (fiʿl) of God. The act of God is creation out of nothing (ihdāth). This alone is the meaning of "act." But the Philosophers hold the world to be eternal. The eternally existent cannot be brought into being after privation.⁴⁵ In the Philosophers' scheme of things the world cannot be an act of God, a creation after privation.

One would expect here an appeal to correct Arabic as in the discussion of the term "agent" to examine what the terms under dispute mean. Instead, the discussion takes a dialectical turn. The Philosophers and al-Ghazālī proceed to debate whether creation after privation is possible.

The Philosophers attempt to prove that creation "after privation" (baʿd ʿadam) is impossible. What seems to be one proof, is actually a somewhat disorganized argument that has three parts. The first and the third are closely related, while the second which appears as part of the first, stands alone in that it introduces into the picture a new element, valuation.

The first part of the argument states that if "creation" means "coming to existence after privation" then the creator would have to be

⁴⁴TF, pp. 125-128; TT, pp. 162-171.

⁴⁵Al-Ghazālī sometimes uses the expression "out of nothing" (ʿan ʿadam). As the above debate proceeds, the expression "after privation" (baʿd ʿadam) is consistently used. These two expressions relative to a metaphysical language can be distinct. We have to remember that the Philosophers, in their cosmology, are Neo-Platonists, to whom the world is an emanation from the One. They could maintain that the world is not created "out of nothing" even if its creation in time is conceded.

related either to the prior privation, or to the existent or to both. Since he cannot be related to privation, where he has no efficacy, he cannot be related to both privation and existence. He can only be related to the existent. This part of the argument stops here. What is implicit, and which becomes evident as the debate progresses, is that God, if eternal and if related only to the existent, must be related to an eternal existent.

The second part which is given as a continuation of the first introduces the element of value. The relation of God to the existent is existence. If we suppose the existent permanent, then the relation, existence, is permanent. If the relation between agent and creation is permanent, then the agent is "so much more the agent" (af^cal) and the more efficacious.⁴⁶ In other words, a God who sustains an eternal world, is "better" or is "more omnipotent" than one who creates a world after privation.

The third part is a variation of the first. An opponent might argue, maintain the Philosophers, that when we speak of a world created after privation, we are dealing with a special kind of existent that has a specific definition: "the existent preceded by privation." One cannot here talk about this existent without the privation preceding it. If God creates this existent, he must create the prior privation, since these two are inseparable. But if this is the case, the Philosophers argue, this would constitute an impossibility. For God does not create privation. Hence, "the existent preceded by privation" is no act of God.⁴⁷

⁴⁶"Af^cal" can also be rendered as "more active" and "more effective."

⁴⁷This argument appears in Ibn Sīnā's Kitāb al-Ishārāt. See Ibn Sīnā, Kitāb al-Ishārāt wa-t-Tanbīhāt, ed., J. Forget (Leyden: Brill, 1892), p. 142.

When God is spoken of as the creator, this simply means that He is the necessary condition for the existence and the continuance of the world. The world is not like a structure that can continue to exist when its builder has ceased to exist.

Al-Ghazālī gives an interesting answer to this third part of the argument. The agent is related to the created and not to the prior privation. Now, the prior privation is a necessary condition for the created to be what it is, an act of God. But it is not necessary that what is a condition for something to be what it is, should also be an act of the agent. For example, a condition necessary for God to be an agent, is that He possess knowledge, will, power. But this condition is not created by Him. Similarly, the prior privation is a condition for the created to be an act of God. But it does not follow that God had to create this condition.⁴⁸

The Philosophers answer that al-Ghazālī in the argument above has conceded that God and the creation are simultaneous in time.⁴⁹ If this is the case, then the creation is finite in duration if God is finite, eternal if God is eternal. The relation of God to the world is similar to the relation of a finger moving in water and the movement of the water it causes. The finger moves the water but is not prior to its movement in time. If, for the sake of illustration, one supposes the movement of the finger eternal, then the movement of the water would have

⁴⁸In this discussion, "privation" seems to be spoken of as though it is a "something" or a predicate by both al-Ghazālī and the Philosophers. Our purpose in this chapter is to articulate the metaphysical conflict and hence we will refrain from elaborate criticisms of what is involved.

⁴⁹Presumably, if God does not create privation and is related only to the existent.

to be eternal. Otherwise, if the finger's movement is finite in duration, the water's movement is finite.

Al-Ghazālī does not deny the possibility of agent and created being simultaneous in time, provided - and this is the fundamental condition for the created to be an act - the created is posterior to privation.⁵⁰ He then proceeds to give his analysis of the illustration given by the Philosophers. The analysis is short but very important and revealing of the metaphysical view we are seeking. Indeed, here we get al-Ghazālī's metaphysics in embryo.

Al-Ghazālī considers first the movement of the finger in the Philosophers' illustration. It is an act, he argues, because the finger does not move by itself. It is moved by the person whose finger it is, and the person is a willing agent. If, for the sake of argument, one supposes the person eternal and eternally moving his finger, the movement of the finger is still a creation. For the eternal movement is in reality a series of independent movements, each created anew by a willing agent, each a creation after privation.

The same applies to the movement of the water. Even if the water's movement like the finger's movement is considered for the sake of argument eternal, it is still an eternal series of individual movements after privations. The analysis thus far illustrates al-Ghazālī's

⁵⁰In what sense "posterior" is not clear. Al-Ghazālī avoids the problem of time here. In the first discussion (the second argument over the world's eternity to be discussed in the fourth chapter), he had arrived at a theory that the world and time were created together. God's priority to the world is not a temporal priority. It is not a logical priority in the Philosophers' sense, either.

atomism.⁵¹ Each part of the movement is individual and indivisible.⁵²

But, al-Ghazālī goes on, it is erroneous to assume in the above illustration that the finger causes the water to move. The movement of the water is not caused by the movement of the finger. The movement of the water is created by God. Here, al-Ghazālī denies causal efficacy between finger and water and places it in God. Here we get a glimpse of his occasionalism, argued for cogently in his critique of natural causality which we will discuss later in this chapter.

c. The Process of Creation.⁵³

This last part of the third discussion is a forceful attack on al-Fārābī's and Ibn Sīnā's Neo-Platonic theory of emanation. It is a critique of the relation between agent and creation, the Neo-Platonic dictum that from the One only one proceeds. God, according to the Philosophers, is one. He is simple in the sense that there is no multiplicity in His nature. Multiplicity does not proceed from Him directly. From Him only the first intellect proceeds, and multiplicity proceeds from this intellect, not directly from the One, God.

Al-Ghazālī tries to show that multiplicity in the One is unavoidable and that there is far more multiplicities in the emanative process than what the Philosophers admit. The emanative theory as a whole, he argues, is at the very best unproven, but in fact unreal and ridiculous.

⁵¹We shall indicate the connection between atomism and occasionalism in Muslim theology. See below, pp. 28ff.

⁵²It has to be indivisible and individual, otherwise it cannot be motion after privation. The past motion must cease to exist. Only the present motion exists. This is more easily illustrated in the movement of the finger. The water's movement follows more complex patterns.

⁵³TF, pp. 129-240; TT, pp. 173-262.

He rejects it completely.

The discussion is intricate and we have to dwell on those aspects that are directly relevant to articulating the conflict of metaphysical categories and extracting al-Ghazālī's views. Here, indeed, we are given more of what al-Ghazālī rejects than what he accepts. Since the discussion revolves around the Philosophers' theory of creation, it is necessary to present it in summary.

The existence of everything except God is in itself possible, but necessary through another. This forms a series of existents, each necessitated by another. This series cannot go on infinitely. Its beginning is God, the existent necessary in Himself. He is the One from whom every other existent necessarily proceeds. From the One, since He is simple, only one existent proceeds, the first intellect. The first intellect thinks⁵⁴ his source, God, and thinks himself.⁵⁵ When he thinks God, another intellect proceeds from him "necessarily," the intellect of the ninth sphere. Because he is an existent in himself only possible, the body of the ninth sphere necessarily proceeds from him.⁵⁶ Hence, there are three "ideas" (ma'āni)⁵⁷ of multiplicity in the first intellect, but none in God. The second intellect thinks the first intellect

⁵⁴The Arabic term is "ya'qil," the imperfect of "'aqala," which can be translated "to think," "to conceive," "to be conscious of."

⁵⁵A personal pronoun could be used since the intellect was interpreted in religious terms as an angel. The problem of the pronoun does not arise in the Arabic.

⁵⁶This point is difficult to understand and is wide open to al-Ghazālī's attack and ridicule as we shall see. What the Philosophers must mean is that the first intellect is of such a nature that a body must necessarily proceed from him. His "being possible in himself" is this nature.

⁵⁷We follow the terminology of al-Ghazālī's Tahāfut here.

and himself and for the reasons similar in the first intellect, gives rise to another triad. The process is repeated and terminates in the last triad, the last of the intellects, the agent intellects, the soul of the sublunary sphere, and the sublunary sphere, the world of generation and corruption.⁵⁸

Al-Ghazālī gives five objections to this scheme to prove that in such a scheme one has to accept multiplicity in God, a greater multiplicity in the emanative process than the triad,⁵⁹ and that the process is not necessary. It is the first and the fifth objections that are directly relevant to our problem.⁶⁰

The first objection⁶¹ deals with the "possible in itself" and the "necessary in itself." "Possibility in itself" is one of the ideas of multiplicity in the first intellect, the Philosophers maintain. Al-Ghazālī questions whether this "possibility in itself" is identical with

⁵⁸ Ibn Sīnā took this theory from al-Fārābī and elaborated it. It appears, for example, in al-Fārābī's The Opinions of the Citizens of the Virtuous City. Al-Fārābī, "Kra' Ahl al-Madīnah al-Fāḍilah," Philosophie der Araber, ed., Friedrich Dieterici (16 vols.; Leyden: E.J. Brill, 1892), XVI, pp. 15-34.

⁵⁹ The Philosophers enumerate nineteen "noble principles" (mabādi' sharīfah) - ten intellects other than God and ten spheres. Aristotle enumerates fifty-five spheres including those of the sun and the moon and holds the unmovable substances and principles to be probably as many. Metaphysics, xii, 8, 1074a.

⁶⁰ The second objection argues that God's knowledge constitutes an idea of multiplicity. The third objection argues that God's thought constitutes another idea of multiplicity. The fourth objection insists that in the emanative process multiplicity exceeds the triad. The heavenly body that emanates from the first intellect, for example, is composed of form and matter; and these, though inseparable, are still two things. Furthermore, in the first intellect there must be a determinant to specify the axis around which the body must revolve. These two determinants constitute further ideas of multiplicity.

⁶¹ TF, pp. 132-133; TT, pp. 195-196, 198, 200.

the existence of the first intellect or not. If identical, then there is no multiplicity. If different, then the "necessity in itself" of God's existence must be other than His existence, and hence God must possess multiplicity. Moreover, and here al-Ghazālī rejects the cornerstone of Ibn Sīnā's metaphysical edifice, God's existence is not necessary in itself. One can affirm the existence of God and deny the necessity of such an existence without contradiction. God transcends such man-made concepts.

In the fifth objection⁶² al-Ghazālī in a spirit of sarcasm and ridicule attacks the theory that the emanative process is necessary. What kind of reason, al-Ghazālī asks, induces the Philosophers to maintain that the first intellect, for example, because he thinks on God, necessitates the creation of another intellect; because he thinks himself necessitates the creation of another soul; and because in himself he is a being only possible, necessitates the creation of a heavenly body? There is nothing in the concept "being possible in himself" from which the conclusion "body proceeds" can be logically derived. The same applies to the propositions "he thinks on God" and "he thinks himself." The procedure of other beings can by no stretch of the imagination be deduced from such ideas. This is foolishness. It is sheer arbitrary assertion. The account of creation they give in its entirety is arbitrary. The dictum that from the One only one proceeds, is arbitrary. The impossibility of two things proceeding from the One is not self-evident, as is, for example, the impossibility of a person occupying two places at the same time. There is no necessity in creation. God creates plurality and

⁶²TF, pp. 138-139; TT, p. 252.

diversity as He wishes and wills. God is a voluntary agent.

In the eleventh discussion concerning God's knowledge,⁶³ al-Ghazālī sums up for us his objections to the Philosophers' concept of God as cause. A God who creates by necessity, argues al-Ghazālī, cannot know his acts. He is a mere natural cause. Knowledge is not attributed to the inanimate:

Action is of two kinds, voluntary, like the action of animals, and natural, like the action of the sun when it gives light, the fire when it heats, and water when it cools. Knowledge of the act is necessary only in voluntary acts, as in the human crafts, but not in natural acts. But, according to you Philosophers, God, may He be praised and exalted, created the world as a consequence on His essence, by nature and necessity, not through will and choice. Everything is consequent upon His essence, as light is on the sun, and, just as the sun has no power to stop its light, and fire no power to stop its heat, the First⁶⁴ has no power to stop His Acts. (May He be greatly exalted over what they say.) And this mode, even if metaphorically we call it an act, does not basically imply knowledge.⁶⁵

Causality In Nature⁶⁶

The second part of al-Ghazālī's Tahāfut⁶⁷ is concerned with the natural sciences. Here al-Ghazālī attacks some of the theories in the natural sciences that conflict with Muslim belief as understood by the Ash'arites. It is as though al-Ghazālī, having rejected the Philosophers' concept of God as cause, proceeds here to give le coup de grâce to this concept of God as cause, by denying necessity in causal rela-

⁶³TF, pp. 184-188; TT, pp. 424-446.

⁶⁴The First (al-awwal) here is God and not the first intellect, as is borne out by the exaltation that follows.

⁶⁵TF, pp. 168-169; TT, p. 537.

⁶⁶TF, pp. 225-237; TT, p. 437.

⁶⁷TF, pp. 220-296; TT, pp. 509-538. This part comprises an introduction and four discussions.

tions all together. However, it would be a mistake to think that al-Ghazālī planned his critique of natural causality as a completion of his earlier critique of God as cause, to regard it, as it were, as the climax of a dialogue with a specific theme. The metaphysical and logical connection is there. But al-Ghazālī's concern was not to formulate a metaphysical doctrine. The metaphysics, as we said before, emerges, despite al-Ghazālī's intentions. The important issue for al-Ghazālī here is to argue for the possibility of miracles. The Philosophers who assert necessary causal connection in nature do not accept literally certain miracles reported in the Qur'ān.

The belief in causal necessity in nature does not constitute Islamic unbelief (kufṛ), according to al-Ghazālī. For the Mu'tazlites, in their theory of generation (at-tawallud)⁶⁸ as al-Ghazālī interprets this theory,⁶⁹ subscribe to causal necessity in nature. As yet there had been no universal consensus amongst Muslims that this belief constitutes Islamic unbelief.⁷⁰ Moreover, the Philosophers who uphold causal necessity, whether between natural events or between God and the world

⁶⁸ The Mu'tazilite Ibn al-Mu'tamir is accredited with formulating this theory. In its original form the theory maintained that in the case when a natural object is initially moved by a person but which later is subject to other natural laws, the initial act for which the person is responsible is generated in the object. If I kill a man with an arrow, my initial act of releasing the arrow from the bow is generated in the flight of the arrow, and hence I am still responsible for the man's death. But this theory was discussed and given various interpretations by the Mu'tazilite doctors.

⁶⁹ TF, p. 295; (Omitted in TT). Al-Bāqillāni suggests that some considered this theory opposed to causal determinism. Al-Bāqillāni, at-Tamhīd, p. 59.

⁷⁰ The term "ijmā'," consensus of legal opinion, does not appear, though it is implied. TF, p. 295 (omitted in TT).

only,⁷¹ admit certain kinds of miracles. A prophet can through the imaginative faculty of the soul attain sensible forms of future events and prophesy. There are also those who possess strong intuition (hadas), who can predict the future. A prophet also might have control over nature.⁷² Just as in the individual, mind has some control over the physical body, in exceptional people, this power can extend to the outside natural phenomena. Thus a prophet can summon rain or storm. But he cannot change the intrinsic nature of things. To give an example, suggested though not stated in the Tahāfut, a prophet on a pyre about to be burnt by the unrighteous, can summon rain to prevent the action of fire. He can summon a preventive cause that counteracts the natural efficacy of the fire. But he cannot change the nature of the fire. Thus if he is unable to summon an impeding cause to stop the fire from burning him, he cannot stop the fire by changing its nature. It burns necessarily. To change its nature would mean a self-contradiction. For the fire would be at the same moment a fire and not a fire. Al-Ghazālī rejects this analysis. He wants to allow for miracles unconditionally. He, therefore denies agency in natural things altogether and attributes it to God and his angels alone. It is in this context that one must consider al-Ghazālī's critique of natural causality, and not as the

⁷¹Some philosophers deny causal relations between natural things and place causality in God. But they differ from the Ash'arite occasionalists in that they maintain that God causes everything by necessity, and in their belief that natural objects must have determined unchangeable natures that prepare them to receive God's acts. Al-Ghazālī rejects both the belief that God's agency is necessary, and that the receptive natures of these objects are unchangeable. TF, pp. 228-237; TT, pp. 519-537.

⁷²TF, pp. 222-224; TT, pp. 512-514. This comes in the introduction to the second part of the Tahāfut and discusses to what extent the Philosophers accept miracles.

deliberate climax to his critique of the Philosophers' concept of God as cause.

Al-Ghazālī's critique of natural causality contains the essential elements of the Humean critique of later centuries. Every distinct thing is contingent. Any two distinct things are logically independent. The denial of one does not mean the denial of the other. We can, al-Ghazālī maintains, affirm the existence of the occurrence of burning and deny the existence of a fire, and conversely, affirm the existence of a fire and a burnable object in contact with it and deny the burning, without contradiction. We have no reason to believe in the necessary connection between cause and effect. This is never experienced. When we apply fire to a piece of cotton and the cotton is burned, all that we perceive is the fire, its contact with the cotton, and the burning. We see the burning at (ind) the occasion of contact between fire and cotton, but we never see the cotton burned by or through (bi) the fire. We maintain that the fire burns the cotton as a matter of habit, because in the past we have seen the simultaneous occurrence of fire and burning. We have mistaken the habit for objective necessity in nature. The fact is that the burning is not the result of the fire. God alone, al-Ghazālī adds, working directly or through the mediation of His angels, is the sole agent. He creates the burning as He creates every change in the world, including the very knowledge in us when on the basis of habit we predict occurrences. This is al-Ghazālī's metaphysical position that emerges most clearly here. He had given expression to it in passing in his discussion of the illustration of the finger moving the water in his critique of the concept of God as cause.

This occasionalism was championed by the Ash'arites although it had its origins in Mu'tazilite thought.⁷³ Thus, again, contrary to his own proclamation,⁷⁴ al-Ghazālī does endorse the doctrine of a specific school. Indeed, al-Ghazālī does not merely endorse Ash'arite occasionalism, but gives his epistemological argument against necessary causation not found in their writings. But Ash'arite metaphysics has its roots in their atomic theory of matter. We must therefore investigate whether in his *Tahāfut* al-Ghazālī endorses this theory and to what extent he agrees with the Ash'arites. The basic propositions of this theory are summarized for us by Maimonides.⁷⁵

The world consists of indivisible substances, the atoms, and the accidents that inhere in them. God creates indivisible moments of time, time atoms. No accident can exist for two time atoms. It is annihilated and God creates a new accident. No atom can exist without accidents. When all the accidents are annihilated, the atom is annihilated, and God creates a new atom out of nothing.

Before we proceed to investigate to what extent al-Ghazālī is in agreement with the Ash'arites, we must consider whether al-Ghazālī is an

⁷³Occasionalism in Islam had its roots in atomism. Ibn Ḥazm, like Maimonides, attributes the atomic theory to the majority of the theologians. Ibn Ḥazm, *al-Fisal*, V, pp. 92-105. The two prominent Mu'tazilite doctors, an-Nazzām and Abu-l-Hudhayl al-'Allāf, discussed this theory: *Ibid.*, V, 105; Shahrastānī, *al-Milal wan-Nihal*, ed. M.F. Badrān, (2 vols.; Cairo: Matba'at al-Azhar, 1947) I, 81. The early Mu'tazilite Dirār Ibn 'Amr not only denied causal efficacy in things, placing it entirely in God, he denied substance and argued that bodies are conglomerates of accidents: Ibn Ḥazm, *al-Fisal* IV, 195; Al-Ash'ari, *Maqālāt al-Islāmiyyīn*, ed., H.R. Ritter (2 vols.; Istanbul: Matba'at ad-Dawlah, 1929) II, 305.

⁷⁴*Supra*, p. 1.

⁷⁵Maimonides, *The Guide for the Perplexed*, p. 120.

atomist. There is no explicit endorsement of atomism in the Tahāfut. However, we can conclude with certainty from al-Ghazālī's general position and from some sundry statements, that he is an atomist. To begin with, his occasionalism commits him to the individuality and ontological independence of one finite temporal existent from another. Moreover, in one place al-Ghazālī mentions the fact that the theory of the potential infinite divisibility of things is a theory of the Philosophers,⁷⁶ implying in his statement that he does not subscribe to it. Furthermore, in the fourth debate, as we shall see in our fifth chapter, al-Ghazālī launches a severe criticism of the Aristotelian theory of matter and rejects it. Granted that his attack is negative, and granted that he does not explicitly argue for atomism, yet, in view of his general position and the statement concerning the divisibility of things mentioned above, it seems certain that the atomic theory of matter underlay his attack on the Aristotelian theory of substance. The question that remains is whether al-Ghazālī in his Tahāfut⁷⁷ subscribes to atomism in its Ash'arite form.

The answer to this question appears in the second discussion that deals with the problem of the eternity of the world in the future.⁷⁸

⁷⁶TF, p. 257 (omitted in TT).

⁷⁷We are dealing with the metaphysics of al-Ghazālī as it emerges in the Tahāfut. Basically, it is in agreement with Ash'arism. The one notable difference is in the theory of the annihilation of the atom discussed below. Two versions of this theory are reported in the Tahāfut and, by implication, rejected by al-Ghazālī who gives his own theory. Yet, in his theological book al-Iqtisād (see above n. 4), he endorses the second version of the Ash'arite theory of the annihilation of the atom. Al-Ghazālī, al-Iqtisād fi-l-I'tiqād (Cairo: Matba'at Hijāzi, no date), p. 20.

⁷⁸TF, pp. 110-19; TT, pp. 118-46.

There the Philosophers argue against the possibility of the non-existence of the world in the future. All the theological attempts to give a logical explanation of how God can, by a creative act, bring about non-existence reduce to contradiction, the Philosophers argue. They report the Mu'tazilite theory, the Karramite theory, and two versions of the Ash'arite theory of how substances can be annihilated, and attack these theories as absurd. It is the two versions of the Ash'arite theory that concern us here.⁷⁹ For these versions deal specifically with the problem of how the atom is annihilated. The two versions of the theory tally with Maimonides' account of the atomic theory. Both versions agree that the atom without the accidents cannot exist. The first version, however, considers "duration" an accident. The second version deals with certain relational properties which they consider accidents. According to the first version, the accidents created by God cannot exist for more than one moment. The atoms are then annihilated when God refrains from creating for them the accident "duration" (al-baqā'). The second version states again that the accidents cannot endure for more than one moment. The atoms are then annihilated when God refrains from creating those relational properties necessary for their existence, rest and motion, combination and separation.⁸⁰

Al-Ghazālī reports the Philosophers' objections to these theories, but does not refute them. He states that he could, if he wanted to, defend the above theories by showing that the Philosophers base their objections on untenable premises. Instead of pursuing this line of argu-

⁷⁹TF, pp. 115-16; II, pp. 134-39.

⁸⁰This version of the theory attempts to avoid the problem of regarding duration as an accident. The theory was endorsed and probably formulated by al-Bāqillānī: at-Tamhīd, p. 42.

ment, al-Ghazālī offers a solution of his own of how the world can be brought into non-existence by God. His solution, by implication, is a rejection, not of atomism, but of the Ashʿarite theory of how the atom is annihilated.

It is by a voluntary act that implies no change in His nature that God brings about non-existence, al-Ghazālī argues. Now this act is not related to nothing. When annihilation takes place, there is a new fact: the fact of renewal. Renewal occurs when God both creates out of nothing and annihilates what exists.⁸¹

We are not concerned with the solution of al-Ghazālī from an analytic point of view. We are concerned with it in its relation to the theory of the Ashʿarites. Al-Ghazālī rejects the theory that annihilation of matter is not due to the direct and positive act of God. The atom is not annihilated for al-Ghazālī because God "refrains" from acting, from creating the conditions necessary for its existence and continuance. For al-Ghazālī such a view would leave the atom with an essence, as it were, that is not directly dependent on God, a nature that determines its non-existence when certain conditions do not obtain. Al-Ghazālī wants to insist on the total dependence of all events on God's positive acts. In his theory of the contingency of things in his Tahāfut he goes even farther than the Ashʿarites, and certainly much beyond Ibn Sīnā's theory of the contingency of things in themselves.

We can sum up now briefly the essentials of al-Ghazālī's metaphysics that emerges in his Tahāfut.

God is the omnipotent, living, knowing, voluntary, agent. He

⁸¹ TF, p. 117; TT, p. 141.

does not act through any necessity in His nature. This would deprive God of freedom. Moreover, it is only the inanimate that are said to act through the necessities in their natures. In reality, no existing essence necessitates the existence of anything else. Events and things in the world are not connected by any necessary causal connection. All change is due to the direct and voluntary acts of God. Efficacy resides in God alone. In themselves things are utterly contingent. Matter is not eternal. Both atoms and substances are created out of nothing and annihilated by the direct acts of God.

It is this metaphysics that underlies al-Ghazālī's arguments against the Aristotelian theory of an eternal world.

CHAPTER II

THE FIRST DEBATE: AL-GHAZĀLĪ'S CRITIQUE OF THE PHILOSOPHERS¹

In the analysis of the first and the longest of the four debates over the question of the world's eternity, we shall pursue our general purpose of demonstrating how the conflict is essentially a conflict of metaphysical premises. Al-Ghazālī argues from his premise that God is a voluntary agent who does not act because by His nature He must act. The Philosophers argue from the opposite premise that the acts of God are necessitated by His nature. God is a being who by His very nature must cause the world. The world is the necessitated effect of His essence. God is eternal and His nature changeless. The effect that is the essential consequence of an eternal changeless essence, must be eternal. The world is eternal. An effect can be delayed after the cause only if there is an obstacle to account for such a delay. In the case of God, the supreme condition of all existents, there can be no such obstacle. Since creation in time for the Philosophers means precisely the delay of the effect after the cause when there is no obstacle,

¹Because of the length and the complexity of this debate, in this chapter we shall discuss only the arguments of al-Ghazālī and the Philosophers. We will devote the chapter that follows to an analysis of Ibn Rushd's reply to al-Ghazālī's arguments in this debate. In this way we can give full justice to Ibn Rushd's views. For although he shares the Philosophers' premises, and indeed, their conclusion that the world is eternal, he is not always in full agreement with them and subjects their arguments to criticisms of his own. The disagreements between the Philosophers and Ibn Rushd could best be articulated in an independent treatment of Ibn Rushd.

it is impossible.

The first debate is the longest of the four. The proof the Philosophers give for the eternity of the world is considered by al-Ghazālī the strongest of the four proofs.² In its structure the first debate is very complex. It divides logically, but with respect to the length of the various divisions not evenly, into three major parts. The first is the proof given by the Philosophers for the world's eternity. The other two parts consist of two main objections of al-Ghazālī to the proof. Each of the objections is debated by al-Ghazālī and the Philosophers. The first objection and its discussion is the longer of the two. Al-Ghazālī asserts the contradictory of the proof's conclusion and attempts to prove that the Philosophers cannot prove the contradictory of their conclusion false. In the second objection, al-Ghazālī attempts to show how the theory of the world's eternity supposedly proved a priori by the Philosophers fails to account for empirical fact, the experience of change in the world.

In the following scheme we attempt to outline the structure of the first debate.

A. Part I

The Philosophers' Proof (TF, pp. 76-79; TT, p. 4): creation in time is impossible; it requires infinite determinants; it implies change in God - (this latter point is omitted in TT).

B. Part II

Al-Ghazālī's First Objection and its Discussion (TF, pp. 80-93; TT, pp. 7-56).

²TF, p. 79. Al-Ghazālī's statement is not reproduced in TT.

Al-Ghazālī's proposal of the contradictory of the proof's conclusion: his assertion that the world created in time by an eternal will is possible (TF, p. 80; TT, p. 7).

The Philosophers' first response to the proposal: it implies the impossible consequence that an effect is delayed after the cause without there being anything to account for the delay (TF, pp. 81-84; TT, pp. 10-12).

Al-Ghazālī's defense of his proposal (TF, pp. 84-87; TT, pp. 13-34):

1. The Philosophers have not disproved his proposal syllogistically (TF, p. 84; TT, p. 13).

2. The impossibility of the proposal is not self-evident. What is self-evident must be self-evident to all. This is not (TF, p. 84; TT, p. 13).

3. The Philosophers' doctrine of the world's eternity itself has consequences that are self-evident contradictions. It implies the existence of revolutions of heavenly bodies that are both infinite and unequal. It also implies a series of revolutions whose end term is neither odd nor even (TF, pp. 84-85; TT, p. 16).

The Philosophers' response to (3) (TF, p. 85; TT, p. 34):

1. Oddness and evenness are attributable only to finite series (TF, p. 85; omitted in TT).

2. The revolutions of the heavenly bodies can be infinite because the past motion no longer exists; i.e., these revolutions do not form actual infinities (TF, pp. 86-87; TT, pp. 23-30).

Al-Ghazālī's response to the above (TF, pp. 86-87; TT, pp. 23-30):

1. The question of the non-existence of past events does not alter the problem: any number of things, whether existent or imaginary, must have the character odd or even (TF, p. 86; TT, p. 23).

2. An eternal world, and immortal yet individual souls, which philosophers like Ibn Sīnā, affirm, forces such philosophers to accept the actual infinite (TF, p. 86; TT, p. 26).

3. Those who deny individual immortality and maintain a unitary theory of the soul involve themselves in more contradictions (TF, p. 87; TT, p. 28).

The Philosophers' reply (TF, pp. 86-87; TT, p. 31):

If al-Ghazālī insists that past events constitute part of an actual not accidental series of events, he is forced into the contradictory assertion that before the time the world existed there was infinite time.

Al-Ghazālī's reply (TF, p. 87; TT, p. 31):

Time and the world are simultaneous creations. He postpones defense of this assertion for the second debate. This issue is the connective link between debates (I) and (II).

A second response of the Philosophers to al-Ghazālī's proposal affirming creation in time (TF, pp. 87-88; TT, p. 34):

An eternal will creating the world in time would have had to differentiate one moment of time from amongst a series of similar ones. This is not possible because:

1. To differentiate between similars requires a determining

principle to specify one similar from another. This leads back to the problem of infinite determinants (TF, pp. 87-88; TT, p. 34).

2. Similar are indiscernible. The human will confronted with choice between exact similars cannot do so (TF, pp. 88-89; TT, p. 34).

Al-Ghazālī's reply (TF, pp. 88, 89-93; TT, pp. 34, 37-38, 41, 51, 53, 55):

1. The problem of the infinite determinants does not arise. The will by definition is that quality capable of discerning and choosing between similars (TF, p. 88; TT, p. 34).

2. The assertion that the will cannot discern between similars is not self-evident (TF, p. 88; TT, p. 37).

3. The example of the human will, if true, still would not apply to the divine will which is different (TF, p. 88; TT, p. 38).

4. But the assertion that the human will cannot discern and choose between similars is false (TF, pp. 88-89; TT, p. 37).

5. In their cosmology the Philosophers must admit choice between similars in at least two instances:

a. God's choice of two specific poles for the world to revolve around (TF, pp. 90-92; TT, p. 41);

b. His choice of the direction of the movement of the heavenly bodies from East to West when He could have reversed the process, reversing all relations (TF, pp. 92-93; TT, pp. 51-53).

C. Part III

Al-Ghazālī's Second Objection (TF, pp. 93-95; TT, pp. 56, 61, 63):

There are new occurrences in the world and these have causes.
The causal series must have a first term in time (TF, p. 93; TT, p. 56).

The Philosophers' reply:

They do not deny new occurrences in the world. They only deny a first new occurrence. A new occurrence sets the conditions for another occurrence to be actualized (TF, p. 93; TT, p. 61).

Al-Ghazālī's answer:

There must be a first actualization in time then (TF, p. 93; TT, p. 61).

The Philosophers offer an explanation of how the eternal motion of the heavenly bodies causes the process of generation and corruption, new occurrences, in the sublunary sphere (TF, pp. 93-94; omitted in TT).

Al-Ghazālī's reply (TF, pp. 94-95; TT, p. 63):

1. The motion of the heavenly bodies must have a beginning in time (TF, p. 94; TT, p. 63).
2. There must be a first occurrence in the sublunary sphere and this is not explained by the eternal motion of the heavenly bodies (TF, p. 94; TT, p. 63).
3. The eternal movement of the heavenly bodies cannot explain the occurrence of those events in the world that happen sometimes but not at other times, i.e., unique events in the world (TF, pp. 94-95; TT, p. 63).

I. Part I

The Philosophers' Proof of the World's Eternity³

The proof has three parts,⁴ two separate but related arguments and an enlargement on these two arguments that introduces the question of God's will.

In the first part the Philosophers argue as follows:

It is absolutely impossible for a temporal being⁵ to proceed from the Eternal. For, if the world's creation in time is supposed, then the world before its creation would have been pure possibility.⁶

Its non-existence in the time prior to its creation could only have been

³TF, pp. 76-79; TT, p. 4.

⁴Only the first part is reproduced and discussed in TT.

⁵In the Arabic, "temporal" (ḥadith) appears as an indefinite noun and hence it is not clear in the proof whether it is held that the proceeding of any temporal from the Eternal is impossible. This becomes an issue later on in this first debate (TF, pp. 93-95; TT, pp. 56, 61, 63) and the Philosophers clarify their position on this point: it is only the proceeding of a first existent in time from an eternal that is impossible and not any temporal existent.

⁶"Pure possibility" that inheres in a subject, matter, the Philosophers must mean, as the fourth debate will show. The term is left undefined in this first proof and Ibn Rushd takes the Philosophers to task for what he contends is their equivocal use of this term. The possible, Ibn Rushd holds, can be taken in the sense of that which is less likely to occur than not, and in the sense of that which has equal chances of occurring. Moreover, Ibn Rushd continues, one must distinguish between the possibility in the agent to act and the possibility in the patient to receive action. Not all of these kinds of possibilities require an external determining principle for their actualization. In the agent, for example, a possibility to act might require an external cause, but if the possibility is of the nature of a positive disposition like the disposition of the geometer to do geometry, the determining principle is not external (TT, pp. 5-6).

due to the fact that no determinant⁷ then was in existence that would have changed it from pure possibility into existence. Therefore, at the moment of its supposed creation, a determinant that hitherto did not exist, must have come into existence anew (tajaddad). But then the coming into existence anew of this determinant is in need of explanation.⁸ Another determinant is required to bring the former determinant into existence and the latter determinant in turn requires another determinant, and so forth ad infinitum. But the infinite is impossible.⁹ The creation of the world in time is therefore impossible.

In the second part the Philosophers argue as follows:

If the states of the Eternal are similar, then there either proceeds from Him nothing at all, or else, something proceeds eternally. But that the state of refraining to create and the different state of beginning to create, should both exist in the Eternal, is impossible.¹⁰

In other words, God is changeless and creation in time means change in God. Hence, it is impossible.

In the third part, the Philosophers proceed to enlarge on these arguments. They ask the reason why, if created in time, the world was not created at an earlier moment.¹¹ One cannot say that prior to the

⁷Following Van Den Bergh's translation of "murajjih," literally, "that which inclines" as "determinant"; VB, p. 1.

⁸The causal principle is implied.

⁹The infinite determinants must co-exist if their infinity is to be regarded as impossible: the Philosophers deny the actual infinite.

¹⁰TF, p. 76 (omitted in TT).

¹¹This question goes back to Parmenides: "I shall not let thee say nor think that it came from what is not and if it came from nothing, what need could have made it arise later rather than sooner?" Quoted from John Burnet, Early Greek Philosophy (3d. ed.; London: A. & C. Black, Ltd., 1920), p. 175.

moment of its creation, God lacked either purpose,¹² power, instrument, or nature. Such a lack would contradict the concept of God as the omnipotent. It also implies change in God. If, for example, we maintain that prior to its creation in time, it was not in the nature of God to create the world and that it became in His nature to create it only at the time that He created, then we must conclude that God's nature changes.¹³ At best we could say that the world was not created earlier because God did not will its existence earlier.¹⁴ God's will then must have been created as the condition for the world's creation at a particular moment of time. But the concept of a created will is self-contradictory. A created will is itself in need of another will to bring about its existence, and this second will requires yet another will and so forth ad infinitum. Once again we are caught in the infinite series. The will then cannot be created. It must be eternal.¹⁵ Since only a theory of a created will can explain the world's creation in time, and

¹²Actually both Ash'arites and Philosophers deny that God creates for a purpose. See for example al-Bāqillāni, at-Tamhīd, pp. 50-51, and Ibn Sīnā, al-Ishārāt, pp. 158-159.

¹³In the proof above only passing mention is made of creating by nature. However, this premise - that God creates by the necessity of His nature - is implicit in the proof. It becomes very explicit in the discussion that follows where the Philosophers attempt to defend their proof against al-Ghazālī.

¹⁴To say that the world's existence was not willed at an earlier moment, does not mean that the will could not have existed earlier. The Philosophers, and as we shall see in the next chapter, Ibn Rushd, realize this, but insist that even if we assume an eternal will, yet at the moment of creation a new disposition initiating the creation must arise. This disposition will lead once again into the problem of the infinite.

¹⁵The eternity of God's will together with the eternity of God's word, the Qur'ān, are Ash'arite dogmas supported by arguments similar to the above. See al-Ash'ari, al-Ībānāh, pp. 68, 100. The Philosophers, however, identify the will with God's essence. Hence to them creation by will and creation by nature with regards to God are identical. The Ash'arites hold the will to be eternal but an attribute "additional" to God's essence.

since such a theory is self-contradictory, the world cannot be created in time. The world is the eternal creation of an eternal will.

B. Part II

Al-Ghazālī's First Objection¹⁶

Al-Ghazālī's Counter Proposal¹⁷

Al-Ghazālī responds to the proof above by proposing the contradictory of its conclusion as a proposition that is not necessarily false. His method of refuting the proof can be better illustrated if the proof's premises are listed together with the conclusion deduced from them. In this way, we hope to demonstrate how the conflict between the Philosophers and al-Ghazālī is a conflict of metaphysical premises. We can list the proof's premises in the following order:

- a. God is the cause of the world.
- b. God is omnipotent, eternal, and changeless.
- c. God's will is eternal.
- d. The infinite series of causes is impossible.
- e. Every event must have a cause.
- f. A cause necessitates its effect (God creates by the necessity of His nature).
- g. The world's creation in time requires a determinant in time.
- h. Creation in time implies change in God.

From these premises it is concluded that the world is the eternal creation of an eternal will.

¹⁶TF, pp. 80-93; TT, pp. 7-56.

¹⁷TF, p. 80; TT, p. 7.

Al-Ghazālī proposes that the statement affirming the creation of the world in time by an eternal will, is not necessarily false. It is possible for the eternal will to decree the existence of the world at a specific moment of time.¹⁸ In effect, al-Ghazālī denies the conclusion of the proof. To deny the conclusion of the proof must mean that al-Ghazālī either finds fault in the deductive process of the proof, i.e., he finds that the conclusion does not follow necessarily from the premises, or else that he rejects all or some of the premises. Al-Ghazālī does not challenge the correctness of the deductions in the Philosophers' proof. Hence, he must either reject all or some of the premises. Now, we know that al-Ghazālī accepts premises (a), (b), (c), (d), and (e).¹⁹ He must therefore deny at least one of the remaining premises (f), (g), and (h). But, since logically, any one of these premises when added to the premises accepted by al-Ghazālī is sufficient for inferring the proof's conclusion,²⁰ al-Ghazālī must on logical grounds reject all three. And indeed, these are the premises, particularly (f), which he rejects on metaphysical grounds as we have tried to show in the first chapter.

The debate that follows has two parts. In the first, the problem

¹⁸Al-Ghazālī adds here that the world need not have existed in the time prior to its creation. Thus far, he still adheres to the theory that time precedes creation, a theory he abandons in the second debate where he maintains that time and the world are created simultaneously.

¹⁹For al-Ghazālī's acceptance of (a), (b), and (e), see summary of al-Ghazālī's metaphysical position, Ch. I, pp. 31-32. Al-Ghazālī never denies (e): he only denies that there are other causes than God. (c) is asserted by al-Ghazālī in his proposal above and it is an Ash'arite dogma (see above note 15). His acceptance of (d) will be apparent shortly in his defense of his proposal.

²⁰The proof's conclusion follows from (a), (b), and (f); (d), (e), and (g); and (b) and (h).

of whether al-Ghazālī's proposal can be proved false by an appeal to self-evident intuition is discussed. Here, (f) is rejected by al-Ghazālī. Thus far his intention had been to show that the world's creation in time is possible. But in this section, in his endeavor to refute (f) he attempts to prove the eternity of the world impossible and the world's temporal creation necessary. In the second part, the nature of God's will is debated. Here, (g) and (h) are rejected by al-Ghazālī.²¹ We will treat these two discussions separately.

First Discussion of al-Ghazālī's Proposal²²

This discussion is central in the controversy between al-Ghazālī and the Philosophers since its main theme is whether one can know a priori by the appeal to the criterion of self-evidence that a cause necessitates its effect. It is here also that the problem of the infinite is discussed. Both parties agree that the actual infinite is impossible since it implies the existence of infinities that are unequal, something both parties consider self-evidently false. They disagree, however, on what state of affairs constitutes an actual infinite. Important as the problem of the infinite in this section is, it must be borne in mind that it emerges as part of the discussion over the problem of whether or not one can, through self-evident reasoning, know that there is necessary causation in the world. The debate begins with the Philosophers' answer to al-Ghazālī's proposal that the world could have been created in time by an eternal will.

²¹The denial is implicit in al-Ghazālī's proposal.

²²TF, pp. 81-87; TT, pp. 10-31.

1. The Philosophers' reply²³

This is clearly impossible. For, every occurrence is necessitated and caused. And just as it is impossible for an event to exist without a cause and a necessitating factor, it is impossible for a necessitating cause to exist with all its necessitating conditions, its causes and principles, completely fulfilled, and the effect delayed. On the contrary, the existence of the necessitated when the conditions of the necessitating are fulfilled is necessary and its delay is just as impossible as the existence of a necessitated effect without the necessitating cause. Before the world's existence, a willer existed, a will, and its relation to what was willed. No new willer appeared, no new will, and no new relation to the will—for all this is change. How then could what was willed have been created anew, and what could have prevented its creation earlier?²⁴

The Philosophers then proceed to argue that sometimes even in accidental and conventional matters, the effect cannot be delayed. How then could it be delayed in the case of the necessary and essential? The example of the conventional case where an effect cannot be delayed is taken from Muslim law. According to a certain interpretation of the law concerning divorce, a husband can divorce his wife simply by uttering thrice the statement that he is divorcing her. A delay in the effectiveness of the divorce may occur only if, in the formula for divorce uttered, there was the stipulation that the divorce will be in effect at a certain moment, or under specific conditions such as the moment when the wife enters the house.²⁵ But when there is no such stipulation, the effect must occur immediately. If then in such conventional cases the delay of effect to cause is impossible, certainly then, in matters per-

²³TF, pp. 81-84; TT, pp. 10-12.

²⁴TF, pp. 81-82; TT, p. 10.

²⁵Ibn Rushd insists that this example put into the mouth of the Philosophers weakens their argument. It allows al-Ghazālī to argue by analogy from the special cases where the divorce is delayed contingent on certain conditions, to a delayed creation of the world in time; TT, pp. 12-13.

taining to the essential as the eternal will of God, it is impossible.

2. Al-Ghazālī's reply²⁶

The Philosophers, al-Ghazālī maintains, arbitrarily assert that an eternal will creating the world in time is impossible. They must prove this assertion. They must prove that it is impossible for the eternal will to be related to any temporal event.²⁷ To prove it they must prove it syllogistically. To prove by a syllogism that "creation in time" contradicts "creation by an eternal will," the Philosophers must exhibit a middle term that relates these two concepts. This they have not done.

They could resort to an appeal to the criterion of self-evident intuition²⁸ to prove the above impossibility, al-Ghazālī maintains. But the intuitively self-evident must be self-evident to all. Unless there is universal agreement on what is thought to be self-evident, it is not actually so. The impossibility of an eternal will creating the world in time is not seen to be self-evident by the majority of the learned. The criterion of self-evidence, then, al-Ghazālī concludes, does not apply in this case. The impossibility of the eternal will is not necessary.

3. The Philosophers' reply²⁹

The Philosophers reaffirm that creation in time by an eternal will implies the view that a necessitating cause can exist without its

²⁶TF, p. 84; TT, p. 13.

²⁷See above note 5. This problem of the relation of the eternal to any temporal whatsoever becomes an issue in al-Ghazālī's second major objection to the proof.

²⁸"Darūrātu-l-'aql" literally, "necessity of thought."

²⁹TF, p. 84; TT, p. 14.

necessitated effect ensuing immediately. This, the Philosophers maintain, is known to be impossible by the necessity of intuitive thought:

We know by the necessity of intuitive thought that it is impossible that a necessitating cause should exist with all its conditions fulfilled, without a necessitated effect. To admit this is an affront to the necessity of intuitive thought.³⁰

For the Philosophers, then, it is an intuitive necessary principle that a cause necessitates its effect. Furthermore, they had maintained that the necessitated effect of a necessitating cause cannot be delayed.³¹ The creation of the world in time, for the Philosophers, is precisely such an example of the delay of effect to cause. God is eternal cause. The world as the necessitated effect of the eternal necessitating cause is eternal.

4. Al-Ghazālī's reply³²

The appeal to intuitive necessary self-evidence, al-Ghazālī answers, can be used to disprove cardinal theories of the Philosophers. It can, for example, be used to show the absurdity of their theory of God's knowledge.³³ But, more than that, it can be used to disprove the theory of the eternity of the world itself. Al-Ghazālī then proceeds to show how the theory of an eternal world is self-evidently false.

³⁰ Ibid.

³¹ A delay can occur if there is an intervening obstacle, but there can be no such obstacle to God's omnipotent acts. We will comment on this problem when we give some observations on the arguments at the end of this chapter.

³² TF, pp. 84-87; TT, pp. 14-34.

³³ God's knowledge of all universals does not constitute plurality in its essence, the Philosophers hold, and this to their opponents is self-evidently impossible. Again, some Philosophers hold that God knows only Himself and hence in this case the Knower, the Known, and Knowledge, are identical - another self-evident absurdity to their opponents.

The form and purpose of al-Ghazālī's answer is not clearly and explicitly stated. But it can be made more clear and explicit if the Philosophers' line of reasoning, using the axiom that the cause necessitates its effect, is exhibited in the form of premises and conclusion:

- a. God is the eternal cause of the world.
- b. A cause necessitates its effect and its effect cannot be delayed.

Therefore: the world is eternal.

The Philosophers hold that the premise (b) is self-evident. Al-Ghazālī accepts premise (a) and the validity - not the truth - of the conclusion derived from (a) and (b). If, now, al-Ghazālī, by an independent proof,³⁴ can demonstrate the falsity of the conclusion, then he would have demonstrated the falsity of (b). If (b) is proved false, then it cannot be a self-evident truth. Since its self-evidence was not recognized as such to begin with, then a proof demonstrating the fact that it is not a self-evident truth would support al-Ghazālī's theory that the genuinely self-evidently true must have universal acceptance.

Hence al-Ghazālī puts forward arguments to prove the impossibility of the theory of the world's eternity. The arguments are all based on the belief that the infinite is impossible. One can differentiate three arguments, although the first two can be considered as one and the same. However, since there is an important new element in what we consider the second argument, we will abide by this division:

³⁴Al-Ghazālī would not want to call his arguments for the impossibility of the world's eternity, proofs. He wants to show that they are self-evidently false. But in order to do that he has to draw the consequences of such a theory. But then, what is the exhibition of the consequences to show their self-evident contradictoriness but proof?

a. In the first argument,³⁵ al-Ghazālī argues as follows:

A theory of an eternal world implies the infinite number of the revolutions of the heavenly bodies. But, then, the number of rotations of the different planets or stars are not equal. The sun, for example, makes one complete rotation in a year. Saturn makes its rotation, on the other hand, in thirty years, while Neptune makes its rotation in twelve years. Saturn's rotations, then, are a thirtieth of the sun's and Neptune's a twelfth. Yet all these rotations are infinite and hence should be equal. But they are not equal. They are therefore both equal and not equal. This is a self-evident contradiction. The rotations of these bodies cannot then be infinite.

Again, al-Ghazālī continues, the number of these rotations must be either odd or even. The number cannot be both odd and even and both not odd and not even. If they are even they can become odd by the addition of one. Hence, if even, they are short of "one" that makes them odd. But, if they are infinite, how can the infinite be short by one? The same contradiction obtains if we regard them as odd.

If the Philosophers insist that oddness and evenness are attributable only to finite not infinite aggregates, al-Ghazālī continues, then how can we describe these rotations as being ratios of each other without ascribing to them the characters odd and even? The very fact, that is, that we can speak of the revolutions of Neptune as being a twelfth of the sun's, means that we are speaking of an aggregate to which oddness and evenness, but not both, must be applied. These revolutions then must

³⁵TF, p. 85; TT, p. 16.

be finite.³⁶

b. The second argument³⁷ comes in the form of an answer to an objection of the Philosophers to the first argument. Oddness and evenness, the Philosophers had maintained, are inapplicable to the number of the revolutions of the heavenly bodies because the past instances of these revolutions do not exist any more, and the future revolutions are not yet in existence.

In effect, the Philosophers expressed the Aristotelian theory of the potential infinite. In objecting to the Philosophers' answer, al-Ghazālī in essence objects to the Aristotelian theory of the potential infinite. Aristotle differentiated between the actual and the potential infinite.³⁸ The actual infinite, for Aristotle, is impossible.³⁹ It results in contradictions similar to those pointed out by al-Ghazālī. By an actual infinite, Aristotle meant a magnitude given simultaneously, and an infinite given as a simultaneous whole is impossible. Space is a magnitude given simultaneously and hence cannot be infinite. The poten-

³⁶ Al-Ghazālī is expressing the accepted understanding of infinite aggregates that continued to be accepted until the theories of Cantor. The paradoxes above rest on the identification of what Russell defines as the "inductive number" and the infinite number; Bertrand Russell, Introduction to Mathematical Philosophy (London: George Allen and Unwin Ltd., 1930), pp. 78-79. But since al-Ghazālī and the Aristotelians shared the same confusion we will discuss this problem again in terms of the Aristotelian assumptions when we treat Ibn Rushd. Al-Ghazālī suggests serious criticisms of the Aristotelian theories of the potential and actual infinite.

³⁷ TF, pp. 85-86; TT, p. 16.

³⁸ Aristotle also differentiates between the potential infinite by division of a finite entity and the infinite by addition such as the succession of motion - Physics, iii, 6, 206a-206b.

³⁹ Physics, iii, 208a.

tial infinite is the opposite. It is given successively and as the new instance or part comes into existence, the prior instance or part no longer exists. Motion is a case in point. Since the past instances of motion no longer exist, they do not admit of comparisons with other infinite series, and hence no contradictions obtain in reality. Hence, such an infinite is possible.

al-Ghazālī's answer is short: the fact of existence or non-existence is irrelevant to the question of the applicability of the characters oddness and evenness to an aggregate. One can imagine a number of horses, for example. These horses are purely imaginary. They have no actual existence. Yet, we must attribute to such a number the characters oddness or evenness and not both.

This problem will be discussed again when we treat Ibn Rushd's answer to al-Ghazālī. But it is well to point out at this stage that al-Ghazālī does not object to the Aristotelian distinction between the potential and the actual infinite. Rather, he objects to what states of affairs constitute the potential infinite. For, in his debate over the question of the eternity of the world in the future, al-Ghazālī maintains that the eternity of the world in the future is possible, though not necessary, precisely because the future events are not yet in existence.⁴⁰ Hence, for al-Ghazālī, if we want to maintain the Aristotelian terminology, future, not yet existing events, can be part of a potentially infinite series, but not past events that had already existed. The Philosophers, on the other hand, insist that both the past no longer existing events, and future not yet existing events, can belong to a

⁴⁰TF, pp. 110-111; TT, p. 119.

potential infinite series.

c. In the third argument⁴¹ al-Ghazālī insists that, as a matter of fact, some of the Philosophers like Ibn Sīnā are committed to admitting in their theory of an eternal world a co-existing infinite. Ibn Sīnā believes the world to be eternal in the past. He furthermore believes in the individual immortality of the soul, even though he denies bodily resurrection. This commits him to accept the actual infinity of souls.⁴² Hence, since a theory of an eternal world must admit of an actual infinite - the actual infinity of souls - it is self-contradictory.⁴³

The Philosophers might try to get out of this difficulty by renouncing the theory of individual immortal souls, and adopting a Neoplatonic unitary theory of the soul, al-Ghazālī continues. One immortal soul participates in the plurality of bodies while these are living. It is momentarily individuated by the bodies, but after the corruption of the bodies it continues to exist unindividuated. The problem of an actual infinite of individual souls will not arise.⁴⁴

⁴¹TF, p. 84; TT, pp. 25-26, 28.

⁴²Assuming that man begets man eternally.

⁴³This issue is discussed again in the discussion over the Philosophers' proof of God's existence (fourth discussion). There, the Philosophers argue that the actual infinity of souls is possible because such an infinite aggregate has no essential order. Al-Ghazālī argues that order can be assigned to these souls if we suppose that each day at least one man dies. TF, pp. 142-143; TT, pp. 273-275. Aquinas reports the Philosophers' argument from order sympathetically, Summa Contra Gentiles, II, 81, sec. 9.

⁴⁴Ibn Rushd defends the theory of the one soul. He advocates the view that only the active intellect is immortal and one in all rational beings. The other aspects of the soul are corruptible.

But such a theory is even more repugnant to the necessity of intuitive thought, al-Ghazālī maintains. Every person knows experientially that he is distinct from others. Knowledge relates essentially to each person and is an individuating principle. The soul is not a quantitative entity like water that can divide amongst a plurality of bodies and then unite and maintain its oneness.

Hence, a theory of the world's eternity must have one of these two consequences, both absurd: the actual infinity of souls, or the unitary theory of the soul.

5. The Philosophers' reply⁴⁵

The criterion of self-evident intuitive necessary thought which al-Ghazālī uses to prove the theory of an eternal world false, the Philosophers argue, can be used to prove the theory of a created world false. If al-Ghazālī insists that he intuitively knows that the infinite past revolutions of the heavenly bodies constitute an actual infinite then this can be turned against his theory. For if the past revolutions are actual, then past time is actual.⁴⁶ Now, if the world is created in time, then, prior to its creation, a time must have existed in which God did not create. This time is either finite or infinite. If finite then the eternal God must have preceded the world by a finite duration of time and this is impossible. If infinite, and if we are to admit al-Ghazālī's contention that a past infinite is an actual infinite, then it is likewise impossible.

⁴⁵ TF, pp. 86-87; TT, p. 31.

⁴⁶ Both parties accept the Aristotelian theory that time is the measure of motion.

6. Al-Ghazālī's reply⁴⁷

Time and the world are both created. Before the world's creation there was no time. Al-Ghazālī postpones discussion of this issue, however, until the second debate which deals exclusively with this problem. This short interchange of argument then forms a connective link between the first and second debate. It should be pointed out, however, that al-Ghazālī had been arguing on the assumption that creation in time means the existence of time before the world. He continues to argue with the Philosophers in the forthcoming discussion on the same assumption.⁴⁸

Second Discussion of Al-Ghazālī's Proposal⁴⁹

In the first discussion the argument centered around the issue whether al-Ghazālī's proposal that the world could have been created in time by an eternal will that decreed its creation at a specific moment of time could be proven false by the appeal of the criterion of self-evident necessary thought. In this discussion, the argument centers around the issue of whether the proposal could be disproved by arguments pertaining to the nature of the eternal will. The Philosophers offer a proof based on the nature of the will to prove al-Ghazālī's proposal false. The proof is a derivative of the first major proof and assumes its premises, so that here again the essential conflict continues to be the conflict of metaphysical premises. Moreover, in this discussion,

⁴⁷TF, p. 87; TT, p. 31.

⁴⁸By his tacit admission of the Philosophers' objection, al-Ghazālī forfeits what he has been arguing for and continues to argue for - the decree of the world's creation at a moment of time by an eternal will.

⁴⁹TF, pp. 87-93; TT, pp. 34, 38, 41, 52, 53, 55.

al-Ghazālī and the Philosophers continue to argue on the assumption that creation in time presupposes the existence of time before the world - they argue as though the last point in the first discussion that the world and time were created together has not been made.

1. The Philosophers' proof⁵⁰

Moments of time are similar in every respect, the Philosophers argue. Creation in time, therefore, means that an eternal will must differentiate between these totally similar moments to choose one moment of time from amongst them for the world to be created in. But, it is an intuitive self-evident necessary truth⁵¹ that entities similar in every respect cannot be differentiated without a differentiating principle (mukhasssīs) that can specify one similar entity from amongst a series of otherwise exactly similar ones.

If the theologians answer that the will specifies one moment of time from amongst a series of similar moments, the Philosophers continue, the old question must be raised again - "why did the will specify that moment and not any other exactly similar one?" The will then would require a determinant to explain its choice, and the determinant in turn would require yet another determinant to explain its existence and so forth ad infinitum. Hence, similars cannot be differentiated without the introduction of a determining principle, and the introduction of such

⁵⁰ TF, pp. 87-88; TT, p. 34.

⁵¹ Again, there still is the appeal to the criterion of self-evidence. This, as we shall see, is a point of disagreement.

a principle leads into the infinite regress, and this is impossible.⁵²

2. Al-Ghazālī's reply⁵³

The will, al-Ghazālī replies, by definition is that quality whose nature is to choose between exact similars. This is what is meant by will. Just as knowledge is defined as that quality which comprehends the knowable, will is defined as that quality that can specify and choose from amongst exact similars.

Al-Ghazālī's definition articulates for us the difference between his concept of God's will and that of the Philosophers. For the Philosophers, God's will and His essence are identical;⁵⁴ and hence God's will is a necessary and necessitating principle analagous to an inanimate natural force that must act in determinate ways. If it is confronted with exactly equal possibilities of action, it is neutralized and cannot act. But since it does act, then it could never have been confronted with such similar possibilities as exactly similar moments of time. The real consequence of the Philosophers' theory of the will, and the proof derived from it to demonstrate the impossibility of creation in time, is not merely that if confronted with the choice between sim-

⁵²In this proof the Philosophers make it clear that if there is to be a determinant to account for the creation of the world in time, this determinant cannot come from without God. It cannot come, for example, from some differences in the moments of time. For these moments are exactly similar. Hence, a determinant must arise from God, and if this leads into an infinite regress of determinants, as it must, then it cannot arise from God. Hence, the determinant is and is not from God and this is contradictory. This is implied in their reasoning. Also implied, is the contention that if the determining factor arises in the eternal will of God, then this will is not the eternal changeless will.

⁵³TF, pp. 87-88; TT, p. 34.

⁵⁴Supra, n. 15.

ilars the will cannot choose, but that God's will could never have been confronted with such a choice. God's nature is determinate and must act in specific ways. God as cause necessitates the world in accordance with His nature that does not change. Al-Ghazālī in his answers insists on the ability of the divine will to choose between similars, he insists on the belief that God is not bound by any necessity in His nature. Thus the fundamental issue of "act by necessity" is revealed once more in the discussion of the will.

3. The Philosophers' reply⁵⁵

The Philosophers assert once again their contention that choice between similars is impossible, for similars cannot be differentiated. This is the definition of the similar. Hence, to speak of a quality that differentiates between similars is self-contradictory. Things we ordinarily consider similar are not in reality so. Two black patches in different places, are not, strictly speaking, similars. Even, a black patch at two different instances of time does not constitute complete similarity. To be similar in every respect there must be spatial and temporal identity.⁵⁶

Again, the concept of "will" which we apply to God, the Philosophers continue, is a concept taken from the experience of the human will and projected by us onto the Deity. We do not differentiate be-

⁵⁵FF, pp. 89-88; TT, p. 34.

⁵⁶Here, in effect, the Philosophers enunciate a theory of the identity of indiscernibles. They no longer seem to be talking about similarities but identities. The conclusion that should be drawn is that if in our example we assumed moments of time similar in every respect, we really could not assume individual moments of time. It should also be noticed that their view that a color patch at different moments of time does not maintain its identity is close to the Ash'arite theory that denies the existence of a quality like color for more than one moment of time.

tween things that are completely similar. If, for example, a thirsty person is confronted with two glasses of water equal in every respect and similar in every way, it is inconceivable that he could differentiate and hence choose one of them.

4. Al-Ghazālī's reply⁵⁷

To begin with, al-Ghazālī answers, the idea that the will cannot differentiate between similars is not self-evident.⁵⁸ The example of the human will's incapability to choose between similars, if true, still would not hold for the Divine will which is different. Just as the Philosophers hold that God's knowledge and human knowledge are the same, the theologians hold that the human will and the Divine will are different. Indeed, the human will and the Divine will cannot be the same. For whereas the human will is always related to an object of desire, the Divine will is not. God in His perfection does not desire. He is complete in Himself.

But, al-Ghazālī continues, the belief that the human will cannot differentiate between similars is false. If we assume that two similar fruit dates are in front of a person who desires them but can take only one of them at a time, he will necessarily choose and take one through a quality in him that differentiates between similars. We can assume perfect conditions of similarity that include equality of distance between the dates and the person, qualitative similarity in the dates, and the absence of such psychological factors as the propensity to use the right hand more often than the left, and insist that the hungry man will still differentiate and choose. The Philosophers will

⁵⁷TF, pp. 89-93; TT, pp. 37-38, 41, 51, 53, 55.

⁵⁸Supra, n. 51.

maintain either that the similarity in every respect has not been attained, and this would be a mere supposition on their part that has no claim to certitude, or else they will reaffirm that the man will remain perplexed and would never choose, and this is self-evidently false.⁵⁹

Finally, al-Ghazālī goes on, in creating the world God must have made choices between exact similars. There are at least two instances in the Philosophers' cosmology where Divine choice between similars must be admitted by them. The first instance is the axis around which the world revolves. The universe as a whole is spherical. There are potentially an infinite number of points on the surface of a sphere. Hence, there is an infinite number of possible diametrically opposed points that could serve as the poles of the axis around which the universe revolves. And yet, out of this potential infinity of similar poles, one particular pair of poles was chosen to be the poles of the axis around which the universe revolves.

Again, the direction of the rotation of the spheres could have been reversed, reversing all relationships. The total result would have been similar but opposite. Here again, God must have chosen between similars. The Philosophers, therefore, must not merely concede that choice between similars has not been proven impossible, but that in actuality, in the very creative scheme they subscribe to, there has been actual choice between similars.⁶⁰

⁵⁹Al-Ghazālī seems to equate common sense with self-evidence here. Common sense tells us that a hungry person confronted with choices of similars will choose.

⁶⁰Ibn Rushd discusses this point and we will review it again when we discuss Ibn Rushd.

With this answer, the second discussion over al-Ghazālī's proposal ends. In the first discussion we have listed the following premises as the point at issue: (f) the cause necessitates its effect and, what to the Philosophers is a consequence of this, the effect cannot be delayed after the cause;⁶¹ (g) creation in time requires a determinant in time; (h) creation in time implies change in God. These premises underlie the conflict over the nature of the will also. We have indicated above⁶² how the Philosophers conceive the eternal will as an eternal essence that necessitates the world and how al-Ghazālī's definition of the will is a rejection of the Philosophers' theory. By his insistence that the will is by definition that quality that differentiates between similars, al-Ghazālī rejects premise (g). If the will by its very nature differentiates and chooses between similars, then there is no need for a determinant to specify one similar from another. The issue of the determinant does not arise. A creation in time does not need a determinant in time.

Premise (g), the Philosophers hold, leads to two consequences, both impossible. It results in the infinite regress of determinants and it implies change in God. The latter consequence is premise (h). Hence, al-Ghazālī's rejection of premise (g) is also a rejection of premise (h).⁶³

⁶¹We will return to this point at the end of the chapter.

⁶²Supra, p. 56.

⁶³Elsewhere in his Tahāfut al-Ghazālī gives an explicit rejection of (h) when he makes the statement that the acts of God do not imply change in His nature. TF, p. 117; IT, p. 141.

Al-Ghazālī's Second Objection⁶⁴

In this objection al-Ghazālī attacks the Philosophers' assertion in their Proof that it is impossible for a temporal being to proceed from the Eternal.⁶⁵ The problem of the relation of the temporal to the eternal is central in this discussion. Underlying the Philosophers' responses to al-Ghazālī's attack is their premise that a cause necessitates its effect. This premise is implicitly rejected by al-Ghazālī in his attempt to show that the theory of an eternal world based on such a premise fails to account for empirical fact.

The presentation of this last part of the first debate in al-Ghazālī's Tahāfut is brief and suffers at times from lack of clarity. For example, the expression "a first event" is used in two senses which are left undifferentiated. It is used to mean the first event in the ontological hierarchy of necessary connected events. The priority here is logical, not temporal. It is also used to mean the first event in a temporal sequence of events.

1. Al-Ghazālī's argument⁶⁶

The Philosophers must admit in their own system that a temporal being proceeds from the Eternal. For, there are new occurrences in the world, and each occurrence must have causes. These causes form a hierarchy of necessitating causes that terminate in the Eternal. Otherwise

⁶⁴TF, pp. 93-95; TT, pp. 56, 61, 63.

⁶⁵Supra, p. 39.

⁶⁶TF, p. 93; TT, p. 56.

the infinite regress will result. In this hierarchy of causes, there must be a first event, first in the logical order of priority, that proceeds directly from the Eternal.⁶⁷

2. The Philosophers' reply⁶⁸

What is intended, when it is said that a temporal being cannot proceed from the Eternal, the Philosophers answer, is not the denial that any temporal being whatsoever cannot proceed from the Eternal.⁶⁹ What is denied is the possibility of a first temporal being in the temporal sequence of events proceeding from the Eternal. For then there can be given no explanation to the fact that such an event occurred at the particular moment of time in which it did occur, and not earlier.

If then, they continue, no first temporal being in the temporal sequence of events can proceed from the Eternal, a first event in the logical sense of "first" can proceed from the Eternal when certain conditions and dispositions in the receptacles of such events obtain for the reception of the events.

In this last point the Philosophers anticipate the exposition of their theory of change that follows shortly. By an event, they do not mean something created out of nothing, but rather, a transformation that occurs in an already existing substratum.

⁶⁷ Al-Ghazālī stops at this point but his intention is clear: if a temporal, i.e., a new event, finite in its temporal duration, can proceed from the Eternal, then a series of such finite events can also proceed. A world created in time would be such a series of temporal events. In other words, if one single event, finite in its temporal duration, can proceed from the Eternal, then it is possible for a world finite in its temporal duration to proceed from the Eternal.

⁶⁸ TF, p. 93; TA, p. 56.

⁶⁹ Supra, n. 5.

3. Al-Ghazālī's reply⁷⁰

Al-Ghazālī's reply is very brief. In this reply he shifts his ground. By "first" here he means first in the temporal sequence of events and not first in the ontological order of priority. The Philosophers' contention that a temporal proceeds from the Eternal only when certain conditions of preparedness or disposition in the receptacle obtains, argues al-Ghazālī, does not solve the difficulty. For, even if this contention that an event occurs only in an existent substratum is admitted, there still needs to be a first disposition in time in the substratum. Otherwise an infinite number of dispositions will occur.⁷¹

4. The Philosophers' answer⁷²

The Philosophers proceed to explain their theory of change and what they mean by "new occurrences." Strictly speaking, the Philosophers maintain, new occurrences exist only in the sublunary sphere. In this sphere the substances, the four elements, are eternal. They undergo formal transformations. A new occurrence is a new transformation. But the process of transformation is eternal. It has no beginning in time.

The process of transformation is caused by the eternal motion of the heavenly bodies. Each heavenly body has a soul. The soul causes necessarily the circular motion of the body. Since the soul is eternal, the motion it causes is eternal. The motion of the heavenly body has an eternal aspect to it and a temporal aspect. The motion is an eternal process. But the circular motion has parts. Each part of the motion

⁷⁰ TE, p. 93; TT, p. 61.

⁷¹ Al-Ghazālī in effect recapitulates his argument for the necessity of a world finite in temporal duration; supra, p. 49.

⁷² TE, pp. 93-94; (omitted in TT).

comes into existence after the earlier part has stopped existing. Hence, each part of the motion is a creation after privation. It is a temporal event. And, just as the motion of the heavenly body is necessitated by the soul of the body, the motion in turn necessitates the changes in the sublunary sphere. Each change of form is related to the individual movement. In its temporal aspect, the heavenly motion is responsible for the temporal occurrence in the sublunary sphere. But inasmuch as the motion is eternal, the process of formal transformations as a whole is continuous and eternal.

5. Al-Ghazālī's reply⁷³

The circular motion of the heavenly bodies is the cause and principle of temporal events either because of its character as a series of temporal changes, or because of its permanence. If it is a series of temporal changes, then each change requires a cause. The series cannot be eternal, and hence the motion of the heavens cannot be eternal. If, on the other hand, it is the principle of change because of its permanency, then how can what is permanent produce change? Furthermore, the heavenly motion, since it is circular in each of its phases. If it is the cause of temporal changes in the world, then these changes in the world must follow a cyclic pattern. But as a matter of empirical fact there are events in the world that occur at irregular spans of time. There are unique events in the world that cannot be explained by the Philosophers' theory of the eternal circular movement of the heavenly bodies. The circular movement cannot be the principle of change and new happenings. All happenings, al-Ghazālī adds, are created directly by God and out of nothing (ikhtira'an).

⁷³ II, pp. 94-95; II, p. 63.

The difference in meaning between the Philosophers' concept of a temporal event and that of al-Ghazālī should be articulated here. Both parties agree that a temporal event is an event that is preceded by privation. But for the Philosophers it is the privation of something that once existed. The circular motion, for example, though eternal, consists of a series of existing motions after non-existing ones. It is the soul of the heavenly body that by necessity causes the motion - it is not the prior no longer existing motion that is cause of the present motion. The eternal soul is constantly acting by necessity and must be eternally moving the body. There can be no motion that is not preceded by the privation of a prior motion. There cannot be a first beginning of motion.

Al-Ghazālī's temporal event is preceded by privation, but the privation need not be the privation of something that once existed. There need not have existed anything before the temporal event. For the event is created directly by a voluntary act of God. God does not act by any necessity in His nature, nor is He conditioned by anything extraneous to Himself such as an already existing substratum. He need not be constantly acting and when He acts His creation is out of nothing.

With this reply of al-Ghazālī the first debate between al-Ghazālī and the Philosophers ends. Before we proceed to discuss Ibn Rushd's views on this debate, a few observations of our own are in order:

In this debate the controversy centered around the Philosophers' concept of cause, the epistemological problem of whether such a notion can be known a priori, the nature of the will, and the problem of the infinite. We will offer some observations on the first of these issues here and postpone discussion of the rest to the next chapter where we

will examine Ibn Rushd's views on this debate.

For the Philosophers, a cause necessitates its effect. If there is a cause, the effect must follow necessarily. They assume that entailed in this concept of cause is the proposition that the effect cannot be delayed after the cause unless there is an obstacle. The Philosophers also differentiate between essential causality and accidental causality. In the latter, the sequence of cause and effect is a temporal sequence. The cause precedes the effect in time. But in essential causality, cause and effect co-exist. The priority of cause to effect is logical not temporal.⁷⁴ The relation of cause and effect in this sense than is logical. As such, it is outside the category of time. If outside the category of time, then it is true that the effect cannot be delayed after the cause, because there can be no question of delay. "Delay" belongs to the category of time. It would be as absurd to speak of the delay of an essential effect to its cause, as it would be to speak of the delay of logical consequence to premise. If an obstacle to the efficacy of the cause intervenes and then is removed so that an effect follows, the effect is not an earlier effect delayed, but rather, a new effect similar to the effect obstructed by the obstacle.

However, the real problem that al-Ghazālī's second objection suggests, is the relation of motion and time to essential causality. If the cause-effect relation is outside the category of time, then it too must be outside the category of time. For Ibn Sīnā the world is the necessitated effect of God in two senses: in the sense that it is an emanation from God; in the sense that its motion is caused by God. To be consistent, it appears, Ibn Sīnā should affirm the first sense and deny the second sense as meaningless since motion is outside the logical category

⁷⁴The problem of the priority of cause to effect will be encountered again in the second debate that treats of the problem of time.

of cause and effect as he conceives it. The world would have to be static. With Ibn Rushd, the difficulty is more severe. For, as we shall see, he differs from Ibn Sina in that he conceives God as cause only in the sense of His causally moving the world.

In the second objection, al-Ghazālī brings a damaging criticism against the Philosophers' theory of change based on this premise that the cause necessitates its effect. If the transformations in the sublunary sphere are necessitated by the circular movement of the spheres, and if the circular movement is similar in all its phases, then the transformations, the events in the sublunary sphere should follow a strict repetitive pattern. But, it is a matter of empirical fact, that there are events that do not conform to any strict repetitive pattern. There are unique events and sporadic events. How can these be explained by the circular harmonious movement of the spheres?

The Philosophers could resort to a theory of eternal recurrence whereby the regular pattern of the world can only be manifested through long stretches of time inaccessible to the scrutiny of mortal men, where these sporadic and individual events can no longer be considered sporadic and individual in that in infinite time they appear at regular though wide intervals of time. Whether such an answer would be tenable or not, neither the Philosophers nor Ibn Rushd attempt it.

In this debate al-Ghazālī has produced effective arguments against the Philosophers' theory of an eternal world. He has shown the difficulties entailed in the Philosophers' concept of necessary causation. Their theory leaves empirical facts unaccounted for. His purpose has been to show that the Philosophers have not proved their theory. In that, we believe he has succeeded. However, we must examine Ibn Rushd's answers and see how the conflict between Ibn Rushd and al-Ghazālī rests also upon incompatible metaphysical premises.

CHAPTER III

THE FIRST DEBATE CONTINUED: IBN RUSHD'S CRITICISM OF AL-GHAZĀLĪ

In this chapter we shall discuss Ibn Rushd's answer to al-Ghazālī and his comments on the arguments of both parties in the first debate. We shall attempt to show that the conflict between Ibn Rushd and al-Ghazālī continues to be a conflict of incompatible premises. But in his *Tahāfut*, Ibn Rushd does not only attack al-Ghazālī, he often criticizes the Philosophers as well.¹ For Ibn Rushd adheres more closely to the teachings of Aristotle. The Islamic Philosophers that preceded him informed their Aristotelianism with Neo-platonic ideas and interpretations of their own. Often they deviate from what Ibn Rushd considers strict Aristotelian theory, and they support such deviations with arguments that are persuasive and dialectical but which fail to fulfill the conditions of demonstrative proof.²

¹The emanative theory of creation endorsed and elaborated by al-Fārābī and Ibn Sīnā is attacked by Ibn Rushd in such passages: *II*, pp. 179-80, 184-94, 245-46, 259-62. Ibn Rushd does not accept Ibn Sīnā's theory of the immortality of the soul: *II*, pp. 27, 107, 275, 295, 498, 574. He disagrees with Ibn Sīnā on the question of whether existence is an accident: *II*, pp. 197-98. He finds fault with Ibn Sīnā's formulation of the theory of God's knowledge: *II*, pp. 450-52. He disagrees with Ibn Sīnā in other details such as the nature of matter in the celestial bodies: *II*, p. 239.

²For example: *II*, pp. 5, 64, 164, 176 and *passim*. Sometimes the dialectical nature of the Philosophers' arguments, Ibn Rushd maintains, is due to the fact that al-Ghazālī had reproduced and discussed them out of context: *II*, p. 553. Indeed, Ibn Rushd's criticism of the Philosophers is an essential part of his attack on al-Ghazālī. For the latter often attacks spurious Aristotelian theories. To refute such theories is not to refute philosophical truth. But even so, Ibn Rushd finds more incoherence in al-Ghazālī's arguments against such theories than in the theories themselves, spurious as these might be: *II*, p. 553.

It is best to indicate at this stage, before we proceed to discuss Ibn Rushd's criticism of al-Ghazālī, the central area where the Philosophers and Ibn Rushd disagree. They both share the essential premise that sharply distinguishes their metaphysics from al-Ghazālī's occasionalism: that the world ultimately is the necessitated effect of God. But they differ in what they mean by effect. For the Philosophers, every existent, directly or through the mediation of another existent, is ultimately the necessitated effect of God in three senses: (1) in the sense that its substance, or matter, is an emanation from God; (2) in the sense that the forms inhering in matter and the intelligences are emanations from God; (3) in the sense that its movement and order is necessitated by God.

Ibn Rushd holds that the world is the necessitated effect of God in the third sense.³ Ibn Rushd's theory of the forms and the intelli-

³II, p. 185 ff. God is like a commander of an army. He determines the order of the celestial intelligences. Each intelligence determines the movement of the celestial body in its daily course from East to West. If all celestial bodies are to move in harmony, there must be a principle that coordinates such movement, God. Moreover, the celestial bodies, apart from their daily movement, possess movements of their own. These are directly ordered by God. The various motions of the celestial bodies in turn determine the eternal process of change in the sublunary sphere. God acts as the final cause. He imparts order in being the object of love. Ibn Rushd is interpreting the twelfth book of the Metaphysics. Indeed, it is from there that Ibn Rushd takes the example of God as the commander: Metaphysics, xii, 1075a, 11-15. The relationship between God and the celestial intelligences is not too clear in Aristotle, and Ibn Rushd attempts to remedy this. Apart from the order of movement imparted by God to the intelligences, there is an order of priority determined by the closeness of the intelligence to God: II, p. 435. The celestial body is said to have matter only in an analogous sense to the matter in the sublunary sphere. Celestial matter does not act as an individuating principle. It is the order of priority that acts as such a principle: II, p. 218.

gences is amenable to an emanationist interpretation,⁴ but Ibn Rushd's precise position is not certain. Substance, however, for Ibn Rushd is not an emanation. It is the necessitated effect of God in the sense that its order and the change it incurs is ultimately caused by God.

God is cause, in the sense of being the principle that orders and moves all existents, through self-knowledge. For He contemplates eternally all forms and intelligences in their most perfect state. The forms exist in degrees of perfection. Their least perfect state is in matter. Their scale of perfection in the intelligences is determined by the order of priority of these intelligences in their relations to God. In God they exist in their most perfect state, and God knows the forms perfectly. The form in its higher degree of perfection acts as cause to the form in the lower state. It acts as its final cause.⁵ The forms in their most perfect state, in God's mind, are the ultimate determining cause of all order and change.

Since matter is no emanation from God, its existence is not necessitated by God. It is eternal and its necessity is in itself. Its movement, however, is in itself possible. Its movement is necessitated, ultimately, by God.⁶ Hence, Ibn Rushd terms matter the "necessary-

⁴See *VB*, pp. 107, nn. 4, 5, 6; 110, n. 5.

⁵This much is clear in Ibn Rushd's *Tahāfut*. Whether above and beyond this Ibn Rushd believes that the form in the lower state of perfection is an emanation from the higher form is not so clear, although this is a possible interpretation. See note 4 above.

The form in a higher state of perfection causes the form in the lower state with one important exception: the form in its lowest state, in matter, is the cause of the concept in the mind of man. The mind abstracts the form from matter. The form abstracted as concept is higher than the form in matter in the scale of perfection.

⁶The bestower of motion is the cause: *II*, p. 172. "The celestial body . . . is necessary in its bodily substance, possible in its locomotion"; *II*, p. 243.

possible": the necessary in its existence, the possible in its order and movement.⁷

Whatever difference there is in the sense in which the world is conceived to be the effect of God in the systems of the Philosophers and Ibn Rushd, both parties agree that it is the "necessitated effect" of God's nature. Moreover, they both agree that God does not act directly upon the world of generation and corruption. He acts through a series of intermediary causes that have determined ways of acting. It is these central premises that are in conflict with al-Ghazālī's occasionalism.

In Ibn Rushd's comments and criticisms in this debate, there is often repetition and the comments are not always relevant to the problem of articulating the metaphysical premises. A case in point is Ibn Rushd's criticism of the Philosophers for their careless formulation of their proof. Van Den Bergh observes, with justice, that Ibn Rushd here is moved by "a certain esprit de contradiction against his Moslem fellow-philosophers" and that he ought to have accepted the argument, and that ultimately Ibn Rushd does so.⁸ Again Ibn Rushd's answer to al-Ghazālī's second objection is a more detailed re-statement of the Philosophers' answer. He adds nothing new. Thus we shall not discuss these two sections. We will concentrate on Ibn Rushd's views concerning al-Ghazālī's first objection. Moreover, since the structure of the first debate has been exhibited in the previous chapter, we need not follow the exact order of the debate in the Tahāfut. We will discuss, first of all, Ibn

⁷IT, p. 127 - also IT, p. 197 where Ibn Rushd speaks of the "real-possible." For the problem of the "necessary-possible" cf. VB, pp. 118, n. 4, 164, n. 3.

⁸VB, p. 1, n. 4. See also chapt. ii, n. 6.

Rushd's views on the will. This has three major parts: a direct attack on al-Ghazālī's proposal; a general criticism of the Philosophers' argument from the impossibility of choice between similars; Ibn Rushd's own analysis of the problem of choice. Secondly we will discuss Ibn Rushd's theory concerning intuitive knowledge in its relation to the problem of necessary causation. Finally, we will discuss Ibn Rushd's three answers to al-Ghazālī's arguments for the impossibility of an eternal world based on the impossibility of infinite past events.

A. The Divine Will⁹

Criticism of Al-Ghazālī's Proposal¹⁰

This criticism can be divided into three parts. The first of these is essentially a defense of the Philosophers' proof. The second is a different formulation of the proof, while the third attempts to point out what Ibn Rushd deems a confusion in al-Ghazālī's use of the term "will" in his proposal. We will discuss these parts separately.

a. In the first part¹¹ Ibn Rushd argues that al-Ghazālī's proposal that the world could have been created in time by the decree of an eternal will, intended to overcome the difficulties posed by the Philosophers in their proof, does not solve these difficulties. A world created in time by the decree of an eternal will implies the delay of the effect after the "will" of the agent. Now, such a delay of the effect after the "will," is not impossible, Ibn Rushd concedes. For "the

⁹IT, pp. 7-8, 35-36.

¹⁰Ibid., pp. 7-10.

¹¹Ibid., pp. 7-8.

will is the desire (shawq) of the agent towards action."¹² To bring about the desired action after a lapse of time, the desire as such does not suffice. A new volitional effort (ʿaṣm)¹³ is necessary. The delay of the effect after this new effort is impossible. For that would be the delay of the effect after the cause, and this is impossible.

Now, if, for the sake of argument, it is granted that the world was created in time by an eternal will, Ibn Rushd proceeds, the world could not have come into existence without the occurrence of this prior new effort. But the occurrence of this new effort is in itself in need of explanation. Al-Ghazālī is therefore forced to maintain either that the act of the agent does not imply change in the agent, or else, that occurrences can happen without a cause. Both these contentions contradict what the Philosophers hold. They maintain that a new act of the agent implies change in the agent, that every occurrence must have a cause, and that God does not change.¹⁴

¹² Supra, p. 9. In this particular argument Ibn Rushd distinguishes between the terms "irādah" and "ʿaṣm." "Irādah," "will," is used in the sense of "shawq," "desire," the desire of the agent towards an act. "Will" in this sense is not sufficient to bring about an act at a future date. A new volitional effort immediately prior to the act is necessary to initiate the act. This is "ʿaṣm" which Van Den Bergh translates as "decision." This translation does not seem to us satisfactory and we prefer "volitional effort" for "ʿaṣm" in the above context.

Elsewhere in the Tahāfut Ibn Rushd uses a somewhat different terminology. He speaks of the necessity of "an increase in the desire" immediately prior to the act desired at a future date. The terminology changes but Ibn Rushd's point is clear: a desire for an act at a future date does not suffice to bring about the act. A new volitional effort or a renewed increase of the desire immediately prior to the desired act is necessary to bring the act into existence.

¹³ See note above.

¹⁴ Supra, chapt. ii, p. 42. Al-Ghazālī rejects the first of these three premises. Supra, chapt. ii, p. 60. Ibn Rushd is aware of this and probably words his second argument accordingly. See below n. 18.

b. In the second part,¹⁵ Ibn Rushd gives a different formulation of the proof against the Ash'arite theory of a world created in time:

The Ash'arites must posit a first agent or a first act of this agent.¹⁶ They cannot maintain that the disposition (al-hāl)¹⁷ of God before He acts and after He acts is the same. A new disposition or relation must occur either in the agent or in the effect (al-maf'ūl) or in both.¹⁸ But this disposition must be caused by something. If this disposition is not caused by God, then God is not the first agent: the disposition precedes the world and its author is the first agent. If it is created by God, then the world is not His first act. His first act would be the creation of the disposition.

Ibn Rushd stops at this point. But in this argument two things are implied: (1) if the world is not God's first act, then the world is

¹⁵II, pp. 8-9.

¹⁶This first act must be the world, otherwise the world will not be the creation after utter privation in the Ash'arites' sense. Supra, chapt. 11, p. 65.

¹⁷VB, p. 3, n. 7.

¹⁸This point is not clear in the argument. Ibn Rushd had maintained that the new disposition must occur in the agent. Now he seems to be saying that the new disposition must occur, if not in the agent and both the agent and the effect, then in the effect. Probably, Ibn Rushd is attempting to meet the Ash'arite belief that the acts of the agent do not imply change in the agent. Thus, even if this is conceded, for the sake of argument, Ibn Rushd seems to say, a new disposition must occur somewhere else - in the effect - and this new disposition must be causally accounted for. In the Arabic, as the argument proceeds, there is no specification as to whether the disposition is in the agent or in the effect, although Van Den Bergh in his translation adds the phrase "in the first agent" after "disposition"; cf. VB, p. 3, two lines from bottom of the page, and II, p. 8, line 11 from top. That a new disposition should occur in the effect indicates a hidden premise that the effect is in a pre-existing substratum.

not a creation after absolute privation as the Ash'arites think; (2) if prior to a new creation a disposition to create must first be created, the disposition itself must be preceded by yet another disposition to create and so forth ad infinitum, and this is impossible. It is clear that Ibn Rushd bases his argument on the premises that God does not change, that a new act of God implies change in God, that every event must have a cause. Moreover, in the first part, he has given expression to the premise that the effect cannot be delayed after the cause. Now these are the basic premises of the Philosophers' proof. Thus Ibn Rushd's argument against the temporal creation of the world is in reality a reformulation of the Philosophers' proof.

c. In the third part,¹⁹ Ibn Rushd points out what he deems a confusion in al-Ghasāli's use of the term "will" in his proposal. This term, Ibn Rushd argues, in its application to the Divine and the empirical is equivocal. The eternal will and the empirical will are indeed contraries. The empirical will by definition is that faculty that desires and chooses between one of two contrary acts. Once it performs one of these acts, it satisfies the desire. The desire ceases and the will ceases. As such, the will in the empirical sense cannot be eternal.²⁰ Moreover, an empirical will cannot be eternal because it cannot eternally desire one act. If it desires eternally one act, it does not choose. But choice is an essential element in the definition of the will. The definition of the will is therefore abandoned.

¹⁹ II, pp. 9-10.

²⁰ This whole passage is not very clear in II. What seems to be the point of Ibn Rushd's argument is that an eternal will cannot create a world finite in its temporal duration. For once it performs the act, it fulfills its desire and ceases to be a will.

In his proposal al-Ghazālī did not differentiate between this meaning of "will" and the meaning of the term as applied to the Divine. He should have shown that by "will" he did not mean the empirical will, and, furthermore, he should have presented a demonstrative proof to show that there exists in the Divine a quality which is termed "will" in accordance with religious terminology. This Divine will, Ibn Rushd continues, is not identical with the empirical will. In fact it is neither natural nor voluntary. It is a quality sui generis that eternally chooses between contraries and eternally creates.²¹

The Philosophers' Proof from the Impossibility of Choice between Similar²²

According to al-Ghazālī, the Philosophers argue that since creation in time implies choosing a moment of time from amongst a series of similar moments, and since choice between similars is impossible, creation in time is impossible. But this presentation of the Philosophers' position is not accurate, argues Ibn Rushd. It gives the impression that it is the Philosophers who uphold the premise that the choice confronting God is a choice between similars. This is not the Philosophers' position. It is a dogma of the theologians. To the theologians, such opposites as "before" and "after" in the temporal sequence, white and

²¹Although the nature of this will is beyond our comprehension, Ibn Rushd believes that its existence can be demonstrated:

Creation proceeds as a consequence of God's knowledge. But God knows everything. His knowledge comprises contraries. He knows what it is for a thing to exist and what it is for a thing not to exist. If God does not choose, then He must create everything that He knows. He must then create contraries simultaneously in the same substratum. This is impossible. Therefore He chooses. *TT*, p. 450.

²²*TT*, pp. 34-39; for the Philosophers' proof, see above, chapt. 11, pp. 55-56.

black in the category of quality, and the extreme kind of opposition, the opposition between existence and non-existence, are, in relation to the eternal will, similar. The Philosophers do not accept this premise. To the Philosophers choice is always between contraries not similars. In the proof reported by al-Ghasali, they simply grant the theologians this premise for the sake of argument, and proceed to show how such a premise is irreconcilable with the theory of a world created in time.

The theologians, Ibn Rushd continues, argue as follows concerning the will:

The eternal will and the human will are not identical. For, the human will desires an action because it seeks to fulfill an imperfection in the agent of the will. Once the action is performed, the desire ceases. This is not the case with the eternal will. The Divine is perfect and does not desire. For desire is the desire of an agent to act in order to perfect himself. Moreover, it is the desire that differentiates between things. Since the eternal will does not desire things outside itself so as to perfect itself and since therefore there is nothing to differentiate one thing from another, things outside the eternal will, in their relation to that will, are similar. But, since as a matter of fact the eternal will chooses, then it necessarily chooses between similars.

But such an argument is confused, Ibn Rushd argues. It is true that the eternal will does not desire because there is an imperfection in the agent. But this does not mean that it does not desire at all. One must make the distinction between two kinds of desire. There is the desire of an agent for an act that is aimed at fulfilling an imperfection in the agent. This kind of desire is peculiar to the empirical will.

But there is also the desire in the agent to fulfill an imperfection, not in the agent, but in the patient, and this kind of desire is peculiar to the Divine will. The Divine will chooses what is best for the thing outside it. Its choice is always a choice between contraries, between what is best for the thing outside it and what is not best.

In this criticism of al-Ghazālī's report of the Philosophers' proof, Ibn Rushd sets down his principle that choice is always between contraries and not similars. Moreover, he implicitly denies that moments of time are similar to the extent that they cannot be differentiated. These two principles guide his answer to al-Ghazālī's objections to the proof he attributed to the Philosophers in his Tahāfut, as we shall see.

Ibn Rushd's Analysis of the Problem of Choice²³

Al-Ghazālī produced three main points against the proof from the impossibility of choice between similars. The first of these points was that even if it is granted that it is impossible for the empirical will to choose between similars, this does not apply to the Divine will which is different. The second point was that as a matter of fact the human will when confronted between similars necessarily chooses. Finally, al-Ghazālī argued that the Philosophers must admit of at least two instances in their cosmology where Divine choice between similars must have occurred: the choice of the pair of poles around which the world revolves; the direction of the movement of the heavens from East to West.²⁴

a. The first of these points was answered, as we have seen, by Ibn Rushd in his general criticism of the proof above. Granted that the

²³II, pp. 38-56.

²⁴Supra, chapt. ii, p. 59.

Divine and the empirical will differ, they differ not in whether they desire or not, but rather in whether they desire for the perfection of the agent or the patient. The argument of al-Ghazālī does not show that the Divine will chooses between similars. Ibn Rushd's belief that choice is always a choice between contraries and not similars is articulated and argued for in his reply to the second and third points of al-Ghazālī's objection: in his reply on the problem of human choice, and in his reply on the problem of whether the world could have revolved and moved in directions opposite to those it follows as a matter of fact. We will discuss these issues separately.²⁵

b. Choice on the human level is always a choice between opposites and not between similars. In the example of the man confronted with two similar fruit dates, reported in al-Ghazālī's *Tahāfut*, the man will ultimately take one of the two dates, but not for the reasons al-Ghazālī gives. The choice is not made because the will by definition is that quality that differentiates and chooses between similars. The man is not confronted with the choice between similars. Rather, he is confronted by the fact of taking either one of the two similar dates or not taking any at all. The choice, hence, is between contraries, not similars. On this point Professor Hourani comments:

But Ibn Rushd has at any rate indicated a very relevant factor in the situation, namely the preponderance of a desire to eat. From this it can be inferred that the man will take the largest possible date as soon as possible, and if they are of equal size he will take the one that presents itself at the moment when that fact is discovered.²⁶

²⁵ *TT*, pp. 38-41.

²⁶ George F. Hourani, "The Dialogue Between al-Ghazali and the Philosophers on the Origin of the World," *The Muslim World*, XLVIII (July, 1958), 186.

This comment assumes that the man considers the dates consecutively. If the realization occurs through a simultaneous consideration of the dates, the difficulty remains.

Ibn Rushd then adds his second principle, and that is that there is never complete similarity. The dates are different by virtue of a quality peculiar to each of them.²⁷ Thus, even if it is admitted that the man's choice in this case is between the fact of not taking any at all or taking one of them, still the choice is between two different things. It should be observed at this point that Ibn Rushd does not deny similarity altogether. Rather, he means that however similar the two dates are, they are not identical, and that hence, if we are to suppose that the choice is between taking either one of them and not between the act of taking one or not taking any at all, still there is a difference in the dates that determines the choice. As we shall point out later, if Ibn Rushd wants to follow this line of argument, it does not suffice to show that the two dates are individuated, but that the difference constitutes a normative determining principle. However, it should be stressed that Ibn Rushd does not actually subscribe to this view. His view is that the choice is between the act of taking one or not taking at all, and that this choice is between contraries, not similars.²⁸

c. God, argued al-Ghazālī, must have chosen one pair of poles for the world to revolve around from amongst a number of similar pairs, and He must have made a choice between similars when He decreed that the

²⁷ Matter, for the Aristotelians, is the principle of individuation.

²⁸ IT, pp. 42-56.

heavens should move from East to West instead of West to East - He could have chosen the latter reversing all relationships. In his answer, Ibn Rushd is dogmatic and relies upon the physics of Aristotle. Through arguments largely a priori, Aristotle sought to prove that the world and the things in it must have special size, place, and characteristics appropriate to it, and that it could not possibly be other than it is. Aristotelian science is at its weakest here in its reliance upon the a priori method in astronomy and physics. Ibn Rushd's answer shares these weaknesses and evades the real point in al-Ghazālī's criticism.

To begin with, Ibn Rushd asserts, the proper answers for al-Ghazālī's objections should be sought in the demonstrative works of science. Space does not permit us to give these demonstrative proofs in the *Tahāfut*. At best, he would give the kind of answer that the works of science give - he cannot give it in all of its demonstrative rigor.

Science demonstrates that the heavenly bodies, since they are bodies that move, are living beings.²⁹ Now we observe that each of the earthly living bodies that move, i.e., animals, has a specific shape and size appropriate to its species. Moreover, the earthly animals have organs for specific functions, placed in specific positions in the body. The organs of locomotion in the earthly animal have specific places in the body. Similarly, the heavenly living bodies have specific shapes, sizes and movements. The shape of the heavenly body is the sphere, and the sphere in its circular movement around itself

²⁹In the Fourteenth Discussion (TF, pp. 204-207; TT, pp. 469-481) al-Ghazālī argues that the Philosophers have not proved that the heavens is a living animal.

moves around a pair of poles. But since the heavenly bodies are animals, they do not revolve around any pair of poles. The poles are their organs of locomotion and the organs of locomotion of an animal have a specific place. Hence, each heavenly body has a pair of poles that has a specific place in that body. Ibn Rushd does not mention the world as a whole, but presumably, the same argument applies to the world as a whole which is a living moving sphere.

Similarly, there is a specific direction of movement determined by the nature of the heavenly body and for the best. In moving in the specific direction that it takes, it actualizes its potentiality for movement determined by its nature and by the best purpose that attracts it, God. It would be as absurd to think of its movement in the reverse direction, as it would be to think that a man should move in the same way as the crab.

The weakness of Ibn Rushd's answer is exemplified in the last analogy he drew. Al-Ghazālī had stated that the reversing of the direction of the movement of the heavens meant also the reversal of all existing relationships. The relation of the actual movement of the heavens to what would be its reversed movement is not analagous to the movement of a man in its relation to the movement of a crab but rather it is analagous to the movement of the man in its relation to the mirrored image of such a movement. Indeed, we have here a version of the problem of incongruent counterparts.³⁰ The choice confronting God in creating the

³⁰In his argument against the Newtonian theory of absolute space, Leibniz uses a similar argument:

If space is absolute and infinite, God could have created the world in a different place and He could have reversed the direction of the movement of the earth. But, since these would be similar alternatives,

world is between the possibility of a world moving as it is, and a world that is the incongruent counterpart of the former. This is the real import of al-Ghazālī's argument.

Ibn Rushd could answer this difficulty by adopting the argument concerning the choice confronting a man and two similar dates. He could argue that the choice confronting God is not between two similar directions of movement, but rather between the act of creating the world to move in one of these two directions, or not to move at all. The choice would be between contraries and not similars. But such an answer implies that God must consider the alternative possibilities consecutively. This is difficult to reconcile with the concept of an eternal and omnipotent will.

Ibn Rushd might adopt the argument that just as in the case of the similar dates, these dates are not similar in all respects, but differ by virtue of a quality peculiar to each, the alternative directions of movement, are not identical, and differ by virtue of characteristics peculiar to each. But it is a dictum of Ibn Rushd that God chooses what is best. Thus, he would have to show not only that the alternative possibilities are not identical, but that one possibility is better than the other. His argument about the necessity of a special position of the poles and about the specific direction of the movement of the heavens determined by its nature and for the best, will not help. For the tele-

no sufficient reason could be given for the world being as it is. Hence, God could have not been confronted with such alternatives. These alternatives are possible only if a Newtonian space is assumed. But, since no such alternatives could have occurred, space is not Newtonian. Leibniz, The Leibniz-Clarke Correspondence, ed. H.G. Alexander (Manchester: The Manchester University Press, 1956). The Third Letter of Leibniz, 4 & 5, pp. 25-36.

ology appropriate to one of the possible worlds will have a counter teleology appropriate for the other.

Whatever the difficulties in Ibn Rushd's position, the essential point in our endeavor to articulate the metaphysical conflict is that Ibn Rushd denies the existence of similar alternatives. Choice is always between contraries. There can be no choice between similars unless there is a determinant to determine the choice. This is essentially the position of the Philosophers. He rejects al-Ghazālī's definition of the will as that quality that arbitrarily differentiates and chooses between similars.

Ibn Rushd insists that God acts for the best. He creates the world because an existing world is better than a non-existing world. The determinant is normative, but it is a determinant nonetheless. If the world's existence is better than its non-existence, and if God in His knowledge and goodness acts for the best, then He necessarily must create the world, and since He is eternal and His nature does not change, His act is likewise eternal.

B. Intuitive Knowledge and Necessary Causation³¹

Al-Ghazālī had argued that it is not impossible for the eternal will to create the world in time, and hence, that the delay of the effect after the cause is not impossible. To show that it is impossible, argued al-Ghazālī, the Philosophers must either prove it by a syllogism or else maintain that its impossibility is self-evident. But what is self-evident must be self-evident to all. The impossibility of the delay of the effect after the cause is not self-evident to all. Hence, it

³¹TT, pp. 13-34.

cannot be a necessary truth. Moreover, such a belief is an essential premise for the Philosophers' proof for the world's eternity. But the theory of an eternal world can be proved to be impossible. Hence, the above premise is not true, and if it is not true it is not a self-evident principle.³²

Against this Ibn Rushd insists that the impossibility of the delay of the effect after the cause is a first principle (mina-l-ma'arif al-ūlā) whose truth is self-evident (ma'rūf binafsih).³³ What is self-evident need not be evident to all. Universal acknowledgment of a belief merely means that such a belief is a common notion.³⁴ But not every common notion is necessarily a self-evident first principle of knowledge.

Al-Ghazālī thinks that just as the Philosophers set out to prove that God is identical with His knowledge even though the identity of the knower and the known is a self-evident impossibility, he too could set out to prove that the eternity of the world is impossible and hence that the delay of the effect after the cause is possible even though the impossibility of the delay of the effect after the cause is self-evident. But, Ibn Rushd goes on, if it is a self-evident principle that the identity of the knower and the known is impossible in both the human and the divine,³⁵ then we know that the Philosophers' proof is fallacious. Sim-

³²Supra, chapt. 11, pp. 48.

³³Literally, "known in itself." We retain the term "self-evident" for convenience' sake in the expository part of this section.

³⁴Moral dicta for Ibn Sīnā are both common notions and self-evident principles. Supra, chapt. 1, n. 43.

³⁵The whole point of the proof is to show that divine knowledge differs from empirical knowledge precisely in the fact that in the case of the former the knower and the known are identical while in the latter case they are not.

ilarly, if the delay of the effect after the cause is a self-evident impossibility, then we are certain that any proof of al-Ghazālī that denies such a principle is fallacious.³⁶

Whenever there is a dispute of this nature the final court of appeal is the sound understanding, not universal agreement. If, for example, two persons dispute over whether a piece of writing is prose or verse, the ultimate criterion here would be the sound knowledge of the science of prosody and the ability to detect what has rhythm. If the piece of writing in question is verse, the fact that one of the disputants cannot detect rhythm does not make the piece of writing prose. Universal agreement is not the criterion here.

This brief interchange of argument on method reveals to us the empirical tendencies of al-Ghazālī and the rationalism of Ibn Rushd and ultimately leads us to the central metaphysical conflict over the concept of cause. Ibn Rushd's insistence that the sound understanding rather than universal agreement is the criterion for the truth of "first principles" is correct. We do, for example, accept the principles of logic³⁷ although we cannot prove them - to prove them we must assume them. The sound understanding of these principles is the prior condition for their acceptance. If these are universally accepted, they are universally accepted by those who understand them. As the experience of the teacher introducing the uninitiated to philosophy well attests, these principles are not consciously held by all. Whatever reasons the logi-

³⁶Ibn Rushd does not stop at this point but proceeds to prove that al-Ghazālī's arguments for the impossibility of an eternal world are fallacious and rest on a misunderstanding of the nature of the potential infinite. This discussion follows this section immediately.

³⁷I.e., the laws of identity, contradiction, and excluded middle.

cian advances to justify his acceptance of such principles, the results of a universal questionnaire are never one of these reasons.

It should be noted, however, that in his proposal, al-Ghazālī indicates that the impossibility of the delay of the effect after the cause is rejected by people who understand the principle - it is not rejected out of sheer stubbornness.³⁸ Ibn Rushd therefore in his reply to al-Ghazālī implies that his opponents merely claim that they understand this principle and in reality do not, and hence the impasse. It should also be noted that al-Ghazālī does not deny the existence of first principles that are necessary. But these for al-Ghazālī do not go beyond the principles of logic.

Ibn Rushd claims that the delay of the effect after the cause is impossible and that its impossibility is self-evident. A literal rendering of the Arabic expression "al-ma'rūf bi-nafsih" is "the known in itself."³⁹ As such, the expression is ambiguous and can have one of two meanings. It could mean, in the first place, the direct apprehension of that which is simple and which is not further analyzable into constituent parts. It could also mean that which is known as the direct consequence of some other principle or principles, that which does not require any evidence for its truth. It is not clear whether Ibn Rushd is aware of this distinction. He seems to regard the principle that the effect cannot be delayed after the cause as "known in itself" in the first sense. But as we have attempted to show in the previous chapter,⁴⁰ this principle is a consequence of the concept of essential cause, the

³⁸ *IT*, p. 84; *II*, p. 13. ³⁹ See above, n. 33.

⁴⁰ *Supra*, chapt. 11, p. 66.

cause that necessitates its effect and whose priority to the effect is not a temporal priority. Given this definition of effect, it is tautologous to state that the effect cannot be delayed after the cause. The real issue here is therefore the causal principle that the Philosophers and Ibn Rushd subscribe to. Is this for Ibn Rushd known in itself, and if so, in which of the above two senses? In his reply to al-Ghazālī's critique of causality,⁴¹ Ibn Rushd maintains that it is a necessary first principle that things have specific natures, and argues implicitly that the principle of necessary causal connection is a consequence of this necessary axiom.⁴² Thus, the causal principle is also "known in itself" in the second sense noted above.

That this principle is neither a necessary first principle nor a consequence of a necessary first principle is affirmed by al-Ghazālī when he denies necessary causal connection, not merely on the basis that such a connection is not observable in nature, but also because one can affirm the cause and deny the effect and affirm the effect and deny the cause without contradiction.

This is not the place to go into the cons and pros of the causal controversy. Our purpose was to reveal how this metaphysical conflict underlies this brief exchange of argument on method.

C. The Infinite⁴³

According to al-Ghazālī, the theory of an eternal world is self-contradictory because it implies the following self-contradictory consequences:⁴⁴ (1) the existence of unequal infinite motions in the past;

⁴¹Supra, chapt. 1, p. 27. ⁴²TT, pp. 520-22.

⁴³TT, pp. 17-31. ⁴⁴Supra, chapt. 11, pp. 49-53.

(2) the existence of series that terminate in a number that is neither odd nor even; (3) the existence of an actual infinity of souls. Against this, Ibn Rushd argues that the contradictions in (1) and (2) are apparent, not real, and are due to al-Qhazālī's confusion between the actual and the potential infinite, while (3) is the consequence of Ibn Sina's theory of the soul which is a false theory. It is not Aristotle's doctrine.

We will first present an exposition of Ibn Rushd's answers to (1) and (2) and then offer some critical comments on Ibn Rushd's analysis of the problem of the infinite. Ibn Rushd's answer to (3) is a discussion that is in a class by itself. It deals essentially with the problem of the soul's immortality. As such its interest is historical and relates to the problem of the place of philosophy in the Medieval Islamic state. We will therefore comment on it separately.

But before we proceed to discuss Ibn Rushd's answers, a brief comment on Aristotle's distinction between the potential and the actual infinite and Ibn Rushd's use of these terms is necessary.

The actual infinite, for Aristotle, is the infinite whose parts co-exist. Such an infinite is impossible.⁴⁵ The infinite whose exis-

⁴⁵The actual infinite must be divisible into many infinities and this for Aristotle is impossible. *Physics*, iii, 5, 204a, 20-25.

An actual infinite such as body, substance, or space, is impossible because it contradicts the principles of physics: for example, body by definition is bounded and the bounded cannot be infinite; if any of the elements such as fire is infinite, it will destroy the equilibrium that exists between the elements; the infinity of space upsets all spacial relationships. *Physics*, iii, 5, 204b, 4; 206a, 5.

tence - in some sense of the term "existence"⁴⁶ - is possible is the potential infinite. This is the infinite whose parts come into existence successively in time, the prior parts ultimately ceasing to exist⁴⁷ - the coming to existence is not an accumulative process. Hence, successive non-accumulative existence is the defining characteristic of potentiality here, just as co-existence is the defining characteristic of actuality with reference to infinities. In his answer to al-Ghazālī, however, we note that Ibn Rushd defines the potential infinite simply as that which has neither a beginning nor an end. Moreover, he seems to identify the finite with the actual. If by "actual" the "co-existing" is intended, then Ibn Rushd's identification of the finite with the actual is mistaken since successive events can be finite also.

1. The Problem of Unequal Infinite Revolutions⁴⁸

Ibn Rushd's discussion of this problem has two parts. In the first part he gives his answer to al-Ghazālī's argument that since the revolutions of the various heavenly bodies are unequal in number, they cannot be infinite in number because then there will occur the contradictory consequence of having infinities that are not equal. In the second part, Ibn Rushd gives another formulation of this problem, not

⁴⁶ The infinite does not exist as a "this." When we say that it exists we are speaking in the same manner as when we say "the day exists" or "the Olympic games exist." "Potentiality" is an ambiguous word. Usually it is applied to what ultimately actualizes. This meaning does not apply to the potential infinite. The potential infinite is never actualized. Neither can it exist as an independent entity. It is like prime matter which is pure potency and which is always combined with form. Physics, 111, 6, 206a.

⁴⁷ Physics, 111, 6, 206a, 18; 206b, 2.

⁴⁸ II, pp. 18-23.

reported by al-Ghazālī, and answers it.

In the first part Ibn Rushd argues that if the number of rotations that a planet like Saturn, for example, makes, is a thirtieth of the rotations that the sun makes in the same time, this ratio holds only if the rotations are considered in the same finite time. This ratio also holds for part of this finite time as it does for the whole time, provided the whole is a finite whole. But this ratio no longer obtains when the time is potentially infinite. For the potentially infinite is that which has neither a beginning nor an end. There can be no proportion between series that have neither a beginning nor an end. Such series are not amenable to comparisons. As such the concepts of "equality" and "non-equality" do not apply to them. The relation of the part to the whole exists only between the finite parts of potentially infinite series. For these alone are actual.⁴⁹ The contradiction of having one infinite greater than another obtains when the infinite is taken to be actual not potential.⁵⁰

In the second part Ibn Rushd gives what to him is a more serious formulation to this problem and answers it. The opponent, Ibn Rushd continues, sometimes argues that the theory of an eternal world implies that the present is preceded by an infinite past. This, for the opponent is impossible because (a) it implies that the present is preceded by an infinity of causes and hence implies the denial of a first cause, and (b) it implies that the present is the completion of an infinite past - but the infinite by definition is never completed.

⁴⁹Here Ibn Rushd seems to identify the actual with the finite.

⁵⁰If the finite is identical with the actual then the actual infinite would be a contradictory concept.

The first of these objections is based on the confusion between the accidental and the essential cause, Ibn Rushd answers. The cause that precedes the effect in time is accidental. It is not the condition for the continuous sustenance of the effect. The prior motion of a moving body is not the essential cause for the posterior movement.⁵¹ Again, a man is the cause of another man accidentally, not essentially. At every moment of man's existence there must co-exist with him a series of causes necessary for his existence. These are the essential causes. They terminate in a first cause, God.⁵² These causes cannot be infinite since their infinity would be an actual infinity. The infinite series of accidental causes are possible because their existence is successive and non-accumulative: their infinity is a potential infinity. But since the existence of these causes is in turn dependant on a finite series of essential causes terminating in an eternal cause, the sequence of accidental causes must necessarily be infinite. If they had a beginning in time, then God must have a beginning in time. But God is eternal, and his act is eternal. The series of accidental causes that precede each other in time cannot have a beginning in time since they are the act of an eternal non-changing agent.⁵³

⁵¹Ibn Rushd is speaking about the heavenly bodies. These are moved by the intellect of the body acting as a final cause. The bodies are "pulled" as it were, or, rather, attracted as by a magnet. As such it is not the prior movement's impulse that keeps the body in motion.

⁵²God, the first cause, does not co-exist in the same manner the other causes co-exist. For God is outside time. We will treat this problem in the second debate.

⁵³Here we have implied again the two fundamental premises that Ibn Rushd shares with the Philosophers and which are the central bone of contention between the Aristotelians and al-Ghazālī, and these are that the acts of God are necessitated by his unchanging nature and that a new act in time not preceded by similar acts implies change in God.

The second of these objections is met by the theory of the potential infinite, Ibn Rushd continues. The potential infinite has neither a beginning nor an end. It is never completed. That an infinite past precedes the present does not mean that the infinite past has been completed. The present, the 'now' is a moment in the infinite process of passing away and coming to be. The 'now' is the limit between the past and the future.⁵⁴ By its very definition it implies a future, and if there is always a future, then there is never a completion.⁵⁵

2. The Problem of the Odd and the Even⁵⁶

The number of the past rotations of the heavenly bodies terminate in the present, and hence must terminate in a number that must be either odd or even. Moreover, unless they do have such a character, we cannot say that the rotations of Saturn for example are a thirtieth of the sun's. But if they are characterized as being odd or even, they cannot be infinite. The Philosophers' answer to this problem to the effect that oddness and evenness are not applicable to the infinite number of past revolutions because the past revolutions no longer exist and the future are not yet in existence, does not solve the difficulty. The fact of existence or non-existence is irrelevant. One can imagine a number of horses. These in reality do not exist. Still, such an imagined number must be either odd or even. Thus argued al-Ghazālī.

⁵⁴Physics, iv, 218a, 21-28; viii, 251b, 21.

⁵⁵This is implied rather than stated by Ibn Rushd. We will encounter in the second debate Ibn Rushd's argument from the definition of the 'now' as the limit that there must always be a past and that hence the past time is infinite.

⁵⁶TT, pp. 23-25.

Oddness and evenness, Ibn Rushd answers, are attributable only to what has a beginning and an end. The potential infinite has neither a beginning nor an end and hence cannot be characterized as either odd or even. When the Philosophers hold that the past instances of such an infinite no longer exist and the future are not yet in existence, they mean that the potential infinite comes under the law of non-existence.⁵⁷ What comes under the law of non-existence cannot be characterized as either odd or even.

Al-Ghazali's imagined horses must have a number that is either odd or even, because these are finite to begin with. Indeed, if they are imagined, they must be finite. The soul cannot imagine the infinite. Thus whether what exists in the soul is merely imaginary or has a corresponding reality outside the soul it is always finite. If what exists outside the soul is infinite, the soul can only imagine a finite part of it, and this finite part will have a number that is either odd or even.

Before we proceed to discuss Ibn Rushd's answer to the last objection of al-Ghazali that deals mainly with the problem of the immortal soul, a brief comment on Ibn Rushd's arguments in (1) and (2) is in order.

It should be observed that all the arguments for the impossibility of the infinite based on the impossibility of unequal infinities are, from the point of view of modern mathematical discovery, not valid. The transfinite number does not share all the mathematical properties of the

⁵⁷ The infinite is a potentiality that is never actualized. See above, n. 46. Motion is also another instance of that which is never actualized. But it is not potentiality, but rather lies in an intermediate stage between potentiality and actuality - it is the process of actualization, not actuality as such.

finite. Thus whereas in finite collections the part necessarily cannot equal the whole, this is not the case with the transfinite number. There the part of an infinite series can be infinite and equal to the whole. Thus neither the arguments of al-Ghazālī for the impossibility of an infinite number of revolutions in the past, nor the arguments of Ibn Rushd for the impossibility of the actual infinite, are necessary. The infinite is not a logical impossibility.

However, the arguments of Ibn Rushd should be discussed in their own terms:

In his answers, Ibn Rushd maintains that the potential infinite, i.e., that infinite whose parts come into existence successively and then pass away, is possible, while the actual infinite, i.e., the infinite whose parts co-exist, is impossible. But "successive existence and passing away" does not entail the idea of infinity, nor does "co-existence" entail the idea of limitation. "Co-existence" here is a temporal term. It says nothing about the numerical character of the co-existing. From the definition of the actual infinite as that infinite whose parts co-exist, the inference that there must be a first and a last part is unwarranted, and Ibn Rushd seems to have made this inference when he identified the finite with the actual.

The potential infinite for Ibn Rushd is possible because it has neither a beginning nor an end. In other words it is possible because it is infinite. For what has neither a beginning nor an end is not amenable to comparisons. The question of "equality" and "non-equality" does not arise. But if it is the fact that the potential infinite has neither a beginning nor an end, rather than the fact that it comes into existence successively, that makes it immune to al-Ghazālī's argu-

ment from unequal infinities, then by the same reasoning the actual infinite, defined as the co-existing aggregate that has neither a beginning nor an end, should be possible. Consistently in his arguments Ibn Rushd defends the possibility of the potential infinite on the basis that such an infinite has neither a beginning nor an end, rather than on its character as coming into existence successively and passing away.

Ibn Rushd later on, however, does give a more explicit statement of the reasons why the actual infinite is impossible.⁵⁸ If an actual infinite exists, argues Ibn Rushd, then this infinite can be divided. The part will also be an infinite. The part then will equal the whole and this is impossible. But why is this division not possible in the potential infinite? The only answer Ibn Rushd could give is the fact that the past instances of the potential infinite have ceased to exist, and that thus in reality, no division can take place. But here al-Ghazālī's argument, that the fact of existence or non-existence is irrelevant when we make such logical judgments, undermines Ibn Rushd's answer. Indeed, past motion ceases to exist, and yet Ibn Rushd must compare the rate of the movements of the various planets in the finite past time if he is to have any astronomical knowledge, and for that matter any knowledge of the world at all.

What might be implied in Ibn Rushd's argument against the actual infinite is that when we divide an actual infinite - supposing it does exist - we would have an infinite that is limited from one direction, and it is this fact which makes such an aggregate amenable to comparisons

⁵⁸This argument comes in passing in the third answer to al-Ghazālī's proof from the actual infinity of souls. *II*, pp. 27-28.

with other aggregates. For then there would be one finite limit that can be placed in a relation of one to one correspondence with another aggregate and then the contradiction of having one infinite greater than another might ensue. This situation will never occur in the potential infinite because this infinite is never completed, never has a finite term limiting it from one direction. But the argument of Ibn Rushd that the infinite past is never limited by the present is not persuasive. For by definition the now is the limit between the past and the future.

It seems clear from the analysis of the infinite that Ibn Rushd gives,⁵⁹ that if he is to allow the possibility of a potential infinite, he must allow the possibility of an actual infinite. This problem, as we shall see, becomes central in the second debate which will be discussed in the following chapter.

3. The Infinity of Souls⁶⁰

Those who uphold the theory of an eternal world, al-Ghazālī argued, must either admit the existence of an actual infinity of souls, and this is impossible, or else subscribe to a unitary theory of the soul, which likewise has contradictory consequences and is therefore impossible. Hence, the theory of an eternal world is impossible.

The first of these alternatives, argues Ibn Rushd, is the consequence of Ibn Sīnā's theory of an immortal yet individual soul. This

⁵⁹ These might be termed the "a priori" arguments for the impossibility of the actual infinite as against the Aristotelian arguments from the principles of physics, although these too have a very dominant a priori character. See above, n. 45.

⁶⁰ II, pp. 25-30.

is a false theory and is not Aristotle's. If Ibn Sina's theory is accepted then the actual infinite would result as al-Ghazali maintains, and the actual infinite, whether consisting of sensible things or non-sensible things,⁶¹ is self-contradictory. But the soul, or rather, "the part of it that survives,"⁶² adds Ibn Rushd, cannot be individuated after the corruption of the body. For the principle of individuation is matter. When separated from matter, the form - in this case the soul which is the form of the living body - is no longer individuated.

Al-Ghazali's criticism of the theory that one soul can participate in a plurality of men⁶³ is confused, Ibn Rushd goes on. The division of the soul in matter is accidental, not essential. Essentially, the soul is one, accidentally, many. The soul is the form of a living body. It is the common element between two different men. If two men, Zayd and 'Amr, die and their souls survive their bodies individuated, then these individuated souls must have another form that represents the common element between them inasmuch as these are souls. This leads to unnecessary multiplication of entities. Al-Ghazali's assertion that

⁶¹Aquinas holds that Aristotle only refuted the actual infinity of sensible things. See above, chapt. ii, n. 44; Summa Contra Gentiles, II, 81, sec. 9.

But Ibn Rushd's interpretation can be supported. For even though in the Physics Aristotle is mainly concerned with the infinity of magnitudes such as body and place, he does report that Plato upheld the theory of the infinity of forms. Physics, iii, 4, 203a, 9. It is not unlikely that the impossibility of an actual infinite did underlie Aristotle's third man argument against the Platonic ideas. Moreover, even though most of the arguments against the actual infinite in the Physics are based on the principles of physics, the argument that if the infinite is actual then it can be divided into many infinities, which for Aristotle is impossible, is a mathematical argument that need not apply only to sensible things. See above, n. 45.

⁶²This is a reference to the active intellect which for Ibn Rushd is eternal and common to all rational beings.

⁶³Supra, chapt. ii, pp. 52-53.

only quantitative substances like water can divide and remain the same and that since the soul is not a quantitative entity it cannot do so, is not true, continues Ibn Rushd. Accidents such as colors divide with the division of the colored body. But their division is not essential, since the color continues to be one and the same, though the body is divided. The division of the soul in many bodies while in essence remaining the same one soul is analogous to light and its division by the various objects it illuminates.⁶⁴

For Ibn Rushd, matter is finite in quantity and form is finite. Generation and corruption is the eternal succession of finite form over finite matter.⁶⁵ Ibn Rushd subscribes, as it were, to a theory of "the conservation of matter and form."

What is significant in this answer is that Ibn Rushd gives an explicit though brief statement of his heretical doctrine of the soul, and that he gives it in this part of the Tahāfut where the problem of the soul's immortality is incidental. The place where Ibn Rushd's statement of his doctrine would be normally expected to appear is in the last discussion where Ibn Sina's theory of the soul is attacked as irreligious by al-Ghazālī because of its denial of bodily resurrection. There, in his comments, Ibn Rushd makes no statement of his theory, but uses the occasion to voice some of his views on the different levels of interpreting truth.⁶⁶ We shall have occasion to return to this point in our

⁶⁴ De Anima, iii, 5, 430a, 15.

⁶⁵ This is the consequence of the affirmation that the actual infinite is impossible for both sensible and non-sensible things. The theory assumes the Aristotelian biological theory of the fixity of species.

⁶⁶ II, pp. 580-86.

concluding chapter where we will examine Ibn Rushd's claims concerning the differences between the Philosophers and the theologians on the problem of the world's eternity in his legal defense of philosophy, Fasl-al-Ma'āl.

There is one brief exchange of argument between the Philosophers and al-Ghazālī based on the infinite concerning the problem of creation which Ibn Rushd comments on. This is the argument where the Philosophers attack the theory of creation in time on the basis that if such a theory is assumed, either finite time must precede the world, or infinite time, and both these alternatives are impossible. Al-Ghazālī answers that time and the world were created together and that before the world there was no time.⁶⁷ But this is precisely the problem that is discussed in detail in the second debate, and for this reason we need not go into Ibn Rushd's observations on the problem in the first debate here.

⁶⁷ Supra, chapt. 11, pp. 53-54.

CHAPTER IV

THE SECOND DEBATE: THE ARGUMENT FROM TIME

The second debate is a continuation of the first, and hence, revolves around the same conflicting premises. It takes up the question of the infinity of time left pending in the first debate.¹ The problem of time arises with the problem of the nature of God's priority to the world. All the parties in the dispute agree that God is not temporally prior to the world. Al-Ghazālī holds that the world and time had a finite starting point in the past. God is eternal and existed before this starting point in a non-temporal sense of "before." The Philosophers and Ibn Rushd, on the other hand, insist that if God is eternal and His priority to the world is not temporal, then the world is eternal. They hold this because of the hidden assumption that the world is the necessitated effect of an unchanging eternal cause. This metaphysical assumption, as we pointed out in the preceding chapters, is in conflict with al-Ghazālī's concept of God as a voluntary agent.

But Ibn Rushd and the Philosophers are not in complete agreement. In their proof, Ibn Rushd charges, the Philosophers fail to make the distinction between natural cause and divine cause. The natural cause that is prior to the effect in essence is simultaneous with the effect. Both cause and effect are contemporaneous in time. But the divine cause is altogether outside the category of time. For God is the unmoved mover.

¹Sumra, chapt. 11, p. 53-54.

Time is the measure of motion. God, being unmoved, is outside time. Thus, even though His priority to the world is essential, it still differs from the essential priority of the natural cause to the effect. For the latter though simultaneous, exist in time. God does not. His priority to the world is a special kind of priority. Thus, in this debate arises the issue of the relation of the timeless to the temporal.

The structure of the debate is simpler than that of the first debate and allows us to discuss the arguments of the three parties concerned in one and the same chapter. The debate divides into two parts. The first part² discusses the Philosophers' proof for the world's eternity, from the nature of God's priority. If God is eternal, time must be eternal and if time is eternal the world is eternal. Against this, al-Ghazālī produces his theory that time and the world were created and before time there was no time. The second part³ consists of a discussion of the Philosophers' second proof, designed to meet al-Ghazālī's theory by attempting to demonstrate that if creation in time is supposed, time must have preceded the world.

Part A.

The Philosophers' First Proof⁴

This proof is a disjunctive syllogism: God's priority to the world is either a temporal priority or an essential priority, and cannot be anything else. If it can be proved that God's priority to the world cannot be temporal, then it must be essential. And if the priority is

²TF, pp. 96-100; TT, pp. 64-83.

³TF, pp. 101-103; TT, pp. 83-97.

⁴TF, p. 96; TT, p. 64.

essential, not temporal, then God and the world are simultaneous in time. If God is eternal - as He is - then the world must be eternal.

The Philosophers give examples of what they mean by "essential priority." The first example they give is that of the natural priority of the number one to two. This priority is not temporal, although both one and two can exist in time simultaneously.⁵ The second example of this priority is the essential priority of cause to effect where both are simultaneous in time. Thus it is the man's motion that causes the motion of his shadow; and it is the finger's movement that causes the movement of the ring on the finger; and it is the movement of the hand in the water that causes the movement of the water.⁶ In all these cases, cause is simultaneous to effect though essentially prior to it.

If God's priority to the world is proven essential by proving that it cannot be temporal, then it would follow that God and the world are simultaneous; so that it would be contradictory to affirm the eternity of the one and the temporal finitude of the other. If God is eternal, the world is eternal; and if God is not eternal, the world is not eternal and simultaneous with Him. The Philosophers stop at this point, but the argument's hidden premise accepted by all parties is that God

⁵This kind of priority is given by Ibn Sīnā, Al-Najāt (Cairo: no publishers given, 1938), p. 256. Aristotle also speaks of the natural priority of one to two and explains that this relationship is not reversible; Categories, 12, 14a. One and two according to the Philosophers can exist in time simultaneously. There is no place in their scheme, however, for any Kantian theory of arithmetic.

⁶The example of the hand's movement is used in the controversy concerning the voluntary nature of God's acts. Supra, chapt. 1, p. 18. In his Iqtisād, al-Ghazālī attacks the Mu'tazilite theory of generation because it affirms the existence of necessary causal connection. The examples of the hand moving the ring and moving the water are given to illustrate what the Mu'tazilites deem instances of necessary causation. Al-Ghazālī denies any necessity in the movement of the ring and the water that follow the movement of the hand. Al-Ghazālī, al-Iqtisād fi-l-ʿItisād, (Cairo: Matba'at Hijāzī, no date), p. 45.

is eternal, and hence, in accordance with the preceding line of argument, the world must be eternal.

The Philosophers then proceed to prove that God's priority to the world is necessarily essential by proving that it cannot be temporal. They use the argument from the nature of time, around which much of the debate that follows revolves, to prove that God cannot be temporally prior to the world. The premises of this argument are two: God's eternity and the definition of time as the measure of motion.

If God is eternal, and if God's priority to the world is supposed to be temporal, then God must have preceded the world and time by infinite time terminating with a final term but having no initial one. Therefore before the existence of the world and time, infinite time existed. But to say that time existed before it existed, is contradictory. Time has no beginning. But time is the measure of motion. If time is eternal, motion is eternal; and if motion is eternal, that through which motion subsists, i.e., the world, is eternal.

The above proof abounds with circularity. In the first place the world's eternity is deduced from the conclusion that God's priority to the world is an essential priority. But the essential priority of God to the world is only deduced from the world's eternity. If God is eternal and the world is eternal then God's priority is essential, not temporal, and if God's priority is essential, the world is eternal. Secondly, the argument from the nature of time is circular. However, we shall postpone the discussion of this problem until we discuss Ibn Rushd who endorses this argument from time. But more pertinent to our aim of articulating the conflict of metaphysical premises, is the fact that the above proof betrays the hidden premise pertaining to the nature

of God's causality. We shall proceed now to extract this premise and show that it is identical with the premise of the first proof of the Philosophers in the first debate and that hence, the second debate is in reality a continuation of the first in that it is based on the same premises pertaining to the nature of God as cause.

It should be observed that the disproof of the disjunct that God's priority to the world cannot be temporal is based on the premise that God is eternal. It is only because God is eternal that He would precede the world by infinite time, if a world finite in the temporal past is supposed. In other words, it is only on the supposition that God is eternal that one must deny God's temporal priority to the world, conclude the world's eternity, and consequently, affirm that His priority is essential. (Here we notice the circularity indicated above.) If it is supposed, for the sake of argument, that God is not eternal, then He would not precede the world by infinite time if His priority to the world is supposed to be temporal, and as such, His temporal priority to the world is possible.

But the Philosophers, in their examples they gave to illustrate what they meant by "essential priority," in effect deny this possibility. For the world, according to them, must co-exist with God. If God is eternal the world is eternal and if God is not eternal the world is not eternal because the world co-exists with God. Why must the world co-exist with God even if God is supposed to be not eternal? The underlying assumption here is not hard to extract. The world co-exists with God because it is the necessitated effect of His unchanging nature. God by His very nature must cause the world. And this is the fundamental premise of the Philosophers' arguments in the first debate as we have seen.

1. Al-Ghazālī's reply⁷

In his reply, al-Ghazālī affirms the eternity of God and denies the eternity of the world in the past, and still maintains that God's priority to the world is not a temporal priority. In so doing, He implicitly denies the premise that God must always act since His act is necessitated by His eternal unchanging nature. God is eternal, and a new act does not imply a change in God's nature. His act is voluntary. God is outside the category of time, and as such His priority to the world is not temporal. Hence, He does not precede the world, if the world is finite, by time. Time is created with the world, and "before" the world there was no time:

Time is created and before it there was no time. The meaning of our saying that God is prior to the world and time, is that He existed without the world and that then He existed together with time and the world. To say that He was without the world means only that God's essence existed and that the world's essence did not exist, and to say that He was with the world is merely to affirm the existence of two essences. The meaning of "priority" is merely "His existence alone," the world being regarded as an individual. Thus if we say for example, that God was without Jesus and then was with Jesus, the statement does not entail anything beyond the affirmation of the existence of one essence and the non-existence of another, and then the existence of two essences. It is not necessary to assume here a third thing, time, although the imagination cannot but suppose it. But we must not pay attention to the errors of the imagination.

The example of Jesus, that al-Ghazālī gives, is revealing of what al-Ghazālī's intentions are. If a temporal event, such as the life of an individual, finite in duration, is caused by an eternal God whose priority to such an event cannot be temporal, then this should be possible in a series of finite temporal events that constitutes a world finite in its temporal past duration. Al-Ghazālī's theory that God creates time with

⁷TF, pp. 96-97; TT, pp. 65-66.

the world is an outcome of the Ash'arite metaphysics of atoms.⁸ For the Ash'arites assert that God creates both substances and time atoms. Time is created with the world, if the world is a conglomerate of such atoms.

2. Ibn Rushd's comments⁹

In his Tahāfut, Ibn Rushd criticizes not only al-Ghazālī, but also the Philosophers. Although he accepts the conclusion of the Philosophers' proof, he does not regard the proof as strictly demonstrative. For the premises of a demonstrative proof must be clear, unambiguous and certain. The Philosophers, however, argue from the premise of God's eternity, and they seem to regard God as eternal in the sense that He eternally exists in time. This is a false premise. For God is eternal. But He is eternal in the sense that He is altogether outside the category of time. Time is the measure of motion and the unmoved mover cannot therefore be in time. The natural cause that is essentially prior to the effect, is in time. Hence, both cause and effect are simultaneous. Now, God is essentially prior to the world. But He is not a natural cause in that He is not simultaneous with the world in time. His priority and causality are a special kind of causality and priority.

Al-Ghazālī therefore, is not wrong when He states that God's priority to the world is not a temporal priority. If, however, the priority of God to the world is not temporal, it follows that the posteriority of the world to God is not temporal. A world non-temporally posterior to an eternal essence, God, is eternal. Otherwise, Ibn Rushd continues, the problem of how the effect can be delayed after the cause reappears.

⁸Supra, chapt. 1, p. 28 ff.

⁹TT, pp. 64-65, 66-69.

Ibn Rushd's introduction of the problem of the delay of the effect after the cause in this context, indicates very clearly that in this argument he shares with the Philosophers their premise that God is an eternal cause, in the sense that by nature He must cause; and that since His nature is eternal and non-changing, God must "always" cause, and the effect therefore must always exist. And this is the central metaphysical conflict between him and al-Ghazālī's concept of God as a voluntary agent. For, al-Ghazālī also maintained that God's priority to the world is not temporal. This therefore implies that according to al-Ghazālī God is not always causing, that He causes when He wishes, and that the effect then is posterior essentially to the cause when the cause occurs.

The problem is difficult because of the fact that for both al-Ghazālī and Ibn Rushd, God is not in time. How can the timeless cause the temporal and be prior to it, not in time, but in essence? Ibn Rushd thought he had solved the difficulty by insisting that the effect is eternal, though in time. But the difficulty is not really solved. For, in the eternal process of generation and corruption, there are finite parts. The life span of an individual would be one. God, in the system of Ibn Rushd, is the contemporaneous cause, in some sense of "contemporaneous," of this finite event through a series of co-existing simultaneous natural causes. But the life of the individual is finite. As such, God, following Ibn Rushd's logic, is eternal and yet non-temporally prior to a finite event in time. If this is possible in the case of an individual, it should be possible in the case of a world finite in its temporal duration. It is only impossible if the premise is true that God's act is necessitated by His unchanging essence and hence must exist

so long as God exists. And Ibn Rushd assumes that this is true.

3. The Philosophers' Criticism of al-Ghazālī's theory¹⁰

Our statement "God was without the world" expresses a third meaning besides the existence of one essence and the non-existence of the world. For if we suppose the non-existence of the world in the future, there would also occur the existence of an essence and the non-existence of an essence, and it would be false to say "God was without the world" and true to say "God will be without the world." For it is only of the past that it is said "God was without the world." Thus there is a difference between our saying "was" and "will be," for neither can replace the other. Let us then examine wherein lies this difference. Certainly, the difference does not lie in the fact of the existence of the one essence and the non-existence of the other, but in a third thing. For if we say of the future non-existence of the world "God was without the world" this would be incorrect. "Was" is only used for the past. This proves that the term "was" comprises a third element which is the past; and the past in itself is time, and the past through another is motion which passes only with the passing of time. Hence, it follows necessarily that before the world a time existed that terminated with the world's existence.

4. Al-Ghazālī's reply¹¹

Al-Ghazālī's defense of his theory has two parts. In the first he gives his definition of time, and in the second he defends his theory that time and motion are finite, by drawing a comparison between the finitude of space Aristotelians uphold and the finitude of time.

When the Philosophers maintain that between the statement "God was without the world" and "God will be without the world" there is a third meaning, this third meaning exists only in relation to us and has nothing to do with the relations of priority and posteriority with regards to God and the world, al-Ghazālī holds. If the priority of God to the world does not consist merely in the existence of one essence without the existence of another, but means that a temporal relation such as "past" must exist, then this relation must be constant. But the past

¹⁰ *TF*, p. 65; *IT*, p. 70.

¹¹ *TF*, pp. 97-98; *IT*, pp. 72-73.

and the future are relative. If we suppose that the world will cease to exist in the future, we will say "God will exist without the world." If God creates the world again, from the standpoint of somebody living in the world created a second time the statement "God existed without the world" is true. The future can become the past and is not a constant characteristic of reality. Time exists only in relation to us.

However, al-Ghazālī's theory of time is not entirely subjective. For he upholds the Aristotelian definition of time as the measure of motion. This measure, however, exists only in the human soul. One might press the issue here and ask whether or not motion has relations of priority and posteriority that are characteristics of motion as such, and if so, whether or not the argument from the relativity of time is applicable to the relativity of prior and posterior motions.¹² Al-Ghazālī does not seem to be aware of this possible line of approach to the problem. It should also be noted that al-Ghazālī does not develop his theory of time beyond stating that it is relative to us; he does not attempt to give an account of the past and the future in the manner St. Augustine did.¹³

Motion, however, for al-Ghazālī is necessarily finite. Motion and time are co-extensive and have a finite beginning. The finitude of time is like the finitude of space, argues al-Ghazālī. Space is finite and bounds the finite universe. There is no space, empty or filled,

¹²For Aristotle, the relations of "before" and "after" exist in space, time, and motion, relative to a frame of reference, but he does not conclude that these relations are subjective. *Physics*, iv, 11, 219a, 12-20.

¹³For Augustine only the present exists. The past is memory and the future anticipation. *The Confessions of St. Augustine*, tr., Edward B. Pusey (New York: Random House, 1949), Bk. xi, pp. 256-58.

"above" space. This is demonstrable, and yet the human fancy, used to attributing a beyond and an above to the spatial magnitudes it experiences in ordinary life, cannot but imagine that there is an "above" beyond the boundary of the universe. Similarly, time and motion are finite, but the human imagination erroneously attributes a temporal priority to the world's beginning. Just as there is no "above" beyond the finite space that bounds the world, there is no "before" beyond the world's temporal but finite existence in the past. This analogy between time and space is used by al-Ghazālī again in the second part of this debate. The controversy over the nature of the infinite discussed in the previous chapter is central here.

5. Ibn Rushd's comments¹⁴

Ibn Rushd again criticizes the Philosophers as well as al-Ghazālī. He accepts the conclusion of the Philosophers' argument, but not its formulation. He objects to the formulation because the Philosophers again argue as though God is in time. When we say that God "was" with the world, argues Ibn Rushd, this is not an indication of a state of God in the past. The copula merely connects the subject with the predicate.¹⁵ It is as though we are saying, "God was compassionate and forgiving." This does not necessarily indicate a past state. The Philosophers' argument could have been formulated without reference to God and only with reference to supposed possible states of the world, its supposed non-existence, its existence, and a second non-existence.

¹⁴II, pp. 70-72, 73-80.

¹⁵The auxiliary verb "kāna," "was," is in the perfect, and the perfect denotes a completed action, and thus usually denotes an action in the past. However, with reference to God it can simply indicate a quality or an attribute without reference to time.

His critique of al-Ghazālī has two parts corresponding to the two parts of al-Ghazālī's argument. In the first part Ibn Rushd offers an argument to show that if a world finite in its temporal past is supposed, then it is necessary that time should have preceded such a world, that time could not have had a finite beginning. Al-Ghazālī is correct, argues Ibn Rushd, when he says that time and motion are necessarily connected and that time is what the imagination constructs in motion. But time and motion do not cease. This statement of Ibn Rushd could be interpreted as affirming that there is objective time corresponding to subjective time. However, Ibn Rushd's main interest is to prove that the kind of existent that is always in time must precede a world supposed to have been created in time, and that hence time must likewise have preceded such a world. Indeed, in this discussion we have another of the metaphysical premises of Ibn Rushd to be debated at length in the fourth debate, to the effect that matter is eternal, and that "creation" is not origination out of nothing, but succession of form over matter.

There are two classes of existents, argues Ibn Rushd, a class of existents that are either in motion or are capable of being in motion, and a class of existents that are neither in motion nor are capable of motion. The attribute of being in motion or of being capable of being in motion is a defining characteristic of the first class, and conversely, not to be in motion or capable of motion is the defining characteristic of the second class. Hence, since these are characteristics of the essence of each class, neither class can be converted into the other. The first class is necessarily always in time, the second cannot be in time. If a world finite in its temporal past is supposed,

the possibility of motion must have preceded the world. For the world is of the class of existents that is in motion. The possibility must have existed in something - here is the implicit identification of "possibility" with "potentiality" which emerges in the fourth debate - and this something must belong to the kind of existents that are capable of receiving motion. If it belonged to the other class, motion would never occur, since these two classes are inconvertible. If what precedes the world is capable of motion, it is in time, and hence time must precede the world.

In the second part, Ibn Rushd attacks al-Ghazālī's argument based on the comparison between space and time as sophistical and malicious. Al-Ghazālī commits the fallacy of equating that quantity, space, which by definition has position and totality¹⁶ with that quantity, time, which by definition has neither position nor totality. Al-Ghazālī commits this error because he treats the "now" as though it is a point.¹⁷ The point can exist at the end or beginning of a line, because the line is at rest. But this cannot be the case with the "now." By its definition it is the boundary between the past and the future. The existence of the "now" implies therefore a past. Hence, a beginning of time is impossible, since by definition it must have a past.

Motion must be preceded by time. Every part of movement comes into existence after privation, the privation of the prior movement. But privation and existence cannot be in the same "now." Therefore, privation must be in a different "now." In other words, the prior mo-

¹⁶Space by definition is a boundary, and the boundary must be finite. Physics, 111, 5, 204a, 5.

¹⁷Physics, v, 11, 220a, 5-20.

tion must be in a prior time.

To deny a temporal "before" to a world supposedly finite in its past duration is quite the opposite of denying a "higher" to the absolutely high. For to deny temporal priority is to deny temporal events, since by definition a temporal event must be preceded by time. To deny the absolutely high, on the other hand is to deny the absolutely low; and to deny these is to deny the absolutely heavy and the absolutely light and thus deny all physical order.¹⁸

Moreover, Ibn Rushd continues, the relation of time to motion is not similar to the relation of the limit to spatial magnitude. The limit exists in the spatial magnitude in a manner similar to that in which the accident inheres in the particular substance. Time does not inhere in motion. The relation of time to motion is similar to the relation of number to the thing numbered. Just as number, as such, is neither individualized by the individuality of the substratum nor pluralized by its plurality, time is neither individualized nor pluralized by the different motions.

This second part of Ibn Rushd's answer to al-Ghazali requires some further comments on our part:

What seems clear in Ibn Rushd's discussion is that the physical point differs from the "now" in that it is fixed, while the "now" is not. Because the "now" is not fixed, it must always have a "before" and an "after." The physical point, on the other hand, need not have both a spatial "before" and an "after."¹⁹ It is this fact which makes spatial

¹⁸Supra, chapt. iii, n. 45.

¹⁹Both the physical point and the "now" are boundaries for Aristotle. They differ in that one is fixed, the other is not. Physics, v, 11, 220a, 5-25.

finitude possible,²⁰ and temporal finitude impossible. It should be observed that in the Aristotelian scheme of things it is only the class of physical points that are absolute limits. This is the class of points on the outermost boundary of the finite spherical universe. What lies within this boundary must have both a spatial "before" and "after."

Now, Aristotle defines time as the number of motion with respect to "before" and "after."²¹ The "before" and "after" in this case must be a "before" and an "after" of motion, not of time. Otherwise the definition of time would be circular. It is necessary, therefore, that the "now" should always have a "before" and "after," only if motion always has a "before" and an "after." In other words, time is eternal only if motion is eternal. To say that time must always have a "before" and an "after" assumes the eternity of motion. But the eternity of motion is the very point at issue. Both the Philosophers and Ibn Rushd argue for the eternity of motion from the eternity of time, while the eternity of time in their terms can be inferred only from the eternity of motion. Hence, their argument is circular.²²

Ibn Rushd's argument that the relation of the limit to spatial magnitude is dissimilar to the relation of dependence between time and motion only proves that time is not confined to a particular motion. It does not prove the eternity of time nor warrant the inference of the eternity of motion from the eternity of time. The analogy between time

²⁰The arguments for the impossibility of the actual infinite makes spatial finitude for Ibn Rushd a necessity.

²¹Physics, v, 11, 219b; 220a, 25.

²²See G.F. Hourani, "The Dialogue Between al-Ghazālī and the Philosophers on the Origin of the World," p. 190.

and number must be understood in its Aristotelian context. Granted that number is distinct from the things numbered in that it is not affected by the nature of the things numbered (the number ten is not affected by whether the things numbered are men or horses), it still is abstracted from particulars and cannot exist without them. Otherwise, Aristotelianism must give way to Platonism. Similarly, time need not be confined to a particular movement. Still, it cannot exist without movement.

It should also be observed that the relation of time to motion is not very clear in Aristotle. Time and motion are not identical, argues Aristotle.²³ In one place, however, he maintains that time is that which is counted in motion,²⁴ in another, that time is that which counts motion.²⁵ Ibn Rushd, apparently uses the second of these definitions in his argument.

6. The Conclusion of Part I²⁶

The first part concludes with an interchange of argument between the Philosophers and al-Ghazālī that rests on a disagreement of naming. The Philosophers criticize al-Ghazālī for his use of the terms "above" and "below" with reference to the world. Since the world is a sphere, they argue, these are relative terms. Al-Ghazālī replies that this is sheer squabbling about words and that he could reformulate his arguments by using the terms "inside" and "outside" instead of "above" and "below."

²³ Since motion can be faster or slower, and since the rate of motion is measured by time, time and motion are not identical. *Physics*, iv, 10, 218b, 14.

²⁴ *Physics*, v, 219b, 5. ²⁵ *Physics*, v, 220a, 1-5.

²⁶ *IF*, pp. 99-100; *TT*, pp. 80-83.

Ibn Rushd agrees that the argument of the Philosophers is defective and takes them further to task for not recognizing the absolutely high and the absolutely low, the proper places in Aristotelian physics where certain elements reside, the heavy like earth at the center, the light as fire at the absolutely high.

Part B

In this second part of the second debate the Philosophers present a second proof to demonstrate the eternity of time, and by implication the eternity of motion. Hence, the Philosophers, and Ibn Rushd who supports them, still insist on the inference of the eternity of motion from the eternity of time. The proof that the Philosophers present, and which is debated in this second part, reminds us of the proof al-Ghazālī presented in the first debate for the impossibility of infinite time based on the contention that the infinity of time implies the existence of infinite but unequal revolutions of the heavenly bodies.²⁷ The Philosophers seem to use an argument from the consideration of the movement of heavenly bodies, to demonstrate that an infinite time in the past is possible.

The Philosophers' Proof²⁸

One must admit that God could have created the world - if we suppose for the sake of argument that it was, as al-Ghazālī maintains, created in time - earlier by one year, a hundred years, a thousand years, or an infinite number of years, argue the Philosophers. If the opponent

²⁷ Supra, chapt. 11, p. 49 ff.

²⁸ IF, pp. 101-102; IT, pp. 83-85.

objects to the use of the term "years" since this is a temporal term that implies the existence of motion, one can formulate the problem in a different manner.

Let us for the sake of argument suppose that the world has had a finite beginning in the past, and let us suppose that up to the present time, the world has made one thousand revolutions. Now, God, in His omnipotence, could have created another world which is the exact duplicate of the present world, but which up to the present has made a thousand and one revolutions. To deny such a possibility would be to deny God power. Moreover, to deny such a possibility would be to deny that the world was possible before it existed. An impossible world could never have come into existence. Hence, the opponent must allow the possibility of God's creating this other world. If he admits that such a world is possible, he must admit that God could have created yet another world exactly similar to our world and moving at the same rate but which up to the present has made twelve hundred revolutions. Indeed, he must admit that God could have created an infinite number of such worlds, each making up to the present more revolutions than the other. Let us consider, however, the three worlds mentioned above. These are similar in every respect except that one has made up to the present a thousand revolutions, the other eleven hundred, and the last twelve hundred. There is therefore a difference in extension as far as their movement is concerned, since they move at the same rate. This difference cannot be merely the existence of God without one of the worlds, or another world without one of the other worlds.²⁹ This difference must

²⁹This point is aimed at al-Ghazālī's theory that God's priority to a world finite in the past is not a temporal priority but rather the existence of God without the world.

be something else and cannot be other than time, which is the measure of motion.

The Philosophers stop at this point. At best they have shown that it is possible for time to have been created earlier than al-Ghazali's world. Hidden here is the assumption that is fully argued in the third debate, as we shall see that the eternal possibility of the world implies the eternal existence of such a world.

1. Ibn Rushd's comment³⁰

Ibn Rushd's comment on the proof is very brief. After expounding the above proof, he points out a difficulty its author, Ibn Sīnā, was not aware of. There is the hidden assumption in the proof, Ibn Rushd argues, that with every possible extension of motion there is time, and that with every time extended, there is motion. But this is the very point at issue, Ibn Rushd maintains, and for a moment it appears as though Ibn Rushd is aware of the problem of the illegitimacy of inferring the eternity of motion from the eternity of time. However, he proceeds to argue that Ibn Sīnā should have made it clear in the proof that the possibility of motion and of time with regard to the other supposed possible worlds, is of the same nature as that of the possibilities of time and motion of this world. Only then does it follow that with every extension of motion there is time and with every extension of time there is motion. If the motion of the possible though non-existing world constitutes the possibility of motion prior to al-Ghazālī's temporally finite world, then this possibility must be in time, and since the possibility is prior, time is prior to al-Ghazālī's world.³¹ Thus

³⁰TT, pp. 84-86.

³¹See above, pp. 112-113.

Ibn Rushd again argues for the infinity of time rather than motion.

2. Al-Ghazālī's answer³²

The proof the Philosophers give is the work of the imagination and has nothing to support it in fact. One could equally argue in an analagous manner to prove space infinite, al-Ghazali maintains. One could, for example, argue that God could have created the heavens to be a cubit higher than what it actually is. If the opponent objects that this is impossible, then he would be denying God power, and hence the opponent must admit such a possibility. But, then, if God could create the heavens higher by a cubit, it has to be granted that He could create it to be higher by two, three, or an infinite number of cubits. We should then infer that beyond space there is space. Conversely one could similarly argue that the world could have been created to be smaller than it is, and that space would then have existed beyond the smaller world in the place the actual world occupies. All this is the work of the imagination, however, and it applies to the supposed temporal extension of the world beyond the time it actually came into existence.

3. Ibn Rushd's reply³³

Al-Ghazālī's argument would be correct, Ibn Rushd answers, if the infinity of body is possible. But the infinity of body is impossible. To imagine the world to be greater than it is would be to imagine what is false since allowing the possibility of a world greater than it is would ultimately lead to the conclusion that an infinite body is possible, and this is impossible. On the other hand, the possibility of a world created before al-Ghazālī's temporally finite world is not

³²II, p. 102; II, p. 87.

³³II, pp. 87-90.

impossible. It would be impossible only if the nature of the possible is created, i.e., if the coming into existence of the possibility of the world coincided with the world's temporal coming into existence.³⁴ But this is false since it renders the judgments of the mind concerning the logical status of existents only two in number, the impossible and the necessary,³⁵ whereas in reality they are three, the impossible, the necessary, and the possible. These judgments are eternal,³⁶ and thus the possibility of the world's existence is eternal. If eternal, then the possibility could not have come into existence with the coming into existence of al-Ghazali's created world. If the possibility is eternal, then it is necessarily prior to al-Ghazali's world, and if the possibility is prior it is not impossible for such a world to have come into existence earlier. The situation is totally different with regard to space. It is impossible for space to be larger or smaller than it is. Now, God cannot do the contradictory. This is agreed upon by everyone. Hence, the omnipotence of God is not at issue when it is said that He cannot create the world larger or smaller than it is, since this would be doing the contradictory.

Moreover, if the supposed extension of time beyond the created

³⁴Van Den Bergh's translation indicates a somewhat different interpretation of the Arabic text; cf. *VE*, p. 51 and n. 2.

³⁵If possibility is not prior to the existence of a thing, Ibn Rushd seems to argue, then before the coming into existence of the thing, the thing would be impossible, and its existence when it does exist, necessary.

³⁶These judgments have corresponding realities for Ibn Rushd as we shall see. The eternity of these logical concepts is not simply the eternity of universals that are outside the category of time like the Platonic ideas, but they are eternally in time. We will encounter this issue in the third and fourth debates.

world of al-Ghazālī is, as al-Ghazālī holds, impossible, then there can be no time whatsoever. For time is nothing but what the mind attributes to the possibility of the extension of motion.³⁷ If it is a truth, known in itself, that time must exist before the created world of al-Ghazālī, then the supposition of such a prior time is certainly not the work of the imagination as al-Ghazālī thinks.³⁸

4. Al-Ghazālī's reply³⁹

Al-Ghazālī anticipates the kind of objection which Ibn Rushd has given above and answers it. The Philosophers might argue, al-Ghazālī states, that the analogy between time and space is not apt. For, the supposition of time before the existence of a world supposedly finite in its past temporal existence is not impossible, and hence God could create a world earlier. The supposition, on the other hand, of a world larger or smaller, is impossible. Since God cannot perform the contradictory, His power is not affected. Against such a defense al-Ghazālī produces three arguments.

a. To say that the world cannot be greater or smaller than it is, is not the same as saying that black and white exist together in the same place at the same time. The latter statement would be a self-evident contradiction. The former is certainly not.

b. If, as the Philosophers state, it is impossible for the world to be greater or smaller than it is, then such a world is neces-

³⁷ See above, p. 113.

³⁸ This is a new thought. It need not be interpreted that we know directly and intuitively that time is eternal, but rather that we deduce this from the definition of time as that which must always have a "before" and an "after."

³⁹ IF, p. 103; IT, pp. 90, 91, 92-93.

sary and not possible. The necessary does not require a cause for its existence. A world that is necessary does not therefore require God. The Philosophers ought to accept the position of the eternalists who deny the world a first cause.

c. The same argument the Philosophers use for the impossibility of a world greater or smaller than it is, could be used to prove that the world could not have come to being earlier than it did. One could argue that before the world's beginning in the finite past it was impossible, that it was possible only when it came into existence. Surely, there are things that are possible at some times, impossible at others.

In reality, al-Ghazālī concludes, what the Philosophers in their second proof maintain about the possibilities of the temporal extensions of the world beyond its finite beginnings, is meaningless. One should simply affirm that God is eternal and powerful and that action is never impossible for Him whenever He desires it.⁴⁰ With this last affirmation of his voluntaristic concept of God, al-Ghazālī closes the second debate.

5. Ibn Rushd's answers⁴¹

Ibn Rushd takes up these three arguments of al-Ghazālī and answers them in order.

As for (a), it is true, argues Ibn Rushd, that the impossibility of the world being larger than it is, is not immediately self-evident as is the case with the proposition affirming the existence of black and

⁴⁰ We detect here the view that things are possible because God wills them rather than the view that God wills the possible. This is analogous to the Ash'arite concept of moral goodness. God does not command a thing because it is good; rather, it is good because God commands it.

⁴¹ II, pp. 90-97.

white in the same place at the same time. But proof can be produced to show that the consequences of a theory of a world that can be larger than it is, reduce to contradictions as obvious as al-Ghazālī's example of a contradiction. Indeed, this is what proof consists of - reducing the consequences of premises to first principles. Thus it could be shown by the principles of physics that the supposition that the world could be greater or smaller than it is would lead to self-contradictory consequences.⁴²

As for (b), this is a confused argument. It could be answered by a resort to Ibn Sīnā's distinction between what is necessary in itself and what is necessary through another. Ibn Rushd does not explicate Ibn Sīnā's theory, but his intention is clear. The world is not in itself necessary but necessitated by something else. The necessitating cause of the world necessitates the specific characteristics it has, so that it cannot have any other characteristics. Thus the fact that it cannot be greater than it is, is due to the fact that it is necessitated by an extraneous cause that determines its size. However, Ibn Rushd maintains, he has a still better answer. If we take a tool like a wood saw, this saw, to be what it is, must have specific charac-

⁴² Ibn Rushd here elaborates on Aristotle's argument in *De Caelo*, 1, 9, 278b, 23-279b, 5. The void for Ibn Rushd and Aristotle is impossible. To suppose the world larger or smaller than it is, argues Ibn Rushd, means that it is possible for space to exist outside this world. This space would have to be either empty space or filled space. It cannot be empty space. The void is not possible. It cannot be filled space. For, if filled space is possible outside this world, then it must be part of another world, and if we allow the possibility of filled space outside this world, then we must allow the possibility of filled space outside this other world. This other world then can be part of another world and this latter world of yet another world, and so forth *ad infinitum*. But an infinite number of worlds is impossible.

teristics. For example, it must be made out of iron, it must have a specific shape and size, without which it would not be the saw. But no one in his right mind would contend that because it must have these specific characteristics necessary for its being what it is, namely a saw, it does not require a cause to produce it. If this kind of necessity, however, did not exist in things, as the Ash'arites believe, then all wisdom is denied the Creator and creation. In other words, things must have real essences necessary for the things to be what they are, but these essences do not imply existence.

It is Ibn Rushd's answer to (c) which is the most significant of the three answers. This answer anticipates much of the argument that comes in the third debate. It discusses the problem of the priority of possibility to existence. Ibn Rushd, however, uses the term "possible" ambiguously to mean both the logically possible and the potential in the Aristotelian sense. The priority of potentiality to actuality is a temporal priority. But the priority of the world's possibility to a world that is eternal cannot be a temporal priority. It must be a logical priority. Ibn Rushd does not distinguish between these two kinds of priority.

It is impossible, argues Ibn Rushd, that possibility and existence should coincide as al-Ghazali's theory implies. Possibility must precede existence. Otherwise, prior to a thing's existence, the thing would have been impossible. If impossible it can never exist. To say that the impossible exists is to utter a contradiction. This is different from asserting the existence of a possible when as a matter of fact it does not exist. The first is a self-contradictory falsehood. The second is a possible falsehood. Ibn Rushd here seems to make the

distinction between the factually false and the self-contradictory. He does that in order to point out that al-Ghazālī in his theory that possibility and existence coincide is in a self-contradiction.

It becomes clear from Ibn Rushd's discourse that he is speaking about potentiality in the Aristotelian sense. What exists is the actual. It cannot be possible in the sense of the potential. What is actually X cannot be potentially X. The potentiality must necessarily precede the actuality. Al-Ghazālī's theory, according to Ibn Rushd, precisely commits the error of affirming that what is actually X is potentially X. To allow this error is to do away with all necessary truths.

Al-Ghazālī, however, Ibn Rushd continues, qualifies his statement by maintaining that a thing can be possible at one time, impossible at another. This is true, but this is not to deny that possibility must precede the existent. For the very nature of the possible - and here Ibn Rushd uses it in the sense of the "potential" - is that it could actualize at certain times and not at others. Thus, al-Ghazālī's statement does not deny the priority of possibility to existence. In fact, there are times when the existence of something is impossible. For example, it is impossible for something to actualize in the substratum when its contrary is actualized. But, it cannot actualize at all at a further time if its potentiality did not precede such an actualization.

However, the creation of the world at a finite moment in the past implies that the possibility of the world's existence must have preceded the world by infinite time. But for the possibility to have preceded the world by infinite time would be contradictory, as will be explained below, and the world must be eternal.

Even though this argument is dealt with again in the third debate, we might anticipate and explain here Ibn Rushd's line of reasoning. Ibn Rushd argues as though he has established that time must precede a world supposed to have been finite in the past. Moreover, the possibility for such a world must be prior in time, and not merely logically prior. How the priority of possibility of the world as a whole can be temporally prior to an eternal world is not clear. However, Ibn Rushd bases his argument on the concept of the impossible. The impossible never exists. He seems, however, to hold the converse, that what has never existed in the eternal past is impossible. Thus if the world was created in time, an eternal past had elapsed before it came into existence, and hence the world was impossible; and since the impossible cannot exist, it could not have come into existence. Since, as a matter of fact the world does exist, it could not have been created at a finite moment in the past. The error in this argument is to suppose that what has eternally not existed in the past is necessarily impossible. Whereas it is true that the impossible never exists, it is not true that what was never existent in the infinite past is impossible.

Ibn Rushd then proceeds to comment on al-Ghazālī's last remark to the effect that the possibilities the Philosophers speak of in their proof are meaningless. Ibn Rushd agrees with al-Ghazālī that the Philosophers in their second proof did not prove the eternity of the world: they only proved that such an eternity is possible. Then he adds another argument from the nature of God the omnipotent in order to show, first of all, that an omnipotent God is more likely to create an eternal world than not; and then to show that as a matter of fact He does and must since God performs the best act.

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God is eternally capable of creating the world, argues Ibn Rushd, and there is nothing to prevent Him from doing so. Indeed, one is more likely to attribute imperfection to God when He creates the world in time. For then one might infer that God is only capable of acting at some moments. But God the eternal omnipotent being is more likely to act eternally and not only at specific moments.

God must perform the best act and cannot perform the inferior act; for this is imperfection. What greater imperfection can there be than for an infinite being to produce only a finite act? The act of an eternal being is eternal. A world finite in its past temporal duration would be a finite effect of an eternal cause and would imply the delay of the effect after the cause. The delay of the effect after the cause is only possible when the cause is not perfect, or when the agent is voluntary and the delay is caused by the choice of the agent.⁴³ For

⁴³II, pp. 96-97: *وذلك أن كل موجود فلا يترافى فعله عن وجوده إلا أن
أن يكون ينقصه من وجوده شيء أعني أن لا يكون على وجوده الكمال أو يكون من زوي الاختيار فيتأخر في فعله
عن وجوده عن اختياره*

Van Den Bergh translates the above as follows:

"For there is no being whose act is delayed after its existence, except when there is an impediment which prevents its existence from attaining its perfection, or, in voluntary beings, when there is an obstruction in the execution of their choice." *VB*, p. 96. We translate the passage as follows: "That is because there is no being whose act is delayed after its existence, unless there is something lacking in its existence, i.e., if its existence is not perfect, or, if the being is a voluntary agent - then the effect is delayed by the choice of the agent."

If our interpretation is correct then Ibn Rushd by implication denies that God is a voluntary agent since he denies that in this case the effect can be delayed after the cause. The argument that follows need not be interpreted to be an affirmation on the part of Ibn Rushd that God is a voluntary agent; the argument only shows that al-Ghazālī who is so insistent on the freedom of God's acts, would have to concede that in some respects God is not free if al-Ghazālī insists that the world must be finite in its temporal duration and that hence God cannot create an eternal world.

God to be able to create only a world finite in its past duration, means that in some respects God is not a voluntary agent since He can only create a finite, not an eternal, world.

The central issue in the whole of this second debate is the question of the legitimacy of the inference of the eternity of motion from the eternity of time. In both parts of the debate the Philosophers and Ibn Rushd attempt to prove the eternity of time for the purpose of proving the eternity of motion and thus of the world that is in motion. This inference, as we attempted to point out, is illegitimate. For the eternity of time assumes the eternity of motion. Thus it is the eternity of motion that is central here, and the eternity of motion is not the consequence of the eternity of time, but it is the consequence of the Aristotelians' concept of God. It is from this concept of God that the eternity of motion is deduced, and it is from the eternity of motion that the eternity of time is deduced. For it is from the concept of the unmoved changeless and eternal - eternal in the sense of being outside time - that the eternity of motion is deduced. God the eternal actuality is eternally actualizing. To refrain from that is both change and imperfection. Thus even though much of the debate revolves around the nature of time and space, the central hidden premise is the Aristotelian concept of God; and it is for this very reason that al-Ghazālī concludes his arguments by an affirmation of the Ash'arite concept of God as the voluntary agent to whom all acts are possible whenever He desires them. Here we detect a theory that states that things are possible when God desires them and wills them, not that God wills and de-

sires what is possible. This has its parallel in Ash'arite ethics where it is maintained that what God commands is good and not that God commands what is good.⁴⁴

Thus in this second debate the underlying conflict is still a conflict of incompatible premises regarding the nature of God. In the forthcoming two debates, we will again encounter a conflict of irreconcilable metaphysical premises, but this time pertaining to the nature of the world and matter.

⁴⁴See above, n. 40.

CHAPTER V

THE THIRD AND FOURTH DEBATES: THE ARGUMENTS FROM "POSSIBILITY"

If the first and second debates exhibited a conflict of metaphysical premises that in the main pertained to the nature of God, the third and fourth debates exhibit a conflict of metaphysical premises that pertain in the main to the nature of the world. In these two last debates we find Ibn Rushd in full agreement with the Philosophers. For their position is thoroughly Aristotelian, and this is manifest in particular in the last debate where the Philosophers use the actual-potential categorial way of looking at things to argue for the eternity of matter. The third debate is the shortest of the four, and much of its content has appeared in passing in the previous debate.¹ The Philosophers use the term "the possible" as a name for the world as a whole and seem to confuse this sense with the logical meaning of "possibility." The fourth debate discusses the problem of whether "possibility" is merely a judgment of the mind, or whether it has a corresponding reality in things outside the mind. Ibn Rushd and the Philosophers insist that it must have such a corresponding reality, that this reality is potentiality that inheres in matter, and argue, as we shall see in their proof, that matter, since it cannot inhere in anything, is eternal.

¹Supra, chapt. iv, pp. 126-127.

A. The Third Debate

This debate consists of four short parts: the Philosophers' proof for the world's eternity; Ibn Rushd's supporting argument to the proof; al-Ghazālī's rejection of the proof; Ibn Rushd's reply to al-Ghazālī.

1. The Philosophers' proof²

The possibility of the world's existence must precede the world, the Philosophers argue. (The sense in which possibility "precedes" existence is left ambiguous in the proof.) Otherwise, if the possibility did not precede the world, the world would have been impossible, and if impossible it could never have existed. Moreover, such a prior possibility could not have had a beginning. If it did, then before such a beginning, it would have been impossible, and the impossible would not change into the possible. The possibility prior to the world's existence is therefore eternal. "If the possibility was eternal, then the possible, in conformity with possibility, must have been eternal."

The expression "the possible" in the proof above cannot stand for "whatever is possible." For, as Van Den Bergh has shown, if we substitute "Socrates" for "the possible," the conclusion would be absurd.⁴ "The possible" in the above proof is used as a name for the world as a whole. But the expression "in conformity with" (alā wifq) suggests that it might be the case that the expression "the possible" is used equivocally by the Philosophers not only as a name for the world, but also as a synonym with "possibility" in very much the same way that

² *IF*, p. 104; *II*, pp. 97-100.

³ *IF*, p. 104; *II*, p. 97.

⁴ *VB*, p. 57, n. 1.

"goodness" sometimes is used synonymously with "the good." Taken in the second sense then it is obvious that "the possible" is in conformity with "possibility," for these two expressions are identical in meaning.

If, however, there was no equivocation in the argument, and "the possible" was simply used as a name for the world, then if "possibility" is taken strictly as a logical concept, the argument would not prove the eternity of the world. "Possibility" stands for that whose existence is neither contradictory nor necessary. If the world must be eternal, then it is in conformity with "necessity," not with "possibility." The Philosophers' argument should then simply be amended to read, "if the possibility was eternal, then the possible in conformity with possibility, must have been eternally possible," and this is a redundant tautology.

But we must probe further into the assumptions of the proof. Again, as Van Den Bergh points out, the assumption in the above proof is that whatever is possible must be realized at some time.⁵ If the world's possibility is eternal, then the realization must be eternal, for, if the world as a whole was realized at a finite moment in the past, then an eternal possibility, a possibility in which the world was eternally not realized, would precede the world. That the possible must be realized, is a corollary to the Philosophers' theory that what eternally did not exist is the impossible. As we pointed out in the previous chapter,⁶ the Philosophers make the unwarranted inference that since the impossible is that which never exists, that which has never existed in the eternal past is impossible. If something is eternally non-existent and hence,

⁵Ibid.

⁶Supra, chapt. iv, p. 127.

according to the Philosophers' logic, is impossible, we should at least deny its possibility not only in the eternal past, but also in the eternal future. But we can deny the existence of something in the eternal future only if we know that it is impossible. Thus the impossible never exists. But the conclusion that what has not existed in the eternal past is impossible, is not correct.

Van Den Bergh also points out that in the proof the Philosophers assume that the world as a whole is ungenerated.⁷ For the argument would not apply to any individual in the process of generation and corruption. The eternal possibility of Socrates would not imply the eternity of Socrates. Socrates differs from the world, in that Socrates is generated and corrupted, while the world as a whole is not. This point becomes very explicit in Ibn Rushd's answer to al-Ghazali, as we shall see. But to assume that the world is ungenerated is to assume the very point at issue. Thus the argument of the Philosophers is a circular argument.

2. Ibn Rushd's Supporting argument⁸

Ibn Rushd supports the proof above with another argument: Not only is the possibility of the world's existence eternal, but the eternity of the world is possible. For it is not contradictory to assert both the world's eternity and the eternity of the world's possibility. But if the world's eternity is possible, then the world is necessarily eternal. For what can receive eternity cannot be corruptible.

Ibn Rushd's premise, that the eternity of the world is possible, if taken in the context of the Philosophers' proof is questionable. The Philosophers seem to speak of the priority of possibility to the world

⁷ VE, p. 57, n. 1.

⁸ IT, pp. 97-98.

as though this is a temporal priority. If both the world and the possibility are eternal, then the priority cannot be temporal. If the priority is temporal, then the possibility of the world's eternity and the eternity of this possibility would contradict each other. However, the premise is valid,⁹ if the priority is not temporal.

However, Ibn Rushd is guilty of treating existence as a predicate, something he himself rejects elsewhere in the *Tahāfut*.¹⁰ The world has a capacity to receive eternal existence. As such, the world is the subject in which the predicate eternal existence inheres. But, what is significant in this argument is that it clearly shows that the possibility of the world's eternity is not merely logical possibility, but potentiality capable of receiving eternity. This links the third debate with the fourth where "possibility" is explicitly identified with "potentiality" by the Philosophers and Ibn Rushd.

3. Al-Ghazālī's rejection of the proof¹¹

What is eternally possible, al-Ghazālī answers, is the world's temporal creation, and that simply means that there is no point in finite time in which such a creation could not have taken place.¹² The

⁹Not for al-Ghazālī who rejects the eternity of the world not only as an unproven theory but as self-contradictory.

¹⁰"When we say that something exists, this does not indicate an idea added to the substance outside the soul as when we say of the thing that it is white;" *II*, p. 197.

¹¹*II*, p. 104; *II*, p. 98.

¹²Van Den Bergh misses the sense of al-Ghazālī's reply when he translates *وإذا قُدِّرَ موجوداً أبداً لم يكن حادثاً فلم يكن الواقع على وفق الإمكان بل على خلافه*

as: "But although it could be at any time, it did not become at any time whatever, for reality does not conform to possibility, but differs from it." *VB*, p. 57. We translate the sentence as follows: "If it is supposed to exist eternally, then it would not have been a creation, and thus in fact it would not have been in conformity with possibility, but contrary to it."

possibility, therefore, is a possibility of the world's temporal creation. But if the world is supposed to be eternal then it is not a creation. As such, the possible, i.e., the world, is not in conformity with possibility, but contrary to it.

Just as the Philosophers maintain that the world could be larger or smaller than it is,¹³ continues al-Ghazālī, and yet deny an infinite spatial extension of the world, so we maintain that the world could have been created at an earlier or a later period, but deny that it is eternal in the past. What is specified is not the extent of the world's temporal duration in the past, but that the duration is not eternal, that it had a beginning. For an eternal world is impossible.¹⁴

The central issue in this answer is the meaning of "creation." The world is God's creation, and creation is the coming into existence after utter privation¹⁵ and is something that is finite in its past duration. Thus al-Ghazālī, in his answer, also assumes the point at issue.

¹³In the previous arguments, the Philosophers and Ibn Rushd did not voice such a view. Indeed, as we have seen in the previous chapter, Ibn Rushd argued against the notion that the world could have been greater or smaller than it is.

¹⁴The second part of al-Ghazālī's reply is simply an expansion on the first point made, and that is, that the possibility of the world's existence is the possibility of a world finite in temporal duration. Van Den Bergh, it seems, having misunderstood the primary intention of al-Ghazālī's main point in the first part, does not fully understand his intention in the second, and hence his notes 57:6, 58:1, that read into the argument problems that are not there. The issue in al-Ghazālī's reply is no longer the problem of whether possibility and the existent should exist simultaneously or whether possibility must precede the existent. Al-Ghazālī neither challenges the Philosophers' argument that possibility must precede the existent, nor that possibility must be eternal.

¹⁵Supra, chapt. 11, p. 65.

If "the possible" for the Philosophers is a name for the ungenerated world as a whole, "the possible" for al-Ghazālī is the name of the world finite in duration and preceded by nothing. Al-Ghazālī, however, cannot identify "possibility" with "potentiality." As such, however, he adheres to the logical meaning of "possibility," and as we have tried to point out, the logical meaning of "possibility" will not help the Philosophers prove their point in the argument. Al-Ghazālī's answer therefore is more plausible, on this account.

4. Ibn Rushd's reply¹⁶

If the possibility prior to the world's existence is one in number, argues Ibn Rushd, then it follows necessarily that the world is eternal. If, on the other hand, one posits, as al-Ghazālī did in his reply, an infinite number of possibilities, then it follows that there must be an infinite number of worlds each preceding the other. For the world would then be like an individual that is generated and corrupted. The matter of the world that is corrupted would be necessary for the existing of the succeeding world, as is the case with all generable and corruptible things. This, continues Ibn Rushd, might seem at first sight a plausible view, but on closer scrutiny it is not. For this makes the world exactly like an individual in the process of generation and corruption. But the individual in the process of generation and corruption proceeds from the eternal first cause, not directly, but through the mediation of an eternal existent in motion and an eternal motion. The world then would have to be part of another world, and this other world in turn of yet another and so on. These worlds must

¹⁶II, pp. 98-100.

be either infinite in number, or ultimately be contained in a world not contained in another world. The first alternative is impossible, since it constitutes an actual infinite. The second alternative constitutes unnecessary multiplication of entities. There is no reason for the series of such worlds not to stop with a second, a third or a fourth. As such, since adding these worlds would not accomplish anything in explaining reality, there is no need for them.

In his answer, Ibn Rushd assumes that, when al-Ghazālī speaks of the world as being eternally possible in the sense that there is no time at which it could not have come into existence, he implies the existence of an infinite number of potentialities, and that what is potential must be realized sometime. This is clearly not al-Ghazālī's intention, and this is a theory al-Ghazālī would not concede. Thus from a logical point of view, the answer of Ibn Rushd is unfair and does not refute al-Ghazālī. But the answer is important in that here it clearly shows that by "the possible" is meant not any individual in the process of generation and corruption, but the world as a whole. It also makes explicit the Philosophers' premise that the world as a whole is ungenerated. The statement to the effect that in the process of generation and corruption the matter of an individual who is corrupted remains as the substratum for the new generated individual, is an expression of the theory of eternal matter which is debated in detail in the following debate.

B. The Fourth Debate¹⁷

In this debate the Philosophers and Ibn Rushd argue for the

¹⁷ II, pp. 105-109; II, pp. 100-117.

eternity of matter. In the previous debate they had argued that the possibility of existence must be prior to existence. The existent they considered was the world as a whole. If the world as a whole is eternal, and its prior possibility is likewise eternal, the priority of possibility to existence, as we tried to point out,¹⁸ could not be a temporal priority. In the fourth debate, the Philosophers argue for the eternity of matter, not through a consideration of the world as a whole, but through a consideration of the temporal existent in the process of generation and corruption. The priority of possibility to the existent here is not a logical but a temporal priority, and this necessarily so in their scheme of things. For it is not logical possibility that they are concerned with, but ontological potentiality. The potential precedes the actual in time. Moreover, possibility, in the sense of potentiality, must inhere in a subject that precedes the existent, matter. Matter, on the other hand, does not inhere in anything. It does not become. It is eternal.

Against this theory al-Ghazālī insists that possibility is nothing but a judgment of the mind. His opponents do not deny that possibility is a judgment and a concept. But a concept must be a concept of something in things outside the mind. Possibility must first exist in the thing outside the mind if it is to be abstracted as a concept by the mind. This issue raises the problem of universals and this problem is debated.

The Philosophers argue for the eternity of matter. But the eternity of the world is implied in their argument. For matter with-

¹⁸See above, p. 135.

out form cannot exist. If matter is eternal, then it is matter eternally formed, and matter eternally formed is the eternal world in the Aristotelian world view.

The arguments in this debate are intricate. There is always the danger of reading into them theories that are not there. For this reason we will attempt, first of all, to expound the thought of the debating parties adhering closely to their mode of saying things. We will leave any criticisms and comments of our own concerning the particular arguments and the general place of the fourth debate in the conflict of metaphysical premises to the end of the chapter.

The structure of the argument without the comments of Ibn Rushd is simple. But Ibn Rushd inserts his criticisms wherever he deems it necessary and in so doing makes the structure of the debate more complex. The fact that with the exception of a brief reference to Ibn Sina's theory of the soul, Ibn Rushd is in complete agreement with the Philosophers, makes it possible to combine Ibn Rushd's comments with the arguments of the Philosophers, indicating the special distinctions and elucidations he adds to their thought.

The Philosophers' Proof and Ibn Rushd's Supporting Argument¹⁹

The Proof has two parts. The first part assumes that possibility must inhere in a subject, matter. This assumption is used as a premise to prove that matter is eternal. The second part attempts to prove the premise true.

In the first part the Philosophers argue as follows:

¹⁹ II, pp. 105-106; II, pp. 100-102.

Matter exists in every temporal being²⁰ and without it the temporal being cannot come into existence. Matter precedes the existent and hence matter does not become; it is eternal. This is proved by the fact that every temporal being in itself²¹ is either possible, impossible, or necessary. The necessary is eternal and does not become. The impossible never exists. Therefore, the temporal being is possible in itself. Now, possibility is an attribute additional to essence. As such, it must inhere in a subject. This subject is matter. Matter does not become. If it did, then the possibility of its existence must precede it and must inhere in something. But the possibility of matter cannot inhere in matter.²² The possibility would then be an attribute without a subject, and this is impossible: an attribute by definition

²⁰"al-hādith," any being in the process of generation and corruption, not the process as a whole. This is the Aristotelian sense of temporal being, not al-Ghazali's. It is not a creation out of nothing.

²¹In the Tahāfut the Arabic is "bi dhātih" which is translated either "in itself" or sometimes more accurately, "in its essence." (See chapt. 1, p. 8.) Van Den Bergh translates "al-mumkin bi dhātih," "the essentially possible" and poses the criticism that if possibility is essential it cannot be an additional attribute as the Philosophers proceed to maintain; YA, p. 99, n. 2. But in the above context the main point of using the expression "bi dhātih" is not so much the issue whether possibility is essential or accidental. The purpose is twofold: (1) that possibility must have a subject - what inheres need not be the accidental only, since the Philosophers and Ibn Rushd speak of essential attributes "a'rad dhātīyah"; (2) and this is the main point, to indicate that when we say that a thing is possible, this possibility does not derive from the agent but from the patient. The thing is not possible because the agent has the power to bring it into existence, but rather, the agent has power to bring it into existence if it is in itself possible. This point is made in the second part of the proof and is even more articulately expressed by Ibn Sina in his formulation of the above argument: al-Najāh, p. 219. There the expression "al-mumkin fī nafsih," "the possible in itself," is used.

²²A thing cannot be both potentially X and actually X. Matter cannot be both potentially matter and actually matter.

inheres in a subject. This last point Ibn Rushd defends with a new argument:

If matter becomes, then its possibility must precede its becoming. The possibility would have to inhere in a different matter. If this different matter is not eternal, it must in turn be preceded by its possibility which must inhere in yet another matter and the process would recede infinitely, and this is impossible. Matter never becomes. It is the eternal substratum of all change.

In the second part, the Philosophers defend their premise that possibility must inhere in matter. The only other meaning "possibility" could have is "God's power to act." The possible is what the agent, God, can do. But this definition is circular. A thing is not possible because God has the power to bring it into existence. Rather, God has the power to bring it into existence because it is possible.²³ Possibility cannot be defined in terms of God's power.

Ibn Rushd reformulates this last point in strictly Aristotelian terms. The possibility for the agent to do the act differs from the possibility in the patient to receive the act. But the possibility to perform the act is logically dependent on the possibility in the patient. For the agent cannot do the impossible. Clearly, by "possibility" in the patient, the Philosophers and Ibn Rushd mean "potentiality." Thus if the agent cannot do what is not potentially in the substratum, he is limited by the nature of the substratum.²⁴ It is also clear that the

²³This is in sharp contrast to al-Ghazali's final assertion in the second debate to the effect that what God wills is possible. *Supra*, chapt. iv, p. 123.

²⁴This is at the root of Aristotelian determinism that makes it unacceptable to many theologians. The consequence of the above theory

Philosophers mean by the "possible in itself" literally "the possibility that is in the thing,"²⁵ its potentiality.

Ibn Rushd then proceeds to give a short exposition of the Aristotelian theory of becoming:

Becoming is the eternal succession of forms over eternal matter. This is what is meant by "judith," generation. The matter of what is corrupted is necessary for the emergence of the newly generated existent. The process of generation and corruption, the movement from potentiality to actuality, is eternal because it is caused ultimately by an eternal agent.

1. Al-Ghazālī's objection²⁶

The possibility that the Philosophers mention is a judgment of the mind and nothing else. We call "possible," al-Ghazālī asserts, anything whose existence the mind is not prevented from supposing (*falam yantani 'alayhi ta'dīrūh*).²⁷ "impossible" anything whose existence the

strictly adhered to is to reject the miraculous. It is a limitation on God's power, since His acts must be prescribed in certain ways.

²⁵See above, n. 21.

²⁶XL, pp. 106-107; XL, pp. 102, 104, 107.

²⁷This phrase Van Den Bergh translates as the equivalent of the Stoic phrase "provided no obstacle presents itself" and proceeds to comment that al-Ghazālī might have taken it from a late Stoic source, and relates al-Ghazālī's argument above to Stoic theories of sense perception. There is no justification for such a translation. There is a technical term for "obstacle" (*ʿāqib*), which al-Ghazālī could have used. The phrase should simply be translated either "if it is not prevented" or even "if it is not impossible." "Imtina'" is a term sometimes used for "impossibility." Al-Ghazālī is definitely not talking about "catalytic" presentations here, as Van Den Bergh interprets him. Al-Ghazālī is talking about judgments. This becomes more evident as the discussion progresses. Van Den Bergh's reading Stoic epistemology into this discussion is not merely unwarranted, but erroneous. Cf. VB, p. 60, n. 2.

mind is prevented from supposing, and "necessary" anything whose non-existence the mind is prevented from supposing. All these are judgments of the mind and do not need an existent to be attributed to. This can be proved by three arguments:

a. If possibility requires an existent to subsist in, then impossibility would likewise require an existent to subsist in. But impossibility does not exist either in itself or in a substratum.

b. The mind judges²⁸ that black and white are possible before they exist. This judgment pertains to black and white as such, and not to the substance in which they inhere. When we judge that black or white are possible, we are not judging that the substance can become black or white. If the judgment pertains to black and white as such, then possibility is purely a judgment of the mind. For black and white are accidents. Accidents are predicates, not subjects. Possibility cannot inhere in them.

c. According to Ibn Sina the human soul is a substance that is neither body or matter nor inhering in matter, and yet it is created. If created, its possibility must precede its coming into existence. But this possibility cannot inhere in a prior matter. Moreover, the Philosophers deny that possibility is definable in terms of the agent's power to create. Thus the status of the possibility of the soul according to the Philosophers' doctrine is left unexplained.

²⁸yaqdi, which Van Den Bergh translates as "decides." He proceeds to criticize al-Ghazali for treating concepts as possible, necessary or impossible, instead of judgments, and once again relates al-Ghazali to the Stoics. It is true, that later on in the argument, judgment and concept are treated as one and the same thing by all the disputants. But in the above argument the word "yaqdi" indicates clearly that al-Ghazali is speaking of judgments. Cf. YB, p. 61, n. 1.

2. The Replies of the Philosophers²⁹ and Ibn Rushd³⁰

The Philosophers first of all give a general answer against the theory that possibility is merely a judgment of the mind, and then proceed to answer each of the three arguments of al-Ghazālī.

The Philosophers deny that possibility is merely a judgment of the mind using an argument to support this denial that is similar to the argument they used to deny that possibility can be defined in terms of the agent's power to act. It is absurd to reduce possibility to a judgment of the mind, they argue. For, a judgment is nothing more than knowledge of possibility. Possibility is, therefore, the object of knowledge, not knowledge. Knowledge comprises possibility and depends on it, but the converse, that possibility depends on its being known, is not true. If the possibility ceases to exist, knowledge ceases, but if knowledge ceases, the possibility in things does not cease. The fact that the mind is not aware of possibility does not mean that there is no possibility. If minds and rational individuals cease to exist, possibility in things does not cease.

Ibn Rushd supports this position, introducing his correspondence theory of truth.³¹ Just as all true concepts require a corresponding

²⁹ *II*, pp. 106-107; *II*, pp. 108-109.

³⁰ *II*, pp. 103-104; *II*, 104-107, 107-108.

³¹ Ibn Rushd speaks of concepts as being true or false. The material form in the objects outside the soul duplicates itself (through its inherent causal power, presumably) in the sensitive soul as a phantom or an image. The active intellect then abstracts the pure concept from this material image. The concept is true if what it abstracts has a corresponding reality in the object outside the soul. Thus, concepts of mythical animals, Ibn Rushd tells us, are false concepts. See Ibn Rushd, *Talkhis Kitab an-Nafs*, ed., Ahmed Fouad El Ahwani (Cairo; maktabat an-Nahdah al-Misriyyah, 1950), pp. 8-81.

object outside the soul, so does possibility. When we say that a thing is possible, our statement is true only if possibility exists in the thing.

The Philosophers and Ibn Rushd then proceed to answer the three arguments of al-Ghazālī:

As for (a), the Philosophers reply, impossibility like possibility is also an additional attribute that requires a substratum to inhere in. For the meaning of "impossibility" is the combining of contraries in the same place at the same time. Thus if a subject receives black as a predicate, it is impossible for it to receive white at the same time. The impossibility therefore characterizes the subject.

Ibn Rushd supports the Philosophers' position. Impossibility, he argues, is the negation of possibility. If possibility requires a substratum, then its negation also requires a substratum. In other words, when we deny the existence of something, we never deny existence in an ultimate sense. We are always denying the existence of a quality or a predicate in something. Privation is the privation of a quality in a substratum.

As for (b), the Philosophers argue, to maintain, as al-Ghazālī does, that black, for example, is in itself possible, is false. Black, separated³² from the body it inheres in, cannot exist. The existence of black is possible only in some body. It is body that undergoes change of qualities. When we speak of possibility, we speak of the possibility of the body to undergo change of qualities. Black in itself is a quality,

³²"~~Mu'jarrah~~," "abstracted," but since this term usually is used for conceptual abstraction, and this is not what the Philosophers here have in mind, we use the term "separated."

not a substance, and as such it is not a subject. It does not have the possibility of other qualities inhering in it. Thus in this argument the Philosophers maintain that black in itself is not possible in two senses of the term which they do not distinguish: (1) in the sense that its existence by itself without a substance in which it must inhere is impossible; (2) in the sense that it does not possess the possibility of having another quality inhere in it.

In a somewhat obscure and difficult passage³³ Ibn Rushd, answering al-Ghasali on this issue, first of all distinguishes between two kinds of possibility. Possibility is predicable both of the inhering quality and the recipient of the quality. These are two different kinds of possibility and are distinguished by the fact that the contrary of the first kind of possibility is the necessary, while the contrary of the second kind of possibility the impossible. Ibn Rushd stops at this point without further explanation. We have therefore to attempt what we deem is the correct interpretation of this view. Now, for Ibn Rushd, the qualities and forms that succeed each other in the process of generation and corruption, are transient. The contrary of the transient is the eternal. As we have seen in the third debate,³⁴ Ibn Rushd identifies the eternal with the necessary. Consequently, the possible and the transient would be identical. Hence, the inhering quality is possible in the sense of being transient and it is in this way that it is a possibility whose contrary is the necessary. The possibility of the recipient to receive the qualities, on the other hand, is potentiality whose contrary is impossibility. In his answer to (a), as we have seen,

³³ *II*, pp. 104-107.

³⁴ See above, p. 133.

Ibn Rushd had insisted that impossibility must inhere in a subject just as possibility must likewise inhere in a subject. Thus the possibility of the inhering quality is not potentiality and indeed, as the second part of this discussion of Ibn Rushd will show, cannot be. For the inhering quality, inasmuch as it exists, is an actuality. What is actually black cannot be potentially black. Thus Ibn Rushd supports the contention of the Philosophers that black in itself is not possible in the sense that it cannot be potential, while allowing a different sense in which black could be spoken of as being possible. What Ibn Rushd and the Philosophers insist upon, however, is the possibility of a thing's coming to be. It is this which they identify with the potentiality of a thing's existence in a preceding substratum, and it is this potentiality that they insist must exist in the substratum outside the soul and cannot be regarded as merely a judgment of the mind.

In an argument designed to prove that possibility with reference to the recipient must exist in a subject, Ibn Rushd proceeds to define the possible as the non-existent that is in a state of preparedness "to exist or not to exist."³⁵ If we consider the constituents of this definition, Ibn Rushd continues, "possibility," "the existent" and "the non-existent" and attempt to see wherein "possibility" lies, we find that it cannot lie in "the non-existent" as such - for the non-existent as such has no possibility. It cannot lie in "the existent," for the

³⁵This is difficult to understand. The doctrine is related to Ibn Rushd's contention that impossibility inheres in a subject. Moreover, the potential, it seems, has the potentiality of not existing when its contrary exists.

existent is the actual and the actual cannot be the potential. It must therefore lie in a third thing, the potential subject.³⁶

As for (c), the Philosophers argue, not all philosophers believe that the soul is created. Some believe that it is eternal in the past and the future and these are not touched by al-Ghazali's problem. Of those who believe that the soul has a beginning in time, some follow the doctrine of Galen and maintain that the soul is impressed in one of the four humors. As such it is impressed in matter and its possibility precedes its coming into existence in that matter. For those who maintain (as Ibn Sina does) that the soul is both created and is not impressed in matter, the soul has a possibility in a different sense. This is the possibility in the body to be administered and directed by the soul.

Ibn Rushd answers that the theory al-Ghazali reports and criticizes is the theory of Ibn Sina, which is not the correct theory of the soul. When it is said by those who uphold the correct theory that the soul is created, all that is meant by such an assertion is that the eternal soul³⁷ is unified with the bodies that are prepared to receive it in the same manner in which mirrors are disposed to receive the light from the rays of the sun. Thus the soul does have a potentiality in a subject which it actualizes when it unites with the body. But this subject is not the same as the subject in which the forms in

³⁶ Again, it is not clear in the passage whether potentiality is in the subject or is the subject.

³⁷ Ibn Rushd means here the active intellect, not the whole soul. For it is only this aspect of the soul that is separable and eternal.

the process of generation and corruption inheres.³⁸ The soul, therefore, does have a potentiality in this "soul-matter"³⁹ that precedes its union with the body.

3. Al-Ghazālī's replies⁴⁰

Al-Ghazālī first of all attacks the Philosophers' theory that possibility cannot be merely a judgment of the mind because judgment is knowledge of possibility in things outside the mind. He reaffirms his view that possibility is merely a judgment of the mind and argues that his opponents' own theory of universals commits them to such a conclusion.⁴¹ What al-Ghazālī presents is his own interpretation of the

³⁸ What this subject is, is a problem for Ibn Rushd, and for those who study Ibn Rushd to establish his exact position. In his paraphrase of the *De Anima*, not the great commentary that survived only in the Latin translation, he is hesitant. He toys with the idea that this subject consists of the sensible images in the sensitive and imaginative soul, but seems to reject such a view. He suggests as a possible alternative an eternal matter, analagous, to prime matter, in which the intellectual concepts are actualized by the active intellect. This matter is both potency and matter, the active intellect is both actuality and form. His statement in the above that there is such a subject different from prime matter supports the view that Ibn Rushd did believe that there is an eternal prime matter peculiar to the soul - *quid secundum*. This is what for Ibn Rushd constitutes the material intellect (*al-'aql al-haywānī*). See *Talkhīṣ Kitāb al-Nafs*, pp. 86-87.

³⁹ This is our expression intended to differentiate between the prime matter of generation and corruption and the prime matter of the soul.

⁴⁰ *II*, pp. 108-109; *II*, pp. 108-109, 112-113, 113-114. Al-Ghazālī's defense of (b) - the theory that black in itself is possible - is omitted by Ibn Rushd and left unanswered in *II*, presumably because Ibn Rushd thought that he had said all he had to say in his previous comments on the problem.

⁴¹ Al-Ghazālī is arguing *ad hominem*, although he gives the impression that this is the theory of universals and abstract ideas that he subscribes to. Actually, he presents his own theory in the second part of the *Tahāfut*. *II*, pp. 258-259; *II*, pp. 572-573. This is a curious theory of imagism and conceptualism that bears some resemblance to British empiricist theories of universals such as those of Berkeley, Hume, and H.H. Price. First of all, in sensation, we possess the image

Philosophers' theory of universals. It is a nominalistic interpretation which Ibn Rushd criticizes as being a misrepresentation of the Aristotelian doctrine and which differs from Ibn Rushd's own nominalistic version of this theory.

Just as animality, color, and other universals, constitute knowledge, although these are merely concepts in the mind and have no existence in the particulars of sense, the same applies to the concept "possibility." The universal does not exist, according to their theory, in the individual of sense. In the individual only the particulars exist. These particulars are sensed, not conceptualized, but they are the cause for the mind to abstract from them an intellectual concept. Thus, if we take the concept color,⁴² we never sense color as such in individuals, but sense in the individual a particular color. We sense the particular color black or white, but we do not sense a particular that is color as such. Thus color as such exists in the mind. In the same manner possibility exists in the mind as a concept. Just as we do

of an individual such as a dog or a hand. This image stands in a "representative" capacity to other dogs and hands. But, the "representation" is quite literal in al-Ghazali. Thus if I see first a dog and then another, I only see the different characteristics of the second dog. Inasmuch that the other aspects of the second dog fully resemble the first, I simply see the first dog. Similarly, when I conceive the idea of body by abstracting this idea from the image of a particular animal and then I see a tree and judge that it is a body, I do so not because I abstract another idea of body from the image of the tree, but because the idea of body I already abstracted from the image of the animal occurs and represents the abstract idea of body. What I newly conceive when I see the tree are only aspects I did not image and conceive before.

⁴²"allawmiryah," which Van Den Bergh translates as receptivity of color. This translation can, however, be misleading, and we avoided it.

not sense color as such, we do not sense possibility as an attribute.⁴³ Thus, our assertion that possibility is a judgment of the mind, is correct.

As for their statement, al-Ghazālī continues, that if the rational beings, or their awareness, ceases, then the possibility ceases, this should then apply to all universals, as they hold it does. If it applies to all universals then it applies to possibility. If they answer that the universals continue to exist in the mind of God, possibility, likewise would continue to exist in the mind of God. But then it is still a judgment and not an attribute of things.

As for their objection to (a) and their assertion that impossibility must have a material substratum, this is not always the case, al-Ghazālī answers. It is impossible, for example, that God should have a rival. This impossibility, by their mode of reasoning should subsist in matter, and in this case there is none.

Should the Philosophers argue that what is meant by the impossibility of a rival to God is the necessity of His uniqueness and solitude, then it would be maintained that His solitude is not necessary since God exists with the world.

If to this, continues al-Ghazālī, the Philosophers answer that when one speaks of the uniqueness and solitude of God one means the uniqueness and solitude of God with respect of a rival, that this solitude and uniqueness is necessary, that the impossibility of the rival reduces to the necessity of God's oneness, one could answer as follows:⁴⁴

⁴³This is implied rather than stated by al-Ghazālī.

⁴⁴This argument is not given in its entirety in II and its complete sense is missing there. This does not seem very important since Ibn Rushd is concerned only with the first part of al-Ghazālī's defense of (c).

One can use such a mode of argument to show that the possibility of the world lies in God. Thus we could argue that God's solitude with respect to a rival is necessary. As such, the necessity is in God. But the solitude of God with respect to the world is possible, not necessary. As such this possibility lies in God.

As for the Philosophers' objection to (b) to the effect that black and white are not in themselves possible, the answer is that this is true with respect to black and white in their existence outside the soul,⁴⁵ but it is not true of black and white when they are considered as concepts in the mind. It is as concepts that we judge black and white to be possible. As concepts, they exist abstracted from matter. Possibility therefore does not pertain to the matter in which they inhere, but to black and white in themselves as concepts.

As for the Philosophers' reply to (c) to the effect that possibility with regards to the created soul consists in the fact that the body can be administered by the soul, this is a far-fetched relationship. One could argue similarly for created things other than the soul and maintain that the possibility in them consists in the fact that God can create and administer them. Then there would be no need for a matter in which this possibility must inhere.

⁴⁵Al-Ghazali, and the Ash'arite atomists in general, do not deny the substance-accident metaphysics. Their atomism does not consist in denying substances, but it does consist of denying the Aristotelian concept of eternal substance. The atom is a substance that must exist with its accidents. But its temporal duration and its creation out of nothing are totally dependent on God's voluntary acts. It is true that the early Mu'tasilite theologian Dirar Ibn 'Amr denied the existence of the atom and held that bodies are conglomerates of accidents. See above, chapt. 1, n. 73.

4. Ibn Rushd's answers⁴⁶

Al-Ghazālī, Ibn Rushd charges, misunderstands and misinterprets the Aristotelian theory of conceptual thought. Knowledge is not knowledge of universals as such. Rather, knowledge is the knowledge of individuals outside the soul in a universal way. It is the individuals that are the objects of knowledge, not the universal. The universal is that by which the individual is understood. The universal "is found in the nature of things in potency." The universal is potentially in things outside the mind, actually as a universal concept in the mind.⁴⁷ Unless what is actually a concept in the mind is potentially outside

⁴⁶ II, pp. 110-11, 112, 113, 114-115.

⁴⁷ The universal which is potentially outside the mind is the form in matter. Here there is no contradiction. The form is actually a form potentially a concept. A contradiction would obtain if the form was both actually a form and potentially a form. But Ibn Rushd's theory of universals and abstract concepts is not always clear, difficult, and not always consistent. For example, his theory that knowledge is the knowledge of individuals in a universal manner is not clear. It is both a psychological account of how we know and an epistemological theory. As an epistemological theory it poses many difficulties. My possession of a universal, according to this theory, is prior to my recognition and knowledge of individuals. But I abstract the universal from the individual. Abstraction presupposes recognition and recognition presupposes a degree of universal knowledge.

More perplexing is Ibn Rushd's brand of empiricism. The form outside the soul is individuated by matter. It becomes the universal concept when matter is abstracted and it is considered without matter. Without matter it is universal - it is the common nature of a class of beings. Yet, in his Talkhīs Kitāb an-Nafs, p. 81, he writes: "The concept of man for me, for example, is different from that of Aristotle, since the concept for me depends upon images of particulars other than those images upon which the concept of man for Aristotle depended."

The theory is rendered more complex when viewed in its totality when one remembers that the same concept exists in higher degrees of perfection in the intelligences and in its most perfect state in the mind of God. This concept is the same that exists potentially as a concept and actually as a material form.

the mind, what is in the mind cannot be a true concept.⁴⁸

Al-Ghazālī's defense of (a) where he argues that the impossibility for the existence of a rival to God does not inhere in a subject, is sophistical, Ibn Rushd continues. Judgments are judgments of what lies outside the soul. If there is neither possibility nor impossibility outside the soul, then there can be no judgment. God's rival is impossible in his existence, just as God's existence is necessary in itself. That which is impossible in its existence cannot be judged.

Ibn Rushd does not report or comment on al-Ghazālī's defense of (b). The implication of al-Ghazālī's defense of (c) concerning the soul, Ibn Rushd continues, is that the possibility attributed to the recipient and the agent is one and the same. This is an absurd view since it would do away with the definition of the soul as the entelechy of the body.⁴⁹ The soul is an entelechy of the body, but it is not impossible that there should be amongst the entelechies of the body an aspect that is separable and independent of the body.⁵⁰ The soul can be like the sailor who directs the ship and the body can be as an instrument of the soul. The possibility in the instrument to be used by the person is not identical with the possibility of the agent to use the instrument, although this

⁴⁸ Again, we encounter some circularity in this correspondence theory of truth (above, n. 31). You can never compare the actual concept with the potential concept, the form in matter. Comparison is a judgment of the mind and the mind will either compare concept with concept, or judge in a universal way an individual with an individual. But according to the theory the comparison must be made between concept and individual.

⁴⁹ I.e., if the possibility of existence does not inhere in matter as al-Ghazālī's argument suggests.

⁵⁰ Ibn Rushd is speaking of the active intellect which alone is separable and survives the body though unindividuated.

is what al-Ghazālī's theory suggests.

We shall now attempt to sum up and criticize the essentials of the debate and proceed to articulate the conflict of metaphysical premises.

In their proof, the Philosophers argued for the priority of possibility to God's ability to act. Possibility cannot be defined in terms of God's power to act since God can do only the possible. Possibility, therefore, is logically prior to ability. But from this premise, the Philosophers conclude (1) that possibility must inhere in matter, (2) that this possibility is the same as potentiality in the Aristotelian sense, (3) that this is the primary meaning of "possibility." The possibility in the agent to act is logically dependent on potentiality, and the concept of possibility in the soul likewise depends on potentiality in things. If there is no potentiality in things, the agent cannot act and there can be no concept of possibility in the soul.

Ibn Rushd supports these conclusions with some modifications concerning (3). He allows other meanings of possibility.

Al-Ghazālī does not challenge the argument that possibility is logically prior to the agent's ability to act, but rejects (1), (2), and (3). He uses individual arguments for this rejection, but, by implication, he denies that these conclusions follow from the premise that possibility is logically prior to the agent's ability. Indeed, the Philosophers assume the Aristotelian theory of matter. They argue that possibility is either primarily definable as God's power to act, or as potentiality inhering in substances. It cannot be defined primarily in terms of God's ability; therefore, it is potentiality. This of course assumes

that these are the only ways in which possibility is definable.

Even if it is conceded that possibility in some manner exists in things, that the nature of this possibility is identical with potentiality in Aristotle's sense has not been shown. The Aristotelian theory of potentiality does not merely affirm that potentiality is in things, but that this potentiality is a characteristic of things that must be realized at some time and realized in certain ways. When we say that the acorn is potentially a tree, we do not mean that it is potentially any tree, an apple or an olive, but potentially an oak. It is impossible for the acorn to actualize into any tree except an oak.

In what manner possibility exists in the thing is not too clear. The Philosophers and Ibn Rushd treat it as an attribute. It is a predicate that, when conceived by the mind, becomes a universal. However, this theory can be criticized in terms of the epistemology of these Aristotelians. The process of abstraction proceeds in the following way: the image of the particular resides in the sensitive and imaginative soul. The rational faculty then abstracts the form from matter. The form abstracted from matter is the universal concept. But the form is an actuality that inheres in matter. Potentiality is not. The potentiality that inheres in matter is not the actual form and as such is not what is abstracted. How then do we get the concept of possibility?

The Philosophers had dogmatically insisted that possibility inheres in the subject. Thus when we say that a certain quality is possible we do not attribute possibility to the quality itself but to the subject. In their argument to support such a view however, they confused the sense of attributing possibility to the subject and the argument that it is impossible for a quality not to inhere in a subject.

When we say it is possible for X to be black, the possibility inheres in X not black. This, however, is not identical with the statement that black cannot exist without X or some other subject. But then, what is the status of this second impossibility? For impossibility according to them must also inhere in a subject.

At this point Ibn Rushd maintains that the inhering quality can be spoken of as being possible. This possibility, however, differs from the possibility in the subject in that the contrary of the first is necessity, of the second, impossibility. We have argued that Ibn Rushd must mean by the possibility of the inhering quality its transient nature. But this transience must inhere in the quality. For possibility must inhere in the thing. But nothing inheres in qualities. Inherence is in substances. The status of the possibility of the quality is unexplainable in terms of Ibn Rushd's theory of possibility.

The issue of what is impossible is even more puzzling. The Philosophers and Ibn Rushd argue against al-Ghazali that impossibility must also inhere in a subject. In one place, Ibn Rushd argues that impossibility is the negation of possibility; and if possibility exists in a substratum, its negation must likewise exist in the substratum. But what is the negation of this possibility? The possibility inhering in matter is potentiality. Its negation is the absence of this potentiality. The absence of the potentiality of an apple tree in the acorn would be considered by Ibn Rushd as something inherent in the acorn. This is difficult and puzzling enough. However, this is confused with another sense of impossibility. It is impossible for a substratum that has contrary potentialities to have these potentialities actualize at one and the same time.

Again, Ibn Rushd, in his answer to al-Ghazali's argument that the impossibility of God's rival would not inhere in any matter, spoke of a thing being impossible in his existence. This is different from the impossibility that is attributable to a subject. He seems here to concede a different sense of impossibility.

In general the Philosophers and Ibn Rushd are caught in their own verbal usages. They do not differentiate between logical possibility and ontological possibility. Even possibility as a concept is not a purely logical concept. It is both a psychological fact and a metaphysical entity.

What we are primarily concerned with in this debate, however, is the conflict of metaphysical premises. Here, al-Ghazali attacks the Aristotelian theory of matter. Unlike the previous debates there does not seem to be in al-Ghazali an opposing theory. His attack is negative and his arguments are ad hominem. And yet, why does he attack with such vehemence and persistence? The obvious answer is that the Philosophers argue for the eternity of matter and that the eternity of matter implies the eternity of the world since matter without form cannot exist. If matter is eternal, then it is eternally formed matter; and eternally formed matter is the eternal world of generation and corruption; and the eternity of generation and corruption in turn implies the eternity of the world as a whole. If the world as a whole is eternal then it is eternal because God by His unchanging nature must actualize eternally such a process. God, then, is not the voluntary agent al-Ghazali and the Ash'arites insist He is.

But there is even a more important reason that is manifest in this debate, and this has to do with the Aristotelian theory of poten-

tiality. God cannot do the impossible. If the impossible is identical with the non-potential, then God can only do what is potentially inherent in matter. Potentialities actualize according to natures of their own. An acorn must actualize as an oak. God cannot violate the inherent nature of things. A miracle which cannot be explained except as a violation of natural law is impossible. Thus this debate adds to the other three a new factor. It is not only the case that God by His unchanging nature must create, but He must create in prescribed ways. Indeed, He simply is the eternal actuality that actualizes potentialities already there and which must be actualized in specific ways. This for al-Ghazali is a further limitation on God, the omnipotent personal God of Islam.

What theory of matter then could remedy these two limitations on God, the limitation that He must create eternally, and that He must create in prescribed ways, prescribed not by His own decree but by the nature of the world as such? The answer is the theory of matter that traditionally has opposed the Aristotelian theory, atomism. But any atomic theory does not necessarily remedy these difficulties. For although atomism has sometimes been associated with indeterminism, it need not be. Moreover any atomic theory need not argue for creation ex nihilo. The atomic theory of matter that however does remedy these difficulties is the Ash'arite theory. For according to this theory the atoms are created out of nothing and annihilated by God's voluntary decree. Efficacy does not lie in the atoms, but in God. Thus the atoms do not have prescribed inherent natures. Even time consists of time atoms created by God. Hence, this theory allows for creation in time,

or rather, with time, and denies necessary natures in things in accordance with which God must act. All power and efficacy is restored to God.

We have tried to show that al-Ghazālī subscribed to such a theory in the first chapter. Even though he makes no mention of this theory in the fourth debate, we can therefore conclude that his positive attack on the Aristotelian theory of matter is a negative defense of the Ash'arite atomistic theory.

CHAPTER VI

CONCLUSION: IBN RUSHD'S STATEMENT IN Faṣl al-Maqāl

Now, in the light of the preceding analysis, we shall proceed to rebut some of the claims of Ibn Rushd concerning the problem of the world's eternity, in his ingenious legal defense of philosophy, Faṣl al-Maqāl.¹ Such a rebuttal, it is hoped, will shed more light on the problem of the position of Ibn Rushd and Islamic philosophy in general in relation to Islam, the institution and the religion. We cannot go here into the details of Faṣl. But we must, if we are to consider Ibn Rushd's statement concerning the problem of the world's eternity in context, give in brief the essentials of the legal argument of Faṣl.

¹The full title of the treatise is "Kitāb Faṣl al-Maqāl wa Taqrīr ma bayn-e-sh-Sharī'ah wal-Hikmah min-al-Ittisāl," literally, "The Book of the Decisive Discourse and the Determination of what Connection there is between Religion and Philosophy." This book will be abbreviated "Faṣl" and references made to Müller's edition of the Arabic text: Averroës, Philosophie und Theologie, ed., Marcus Jozeph Müller (Munich: 1859). Müller's text includes Ibn Rushd's treatise "Kitāb al-Kashf 'an Manāḥij al-Adillāh" (to be abbreviated "Manāḥij") that elaborates further Ibn Rushd's theory of allegorical interpretation, and Damīmāh, Ibn Rushd's appendix to Faṣl, where his theory of God's knowledge is further elaborated.

Faṣl and Damīmāh has been edited and translated into French with an introduction and notes by Léon Gauthier (Alger: 1942).

A new critical Arabic text of Faṣl, Damīmāh, and part of Manāḥij, edited by G.F. Hourani, is currently at Leiden in the press. An English translation of these texts with an introduction and notes is also currently in the press. Professor Hourani has kindly loaned me both the manuscript for the Introduction to the English translation with its notes, and the manuscript to the English translation with its notes. These will be abbreviated respectively, "Hourani, Introduction" and "Hourani, Translation."

In his Tahāfut, al-Ghazālī did not only undertake a logical refutation of the Philosophers, but he also charged at the book's conclusion that in three of their doctrines - the doctrine of the world's eternity, God's knowledge, and the soul's immortality - the Philosophers did not merely introduce innovations to the faith (bidaʿ), but actually committed Islamic irreligion (kufr), punishable by death.² Thus was stirred the legal question: should "sharʿ" allow the study of philosophy? "Sharʿ" in its broadest meaning stands for "religion," but more particularly for "law" or the scriptural sources of the law.³ The Islamic state was theoretically a community of believers governed by divine law.

Ibn Rushd wrote his Faṣl as an answer to this question and as a defense of the Philosophers against the charges of al-Ghazālī. He formulates the question at the outset in its Islamic legal terms: "Is the study of philosophy and the sciences of logic allowed, prohibited, or commanded - either by way of recommendation or obligated - by law?"⁴ Ibn Rushd then proceeds to argue that philosophy is not merely recommended by law, but obligated. But it is obligatory only on those who possess the capacity and the training to pursue it, prohibited for all others. Ibn Rushd bases this ruling on certain Qurʾanic passages. Thus the use of logical reasoning (qiyās),⁵ both in law and in philosophy is commanded, according to Ibn Rushd, by the Qurʾanic sentence: "Therefore

²TF, pp. 293-95; the passage is omitted though commented on in TT, p. 587.

³Hourani, Introduction, p. 30. ⁴Faṣl, p. 1.

⁵In philosophy "qiyās" is "syllogism"; in law and theology "analogy." The philosophical term for analogy is "mithāl." Al-Ghazālī, Maqāṣid al-Falāsifah, I, 29.

consider ye who have sight," (fa^ctabirū ya uli-l-absar).⁶ He also cites other passages in the Qur'ān where nature is pointed to as a manifestation of God's power.⁷ From such passages, Ibn Rushd concludes that the study of nature is an obligation, binding on all Muslims.

Now, Ibn Rushd continues, philosophy is the most perfect method of executing this divine injunction. It consists in demonstrative inference of the unknown from the known, which leads to the knowledge of God. But not all Muslims are capable of demonstrative reasoning. The reasoning capacities of men differ.⁸ Each Muslim must study the manifestations of God's power in nature according to his capacity for understanding. The majority of men do not transcend, in their reasoning

⁶Qur'ān, lix:2. The passage in which the above expression occurs is polemical. It cites the example of "the people of the Book," probably here the Jews of Madinah, who have not accepted Islam, and who will be punished by God in the afterlife. Already, He has brought terror into their hearts and they themselves have destroyed their own homes - with the help of the believers. Their case should be "considered," as a lesson. The tone is polemical and moralistic. Ibn Rushd's derivation of the injunction to study logic from this passage is farfetched indeed and is a good illustration of how he interprets the Qur'ān according to his whims. For a study of the derivatives of the root of the verb "I'tabara" and the meanings they acquired in Muslim thought see Muhsin Mahdi, Ibn Khaldun's Philosophy of History (London: George Allen and Unwin, 1957), pp. 63-73; for the moralistic meaning, see p. 66.

⁷In pre-Islamic poetry nature was never described as a manifestation of supernatural powers and never had any mystical elements. In the Qur'ān the case is different. In the apocalyptic passage nature inspires terror and the sense of doom. There is also mystical descriptions of nature. But, the dominant theme in the passages that describe nature, is that nature is an "āyah," a sign of God's power to create and destroy, to reward and punish. It is teleological in this sense, not in the Aristotelian sense.

⁸Ibn Rushd divides people into classes that correspond to the division of the Aristotelian syllogism into the rhetorical, dialectical and demonstrative. Philosophy should be confined to the demonstrative class. This terminology though Aristotelian expresses the Platonic view that wisdom should be confined to the select few.

powers, the rhetorical level, and should pursue the divine injunction on this level. Similarly, those whose powers of reasoning do not go beyond the dialectical level should pursue their study of nature on this level. Philosophy should be pursued only by the few who are capable of demonstrative reasoning.

What if the conclusions of demonstrative knowledge should contradict the scriptures? This can never be, answers Ibn Rushd. For, and this is the central thought of Fasl, "truth does not contradict truth but accords with it and bears witness to it."⁹ There are only apparent contradictions that can be resolved through the allegorical interpretation of the scriptural passage. But this allegorical interpretation should be confined to "those well grounded in knowledge," mentioned in the Qur'an,¹⁰ and these for Ibn Rushd are the philosophers.

Scriptural texts, Ibn Rushd proceeds,¹¹ fall into three classes.

⁹Fasl, p. 7.

¹⁰Fasl, pp. 8, 10; Qur'an, iii:5. It is possible to punctuate the passage in two different ways that give two different meanings. The most likely rendering from the point of view of sense, style and grammar, is as follows:

"It is He who has sent down to you the Book wherein are clear verses, which are the essence (literally, the mothers) of the Book, and others ambiguous. Now those in whose hearts is mischief follow the ambiguous passages desiring dissension and seeking their allegorical interpretation. No one knows their interpretation except God. And those well grounded in knowledge say: We believe in it, all is from our Lord . . ."

The last two sentences in the above could be punctuated differently to read:

"No one knows their interpretation except God and those well grounded in knowledge. They say: We believe in it, all is from our Lord . . ." Ibn Rushd reads it the second way. For a discussion of Ibn Rushd's treatment of this passage, see Léon Gauthier, Théorie de Ibn Rochd (Averroès) sur les Rapports de la Religion et de la Philosophie, pp. 59-68; Hourani, Translation, n. 87.

¹¹Fasl, pp. 14-16. We are not following the exact order of presentation of Fasl. We are striving after the essentials of Ibn Rushd's theory of scriptural interpretation pertinent to his defense of the doctrine of the world's eternity.

In the first class of texts the meaning can be understood in the same manner by the three methods, the rhetorical, dialectical, and demonstrative. Such texts should be taken literally by all and their allegorical interpretation is not permissible. The second class of texts are by nature abstruse and should be understood by the method of demonstration. Only the qualified scholar should undertake to follow the demonstrative method in understanding them. The non-qualified should not be permitted to do so. Then there is a third class of texts whose classification in terms of the other two is not certain. They are interpreted by some scholars allegorically, while taken in their literal sense by others. In any case it is only the qualified scholar who should decide whether to take them allegorically or not.

Now should the qualified scholar in dealing with the second class of texts err in his demonstrative understanding of the text, and should the qualified scholar in dealing with the third class of texts err in interpreting allegorically that which he should be taking literally - although there is no way to be certain about the error - in either case of error, the error is permissible. It does not constitute Islamic irreligion (kufṛ). This is supported by the words of the prophet who said: "If the judge in the exercise of his individual judgment¹² arrives at a correct conclusion, he has twice the reward; if he errs, he has one reward."¹³

In theory, the only valid decision ruling that irreligion (kufṛ)

¹²The reference is to "ijtihād," the technical legal term for the exercise of individual judgment allowed the lawyer when no other resort is open to him.

¹³Faṣl, p. 14. Bukhārī, xcvi:21.

has been committed can be arrived at through "ijmā'," the consensus of the opinion of Muslim scholars. But in practice, argues Ibn Rushd, such a decision in matters of doctrine can never be arrived at. For the consensus in such matters must be definitive. To be definitive all the qualified scholars in the Muslim realm at any one time must be in agreement.¹⁴ It must be known that all the qualified scholars had given their opinion and it must be known that they all expressed what they actually believed. But this is impossible. The number of qualified scholars in the wide realm of Islam cannot be ascertained, and it can never be known whether or not the scholars who give their opinion give what they actually believe. In matters pertaining to doctrine¹⁵ "ijmā'" in the definitive sense can never obtain. The charges of irreligion leveled by al-Ghazālī against the Philosophers have no legal validity.

It is within this legal framework that Ibn Rushd defends al-Fārābī and Ibn Sīnā against the charge of irreligion leveled against them by al-Ghazālī for their endorsement of the theories of the world's eternity, God's knowledge, and the soul's immortality that denies bodily resurrection. Should the Philosophers have committed any errors in these theories

¹⁴In theory, orthodoxy was defined in terms of the acceptance of the Islamic community, whose consensus (ijmā') cannot err. In practice "ijmā'" came to mean the consensus of the Muslim scholars and in the early period, the Muslim scholars of Madīna. Hourani, Introduction, pp. 49-51; Joseph Schacht, The Origins of Muhammadan Jurisprudence (Oxford: Oxford University Press, 1950), pp. 82-97.

¹⁵Ibn Rushd thinks "ijmā'" possible in practical matters only, i.e., law. He does not dwell on this point and it is not clear whether he means that in such matters "ijmā'" need not be definitive. Furthermore it is not clear whether legal theory as well as individual prescriptions of conduct are included in the category "practical matters."

their error is permissible. However, in the case of the Philosophers' theory of God's knowledge, al-Ghazālī bases his attack on a misunderstanding of the theory.¹⁶ For the Philosophers do not deny, as al-Ghazālī supposes, that God knows particulars. They only deny that God's knowledge of the particular is identical with human knowledge. In this they are necessarily correct. For in the case of human knowledge, it is the particular which is the cause of the knowledge. In the case of God, however, it is God's knowledge which is the cause of the particular, and hence God knows the particular as a cause that knows its own effect. As for the theory of the soul's immortality, again, Ibn Rushd argues, the passages in the scriptures that speak of immortality belong to that class of texts that it is uncertain whether it should be taken literally or allegorically. Thus, if the Philosophers did err in not taking those passages literally, their error is permissible.¹⁷

Ibn Rushd's defense of the theory of the world's eternity has three separate arguments, the first of which is the general legal argument to the effect that any error the Philosophers could have possibly committed in such a theory is a permissible error. It is best, however, to list the three arguments in order, and comment on them:

1. Any error the Philosophers could have committed in their endorsement of a theory of an eternal world is a permissible error. For there can be no "ijmā'" on this issue. The Philosophers must exercise their individual judgment and follow wherever their reasoning leads them. If their reasoning is faulty, the error is excusable.

2. The differences between the Philosophers and the Ash'arites

¹⁶Fasl, pp. 10-11.

¹⁷Ibid., pp. 16-17.

in their respective doctrines of the world's creation and continuance are not diametrically opposed. On the contrary there is more basic agreement than disagreement. The differences are minor and do not justify the charge of irreligion.

3. Neither the Ash'arites nor the Philosophers accept the scriptures literally on the question of creation. There is, for example, no theory of creation ex nihilo literally stated in the Qur'ān. Indeed, in this matter the Philosophers seem to be more in harmony with the literal sense of the Qur'ān than the Ash'arites. The Ash'arites, therefore, cannot charge the Philosophers with irreligion for not taking the Qur'ān literally.

It is (2) and (3) that concern us most in this analysis. However, a brief comment on (1) is pertinent here. Ibn Rushd as a lawyer has to admit "ijmā'." In matters of doctrine he accepts it only in theory. But even this theoretical acceptance is lip service. For, not only has he, by formulating the requirements of "ijmā'" in such a way, rendered it inaccessible as an instrument to determine doctrine, but in reality he has no use for "ijmā'" at all as a criterion for truth in demonstrative matters. We have only to recall here the dispute between Ibn Rushd and al-Ghazālī in the first debate over the problem of intuitive knowledge.¹⁸ Al-Ghazālī had insisted that what is intuitively true must be universally acknowledged as such. Universality was a necessary criterion for al-Ghazālī. Ibn Rushd, on the other hand, insisted that the final court of appeal in such matters is the sound understanding. In matters of first principles - and these, it must be emphasized, are the fundamental issues

¹⁸ Supra, chapt. iii, pp. 34-86.

where agreement is necessary since the whole of the controversial doctrines are structured on these principles, "ijmā'" by implication is ruled out by Ibn Rushd.

It is (2), however, which is the crucial argument where Ibn Rushd attempts to conceal the real differences between the Aristotelians and the Ash'arites. Ibn Rushd's own words must be reproduced here in full. We use Professor Hourani's translation:

Concerning the question whether the world is pre-eternal or came into existence, the disagreement between the Ash'arite theologians and the ancient philosophers is in my view almost resolvable into a disagreement about naming, especially in the case of certain of the ancients. For they agree that there are three classes of being: two extremes and one intermediate between the extremes. They agree also about naming the extremes; but they disagree about the intermediate class.

One extreme is a being which is brought into existence from something other than itself and by something, i.e., by an efficient cause and from matter: and it, i.e., its existence is preceded by time. This is the status of bodies whose generation is apprehended by sense, e.g., the generation of water, air, earth, animals, plants, and so on. All alike, ancients and Ash'arites, agree in naming this class of being 'originated.'¹⁹ The opposite extreme to this is a being which is not made from or by anything and not preceded by time; and here too all members of both schools agree in naming it 'pre-eternal.' This being is apprehended by demonstration; it is God, Blessed and Exalted, who is the Maker,²⁰ Giver of being and Sustainer of the universe: may He be praised and His power exalted.

The class of being which is between these two extremes is that which is not made from anything and not preceded by time, but which is brought into existence by something, i.e., by an agent. This is the world as a whole. Now they all agree on the presence of these three characters in the world. For the theologians admit that time does not precede it, or rather this is a necessary consequence for them since time according to them is something which accompanies motion and bodies. They also agree with the ancients in the view that future time is infinite and likewise future being. They only disagree about past time and past being: the theologians hold that it is finite (this is the doctrine of Plato and his followers) while Aristotle and his

¹⁹"ḥudathah," which could also be rendered "created" and "temporal being."

²⁰"Ḥā'il" which could also be rendered "agent."

school hold that it is infinite, as is the case with future time.

Thus it is clear that this last being bears a resemblance to the being that is really generated and to pre-eternal being. So those who are more impressed with its resemblance to the pre-eternal than its resemblance to the originated, name it pre-eternal, while those who are more impressed with its resemblance to the originated name it 'originated.' But in truth it is neither originated nor really pre-eternal, since the really originated is necessarily perishable and the really pre-eternal has no cause. Some - Plato and his followers - name it 'originated and coeval with time,' because time according to them is finite in the past.

Thus the doctrines about the world are not so very far apart from each other that some of them should be called unbelievers and others not. For this to happen, opinions must be divergent in the extreme, i.e., contraries such as the theologians suppose to exist on this question; i.e., they hold that the names 'pre-eternity' and 'coming into existence' as applied to the world as a whole are contraries. But it is clear from what we have said that this is not the case.²¹

This is glib talk. It is true that there are similarities as well as differences in naming in the controversy between Ash'arism and Aristotelianism, but these similarities and differences imply differences in irreconcilable metaphysical positions. We can take the three classes of being Ibn Rushd mentions in the above passage and by recapitulating some of the conclusions we arrived at in our analysis of the four debates in the Tahāfuts show how deep the differences are.

Ibn Rushd argues that both the Ash'arites and the Philosophers agree in naming the class of being apprehended by sense "originated" (muhdathah). But the metaphysical analysis of the "muhdath" that the Ash'arites give is irreconcilable with the analysis the Aristotelians give. For the Ash'arites the "muhdath" consists of atoms and accidents. These are created out of nothing and directly by God. There is no causal efficacy between things in the sensible world. Things do not act by the necessities of their essence. The members of the class of sen-

²¹ Faṣl, pp. 12-13; Hourani, Translation, pp. 19-21.

sible being are utterly contingent. It is true that in some sense time precedes these sensible beings. But time does not precede all of them. There is a first sensible thing in the temporal series of events, a first being before which there was no time. Time came into existence with the coming into existence of this being.

For the Aristotelians the sensible being is part of the eternal process of generation and corruption, the process of change from potentiality to actuality. This process demands a series of essential causes terminating in God. But God does not act on this process directly. The underlying substratum of this process is eternal matter, not the indivisible atom. The actualized potentiality actualizes in a specific determinate way, determined by its inherent nature. Things interact according to necessary determinate ways, determined by their very nature and the nature of the cause that actualizes them. The cause by definition acts as it does, and the recipient of the act by its very nature is affected in a specific way. The sensible things are related to each other by necessary causal relations.

These two interpretations of the class of sensible beings are not reconcilable. Though both parties call the class of sensible beings "muhdathah," they do not mean the same thing by such a term.

Again, Ibn Rushd maintains that the Ash^carites and the Aristotelians agree with regards to the second class of being, God: God for both parties is the uncaused eternal agent of all existents. It is true that both parties agree that God is uncaused, that He is eternal, and that He is the supreme "agent." But their metaphysical analysis of "agent," "al-fa^cil" differ in the extreme. As we have tried to show in the analysis of the first two debates, the Aristotelians' theory of the

world's eternity is the direct consequence of their concept of God as cause.²² Their proofs rest on the premises that God, the unchanging eternal agent, acts by the necessity of His nature and for the best, and that the world is the consequence of a God who by nature must cause. Moreover, He does not act directly on all existents. He acts through a series of necessary essential causes. And, furthermore, He acts in specified determined ways, determined not only by what is best, but also by the necessities inherent in things. This became clear in the fourth debate where the possible was identified by the Aristotelians with the potential. God cannot do the impossible: He cannot actualize what is potentially not there. God, who is the ultimate, though not direct, cause of the acorn's actualizing into an oak, cannot actualize the acorn into an apple tree.

But more fundamental than all that is the fact that for Ibn Rushd,²³ God is the agent only in the sense that He is the ultimate cause of all movement and the bestower of order to the universe. He does not produce the material world out of nothing.²⁴

²²In the third discussion the meaning of "fa'il" was debated: for al-Ghazālī it referred only to a voluntary agent who creates out of nothing, to the Aristotelians it meant "cause." See chapt. 1, pp. 14-16.

²³See chapt. iii, pp. 69-70.

²⁴Cf. Michel Allard, "Le Rationalisme d'Averroès d'Après une Étude sur la Création," Bulletin d'Études Orientales, IIV (1952-54), pp. 7-59. Allard agrees that Ibn Rushd does not advocate creation ex nihilo, yet argues that Ibn Rushd seeks a conciliation between the Aristotelian concept of God as cause and the Islamic concept of God as creator, that Ibn Rushd departs, particularly in his concept of God as cause of sensible things, from Aristotle, and that Ibn Rushd reaffirms the concept of "creation," though this is not creation ex nihilo. We cannot go into a detailed discussion of this study, but we will make the following observations:

1. Allard hardly touches on the four debates and bases his conclusions on statements elsewhere in the Tahāfut. This is strange for a

Against this, the Ash'arites vehemently argue that God does not act through any necessity in His nature. God is the omnipotent voluntary agent that acts directly. All change is direct creation out of nothing by God.

study of the problem of creation. It is in the metaphysical premises underlying these debates that the answer to the question of the relation of Ibn Rushd's view of God to the Qur'an must be sought. To point out that for Ibn Rushd God is a creator in that He is the cause of existence by being the cause of the composition of form and matter is not enough, even if it is conceded that this is a "departure" from Aristotle. The same applies to Allard's emanationist interpretation of Ibn Rushd's theory of forms. The real issues that separate him from the Ash'arites, and as we shall argue, from the Qur'anic view, is that God, in whatever other sense He is cause, causes the world by necessity, that He causes through a series of intermediary essential causes, that the world has inherent potentialities that God merely actualizes but cannot change. These are the issues al-Ghazali attacks as foreign to the Qur'an and which indeed are.

2. Most of the statements that Allard discusses are amenable to a strict Aristotelian interpretation. It is true that in the third discussion (TT, p. 151) Ibn Rushd voiced the puzzling statement that Aristotle held the theory that God brings the entire universe from non-existence to existence. This is a theory of eternal creation which Van Den Bergh criticizes as self-contradictory - self-contradictory that is, and this is not pointed out by Van Den Bergh, if the world is an Aristotelian world and God an Aristotelian God. See VB, 90:2. The statement of Ibn Rushd as it stands contradicts his general position. Later on, however, Ibn Rushd maintains that God is the cause of the composition of form and matter, and the cause of this composition is the cause of being (TT, p. 172), so that Ibn Rushd's previous statement can be interpreted to mean that God is the ultimate cause of the order and the succession of form over matter in the process of change from potentiality to actuality. Ibn Rushd prefers the words "continuous creation" to "eternity"; (Ibid.) But this need not be taken to mean anything beyond "continuous change from potency to act." Ibn Rushd often uses "none-existence" and "potency" interchangeably. For other observations on the problem of continuous creation, see Majid Fakhry, "The 'Antinomy' of the Eternity of the World in Averroes, Maimonides, and Aquinas," Le Muséon, LXVI (1953), pp. 139-155.

3. Allard does bring to light ideas in Ibn Rushd not spelled out in Aristotle's concept of God as cause. But these are developments and interpretations rather than "departures" from Aristotle. For Ibn Rushd was primarily an interpreter of Aristotle and sought, as a whole line of Aristotelian scholars unto the present day have sought, to interpret Aristotle when the latter was not clear in a manner consistent with the general Aristotelian position. The problem of God as cause still engages Aristotelian scholars. Cf. W.D. Ross, Review of Aristoteles Lehre vom Ursprung des Menschlichen Geistes, by Franz Brentano, Mind, XXIII, (April, 1914), pp. 289-291. Ibn Rushd was well acquainted with the writings of

Now, the Ash'arite theory of a created world was precisely endorsed to debunk the Aristotelian theory of God. For the theory of an eternal world, as we have remarked, is the direct consequence of the Aristotelian theory of God. To refute it, is to refute that the character of the Godhead is Aristotelian. Al-Ghazālī did not merely attempt to show that the Philosophers had not proved that the world is eternal, but attempted to prove that the world cannot be eternal and must be created in time. His motive is clear: God must be a voluntary agent, all powerful and transcendent, who creates out of nothing and not merely moves the world. For Ibn Rushd to maintain that the Aristotelians and the Ash'arites are in agreement here since they both acknowledge the eternity and prime agency of God, is sophistry. Although Ibn Rushd was candid and courageous relative to the religio-political circumstances of his time, he was still practicing the art of concealment.²⁵

We come finally to Ibn Rushd's treatment of the intermediate class of being, the world as a whole. A recapitulation of his position here is in order so that we do not lose the thread of thought: There is agreement here between the Ash'arites and the Aristotelians, according

such important Aristotelian commentators as Themistius and Alexander of Aphrodisias. In matters of interpretation, which is strictly a scholarly and philosophical activity, he would consult such people. Hence, even if it is conceded that Ibn Rushd "departs" from Aristotle in his concept of God as cause, we cannot conclude that Ibn Rushd in this departure was influenced by religious Islamic concepts without first studying what these commentators had to say. This Allard, by implication, dismisses as unnecessary.

²⁵ This art as practiced by al-Fārābī has been discussed by Leo Strauss. See Leo Strauss, Persecution and the Art of Writing, pp. 7-21.

Indeed, philosophy, according to Ibn Rushd, should be confined to philosophers. Its contents should not be revealed and discussed by the non-philosophers. He is angry at al-Ghazālī for, as it were, "letting the cat out of the bag," by bringing philosophical issues to the attention of everyone. See Faṣl, pp. 17-18.

to Ibn Rushd, in that both parties agree that time does not precede the world as a whole. The only difference is that for the Ash'arites past time is finite, while for the Aristotelians it is infinite. Inasmuch as the world as a whole for both parties is not preceded by time, it resembles the eternal God, who is likewise not preceded by time. Inasmuch, however, as the world as a whole requires an agent, it resembles the class of being that is apprehended by sense; the world of generation and corruption. Furthermore, both parties agree that future time is eternal. The world as a whole is not corruptible and hence in this respect also resembles the eternal God. Those who are more struck by its resemblance to the world of sensible objects call it originated, while those who are more impressed by its resemblance to the eternal God call it eternal. Ibn Rushd also draws a parallel between the Ash'arites and the Platonists who also uphold that past time is finite.

Here again, Ibn Rushd glosses over the fundamental differences. It is true that for the Ash'arites time does not precede the world. But that is so because time was created with the world at a finite temporal extension in the past from the present. Moreover, such a theory for the Ash'arites includes creation ex nihilo. What this theory implies constitutes all the fundamental differences we enumerated in our discussion of the other two classes of being. The Ash'arites cannot therefore call the world pre-eternal. The similarity between God and the world in that both are not preceded by time will not enable them to name it pre-eternal. As for Ibn Rushd's statement that both the Ash'arites and the Aristotelians believe in the future eternity of the world, the statement is inaccurate. The Aristotelians believe in the future eternity of the

world as a proven necessity: the Ash'arites merely maintain that this is a possibility, not a necessity.²⁶ Hence, the Ash'arites do not maintain that the world is eternal in the future. Their position is agnostic. Indeed, they were troubled and argued about the logical problem of how the world can be brought into non-existence.²⁷ For they believed that it can be brought into non-existence. Thus, Ibn Rushd cannot maintain, as he seems to imply, that the Ash'arites believe that the world as a whole is incorruptible.

The motives of Ibn Rushd in drawing the parallel between Ash'arism and Platonism are not difficult to extract from the general tenor of his argument. He wants to show that even the Ash'arites subscribe to views held by the ancient pagan philosophers. However, though there is an admitted similarity here, the similarity is deceptive. The similarity lies in the fact that the God of Plato is an artificer and hence closer to the Islamic (as well as the Christian) concept of God. But the Ash'arite God and the Platonic God are not one and the same. Indeed, here again we find fundamental metaphysical differences between the two concepts of God. First and foremost, the God of Plato's Timeaus does not create ex nihilo. He forms the pre-existing space-matter, and He forms such a world according to patterns outside him and eternal. Inasmuch as the Platonic God creates according to eternal patterns outside him, he is in this sense limited. Secondly, the God of Plato is not omnipotent in that His creative act is limited by the nature of the material with which he works. The sensible things he forms in accordance with the ideas can

²⁶ Supra, chaps. i, p. 30; ii, p. 51.

²⁷ Supra, chapt. i, p. 30 ff.

never be perfect duplications of these ideas. He forms things as best He could from "what is not so fair and good."²⁸ It should also be added that Plato's God acts because He is good and has no jealousy.²⁹ The emphasis is on the goodness of God. The Ash'arites, emphasize God's power.

Ibn Rushd's third argument³⁰ in his defense of the theory of the world's eternity against the charge of irreligion, seems to be the strongest. He points out, correctly, that the theory of creation ex nihilo is not found in the Qur'an. Neither the Aristotelians nor the Ash'arites take the words of the Qur'an describing creation literally.³¹ The Ash'arites take the Qur'anic words that refer to water and smoke preceding creation as metaphorical discourse,³² while the Aristotelians do not take literally the assertions to the effect that the world was created in six days; they deny temporal creation. Thus, the Ash'arites inasmuch as they themselves depart from the literal sense of the scriptures, cannot accuse the Aristotelians with irreligion for doing the same thing. But the question here is: do the Ash'arites level the charge of irreligion because the Aristotelians depart from the literal meaning of the Qur'an in the passages that describe creation? Moreover, one must ask: why did the Ash'arites endorse and elaborate a theory of creation ex nihilo not spelled out in the Qur'an?

²⁸Timaeus, p. 53. ²⁹Ibid., p. 29.

³⁰Faṣl, p. 13; Manāḥij, pp. 89-90.

³¹As Léon Gauthier remarked concerning the problem of creation in general, neither the eternity of the world nor creation ex nihilo are primitive concepts. Léon Gauthier, Ibn Rochd (Averroès), (Paris: Presses Universitaires de France, 1948), p. 189.

³²Qur'an, xi:9, xli:10.

As for the first question, it is clear from our analysis of the four debates that al-Ghazālī objected to the theory of an eternal world, not because the theory did not conform to the literal words of the Qur'ān in those passages that describe creation, but because of what such a theory implied regarding the nature of God. He did not oppose it because it was an interpretation, but because it was the wrong interpretation. The God of a world, demonstrably eternal, is Aristotle's God, not the God of the Qur'ān. As to the second question, the answer is that the Ash'arites endorsed and elaborated a theory of creation ex nihilo precisely in order to preserve the concept of an all-powerful God emphasized in the Qur'ān. Muhammad preached stark monotheism against Arabian paganism and against Christianity as he understood it. This one God was all-powerful and transcendent, yet in complete control directly of everything existent. The concept of an all-powerful God must also be understood in terms of the political and religious circumstances of Arabian Islam, Islam, that is, in its Arabian purity. The struggles of Muhammad became political and military. Those who opposed him will not succeed because the all powerful God will judge and punish them both in this life and the next.

Thus the concept of the all powerful transcendent one God is very dominant in the Qur'ān. We find that Muslim theology concerned itself primarily with this problem.³³ The Ash'arites carried the con-

³³The problem of free will which occupied the attention of Muslim theology arises from the problem of God as all powerful. See Majid Fakhry, "The Mu'tazilite View of Free Will."

Islamic theology concentrated on this problem and neglected to elaborate a doctrine of man. Islam in its profoundest sense is the anti-thesis of "jahil," the state of self-centeredness, arrogance, violence, particularism, tribal chauvinism, hedonism, and pessimism, expressed in the pre-Islamic poetry. All this is cast away when man surrenders himself to God. This aspect of Islam was not elaborated as a theology.

cept of an omnipotent God, found in the Qur'an, to its logical extreme. God was everything; the world nothing.³⁴ Their occasionalist metaphysics was constructed to uphold this notion of God. Their metaphysics of the fleeting atoms, ingenious as it was, was not philosophically or scientifically motivated. Hence, Maimonides' indictment:

The earlier theologians . . .³⁵ when they laid down their propositions did not investigate the real properties of things; first of all they considered what must be the property of things which should yield proof for or against a certain creed.³⁶

Moreover, their natural theology is philosophically indefensible. Ibn Rushd with good reason argues that the Ash'arites could not infer the existence of God if they deny the natural world necessary order and necessary causation.³⁷ Indeed, the Ash'arites can only argue for a first agent as a fact given by revelation. The world is constructed by them to accommodate that fact.

If the Ash'arites are to be criticized as theologians, the criticism cannot be that in their theory of creation ex nihilo they expounded a God foreign to the Qur'an. For the God of the Qur'an is a powerful, transcendent personal God. They can be criticized in that they stressed only this aspect of the Godhead. For the God of the Qur'an is a compassionate and a wise God. They, moreover, did not articulate and formulate the central opposition between Islam and "jahl" and thus did not give a theory of man in Islamic terms.³⁸

³⁴Louis Gardet, Le Pensée Religieuse d'Avicenne (Ibn Sina), p. 68.

³⁵Maimonides speaks about the early theologians both Christians and Muslims. His criticism is pertinent to Ash'arism also.

³⁶Maimonides, The Guide for the Perplexed, p. 68.

³⁷TT, p. 519; Manāhij, pp. 85-86.

³⁸See above, n. 32.

Ibn Rushd justifies his interpretation in that God is wisdom. The world is a manifestation of God's wisdom and knowledge. Indeed, the scriptures urge us, according to Ibn Rushd, to consider the handiwork of God in nature. Now it is true that the Qur'ān abounds with teleology. But the teleology of the Qur'ān is not Aristotelian teleology as Ibn Rushd would want us to interpret it, and cannot be so. For an Aristotelian teleology centers around the prime mover, who is a final cause, thought thinking thought, and moving the universe by being the object of desire. The universe has inherent characteristics of its own with which God does not tamper. He simply actualizes. Indeed, for Ibn Rushd the wisdom of creation consists in the necessity with which things are related.³⁹ Such a world cannot be other than it is. God who is the ground of the order of the universe cannot tamper with this order. Such a God is not the God of the Qur'ān.

The teleology in the Qur'ān has to be understood in terms of the religious temperament of the founder of Islam. First of all, the concept of nature in the Qur'ān, relative to what preceded it in Arabic literature, is revolutionary. In pre-Islamic poetry there is neither mysticism nor teleology.

In the Qur'ān we find a totally different attitude. In the apocalyptical early Meccan sūras, the descriptions of nature inspire terror and the sense of doom. Nature also becomes the vehicle of mystical symbols as in the sūra of light. But the dominant theme with respect to nature in the Qur'ān is that it is an "āyah," a sign, a manifestation of the glory and power of God, and particularly the power of God the judge who rewards and punishes:

³⁹IT, pp. 519 ff.

Verily in the creation of the heavens and the earth, and in the alternation of night and day are signs for those of insight; who remember Allah, standing and sitting (lying) on their sides, and meditate on the creation of the heavens and the earth: "O our Lord, thou hast not created this in vain; glory be to thee! protect us from the punishment of the Fire."⁴⁰

In the Qur'an, the heavens, to be sure, declare the glory of God, but they often declare it as a reminder of the power of God the judge who punishes and rewards. The descriptions of nature are associated with the figure of God the judge so dominant and pronounced in the Qur'an. Promises of reward and punishment in the afterlife are basic to Muhammad's message. The world with its wonders is a manifestation of a powerful God who can and will raise the dead, judge them, reward or punish them in accordance with their performance in this world.

But in Ibn Rushd's scheme of things, there is no place for this concept of God the powerful judge. To begin with, as the analysis of the debates reveals, God for Ibn Rushd is removed from the direct concerns of men. Secondly, there is no place for the day of judgment in Ibn Rushd's theory of immortality. Not only does he deny bodily resurrection, but he denies individual immortality. At least, in the philosophy of Ibn Sīnā, even though heaven and hell derive more from the pages of Aristotle's Ethics and De Anima than the pages of the Qur'an, individual immortality of souls is maintained. For Ibn Rushd, only the active intellect, common to all rational men, is eternal and separable. The rational soul, according to Ibn Rushd, consists of two parts or aspects, the practical and the theoretical. It is the practical faculty that is responsible for all moral action. But this practical faculty,

⁴⁰ Qur'an, III, 187-89, Bell's translation: Richard Bell, The Qur'an (Edinburgh: T. & T. Clark, 1937), p. 64.

together with all the lower parts of the soul that include memory, do not survive death.⁴¹ The message of Muhammad is a moralistic message. The scriptural passages that describe reward and punishment in the after-life are of the very essence of that message. Individual immortality is a fundamental doctrine. Yet we find that Ibn Rushd regards the numerous descriptions of reward and punishment as mere prescriptions to keep the masses orderly.⁴² They have no theological significance and are not to be taken at their face value. In effect, Ibn Rushd repudiates the concept of God the judge, so dominant and insistent in the Qur'an.

If the study of the four debates brings out anything at all, it brings out the fact that Ibn Rushd's God is not the God of the Qur'an. The question of the relation of Ibn Rushd to Islam which has occupied many a scholar should not play down this fact. It would be a mistake to interpret Ibn Rushd's words in Faṣl concerning the world's eternity as some sort of attempt at synthesis between the scriptural view as interpreted by the Ash'arites and the Aristotelian view. Unlike St. Thomas Aquinas, Ibn Rushd did not undertake a reconciliation between the scriptural view of God and the world and the Aristotelian view.⁴³ A reconciliation would recognize the discrepancy between the two views and would obtain through a modification of one of the two views or of both. Ibn Rushd did not recognize the discrepancy. There was one true view, the Aristotelian. The Qur'anic view was merely a popular expression of the Aristotelian view in language comprehensible to the masses. Only

⁴¹Ibn Rushd, Talkhīs Kitāb an-Nafs, p. 70.

⁴²TT, pp. 580-86.

⁴³See Majid Fakhry, Islamic Occasionalism and its Critique by Averroës and Aquinas. Professor Fakhry's thesis is that Aquinas brought about the synthesis that preserved the concept of a unique personal God the occasionalists argued for and the Aristotelian concept of a rational order in nature.

the select few had proper understanding of the correct view.

The Ash'arites, on the other hand, felt this discrepancy very keenly and articulated it in their metaphysics of contingency, an occasionalism irreconcilable (as it stands) with Aristotle's metaphysics. Their arguments for a world created in time and out of nothing embodied their metaphysics. In his Tahāfut and Manāhij, Ibn Rushd attacked Ash'arite occasionalism as irrational and impossible, and hence, by implication, not representative of the scriptural view. But the Ash'arite view was gaining acceptance and Ibn Rushd was on the defense. In Faṣl he strove in his defense of the doctrine of an eternal world to conceal the real discrepancy between his views and those of the Ash'arites. Ibn Rushd's words in the passage we discussed where he glossed over the real differences between the Aristotelians and the Ash'arites, belong to the literary art of concealment.

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