Averroes: God and the Noble Lie

Richard C. Taylor

Marquette University, richard.taylor@marquette.edu

While Averroes has certainly been a central figure in Western reflections on the history of ideas since the nineteenth century—and before that in the scholastic tradition even if only to be often attacked and, as it were, “refuted” by Christian medieval thinkers—since the mid-nineteenth century he has also been regarded among Arabic writers as an important figure confronting the advancement of Western scientific culture with its attendant economic benefits, in contrast with the lack of such advancement in the Arab world, where religious fundamentalism in various forms has often played a central role in society. This latter use of the thought of Averroes by modern Arabic writers has been documented by Anke von Kügelgen in her work on twentieth-century “Arab Averroists.” Recently this sort of interest has allied itself with somewhat different goals of modern Western humanism to set forth the characterization of Averroes as an Enlightenment figure, that is, as prefiguring and perhaps contributing to the rise of the views central to the Western Enlightenment movement. Both modern Arabic writers and Western humanists praise Averroes for his stance on the connection between religion and philosophy which they view as “enlightened” and which philosophically might be considered a form of compatibilism.

What Averroes is praised for, in this context, is his account of the compatibility of Islamic religion and philosophical rationalism as found in his famous Faṣl al-Maqāl or Decisive Treatise. There he sets out his understanding of human religious psychology in a way which allows for the reading of religious texts on multiple levels in accord with the capacities of the readers, some being of the rhetorical class who are only able to consider scripture literally, others of the dialectical class who are able to approach and
understand scripture in the context of preconceived notions or assumptions, and finally a last group who are able to consider scripture in accord with truth in its highest form, demonstrative argumentation. The Qur’an is taken as being suitable for all three classes but with the proviso that those expounding religious doctrine not confuse the masses by exposing them to interpretations which they cannot understand and which may consequently lead them astray in their religious belief so important to proper moral character and a fulfilling and happy human life. Although groundwork for such a view can be found in the writings of al-Farabi and Avicenna, Averroes spells it out in detail and adds critiques directed at the literalists, who would have all people read scripture literally, and the Mutakallimun, dialectical theologians, who would have all people reason on the basis of assumptions about the nature of God and creation. For Averroes, such ways of proceeding not only have their own intrinsic problems but are deeply inappropriate because they fail to respect the abilities of the diverse intellectual classes and may lead to confusion on the part of simpler believers who are unable to understand that scripture is to be read differently by individuals of differing levels of insight and understanding. Some have characterized this as a view which highlights philosophical reflection in the context of “a plurality of rationalities,” while others understand Averroes to be holding that

there is no privileged access to the nature of reality which represents how things really are. The ordinary person has just as valid a grasp of how things really are as does the philosopher or religious thinker, provided that the ordinary person is able to use concepts which connect with that reality in a loose way.

Although Arabist scholars have almost universally denied that Averroes’ own teachings entail a doctrine of Double Truth, understood in this way Averroes might be held to have taught in fact what in the Latin West came to be called the doctrine of Double Truth. The present essay explores Averroes’ understanding of God and in doing so employs a different methodological approach, one more traditional than the two cited above, one founded on Averroes’ foundational statement in the Fasl al-Maqâl on the nature of truth. There, in the religious context of that legal determination of “whether the study of philosophy and logic is allowed by the [Religious] Law, or prohibited, or commanded—either by way of recommendation or as obligatory,” Averroes writes,

Now since this religion is true and summons to the study which leads to knowledge of the Truth, we the Muslim community know definitively that demonstrative study does not lead to [conclusions] conflicting with what Scripture [or Religious Law] has given us; for truth does not oppose truth but accords with it and bears witness to it.
As I have shown elsewhere, this remark that “truth does not oppose truth but accords with it and bears witness to it” is a paraphrasing quotation of Aristotle’s *Prior Analytics* 1.32, 47a8–9; “For everything that is true must in every respect agree with itself.”

In accord with this statement by Averroes, in the present article I assume that religion and philosophy are able to intersect and that propositions asserted about God, human beings, and the world are open to the possibility of contradicting one another in such a way that one is false and the other true. Averroes recognizes both this intersection and the methodological priority of philosophy when in his *Faṣl al-Maqqāl* he asserts that scriptural interpretation which is in conflict with demonstrated truth must be set aside as incorrect and the text in question must be interpreted allegorically. If that is the case for Averroes, it may well be that purportedly “true” statements in religion about God and purportedly “true” statements in philosophy about God should be ranked and compared with reference to their full truth since “truth does not oppose truth but accords with it and bears witness to it.” Certainly this is in agreement with his view expressed in the *Faṣl al-Maqqāl* where he argues that it is known that demonstrative philosophical arguments do not conflict with Scripture or Religious Law. And if that is so, it may be quite appropriate to consider in the thought of Averroes whether purportedly central principles and foundational pillars of religion concerning the nature of God are in fact compatible with truths about the deity grounded in philosophical argumentation.

In presenting Averroes’ philosophical understanding of God I am making two assumptions. The first is the one to which I refer just above, namely the falsity of the notion that there are two truths, one for philosophy and one for religion. My second assumption is that truth in its fullest for Averroes is to be found in his philosophical writings. This is founded on his statement in the *Tahāfut at-Tahāfut* (*Incoherence of the Incoherence*) where he explains that the accounts and discussions in that work are dialectical in nature and that for a full account one must turn to his technical demonstrative works written for students of demonstration. I understand this to mean that the truth in the fullest sense is to be found in his philosophical works and particularly in his Aristotelian commentaries where he asserts there to be demonstrations.

All this is the theory of the philosophers on this problem and in the way we have stated it here with its proofs, it is a persuasive not a demonstrative statement. It is for you to inquire about these questions in the places where they are treated in the books of demonstration, if you are one of the people of perfect eudaemonia, and if you are one of those who learn the arts, the function of which is proof. For the demonstrative arts are very much like the practical; for just as a man who is not a craftsman cannot perform the function of craftsmanship, in the same way it is not possible for him who has not learned the arts of demonstration to perform the
function of demonstration which is demonstration itself: indeed this is still more necessary for this art than for any other—and this is not generally acknowledged in the case of this practice only because it is a mere act—and therefore such a demonstration can proceed only from one who has learned the art. The kinds of statements, however, are many, some demonstrative, others not, and since non-demonstrative statements can be adduced without knowledge of the art, it was thought that this might also be the case with demonstrative statements; but this is a great error. And therefore in the spheres of the demonstrative arts, no other statement is possible but a technical statement which only the student of this art can bring, just as is the case with the art of geometry. Nothing therefore of what we have said in this book is a technical demonstrative proof; they are all non-technical statements, some of them having greater persuasion than others, and it is in this spirit that what we have written here must be understood.\[^{15}\]

And, following Aristotle closely in his *Long Commentary on the Posterior Analytics*, Averroes asserts that a demonstration is a syllogism proceeding on true premises to produce knowledge and which is such that the very grasp of the syllogism is that knowledge. In his *Long Commentary on the Posterior Analytics* Averroes stresses that, without true premises known to be such and the other conditions of the premises required by demonstration, the syllogism will not be a demonstration.\[^{16}\] He says that such an argument will be a dialectical syllogism, a rhetorical syllogism or a sign\[^{17}\] and will not be *al-yaqin alladhi fi al-ghayah/secundum maximam veritatem*.\[^{18}\] I understand this to be in accord with my first assumption.

**Averroes on God**

While Avicenna proceeds to indicate the existence of God or the Necessary Being on the basis of the mind’s grasp of the notion that all reality is divided into the possible and the necessary,\[^{19}\] Averroes follows Aristotle in beginning his philosophical account from the physical world and its need for an ultimate cause of motion. For Averroes it is the science of physics, which includes cosmology, that establishes the ground of the eternal motion of the heavens. Aristotle’s requirement of eternal motion which as necessary cannot be otherwise led him to assert the existence of a plurality of unmoved movers with one among them understood to be first. Working within a conceptual framework affected by the mixture of Aristotelian and Neoplatonic thinking together with religious thought on the nature of God, Averroes followed and expanded on Aristotle. For Averroes the celestial bodies have an indestructible matter free of contraries and contain potency only for movement. Herbert Davidson explains this by saying,
The heavens must instead be construed as a body of a completely different type, consisting in the association of a simple matter-like substratum in motion, and an independently existing immaterial form moving the substratum. The matter-like substratum exists necessarily by virtue of itself, and the form is a source of infinite power whereby the substratum moves eternally. 

The form to which Davidson refers is the immaterial and incorporeal soul which is associated with the celestial body. This soul has in turn a separate intellect as its extrinsic final cause. In his Aristotelian philosophical context, Averroes continues to hold that the immaterial intellects as such are not efficient causes of the motion in the celestial bodies. This, however, is as far as the science of physics can proceed in this investigation since physics has as its subject matter bodies and their accidents of motion. Physics is concerned with what has in itself its own principle of motion and rest (Physics 2.2, 192b14) and hence cannot then have as its subject matter incorporeal and immaterial substances which are not subject to motion and rest.

Aristotle, in Metaphysics 6.1, argues that unless the existence of immaterial entities is established, first philosophy will be physics. But Aristotle and Averroes do consider that they have shown the necessity of the existence of immaterial entities and so proceed to consider what we call metaphysics to be first philosophy. Now, while Aristotle quickly moved in Metaphysics Lambda to assert that the plurality of unmoved movers must each be immaterial and consequently intellectual, Averroes is apparently aware of the necessity of another step in this account. For Averroes, psychology, a branch of physics which bridges to metaphysics, must play a role here.

In both his Long Commentary on the De Anima and in his Long Commentary on the Metaphysics, Averroes asserts the necessity of the use of the science of psychology to make possible the understanding of the natures of the immaterial entities to which physics ultimately points. What are the essential elements in his arguments for this position? First, it must be assumed that human beings do have knowledge, that is, an actuality somehow in them for classifying particulars in groups, something we call a grasp of the universal. Such an actuality existing as a power in human beings is for Averroes and Aristotle an immaterial actuality. Second, Averroes understands (a) that the universal nature of this requires that it not be such as to take place in an individual entity, since, as particularized by the individual in which it exists, it would not be an intelligible in act, that is, an understood universal, and also (b) that discourse and interpersonal communication on intellectual issues would not be possible unless there is a single shared science or a thesaurus of forms in which all human beings share or to which all refer in thought and discourse. On the basis of this, then, Averroes asserts that there must be a separate Material Intellect and a separate Agent Intellect actualizing it, shared by all human beings, and that these separate intellects, although immaterial
entities, nevertheless must be considered as part of human nature by way of an operational linking rather than as ontological parts of human beings.24

Additionally entailed in this understanding are four conclusions relevant for consideration of Averroes' understanding of God which can be drawn from this discussion. First, in this demonstrative account there is no basis for asserting personal immortality for individual human beings, that is, there is no provision in his metaphysical account of human beings and their relationship to the separate Material Intellect and Agent Intellect for individual human beings to have any existence after earthly life.25 In the penultimate discussion of the Tahafut at-Tahafut, Averroes does provide arguments for the continued personal existence of the soul after death by way of a transmigration of individual souls to celestial matter. But such a view contradicts basic Aristotelian principles of psychology to which Averroes adheres and is clearly only a dialectical argument the conclusion of which is not known to be necessary or true. That is to say, Averroes in the dialectical context of the Tahafot does not take that argument for personal immortality seriously but rather merely sets it forth for those who wish to find some grounds for believing in personal immortality.26

Second, for Averroes only the human species is argued to be eternal and that argument is asserted on the basis of the eternality of the separate intellects. The separate intellects as immaterial and therefore incorruptible are understood to have no beginning and no end to their existence. While the existence of the Material Intellect is asserted by Averroes on the basis of human knowledge understood as indicated above, once it is established as separate and eternal, its existence as such is used to argue that its eternal nature as recipient of intelligibles in act also entails the eternality of the human species. This works as follows. The senses affected by sensible objects provide the imaginative powers of the soul with images which, while always essentially particular, are then refined with as much particularity removed as possible. The results are denuded intentions (which are nevertheless still particular intentions) then presented to the Agent Intellect for transformation by its "light" into universal intentions now constituting knowledge. In that process these are impressed upon the separate Material Intellect which is the thesaurus which all human beings share in the unity of science.

Third, this establishment of the existence of the separate Material Intellect and Agent Intellect as immaterial entities, which are intellectual in nature, proves that immateriality and intellectuality coincide. This is something Averroes could have argued from the general Aristotelian account of the relationship of form and being, since for Aristotle substantial form and substantial being as investigated in Book Zeta of the Metaphysics are shown to coincide and to be mutually entailed in any actually existing entity.27 This entails that all that has form has intelligibility, that is, is an intelligible object. On this basis it could be further argued speculatively that any actually
existing separate form must, as existing in act, be an intelligible not in potency but in act and that it must be so in virtue of itself, that is, its essence. Hence, any actually existing separate form must be both intelligible and intelligent in virtue of itself. This is what Aristotle asserts in Book Lambda of the *Metaphysics*.28 For Averroes it is psychological theory which provides the evidence for such a position. In this way Averroes is able to assert that psychology is essential to the explication of the nature of metaphysics and its assertion of immaterial unmoved movers as intellectual entities.

Fourth, on his understanding of the Material Intellect as an intellectual substance into which are deposited forms derived from sense perception and purified by the light of the Agent Intellect, Averroes establishes that it is possible for there to be some sort of potency in separate immaterial intellectual entities. This is a doctrine which he cites in his *Long Commentary on the De Anima*:

... as sensible being is divided into form and matter, intelligible being must be divided into things similar to these two, namely into something similar to form and into something similar to matter. This is [something] necessarily present in every separate intelligence which thinks something else. And if not, then there would be no multiplicity [410] in separate forms. And it was already explained in First Philosophy that there is no form absolutely free of potency except the First Form29 which understands nothing outside itself. Its being is Its quiddity (*essentia eius est quiditas eius*). Other forms, however, are in some way different in quiddity and being.30 If it were not for this genus of beings which we have come to know in the science of the soul, we could not understand multiplicity in separate things, to the extent that, unless we know here the nature of the intellect, we cannot know that the separate moving powers ought to be intellects.31

These conclusions, which he understands as demonstrative, allow Averroes to assert that among the plurality of separate immaterial unmoved movers established by physics, there can be understood to exist a hierarchy of intellectual entities having less or more potency in them. At the pinnacle of the hierarchy is the first of these entities, God or the First Cause and First Form, who has no need in any way of anything outside Himself and is in complete actuality without potency in any sense. All the other intellects in the hierarchy, however, while being substances per se eternal and incapable of destruction, nevertheless are understood by Averroes to have some potency in them and to be classified in the hierarchy according to their intellectual powers. There are two considerations to be noted here. The note of potency found in all but the First, for Averroes, seems to be tied to the fact that in all below the First there is contained a reference to something outside themselves, namely a reference to the perfect and completely actual First Cause. That is to say, the separate intellects other than the First are not absolutely simple and have some sort of composite—albeit still intellectual and
immaterial—nature as a consequence of their need to think something outside themselves. They are “composite things [which] surpass one another by the lack of composition and their proximity to the simple and the first in this genus.” Averroes uses this to explain that in comparison with the First they are of a lower ontological status and that their intellectual powers are proportional to their “proximity” to the First. But for my purposes here I will focus on the nature of this First, known as God.

Averroes follows Aristotle in asserting that the First Principle or God is self-thinking thought, a conclusion which is also suitable in regard to all other immaterial intellects in the hierarchy. But God’s case is unique in that He does not have within His nature any comparison to anything outside Himself. All other entities have a relation to God while God has no relation or comparison to other entities. But does this mean that God has no knowledge of anything outside of Himself, no knowledge of particulars or, for that matter, of universals? If such is the case, of course, God would per se have no particular providence and perhaps also no universal providence, at least in the meaning which those words have in a religious understanding which entails divine intention in regard to creatures for their benefit.

In his *Long Commentary on the Metaphysics*, Averroes asserts that God has knowledge which is properly understood as neither of particulars nor of universals. He writes,

> The truth is that because it knows only itself, it knows the existents through the existence which is the cause of their existences. . . . [T]he First . . . is He who knows absolutely the nature of being qua being, which is His essence. Therefore, the word “knowledge” is said of His knowledge and our knowledge by homonymy. For His knowledge is the cause of being and being is the cause of our knowledge; and His knowledge cannot be described as universal, nor as particular, for he whose knowledge is universal knows potentially the particulars which are in actuality and the object of his knowledge is of necessity knowledge in potentiality since the universal (knowledge) is only knowledge of particular things; if the universal (knowledge) is knowledge in potentiality and there is no potentiality in His knowledge, then His knowledge is not universal. A clearer (argument) is that His knowledge is not particular, because the particulars are infinite and no knowledge encompasses them; He is not characterized by the knowledge which is in us, nor by the ignorance which is its opposite, just as that which is not fit to possess any of these two (knowledge and ignorance) is not characterized by the knowledge which is in us, nor by the ignorance which is in us, and whose existence is not distinct from his knowledge has thus become evident.¹³

In this context it is worth recalling that the attribution of knowledge to God in the first place is a consequence of the assertion that immaterial entities are necessarily intellectual entities, something I have shown is based on Averroes’ arguments in psychology.
As an intellectual entity which cannot be merely in potency but must necessarily exist as an actuality of activity, God must then be exercising in complete actuality, eternally, an intellectual activity. Since intellectual activity is knowing, God is eternally active in knowing with the object of His knowing being Himself. Hence, it is clear that God’s activity should be characterized as knowing on the basis of the view that any immaterial activity must be an intellectual activity of knowing. But, as Averroes himself indicates in the quotation just cited, the predicate “knowing” when said of God does not have the conceptual content which it does in the two forms of knowing of which we have experience. That is to say, we do not know the predicate to assert anything more than that God has an immaterial activity which should be intellectual and thereby should be classified as knowledge, since every intellectual activity is suitably called knowledge. The predicate asserted of God is true, but we do not have sufficient understanding of the conceptual content of the predicate so as to apply it with any more meaning than “God has an immaterial activity which should be intellectual and thereby should be classified as knowing.”

Critical consideration also has to be given to his assertion that God “knows the existents through the existence which is the cause of their existences.... [T]he First... is He who knows absolutely the nature of being qua being, which is His essence.” If we can talk about God’s knowledge in any meaningful sense, something which is highly questionable on this account, we have to say that God’s knowledge of His essence does not necessarily involve his knowledge of what is per accidens consequent upon His essence. When he writes, “The truth is that because it knows only itself, it knows the existents through the existence which is the cause of their existences,” Averroes is stressing not that God knows the world and its many parts or even that God knows anything outside himself. Rather, God, who is final cause for the universe and all its beings, knows only Himself, as Averroes repeatedly stresses in the Long Commentary on the Metaphysics. When Averroes asserts that God “knows the existents” this must not be taken literally but must be understood in conjunction with the rest of the sentence, “through the existence which is the cause of their existences.” For Averroes the predicate “Creator” is said of God not because of a divine activity of creation ex nihilo by some form of efficient creative causality, something rejected by Averroes on philosophical grounds, but because of a relation of final causality on the part of the world relative to God. But, while it makes sense in Averroes’ account to hold that final cause and formal cause coincide in the being of God, God’s role as final cause of the universe does not entail that He know the forms of things in the universe in any direct way or even in any indirect way. That would perhaps be possible if God were the efficient cause of those things and if this efficient causality in the emanative creation of things—something completely unknown in the thought of Aristotle—were properly established to be understood along the lines of Aristotle’s account of the causing of
motion in Physics III\textsuperscript{37} where he asserts that the actuality of the agent as cause (the mover) is in the patient (the moved) and traceable to the agent which possessed actually what the patient possesses only potentially prior to the action.\textsuperscript{38} Indeed, that might open the door to a doctrine of naming of God as cause through a doctrine of analogy asserting that the effect is revelatory of its cause. In knowing Himself God could perhaps be argued to know what emanates from Him or what is created by Him. But such cannot be the case for Averroes since his philosophical account of God identifies God only as final cause for other things.\textsuperscript{39} For a doctrine of analogy to function here, the actuality of the agent would have to come about in the patient, something which occurs only in efficient causality. God does not pre-contain the forms of the world for Averroes. Rather, the beings of the world are drawn to God as final cause of all and so God's role as extrinsic final cause draws them toward the perfection possible for them in virtue of the forms already present in them. God does not create the forms of the world but rather only draws them toward their perfection.\textsuperscript{40}

Thus, God does not know the world since His activity is fully and totally self-contained. What is more, it makes no sense to say that by His self-knowledge God has either universal or particular intention in relation to the world if intention requires knowledge. Does this mean that God has no providence in relation to the world? On this notion Averroes holds that all that exists below the celestial bodies is receptive of the providence of the celestial bodies responsible for guiding the world.\textsuperscript{41} He then writes,

> It must be known to you that this is Aristotle's view concerning providence, and that the problems arising about providence are solved by (his view); for there are people who say that there is nothing for which God does not care, because they claim that the Sage must not leave anything without providence and must not do evil, and that all his actions are just. Other people refuted this theory through the fact that many things happen that are evil, and the Sage should not produce them; so these people went to the opposite extreme and said that therefore there is no providence at all. The truth in this is that providence exists, and that what happens contrary to providence is due to the necessity of matter, not to the shortcomings of the creator.\textsuperscript{42}

God's providence in reference to the world means nothing more than what is consequent upon His nature as most perfect being toward which all reality strives by final causality. God has no relation to and no knowledge of the world, but the world is related to God on the principles which Averroes employs in his demonstrative accounts. This does not mean that there is no providence in any sense, but only that providence in behalf of the changing world below the sphere of the moon is constituted in the effects of the celestial bodies and movements on the world. They have no
intention in relation to the world; rather, their intention is in relation to their final
causes. Providence, when said of the activity of the celestial bodies and their motions,
means the reception of beneficial influence from a higher cause to the extent that this
influence is not hindered “due to the necessity of matter.” In this account providence
and intentional action are fully distinct. If the concept of providence necessarily
entails intentional action, God is not in fact providential. However, Averroes can assert
that the predicate “providential” can be said of God insofar as the effects of God’s final
causality provide benefit to the world by drawing the world and all its beings toward
the perfection of God, the most perfect being in the universe. This is all that his
demonstrative account of Divine “providence” will allow. If others understand “provi­
dence” to entail other meanings on the basis of the religious views which they bring
to their consideration of the notion, that is because of their philosophically unfounded
assumptions based on religious beliefs.

Averroes’ discussion of religion in the *Tahafut at-Tahafut* seems to proceed in
accord with this. There he explains that in the case of human beings who, like all the
rest of the universe, are related to God, God’s final causality involves religious activity
on the part of human beings for whom

the religions are, according to the philosophers, obligatory, since they lead toward
wisdom in a way universal to all human beings, for philosophy only leads a certain
number of intelligent people to the knowledge of happiness, and they therefore have
to learn wisdom, whereas religions seek the instruction of the masses generally.43

The value of religion, then, is to be found in the intrinsic fulfillment to which it leads
all human beings, namely, happiness. This is why

all the learned hold about religions the opinion that the principles of the actions
and regulations prescribed in every religion are received from the prophets and
lawgivers, who regard those necessary principles as praiseworthy which most incite
the masses to the performance of virtuous acts.44

These two quotations taken from his *Tahafut at-Tahafut* emphasize the importance of
religious duties and activities as contributing to human perfection and the attainment
of happiness, the human version of the perfection which each entity seeks in its striving
in final causality toward the perfection of God. These dialectically argued views are in
accord with those found in his demonstrative accounts of these matters as just discussed.

Averroes’ philosophical account of God follows upon Aristotelian principles and
reaches a conclusion fundamentally the same as that of Aristotle. This can be dis-
cerned if one takes his methodological suggestions seriously and looks to the demonstrative arguments of his commentaries on Aristotle for the philosophical account. This entails setting aside the literal understanding of the rhetorical and dialectical accounts of religions when truth is sought in its fullest sense, al-yaqin alladhi fi al-ghāyah/secundum maximam veritatem. Those religious accounts are not without value since they serve the practical function of leading human beings to the moral virtue which is necessary for human happiness and which is necessary for the perfection of the intellectual virtues by which human happiness in its fullest can be attained. The fullness of moral virtue requires the involvement of the community and so too intellectual virtue in its fullness also requires the support of the community insofar as moral excellence is presupposed by intellectual excellence. In this sense religion, in supplying for the community “necessary principles as praiseworthy which most incite the masses to the performance of virtuous acts . . .” makes intellectual fulfillment possible. In this sense the principles of religion can be regarded as “true” insofar as they contribute to the welfare and happiness of human beings, something quite in accord with Aristotle who holds that practical truth involves “truth [which] is in agreement with right desire.” In accord with this, the religious proposition asserting God’s providential interest and involvement can be regarded as “true” in the sense of being practically valuable in guiding human beings toward moral virtue, while it is in fact not proven true since the demonstrative philosophical account has no provision for providential action of an intentional nature by God in relation to the world. Taken literally the religious proposition may be false and certainly is insufficiently grounded in demonstrative philosophical argumentation for its truth to be asserted. But, of course, the consequences are stronger than that. The common religious proposition which asserts God to have an interest in the world and to have a providential relation to the world is in fact false for Averroes because demonstrative argument about God’s nature and providence shows that God knows only Himself. While the world is related to God in a relation of dependence, the philosophical account holds that God is not related to the world and has no intentionality in relation to the world with the consequence that providence cannot be predicated of God as al-yaqin alladhi fi al-ghāyah/secundum maximam veritatem. For Averroes, then, this would be a situation in which a religious proposition is in contradiction with a demonstrated philosophical proposition. Thus, just as he holds that there cannot be correct interpretation of Scripture which is in contradiction to demonstrated philosophical propositions, so too religious propositions derivative on Scripture or generally accepted religious belief cannot be true if they are in contradiction with demonstrated philosophical propositions.

The philosopher Averroes’ support of religious statements in Scripture and Religious Law which affirm such common doctrines as universal and individual providence may in some sense be an acknowledgment of a plurality of rational ways to approach
reality but surely is not an instance of a genuine support for a theory of double truth. Averroes' views on the priority of demonstrative argumentation in the interpretation of Scriptural statements makes it clear that religion and philosophy are intersecting disciplines and that propositions common to both can be evaluated with a view to their truth. And when there are conflicting propositions, the principle which comes into play is, "Truth does not oppose truth but accords with it and bears witness to it."

What is more, the one best in the position of evaluating truth is the philosopher whose concern is with the truth of propositions which are characterized as *al-yaqin alladhi fi al-ghāyah/secundum maximam veritatem*.

Nevertheless in the *Tahāfut at-Tahāfut* he asserts that "... the religions are, according to the philosophers, obligatory, since they lead towards wisdom in a way universal to all human beings, for philosophy only leads a certain number of intelligent people to the knowledge of happiness, and they therefore have to learn wisdom, whereas religions seek the instruction of the masses generally." To this he later adds that philosophers are not to express doubt about religious principles or to contradict the sayings of prophets when he writes,

> For it belongs to the necessary excellence of a man of learning that he should not despise the doctrines in which he has been brought up, and that he should explain them in the fairest way, and that he should understand that the aim of these doctrines lies in their universal character, not in their particularity, and that, if he expresses a doubt concerning the religious principles in which he has been brought up, or explains them in a way contradictory to the prophets and turns away from their path, he merits more than anyone else that the term unbeliever should be applied to him, and he is liable to the penalty for unbelief in the religion in which he has been brought up.  

What, then, is the best way to understand Averroes' assertions about the intersection of religious propositions and philosophically demonstrative propositions?

As already indicated, Averroes wrote a paraphrasing *Commentary on the Republic* of Plato. Unlike middle commentaries, however, this work is not merely a paraphrase but rather a thoroughly Aristotelian interpretive work deeply imbued with his study of Aristotle's *Nicomachean Ethics*. It is in the *Commentary on the Republic* that Averroes recounts Plato's famous "noble lie" (*Republic* 414B–C). This "noble lie" is put forward to forestall any dissension among the different classes and to unify the community for its own benefit. Averroes also adds,

> And it is due to his care [for the city] that the prophet announced that the ruin of this city will only come to pass when its chief who guards it is of iron or bronze.
This story will be transmitted to them through music from youth, just as other stories are transmitted to them. When he finished this he said that the settlements of these chiefs and guardians of the city ought to be raised above the city and that if there is one of them who does not wish to accept the Law he will be smitten.\footnote{52}

In light of this, of the texts from the \textit{Tahâfut at-Tahâfut}, and of his remarks in the \textit{Faṣl al-Maqāl}, it appears most reasonable not to give up the principle of truth (“Truth does not oppose truth but accords with it and bears witness to it”) nor to assert that religious propositions are without practical value, nor to embrace Double Truth, but rather to hold that Averroes, like Plato, understands the practical necessity and value of the “noble lie” for the attainment of the human end which is, following Aristotle, the attainment of intellectual virtue and excellence founded on moral virtue.\footnote{53}

\textbf{Notes}


2. See \textit{Averroes and the Enlightenment}, ed. Mourad Wahba and Mona Abousenna (Amherst, NY: Prometheus, 1996) and the contributions of Paul Kurtz and Timothy Madigan there. The view that the contradictory views of religion and philosophy can be reconciled by merely respecting each as a contribution to the discussion is just as unsatisfactory as the philosophical concept of compatibilism which holds that determinism is true and is compatible with human freedom. Such a view functions well only if human freedom itself is understood to be nothing more than liberty from external restrictions and restraints and to be compatible with internal psychological determinism. Similarly, religion and philosophy can be understood as reconcilable even when asserting incompatible propositions if one holds that each is true in its own sphere and that those spheres are non-intersecting.


7. Oliver Leaman, *A Brief Introduction to Islamic Philosophy* (Cambridge: Polity, 1999), 170. The complete paragraph is worth quoting: "This is a crucial aspect of ibn Rushd's theory of meaning, stemming perhaps from Aristotle's observation that the degree of precision which we should employ in language is a function of the context within which we are working. The implications which ibn Rushd draws from this theory are radical. First, it means that there is no privileged access to the nature of reality which represents how things really are. The ordinary person has just as valid a grasp of how things really are as does the philosopher or the religious thinker, provided that the ordinary person is able to use concepts which connect with that reality in a loose way. Let us take as an example here the notion of an afterlife. For the philosopher, this should not be understood, ibn Rushd argues, as the individual survival of the person after his or her death in an environment rather like the environment of the world of generation and corruption. Once our body perishes, there is no sense in thinking of the continuing existence of the individual soul, since the soul is just the form of the material body, and once the latter disintegrates, there is no longer any matter to be informed by the soul."

This view is in accord with what Leaman wrote in his 1988 *Averroes and His Philosophy* (Oxford: Clarendon Press), 195–96: "Rather like Aristotle, Averroes respects a whole gamut of different views on a common topic, refusing to select some as more privileged or accurate than others."

"We must respect the different uses of the same word because they represent different points of view, different points of view of the same thing. It is an error to represent some uses as essentially more accurate than others. . . . In his philosophical methodology Averroes tries to show how it is possible for one thing to be described in a variety of ways. The arguments which have subsequently arisen concerning his 'real' views fail to grasp the philosophical approach he has constructed. When he tries to reconcile apparently contradictory views his strategy is to argue that all these views are acceptable as different aspects of one thing. The Averroist movement provides a useful focus for this idea, the precise nature of the apparent conflict between reason and religion. In his tentative remarks on language Averroes suggests that this conflict comes down to stress upon different aspects of one thing, namely, the way the world really is. This is an intriguing interpretation of a longstanding philosophical dilemma, and may well be Averroes' most important contribution to philosophy itself." Cf. n. 8 below.

8. "According to this doctrine, a proposition could be both true philosophically and true theologically, even though the philosophical understanding of it is contrary to the theological one. This is sometimes seen as far too radical a notion to be identified with ibn Rushd, but I have
come to think that this is probably wrong. Certainly no proposition could be both true and false at the same time, but it is clearly possible for a proposition to be true when taken in one way, and false when taken in another. This is surely what the doctrine of double truth came to mean in medieval Europe, and this also explains how radical it is. Some commentators have spoken of a thirteenth-century European renaissance, and if there was one, then the principles of Averroism played a large part in it. According to those principles, neither religion nor philosophy has the last word to say on the issue of truth (Leaman, 1991). Both are equally valid views of the same truth, so neither the philosopher nor the theologian is in a superior position when it comes to determining the nature of reality. We tend to see this as the view that religion does not have priority over reason, but we could equally well take it that reason has no priority over religion. Both are valid and have appropriate uses; the problems arise only when one tries to mix them up and insist that one has priority over the other or that one form of argument may be assessed according to the criteria appropriate to the other.” Oliver Leaman, *A Brief Introduction to Islamic Philosophy*, 171–72. The embedded reference to Leaman 1991 is a reference to his article, “Averroes, le Kitâb al-nafs et la révolution de la philosophie occidentale,” in *Le Choc Averroes* (Paris: Maison des Cultures du Monde, 1991), 58–65. Also see O. Leaman, “Ibn Rushd on Happiness and Philosophy,” *Studia Islamica* 52 (1980): 167–81. Regarding the issue in the Latin West, see Richard C. Dales, “The Origin of the Doctrine of the Double Truth,” *Viator* 15 (1984): 169–79.


12. Aristotle, *Prior Analytics* 1.32 (47a8–9), trans. A. J. Jenkinson. Averroes comments on this in his *Middle Commentary*, writing, “[Aristotle] said: It remains for us after this to say how we are able to reduce syllogisms used in books and addresses to these figures and to resolve them to these, since they are not used in books and speeches in the way mentioned. This is the third issue which remained for us to investigate regarding syllogisms. For if we know the kinds of syllogisms and are able to use them and able to reduce all that occur in discourse and in speech to the forms which we mentioned, then indeed we would have our first goal in the knowledge of the syllogism. For we find whenever we speak regarding the resolution of syllogisms to the forms mentioned that we grow in certainty regarding what was said about the fact that every syllogism exists only in one of the forms mentioned. For, when we find all the syllogisms used in books and speeches reduce to these forms, then we infer by way of induction that these syllogisms are the elements of all syllogisms. And this is the nature of the reality on which demonstration rests, namely, that it is found to be true in every way in which it is regarded and it is found to be consistent in each and every way. For truth, as Aristotle says, is a witness for itself and is consistent in every way, i.e., it bears witness to it in every way.” My translation of the Arabic of Ibn Rushd (Averroes), *Middle Commentary on Aristotle’s Prior Analytics*, Arabic, ed. Mahmoud M. Kassem, with Charles E. Butterworth and Ahmad Abd al-Magid Haridi (Cairo: The General Egyptian Book Organization, 1983), § 216, 226.1–15.

13. “... [W]e affirm definitely that whenever the conclusion of a demonstration is in conflict with the apparent meaning of Scripture [or Religious Law], that apparent meaning admits of allegorical interpretation according to the rules for such interpretation in Arabic. This proposition is questioned by no Muslim and doubted by no believer. But its certainty is immensely increased for those who have had close dealings with this idea and put it to the test, and made it
their aim to reconcile the assertions of intellect and tradition. Indeed we may say that whenever a statement in Scripture [or Religious Law] conflicts in its apparent meaning with a conclusion of demonstration, if Scripture [or Religious Law] is considered carefully, and the rest of its contents searched page by page, there will invariably be found among the expressions of Scripture [or Religious Law] something which in its apparent meaning bears witness to that allegorical interpretation or comes close to bearing witness.” Hourani, Arabic 1959, 7–8; Hourani, English 1967, 51.

14. Regarding the nature of demonstration Averroes follows closely Aristotle’s account: “By demonstration I mean a syllogism productive of scientific knowledge, a syllogism, that is, the grasp of which is eo ipso such knowledge. Assuming then that my thesis as to the nature of scientific knowing is correct, the premisses of demonstrated knowledge must be true, primary, immediate, better known than and prior to the conclusion, which is further related to them as effect to cause. Unless these conditions are satisfied, the basic truths will not be ‘appropriate’ to the conclusion. Syllogism there may indeed be without these conditions, but such syllogism, not being productive of scientific knowledge, will not be demonstration.” Posterior Analytics 1.2 (71b18–24), trans. Mure. Cf. Ibn Rushd, Sharḥ al-Burḥān li-Aristū in ed. ‘Abdurrahmān Badawi, Ibn Rushd. Sharḥ al-Burḥān li-Aristū wa-Talkhiṣ al-Burḥān (Grand Commentaire et Paraphrase Des Seconde Analytiques d’ Aristote) (Kuwait: al-Majlis al-Watani lil-Thaqāfah wa-l-Funūn wa-l-Ādāb, Qism al-Turath al-‘Arabī, 1984), 180 ff. (hereafter cited as Sharḥ al-Burḥān); Aristotleis Stagiritae Posteriorum Resolutionum Libri Duo cum Averrois Cordubensis Magnis Commentariis in In Aristotelis Opera Cum Averrois Commentariis (Venetiis Apud Iunctas, 1562; reprint Frankfurt am Main: Minerva, 1962) vol. 1 part 2: 29ff. (hereafter cited as LCPA, Long Commentary on the Posterior Analytics). The published Arabic text of the Sharḥ al-Burḥān extends from the beginning through Book I, chapter 23 (85a12).

15. Averroes, Tahaẓut at-Tahaẓut, ed. Maurice Bouyges, S.J. (Beirut: Imprimerie Catholique,1930), 427–28; Averroes’ Tahaẓut at-Tahaẓut (The Incoherence of the Incoherence), trans. Simon Van Den Bergh (London: Luzac, 1969), 257–58. In his Averroes and the Metaphysics of Causation (Albany: SUNY, 1985) Barry Kogan is aware of Averroes’ assertion that the Tahaẓut at-Tahaẓut argues dialectically but Kogan makes great use of it together with the Long Commentary on the Metaphysics to establish an understanding of Averroes’ teachings on God and metaphysics (9). Kogan, however, is well aware that “Averroes designed the Tahaẓut at-Tahaẓut primarily for ‘philosophers-to-be,’ with a view toward preparing them to study strictly ‘scientific’ or demonstrative works. But the Tahaẓut itself, he openly admits, was not intended to be such a work” (255–56). Oliver Leaman regards the Tahaẓut at-Tahaẓut as a reliable source for understanding the thought of Averroes. In his Averroes and His Philosophy he writes, “I am taking it to be the case that he [Averroes] presents a broadly similar line of argument in all his works, whether commentaries or essays, and that analysis of his arguments will establish that this is the correct approach to take” (11). Kogan’s book is clearly one of the most sophisticated and detailed attempts to understand Averroes’ thought on God. The final chapter of Leaman’s Averroes and His Philosophy, “Averroes’ Philosophical Methodology” (179–96), is a similarly challenging albeit less penetrating account of Averroes for contemporary interpreters. The methodological approaches of both of these interpreters of Averroes are different from the one I employ here, with the result that the conclusions reached here are quite different from those of Kogan or Leaman. For discussion of an example of a dialectical account in the Tahaẓut at-Tahaẓut which is clearly contradicted by his account in a Long Commentary, see Richard C. Taylor, “Averroes’ Philosophical Analysis of Religious Propositions” in What is Philosophy in the Middle Ages? Proceedings of the 10th International Congress of Medieval Philosophy of the SIEPM, 25–30 August 1997 in Erfurt, Miscellanea

18. Sharh al-Burhān, 184; LCPA Book 1, Comment 9: 1.2:32ra. Note that at 32vD he quotes Aristotle’s text that it is possible to make true conclusions from false premises, as is discussed in the Prior Analytics, but then those conclusions are per accidentem. In his following comment he stresses that the conditions for demonstration must be fully met. If premises are known through something intermediate (per medium), then the demonstration is not absolute or simpliciter (as mentioned at 31Vf) but only equivocally called a demonstration.


27. Metaphysics 8.2 (1043a19–21). The cause of actuality in a composite thing is the form. See Averroes Taftir ma ba’d al-ṭabī‘ah, Book Há’ c. 7: 1055; Latin 8.7, 8: f. 215v K. Cf. Metaphysics 8.6 (1045b22–24) and Averroes Taftir ma ba’d al-ṭabī‘ah, Book Há’ c. 16: 1102; Latin 8.16, 8: f. 225rF.

28. This account is a key element of my argument in Taylor, “Averroes on Psychology and the Principles of Metaphysics.” At the time of writing that article, it had escaped my notice that this point had been made by Barry Kogan in his 1985 Averroes and the Metaphysics of Causation (Albany: State University of New York Press, 1985), 232. It is worth noting that Al-Farabi comes close to an account similar to this in his work on the Opinions of the People of the Virtuous City, Arabic: “6. Because the First is not in matter and has itself no matter in any way whatsoever, it is in its substance actual intellect; for what prevents the form from being intellect and from actually thinking (intelligizing) is the matter in which a thing exists. And when a thing exists without being in need of matter, that very thing will in its substance be actual intellect; and that is the status of the First. It is, then, actual intellect. The First is also intelligible through its substance; for, again, what prevents a thing from being actually intelligible and being intelligible through its substance is matter. It is intelligible by virtue of its being intellect; for the One whose identity is intellect is intelligible by the One whose identity is intellect. In order to be intelligible the First is in no need of another essence outside itself which would think it but it itself thinks its own essence. As a result of its thinking its own essence, it becomes actually thinking and intellect, and, as a result of its essence thinking (intelligizing) it, it becomes actually intelligized. In the same way, in order to be actual intellect and to be actually thinking, it is in no need of an essence which it would think and which it would acquire from the outside, but is intellect and thinking by thinking its own essence. For the essence which is thought is the essence which thinks, and so it is intellect by virtue of its being intelligized. Thus it is intellect and intelligized and thinking, all this being one essence and one indivisible substance—whereas man, for instance, is intelligible, but what is intelligible in his case is not actually intelligized but potentially intelligible; he becomes subsequently actually intelligized after the intellect has thought him. What is intelligible in the case of man is thus not always the subject which thinks, nor is, in his case, the intellect always the same as the intelligible object, nor is our intellect intelligible because it is intellect. We think, but not because our substance is intellect; we think with an intellect which is not what constitutes our substance; but the First is different; the intellect, the thinker and the intelligible (and intelligized) have in its case one meaning and are one essence and one indivisible substance. 7. That the First is ‘knowing’ is to be understood in the same way. For it is, in order to know, in no need of an essence other than its own, through the knowledge of which it would acquire excellence, nor is it, in order to be knowable, in need of another essence which would know it, but its substance suffices for it to be knowing and to be known. Its knowledge of its essence is nothing else than its substance. Thus the fact that it knows and that it is knowable and that it is knowledge refers to one essence and one substance.” Trans. Richard Walzer in Al-Farabi on the Perfect State, 70–73.

29. This “First Form” is God for Averroes.
30. For Averroes God is pure actuality, *fa-inna-ha fi’lun mah’dun*, *Tafsir ma’ ba’d al-šabi’ah*, Book Lam c.37: 1599.7; Genequand trans. 151. Note, however, that the Latin translation apparently omits this phrase. See Latin 12.37, 8: f.319v G–H.


32. I modify Genequand’s rendering of *qillah at-taqdib*, “the insignificance of the composition.” *Tafsir ma’ ba’d al-šabi’ah*, Book Lam c. 51, 1704.16; Genequand tr. 196; Latin, 12.51, 8: f. 336v l. Averroes’ discussion here (Book Lam c. 51, 1703–7; Genequand tr. 195–97; Latin, 12.51,8: f. 336rE–vK) is drawn on by thinkers of the Latin West for the hierarchy of immaterial intellects up to God.

33. *Tafsir ma’ ba’d al-šabi’ah*, Book Lam c. 36, 1707–8; Genequand trans. 197–98; Latin, 12.36, 8: 337A–C. At LCDA 3.36, 501, Averroes cites Themistius in this regard: “In this way, therefore, human beings, as Themistius says, are made like unto God in that he is all beings in a way and one who knows these in a way, for beings are nothing but his knowledge and the cause of beings is nothing but his knowledge. (1) How marvelous is that order and how mysterious is that mode of being!” In his paraphrase Themistius writes, “That is why it also most resembles a god; for god is indeed in one respect [identical with] the actual things that exist, but in another their supplier (khorégos). The intellect is far more valuable insofar as it creates than insofar as it is acted on; that is because the productive first principle is always more valuable than the matter [on which it acts]. Also, as I have often said, the intellect and the object of thought are identical (just as are actual knowledge and the very object of knowledge).” Greek (1899), 99.23–28; Arabic (1973), 180.6–10; English tr. (1996), 124–25.

34. Kogan, drawing heavily on the *Tahafot at-Tahafut*, works hard to make sense of Averroes’ statements that God does know the world and creates the world by his knowledge but ultimately finds Averroes’ account sorely lacking. Averroes “bases his account of Divine causation on an inadmissibly ambiguous use of the verb ‘to know.’” *Averroes and the Metaphysics of Causation*, 264. Druart remarks regarding Averroes’ account of Divine understanding of the world through understanding Himself that “this seems to be a clever but rather unsatisfactory answer to the problems raised by God’s Knowledge of anything outside himself. Even if God is a metaphysician, and therefore metaphysics is the divine way of knowing, it still does not ensure true knowledge of things here below.” Thérèse-Anne Druart, “Averroes on God’s Knowledge of Being Qua Being,” in *Studies in Thomistic Theology*, ed. Paul Lockey (Houston: Center for Thomistic Studies, 1995), 175–205. An inferior printed version of this is found in Anaquel de Estudios Arabes 4 (1993): 39–57. My references are to the 1995 version. For the present quotation, see 198. Both Kogan and Druart are correct on this point.

35. Cf. Harry A. Wolfson, “The Plurality of Immovable Movers in Aristotle and Averroes,” *Harvard Studies in Classical Philology* 63 (1958): 233–53, 248–49. “[A]ccording to the mediaeval explanations there is some kind of distinction of prior and posterior in the immaterial movers themselves, whereas according to our explanation [of Aristotle] there is no distinction at all in the immaterial movers themselves; the distinction between them is only a distinction in their relation to things outside themselves—a distinction of external relation which, as we have shown, does not affect their nature. Now the assumption on the part of the mediaevals of a distinction of prior and posterior, whether that of cause or that of nobility, in the immaterial movers themselves has led to those endless questions as to whether that distinction does not after all imply a relationship of matter and form and also as to whether that relationship of matter and form is compatible with the initial assumption that these immovable movers are immaterial. But to assume, as we do, that the distinction between the immaterial movers is
only a distinction in their relation to things outside themselves does not lead to any of those questions.”

36. Creation ex nihilo is denied by Averroes in his discussion at *Tafsir mā ba‘d al-ṭabi‘ah*, Book Lám c.18, 1497–1505, Genequand trans. 108–12; Latin, 8: 304rD–305vI. For Averroes creation consists in “bringing what is in potentiality into actuality. What becomes actual is destroyed in potentiality and all potentiality becomes actuality when that which is in actuality brings it out. If potentiality did not exist, there would be no agent at all. Therefore it is said that all proportions and forms exist in potentiality in prime matter.” 1505; Genequand trans. 112; Latin 305vH–I.

37. *Physics* 3.2–3 (201b24–202b21). See particularly c. 3 where Aristotle asserts that the actuality of the agent takes place in the patient.

38. Ibid., 3.3, (202b9–10).


40. I want to thank my friend Prof. Thérèse-Anne Druart for a stimulating and valuable critical comment on this issue following my presentation of a related paper at the University of Chicago Islamic Philosophy Conference held April 27–28, 2001.

41. “He means: the actions of the celestial bodies in their sharing one with another in the maintenance of the world are like the actions of the freemen in the maintenance of the house; for just as the freemen are not allowed to perform all the actions which they desire, all their actions being due to the help which they give to one another, the same holds for celestial bodies. As for the existents which are below them, their condition is like that of the slaves and the animals which guard the houses: just as the actions of the slaves which share in (those of) the freemen are few, and even more so those of the animals, so is the case with that which is below the celestial bodies with regard to the celestial bodies.” *Tafsir mā ba‘d al-ṭabi‘ah*. Book Lám c. 52, 1714; Genequand trans. 200; Latin, 8: 338rB–D.

42. *Tafsir mā ba‘d al-ṭabi‘ah*, Book Lám c. 52, 1715; Genequand trans. 200–1; Latin, 8: 338rD–F.


44. *Averroës: Tahafot at-tahafot*, 584; Van Den Berg trans. 361.

45. “As for the moral virtues, it appears from their case too that they are for the sake of the theoretical intelligibles.” Lerner, trans. 88. “But this kind of perfection, i.e. the moral, is laid down [in relation to] theoretical perfection as a preparatory rank, without which the attainment of the end is impossible. Hence, this perfection is thought to be the ultimate end because of its proximity to the ultimate end. It appears from this, then, that the human perfections are four classes and that they are all for the sake of theoretical perfection.” Lerner trans. 92.


47. For another example of this sort of thing see the article mentioned in n. 26.

48. See n. 13.


51. Averroes also wrote a *Middle Commentary on the Nicomachean Ethics*. The surviving Hebrew translation of this work has recently been published. See *Averroes’ Middle Commentary on Aristotle’s Nicomachean Ethics in the Hebrew Version of Samuel Ben Judah*, ed. Lawrence V. Berman (Jerusalem: The Israel Academy of Sciences and Humanities, 1999). Also see Averroes, *In Moralia Nicomachia Expositione in Aristotelis Opera Cum Averrois Commentariis*, III (Venetiis Apud lunctas, 1552; reprint Frankfurt am Main: Minerva, 1962). Regarding Averroes’ *Middle

52. Lerner trans. 37 (41.1–7).

53. See n. 45. I am pleased to express my thanks to Peter Adamson, Dimitri Gutas, Wayne Hankey, Steven Harvey, John Jones, and James South for reading this paper and offering valuable suggestions, some of which are incorporated here and others which will significantly enhance my future work on this topic.