
Maimonides, and Sforzo on Genesis 1"

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IN THE BEGINNING: THE PHILOSOPHIC COMMENTARY
OF IBN EZRA, MAIMONIDES, AND SFORNO
ON GENESIS 1

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DIGEST

The origin and structure of the universe has always been a subject of wonder and inquiry. This was especially true for medieval Jewish thinkers, for this issue affected numerous other theological areas. This thesis examines the views of three medieval thinkers: Abraham Ibn Ezra, Moses Maimonides, and Obadia ben Jacob Sforno. Their exegetical comments on the text of Genesis 1 served as the basis for this examination.

Relevant passages from each of their exegeses are first translated. The thesis then attempts to give a detailed analysis of the views expressed regarding the origin and structure of the universe, the possible sources for these views, and the implications for Jewish thought and belief.

Chapter 1 deals with the commentary of Ibn Ezra. It is found that the concept of creation for Ibn Ezra is a very limited one, involving the imposition of order on a pre-existent chaos, and only applying to the lower realm of earth and its surroundings. He cryptically presents a three-tiered universe consisting of intelligences, spheres, and the lower realm, and gives the process of interaction that links all three realms together. Platonic and Neoplatonic influences are evident throughout his commentary.

Chapter 2 looks at the comments regarding Genesis 1 in Maimonides' Guide for the Perplexed. Maimonides advocates creation of the whole universe, but it is not creation ex nihilo; rather, it involves creation from a pure matter, and reveals Platonic influence. The structure of the universe presented by Maimonides closely parallels the medieval understanding of Aristotle's physics. Maimonides also discusses the ultimate purpose of creation, concluding that all is according to God's will and wisdom.

Chapter 3 examines the commentary of Sforno. Unlike Ibn Ezra and Maimonides, Sforno affirms creation ex nihilo, and uses philosophical arguments to support his position. Although he resists Aristotle's influence on the question of the universe's origin, Aristotle's physics will greatly affect the structure that Sforno presents.

All three thinkers strive to achieve a fair balance between the teachings of their tradition and the arguments of the philosophy and science of their time.

לבועז

דודי ורעי

I wish to express my deepest
gratitude to my parents, אבנא
and חוה, who supported me
through years of study, and
instilled within me the love
of learning.

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INTRODUCTION

The intellectual world of the medieval Jewish thinker contained two apparently independent sources of knowledge. On the one hand there were the religious beliefs and doctrines of the Bible, interpreted and handed down by tradition. On the other hand, there were the philosophic and scientific arguments of Greek rational reflection, transmitted to the Jews by their Islamic contemporaries. Identical issues were the concern of both: the origin and structure of the universe, the nature of the Deity, that Deity's relationship with humankind, and the just way of life. Both sources claimed recognition as the "Truth"--i.e., as the correct understanding of these issues.

This dualism of religious belief and philosophic argument, of "revelation and reason," with each claiming supremacy, created a tension in the intellectual Jewish community. For there can be only one Truth, only one correct answer (for example, the universe can have only one structure). Furthermore, an identical origin was attributed to both revelation and reason. The religious doctrines of the Bible were viewed as the word of God, beyond all doubt and never to be rejected. Yet the human reason that

produces philosophic argument was also seen as coming from God, representing the unique divine endowment of the human species. If the two sources of knowledge come from the same God, then the same basic truth must underlie both. Hence, the medieval Jewish thinkers endeavored to relieve this tension by achieving a synthesis, or more correctly, an accommodation between the teachings of the Bible and the teachings of reason.

This accommodation was accomplished by using each source of knowledge to help understand and clarify the other. Citing the limitations of the human mind and the boundaries of intellectual apprehension, many thinkers used the Biblical doctrines as guidelines in the interpretation of philosophic positions. The arguments of Plato, Aristotle, and Plotinus were re-examined and re-worked in order to agree with traditional beliefs. Conversely, the results of philosophic and scientific inquiry were incorporated into the interpretation of Scripture. The Bible is not a systematic work; its principles are often not clearly formulated, and inconsistencies are to be found throughout. The tools of rational analysis were applied to delineate some of these principles, and to demonstrate how conflicting passages can be harmonized. More importantly, Biblical doctrines were re-interpreted and re-formulated in order to harmonize with philosophic and scientific arguments. These efforts were not done haphazardly or deceptively; rather, they were motivated by a sincere and

strongly-felt trust that a genuine accommodation between revelation and reason was possible without doing major damage to either. For the medieval Jewish thinker, fallible human reason could not override or contradict the infallible word of God; once used properly, human reason should arrive at the same truth of Scripture. And Scripture, once properly interpreted, should contain the same doctrines as reason, for tradition had long maintained that principles of physics and metaphysics are deeply implanted in the text itself.

However, this process of accommodation was often difficult, for serious differences existed which could not be easily explained or harmonized. The God of the Bible is a personal Being, directly guiding the lives of individuals and nations; yet the Deity of Greek thought is an impersonal principle or force, removed from any direct involvement with the world. For the Bible, the just way of life demands *mitzvot*, deeds, based on a divinely ordained code of conduct; yet for the Greeks, the just way of life demands thought, contemplation, based on the search for principles. The major differences are most clearly seen in the discussion of the origin and structure of the universe. The traditional understanding of the Biblical text held that the universe was created ex nihilo by God at a certain point in time; that this was an act of a voluntary, intelligent, and willful agent; and that God remained in complete control of all workings of that universe, being able to affect or

change them at any time. In contrast to this, the philosophic arguments of Greek thought stated that there is either eternal matter or an eternal universe; that all things unfold ultimately according to causal necessity, and not will; and that the entire universe, including God, is bound by one set of causal principles that can never be changed or violated.

These differences regarding the universe's origin and structure represent a most fundamental and crucial conflict, for the resolution of this conflict affects the entire process of the accommodation of revelation and reason. The final decision regarding creation will determine what one believes about God and God's nature; this in turn will influence one's conception of God's relationship to both the universe and humankind; and this will affect one's conception of proper human conduct. All is linked to the question of the origin and structure of the universe. It is not surprising, therefore, that attempts to reach an accommodation on this one difficult issue dominated the writings of all medieval Jewish thinkers.

In the following pages we shall examine three such attempts: the philosophical comments of Abraham Ibn Ezra, Moses Maimonides, and Obadia ben Jacob Sforno on Genesis 1. These exegetical comments were chosen for three reasons. First, they present a reasonable amount of material for the scope of this project. Second, the text of Genesis 1 provides a convenient basis for each individual to elaborate

on his conception of the origin and structure of the universe. Third, the commentaries reflect those aspects of an individual's thinking which were intended for a majority of Jews, and which were viewed as beneficial to society; thus the commentaries represent not only intellectual endeavor but also practical steps in this key area. Three factors also led to the choice of Ibn Ezra, Maimonides, and Sforno. First, each individual exerted important influences on Jewish thought. Second, all three are known for their exegetical work, their philosophic writings, and their command of the scientific knowledge of their time. Third, it was felt that their views would display both similarities and differences, reflecting not only the changes through the centuries but also the various backgrounds of each.

Selected translations of their exegeses will be presented. We shall then attempt to provide a detailed analysis of the views expressed regarding the origin and structure of the universe. Throughout our analysis we shall ask the following questions: does the commentator maintain that Genesis 1 teaches creation ex nihilo? If so, on what grounds does he base his argument? If the commentator feels that Genesis 1 does not teach creation ex nihilo, what alternative is given, and how is it supported? How does the commentator describe the structure of the universe? And finally, what are the strengths and weaknesses of the commentator's position?

Through our efforts, we shall strive to see how each individual resolved the tension created by the "dualism of revelation and reason." It is the hope that our results will provide fresh insights into the intellectual world of the medieval Jew, and thereby stimulate further study and discussion.

Abraham b. Meir Ibn Ezra was a grammarian, poet, exegete, philosopher, and physician. Born in Tudela, Spain around the year 1089, he was comfortable with Arabic and was thoroughly familiar with the literary and philosophical studies cultivated in enlightened Spain by both Arabs and Jews. Little detail is known of his personal life, although it does not seem to have been a happy one; in his writings he hinted at family tragedy, and complained bitterly about his constant and severe poverty.¹ In 1140 Ibn Ezra left his native land and spent the remaining twenty-seven years of his life traveling throughout Europe and parts of Africa.

These wanderings were not aimless; instead Ibn Ezra was continually busy with literary activity, seeking to enlighten and teach the non-Arabic speaking Jewish communities to which he came. He collected and organized the works of earlier philologists of the East and of Spain, and his treatises on grammar fulfilled a great contemporary need, especially in Italy.² Ibn Ezra's volumes of poetry,

¹Encyclopedia Judaica, 1971 ed. (Jerusalem: Keter Publishing House, Ltd.), Vol. 8, p. 1163.

²Ibid., p. 1168.

both secular and religious, introduced many new forms and motifs into Hebrew poetry.³

He produced works on medicine and mathematics, and wrote no less than seven treatises on astronomy.⁴ Yet by far his greatest contribution was in the field of Biblical commentary. Unlike previous commentators, whose purpose was often homeletical or mystical, Ibn Ezra sought to "give a true picture of the literal meaning of the text, based on a rational approach and careful consideration of linguistics."⁵ Explaining each element grammatically, Ibn Ezra stresses what he believes to be the simplest meaning of the text, and avoided allegorical interpretation. Only when the text clearly contradicted "reason"--that is, the accepted logical and scientific premises of the time--does he search for a hidden meaning. It is believed that Ibn Ezra wrote commentaries on every book of the Bible, and his commentary on the Torah continues to this day to hold an important place in Biblical study.

It is within these very commentaries that we also encounter Ibn Ezra the philosopher. Although he wrote two purely philosophical works, one on the names of God and the other on the meaning of the commandments,⁶ the majority of

³Ibid., p. 1165.

⁴R. Levy, Astrological Works by Abraham Ibn Ezra (Baltimore: Johns Hopkins Press, 1927), p. 11.

⁵Arthur Oles, Translation of the Commentary of Abraham Ibn Ezra on Genesis (Cincinnati: Hebrew Union College, Jewish Institute of Religion, 1960), p. 3.

⁶Sefer Ha-Shem and Yesod Mora; see Encyclopedia Judaica, Vol. 8, p. 1168.

his philosophical views are found interwoven with his remarks on the Biblical text. Metaphysical observations are inserted in the middle of a grammatical analysis; philosophical comments are placed side by side with a simple explanation of the verse.

Yet a casual reading of the commentaries will not yield a clear and detailed picture of Ibn Ezra's philosophy, for we are faced with two difficulties. First, these metaphysical and philosophical comments are not systematically presented; instead they are scattered throughout his works, seemingly without order. Second, Ibn Ezra is frequently vague and elusive, dropping mere hints or veiled references for the knowledgeable readers to decipher. This enigmatic style was intentional; for, as we shall see, many of Ibn Ezra's views would have been neither understood nor sympathetically received by the average reader of his time. Hence, Ibn Ezra deliberately chose to record his philosophical views in a manner which revealed them to the enlightened, while concealing them from the ignorant.

Yet despite these difficulties we can still glean some genuine insights into his philosophical world. While we are not able to construct a coherent and total philosophical system with the material at hand, we can at least attempt to discover the broad outlines of Ibn Ezra's true convictions regarding our subject: the origin and structure of the universe.

As we begin to read Ibn Ezra's commentary on Genesis 1, it soon becomes apparent that his view of the creative process differs from what had come to be regarded as the traditional Jewish viewpoint. Speculation regarding creation was certainly nothing new in Jewish thought; the Talmudic and Midrashic literature records many such discussions among the rabbis.⁷ In their attempt to clarify certain vague or conflicting elements of the Genesis narrative, the rabbis broadened the scope of discussion to include a whole range of divergent viewpoints.⁸ Yet these speculations were strictly a private matter among an elite circle; the general consensus and public teaching of the rabbis throughout the years remained true to some basic fundamentals: that God and God alone, without the aid of angels, Demiurges, or primordial elements, willfully created the heavens and the earth out of nothing, and that this single creative act marked the beginning of time and existence for all beings except God.⁹ This view of the creative process and the Creator became the traditional one accepted by the average Jew of medieval times. Yet Ibn Ezra was not the average Jew, and his interpretation of Genesis 1 contains divergent and startling elements.

⁷E. E. Urbach, The Sages (Jerusalem: Magnes Press, 1975), pp. 135-95.

⁸Ibid., pp. 196-210.

⁹Ibid., pp. 212-13, and Encyclopedia Judaica, Vol. 5, p. 1062.

Obviously, the first chapter of the Bible deals with a beginning, but while for Ibn Ezra it is a beginning of a process, it is not necessarily the beginning of time itself. In his analysis of the word *בְּרֵאשִׁית*, he uses both grammar and comparison verses of the Bible to demonstrate that this cannot be translated "in the beginning" or "with the beginning"; rather:

. . . it is a construct, as 'in the beginning of the reign of Jehoiakim' (Jeremiah 26:1). Do not object how a verb in the past tense can be in construct, for behold 'at the start of the Lord's speaking (חַלַּל דָּוִד יְהוָה) with Hosea' (Hosea 1:2) and 'the city of David's encampment' (קִרְיַת חֹנֶה דָּוִד) (Isaiah 29:1) and the meaning will be clear for you in the second verse.¹⁰

For Ibn Ezra, as for Rashi, the first verse of Genesis is a dependent clause, linked to the clauses following in verses 2 and 3. Consequently, we should translate as follows: "In the beginning of God's creating the heaven and the earth, the earth being void and formless . . ." or "When God began creating the heaven and the earth, the earth being void and formless . . ." The text thus describes the beginning of a creative process, i.e., the formation of heaven and earth (which shall also be further defined by Ibn Ezra); yet nowhere does the text explicitly state that this process represented the beginning of time itself. Further evidence for this point is found in Ibn Ezra's comment on 2:1: "There are those who say that the

¹⁰ *Mikraot Gadolot*, 5 vols., 1976 ed. (Jerusalem: J. Weinfield and Co.), Vol. 1, p. 1:b.

days were created, and with the creation of the seventh day the work was completed; this is the interpretation of a fool."¹¹ Hence, if the days are indeed uncreated, and if the passage of day into night and night into day represents a measurement of time, then time itself existed before the creative process described in Genesis 1. The implications of this will become clearer as we proceed.

Even more startling is Ibn Ezra's implicit rejection of creation ex nihilo--i.e., the belief that God miraculously created both the heaven and the earth from nothing; instead, he depicts creation as the imposition of order on pre-existent matter or chaos. Although Ibn Ezra does not state this view explicitly, he provides the reader with various clues that clearly point toward this conception. The first clue is found in his interpretation of the word **וַיֵּרָא**:

Most of the commentators say that **וַיֵּרָא** means to bring something from nothing . . . but behold, they have forgotten 'and God created the sea monsters' (Gen. 1:21), and three more times in 'and God created man' (Genesis 1:27); and 'creator of darkness' (Isaiah 45:7) for it is the absence of light that exists . . . it is like 'And it will cut them down' (Ezekiel 23:47). And its meaning is to cut or to set a limit. The wise will understand.¹²

This passage has at least three significant elements.

First, note that the quoted examples all involve creation

¹¹Ibid., Vol. 1, p. 9:a.

¹²Ibid., Vol. 1, pp. 1:b - 2:a.

out of an existing matter: the sea monsters from the waters, man from the earth, and darkness from light.¹³ Second, if קצץ means "to cut or set a limit," then something in which to cut or set this limit must exist beforehand. Third, the cryptic phrase "the wise will understand" is a clear indication that Ibn Ezra is dealing with a concept that is not intended for all, a concept that would perhaps offend many if openly stated. There would be no need for such caution if he is advocating the traditional view of creation ex nihilo.

The second clue appears in the discussion of the phrase והארץ ובה (Genesis 1:2). In this passage Ibn Ezra provides some detail regarding the earth's characteristics at the time of creation:

In Sefer Yezirah this והארץ is a green line, and ובה is moist stones. And the correct meaning is in accordance with the Aramaic translation. And thus, 'and in the desolation, a howling wilderness' (Deuteronomy 32:10) and 'after empty things' (I Samuel 12:21) . . . [והארץ] is similar to והארץ . . . and the meaning is that before the creation of the firmament and the dry land, there was no habitation on the earth, for it was covered with water. Furthermore, God placed [in it] a power to generate below the waters.¹⁴

Some elucidation will be helpful here. The passage referred to in Sefer Yezirah is actually found in the Talmudic passage Hagigah 12a-b; the "green line" is described there as a line encompassing the earth, and is

¹³Oles, Translation of the Commentary of Abraham Ibn Ezra on Genesis, p. 32.

¹⁴Mikraot Gadolot, Vol. 1, pp. 3:a-3:b.

credited as being the source of darkness; the "moist stones" are said to be the sources of water.¹⁵ We know that water covered the earth from Ibn Ezra's explicit statement; and the phrase "God placed in it a power to generate below the waters" serves as further evidence that water originally covered the earth. In addition to this Ibn Ezra tells us that the correct meaning of *הוּו וְהוּו* is according to the Aramaic, which is "*צוּיָא וְרִיקְנִיָא*"; these words mean "desolate or formless" and "empty."¹⁶ Hence, we are presented with a dark, watery, desolate and formless mass--a vivid picture of a primordial earth without order or form. We must call to mind that with the interpretation of Genesis 1:1 as a dependent clause, Genesis 1:2 syntactically becomes a parenthetical clause--i.e., a phrase describing the nature of the earth when the process of creation first began. (The initial act of that process is not given until Genesis 1:3.)¹⁷ Thus, in his analysis of *הוּו וְהוּו*, Ibn Ezra has subtly given us a description of the pre-existent chaos upon which order was imposed during creation.

A further characteristic of this chaos is indicated by the phrase "And this light was above the wind" found in Ibn Ezra's analysis of Genesis 1:3. We can infer from this that

¹⁵ Leo Prijs, *Abraham Ibn Ezra's Kommentar zu Genesis Kapitel 1* (Weisbaden: Granz Steiner Verlag, 1973), pp. 18-19.

¹⁶ Ibid., p. 19.

¹⁷ A. E. Speiser, *Genesis* (New York: Doubleday and Co., Inc., 1964), p. 12.

the wind existed before that initial light, and was thus a part of the primordial chaos. The text of Genesis 1:2 supports this inference, for it mentions darkness and a "spirit" or wind of God hovering over the waters.

Our third clue is provided by Ibn Ezra's interpretation of the word *לשון* in both Genesis 1:9 and 2:4. In Genesis 2:4 he states: "and the words 'in the day that the Lord God made [*לשון*] earth and heaven'--it is an improvement, and the testimony is "and he hurried to make [*לעשות*] it" (Genesis 18:7).¹⁸ If Ibn Ezra adhered to the belief in creation *ex nihilo*, then to describe the making of earth and heaven from nothing as an "improvement" would be a grave understatement. Rather, the concept of improvement more appropriately describes the change from a formless, chaotic mass to a world of order and design.

This definition of *לשון* as improvement also helps clarify the following passage from 1:9, which may serve as further evidence for Ibn Ezra's pre-existent chaos.

According to my opinion, this verse [Genesis 1:9] is joined with the one above it, for the firmament was not made until the earth was dry. And the testimony [for this] is 'In the day that the Lord God made earth and heaven' (Genesis 2:4), and behold they were made on one day, for the showing of a hidden thing and the gathering of a scattered thing is not creation (*בריאה*). And thus its meaning is 'God had already said, Let the waters be gathered'.¹⁹

Ibn Ezra's point is that the appearance of the earth from

¹⁸ *Mikraot Gadolot*, Vol. 1, p. 10:a. (We must note that in *Mehokekei Yehudah* this comment is absent, and an *ex nihilo* interpretation is cited instead.)

¹⁹ *Mikraot Gadolot*, Vol. 1, p. 6:a.

beneath the waters (i.e., "the showing of a hidden thing") and the collection of these waters into seas (i.e., the gathering of a scattered thing") are best described by the word *עשון*, which, as we have seen above, denotes improvement. Again he is hinting at the change from an earth totally covered with water to an earth divided into continents and seas--the change from chaos to order. Yet what shall we do with his statement that this "is not creation (*בריאה*)"? Could Ibn Ezra possibly be saying here that the transition from chaos to order does not constitute creation, whereas creation ex nihilo might? Have all our previous clues been negated? The solution will become clear when we recall Ibn Ezra's conception of the word *ברא*. Referring back to Genesis 1:1, we see that for Ibn Ezra *ברא* denotes, at the very least, the creation of something from something: sea monsters from water, darkness from light, and the world from the ordering of chaos (i.e., the setting of limits). Yet in our passage from Genesis 1:9 nothing is being "created" (*ברא*) at all; for the earth and waters were both components of the pre-existent "stuff" before the process of creation began. (Recall our discussion of *מהו ומהו*.) In Genesis 1:9 the earth is able to appear after the waters are gathered--but no new entity has been created from something; instead, existing things became better organized. Thus, Ibn Ezra does not contradict his view regarding the creative process when he states "the showing of a hidden thing and the gathering of a

scattered thing is not creation (בריאה) "--indeed it is not, according to the definition given to ברא in Genesis 1:1.²⁰

Our final clue comes from a comment made not in Genesis but in Ibn Ezra's commentary on the Book of Psalms. Regarding Psalm 95:5, Ibn Ezra writes: "the dry land and the sea . . . that is, the elements--and from them God made [עשו] all things."²¹ These elements--earth, water, fire, and air--were the "something" out of which God constructed the world. For Ibn Ezra, they were the principal components of that pre-existent chaos on which God imposed order and form in the process called creation.

Before we continue our discussion of Ibn Ezra's views regarding the origin and structure of the universe, we should pause and ask the following question: what is the source (or sources) for his concept of the ordering of pre-existent chaos? Is it original with Ibn Ezra, or does it derive from another philosophical source? We do find within Jewish tradition a small number of references to a pre-existent matter. (It is interesting to note that the Bible itself nowhere explicitly states that creation = creation ex nihilo.) For example, in Wisdom of Solomon (11:17), it is stated that creation was from "formless

²⁰For an alternative solution, see Prijs, pp. 45-46.

²¹M. Friedlander, Essays on the Writings of Ibn Ezra (London: Worthheimer and Co., 1877), p. 15.

matter";²² and in Genesis Rabba 10:3, R. Johanan states: "The Holy One took two clews, one of fire, one of snow, and kneaded them into each other; and from them was the world made."²³ Yet it is unlikely that a few scattered statements would serve as Ibn Ezra's source. Although the line of transmission is by no means clear, it is more probable that his source lies in the philosophy of Plato, particularly as expressed in the Timaeus. In this work Plato presents arguments to show that the universe did indeed have an origin, and that it was generated from a pre-existent, primeval "substance" or matter, i.e., disorderly motion in the Receptacle.²⁴ There are some scholars who argue that the Timaeus is an allegory, and that the creative process described is not meant to be taken literally. Yet others have offered equally convincing arguments that Plato sincerely believed in his theory of creation, and that he was able to successfully integrate it into his philosophical system.²⁵ This Platonic concept of a universe generated from primeval matter found many adherents among the Arabic

²²C. Blacker and M. Loewe, Ancient Cosmologies (London: G. Allen and Unwin, 1975), p. 71. Creation ex nihilo is first explicitly mentioned in II Maccabius, 4:23.

²³Urbach, The Sages, p. 195.

²⁴Gregory Vlastos, "Creation in the Timaeus: Is It a Fiction?", Studies in Plato's Metaphysics, ed. R. E. Allen (London: Routledge & Kegan Paul, 1965), p. 402.

²⁵For an excellent discussion of this issue, see Vlastos' "The Disorderly Motion in the Timaeus" and "Creation in the Timaeus: Is It a Fiction" in the above volume, pp. 379-99 and 401-19.

and Jewish philosophers of medieval times. Ibn Ezra was well-trained in philosophy, and it is very likely that he was thoroughly familiar with Plato's view. Finding it in accordance with his beliefs, Ibn Ezra adopted it as a basis for his own view of creation.

Yet he did not adopt Plato's theory in its totality. For Plato, the world-order as a whole is the product of creation; the entire cosmos is formed from the primeval matter. Yet for Ibn Ezra, creation--the ordering of pre-existent chaos--is only applicable to the "lower" world. In Ibn Ezra's system, the events given in Genesis 1 affected only the visible world around us, and not the entire universe.

Our first indication of this is found in the many places where Ibn Ezra identifies "heaven and earth" as the visible sky and dry land. He states this directly in his comment on Gen. 1:1: "and it is my opinion that these--the heaven and the earth--are the firmament [sky] and the dry land."²⁶ While explaining the term *אֵלֶּיִם* in Genesis 1:1, Ibn Ezra quotes two Psalms as further evidence:

And after this it says: 'The One who stretches out the heavens' (Psalm 104:4)--this is the firmament . . . And it says: 'The One who established the earth' (Psalm 104:5)--and this is the dry land.²⁷

²⁶Mikraot Gadolot, Vol. 1, p. 3:a.

²⁷Ibid., Vol. 1, p. 2:a.

In commenting on Genesis 2:4, which speaks of the generations of heaven and earth in their creation, Ibn Ezra writes that "this is the firmament coming to be and the earth appearing."²⁸ And in his analysis of רָמִיָּם (Genesis 1:1), Ibn Ezra points out that the ה of the definite article indicates the heavens, i.e., the visible sky.²⁹

Other comments to the same effect are more subtle.

In Genesis 1:1, he writes:

And the meaning of רָמִיָּם is 'height' or 'altitude', as it is in Arabic, which for a large part has the same pattern as Hebrew. And there are also the higher heavens.³⁰

Obviously, Ibn Ezra does not view the רָמִיָּם of Genesis 1:1 as these "higher heavens"; the רָמִיָּם of Genesis 1 is instead the firmament, which Ibn Ezra will further define as the atmosphere. In his comment on Genesis 1:6, he states:

. . . this firmament is the air; for when the light became strong upon the earth and the wind dried up the [waters of the] earth, the flash reversed and became the firmament. And thus it says in Psalms: 'The One who stretches out the heavens like a curtain . . . ' (Psalm 104:2).³¹

²⁸Ibid., Vol. 1, p. 10:2.

²⁹Friedlander, Essays on the Writings of Ibn Ezra, p. 6.

³⁰Mikraot Gadolot, Vol. 1, p. 3:a.

³¹Ibid., Vol. 1, p. 5:a.

This definition of the firmament as the air is reinforced by his statement in Gen. 1:20 that "the verse 'let fowl fly above the earth in the firmament' is testimony to the interpretation of firmament."³² We must also note that in the above quote from Genesis 1:6, the proof text used contains the words "the heavens"--another example of Ibn Ezra's identification of שמים in Genesis 1:1 as the firmament. This also occurs in the comment on Genesis 1:9: ". . . the firmament was not made until the earth was dry. And the testimony [for this] is: 'In the day the Lord God made earth and heaven'. (Genesis 2:4)."³³

Our second indication that creation only affected this lower world is the single statement in Genesis 1:2 that "Moses did not speak about the world to come, which is the world of angels, but only of the world of generation and corruption."³⁴ Hence, the text of Genesis does not deal with the entire universe, which would include "the world of angels," instead, it deals only with that part of the universe where birth, growth, decay, and death are commonplace--our visible world.

Our final indication is a set of comments dealing with the שמי השמים, the "upper heavens." For, as we shall see, it is these שמי השמים that Ibn Ezra will identify as the less visible realm of heaven; consequently, the שמים of

³²Ibid., Vol. 1, p. 7:a.

³³Ibid., Vol. 1, p. 6:a.

³⁴Ibid., Vol. 1, p. 4:a.

Genesis' first chapters can be nothing more than the visible sky around us. First, we have the direct statement from his comment on Genesis 1:1, "And there are also the higher heavens."³⁵ Second, we are given a series of Scriptural quotations in the comment on Genesis 1:14 that mention these שמי השמים:

But behold, Scripture says, 'In the firmament of the heavens' (Genesis 1:15), which teaches that there are heavens above it [i.e., the firmament]. And thus 'the heaven of heavens' (Nehemiah 9:6) and 'to Him that rides upon the heaven of heavens . . . ' (Psalm 68:34).³⁶

Third, when we check the aforementioned citation from Nehemiah 9:6, we find that the text reads

עשית את השמים שמי השמים וכל צבאם ; and Ibn Ezra then says "השמים--this is the firmament, and שמי השמים are the uppermost regions."³⁷

Finally, we have the comment in Genesis 1:2 where Ibn Ezra points out the logical difficulty involved when we define the שמים of Genesis 1:1 as the upper heavens. He writes:

As for those who explain that השמים in the first verse are the upper heavens--what will they do with 'the earth,' when behold there are conclusive proofs from men of reasoning that there is only one earth?³⁸

³⁵Ibid., Vol. 1, p. 3:a.

³⁶Ibid., Vol. 1, pp. 6:a-6:b.

³⁷Ibid., Vol. 4, p. 298:a.

³⁸Ibid., Vol. 1, p. 4:a.

These thinkers will have two "heavens"--i.e., the upper heavens of verse one, and the visible heaven, the firmament, of verse six. Correspondingly, there should be two earths; and we have the second, lower earth--the "dry land" of verse nine. Therefore, what other realm could the word "the earth" in verse one possibly be referring to? We know from "conclusive proofs" that there is one and only one earth, the dry land. The result of this line of argument represents an absurd conclusion for a medieval thinker: the existence of another earth. Hence, the initial premise of defining רָקִיעַ of verse one as the heavens must be rejected.

Therefore, based on Ibn Ezra's analysis of "heaven and earth," his comment regarding the world of generation and corruption, and his reference to an upper realm beyond that of Genesis 1, we may conclude that the creative process discussed earlier was a limited one indeed. For Ibn Ezra, the ordering of primeval chaos only occurred within our visible world, and not in the entire universe.

We are now led to an inevitable question: what exists above our world? If only our world was formed by the creation in Genesis, what comprises the rest of the universe? Ibn Ezra does not answer this question explicitly in his commentary on Genesis 1; instead he gives us only hints and clues. Yet when we weave those clues together with comments made elsewhere in his Biblical commentary, we shall

see that Ibn Ezra conceives of a three-tiered universe.
(Of course, God exists above this universe.)

The first of these three domains is that of intelligible substances. In medieval philosophy the existence of incorporeal, intelligible and/or intelligent beings was widely accepted, be they the Forms and souls of Plato or the separate intelligences of Aristotle. Like his contemporaries, Ibn Ezra believed in such beings, and placed them in a separate realm, a realm higher and more noble than all else except God.³⁹ We can speculate that this realm is the עֲלֵי הַשָּׁמַיִם, the upper heavens, which we have seen Ibn Ezra refer to in several places. It is "the world to come . . . the world of angels"⁴⁰ mentioned in his comment on Genesis 1:2. Throughout his works Ibn Ezra will often use the terms "angels" or "hosts" (צְבָאוֹת) as euphemisms for these intelligences.⁴¹ This is seen in the following two passages, which speak of the intelligences' exalted position. The first is in his comment on Genesis 1:1:

Do not pay attention to the statement of Saadya Gaon who said that man has greater honor than the angels, and I have already explained in Sefer HaYesod that all his proofs are refuted. And we know that no humans are more noble than the prophets, but Joshua fell on his face before an angel of the Lord and bowed down and said 'What does my Lord say to his servant?' (Joshua 5:14). And also Zechariah (1:8) and Daniel (10:17).⁴²

³⁹Friedlander, Essays on the Writings of Ibn Ezra, p. 14.

⁴⁰Mikraot Gadolot, Vol. 1, p. 3:a.

⁴¹Friedlander, Essays on the Writings of Ibn Ezra, p. 14.

⁴²Mikraot Gadolot, Vol. 1, p. 2:a.

The second reference to the intelligences' high place in the universe is found in Ibn Ezra's comment on Psalm 148:1, where he says: "the hosts of the Eternal are . . . the highest steps of the ladder to the Most High . . . the incorporeal beings who dwell in the uppermost heaven."⁴³

In addition to these hints regarding the intelligences' existence and place in the universe, we are given a clue regarding their nature. In his comment on Genesis 1:1, Ibn Ezra writes "and do not think that the angels are made up of fire and wind because it is found 'who makes winds His angels' (Psalm 104:4), for this is not its obvious meaning."⁴⁴ It is possible that Ibn Ezra is hinting here at the intelligences' incorporeality--yet we must be careful to correctly understand what the term "incorporeal" means for Ibn Ezra. If we examine his lengthy concluding remarks to Exodus 25:40,⁴⁵ we find that even the intelligible substances are made up of matter and form. Yet we know that these substances were deemed by medieval thinkers to be incorporeal--totally void of all matter. This apparent discrepancy can be explained if we briefly investigate a major philosophical source for Ibn Ezra's thought. It has been shown that the theories of Neoplatonism and its

⁴³Friedlander, Essays on the Writings of Ibn Ezra, p. 16.

⁴⁴Mikraot Gadolot, Vol. 1, p. 2:a.

⁴⁵Ibid., Vol. 1, p. 126:b.

founder Plotinus exerted a great influence on Ibn Ezra;⁴⁶ we shall have opportunity to discuss this influence in more detail below. At this point we need only mention that for Plotinus the intelligible substances contain matter as well as form; yet it is not the same matter as found in our world, a matter that changes and decays. The matter of the higher realm is instead the common substratum which underlies all the differing intelligences that enables them all, despite their individual differences, to be classified as such.⁴⁷ In other words, each intelligence differs from every other, either in the role it plays or in the ideal it embodies. This individuation is a result of their different forms. Yet they are all still intelligences--they all share a common element that differentiates them from the planets or the earth or human beings. This common element is the matter of the upper realm. Granted, the matter of our world performs the same function; yet the matter of the intelligences is of a different "stuff," a purer substance. It is incorporeal in the sense that it has no width, height, or depth. It is this Neoplatonic concept of matter that Ibn Ezra has in mind when he explicitly discusses the matter and form of the intelligences in

⁴⁶ Julius Guttman, Philosophies of Judaism (New York: Schocken Books Inc., 1964), pp. 134-36.

⁴⁷ Isaac Husik, History of Medieval Jewish Philosophy (Philadelphia: Jewish Publication Society, 1976), pp. xxvii-xxviii. See also Guttman, pp. 103-04.

Exodus 26; and it is this "incorporeal matter" of the intelligences that he hints at in Genesis 1:1 when speaking of the angels.

The second realm of Ibn Ezra's three-tiered universe is the realm of the stars and planets. Like the intelligible substances, the heavenly bodies were in existence before the creative process of Genesis 1. We have only three comments that subtly refer to this realm in our Genesis chapter; yet it is only with the assumption of this second realm that these comments make sense. In addition, information contained in Ibn Ezra's various astronomical treatises will provide further evidence for this realm's existence.

Our first enigmatic hint is found in his comment on Genesis 1:14:

A great Spanish sage said that the firmament is divided into 8 divisions, the seven stars [planets] and sphere of the constellations. But this is not possible . . . and the correct [interpretation] in my opinion is that the sun and the moon and all the stars are called lights in the firmament because they are seen there.⁴⁸

Recall that Ibn Ezra has identified the firmament as the air, as the earth's atmosphere. How then is it possible for the air to contain all the planets and stars? As a trained astronomer who wrote several treatises on the

⁴⁸Mikraot Gadolot, Vol. 1, p. 6:a.

subject, Ibn Ezra was well aware of the estimations of the planets' sizes;⁴⁹ the earth's atmosphere could not possibly contain them all. They must instead exist in a realm above the air, that is, above the firmament. Granted, it is said that the sun and moon are "in the firmament," yet that is only a figure of speech; it is said because the firmament is the medium through which their light first reaches us, or, as Ibn Ezra says, "because they are seen there."⁵⁰ Their actual location is in a realm above our world; yet we benefit from their light due to our atmosphere's ability to transmit it to earth.

This interpretation is reinforced by Ibn Ezra's comment on Genesis 1:17: "Do not be surprised about the world וְהַיָּרְחַ וְהַשֶּׁמֶשׁ, 'and God set them in the firmament', for it is also written 'I have set my rainbow' (Genesis 9:13)."⁵¹ We might erroneously assume that, due to the words "to set," the sun and the moon are indeed set into the firmament. Yet this comment is Ibn Ezra's rejection of such an interpretation, and he provides an example to help point to the correct interpretation. Although a rainbow is visible in the clouds, its actual source is the sun;⁵²

⁴⁹ R. Levy and F. Cantera, The Beginning of Wisdom: An Astrological Treatise by Abraham Ibn Ezra (Baltimore: Johns Hopkins Press, 1939), p. 155.

⁵⁰ Mikraot Gadolot, Vol. 1, p. 6:a.

⁵¹ Ibid., Vol. 1, p. 7:a.

⁵² Oles, Translation of the Commentary of Abraham Ibn Ezra on Genesis, p. 36.

hence, although the sun, moon, and stars are visible in the firmament, their actual source--i.e., location--is somewhere else.

Our third comment is from his remarks on Genesis

1:16:

Did the wise astronomers not say that Jupiter and all the planets except Mercury and Venus are larger than the moon? How then can the text read 'the great ones (הַמְּאֹרֹת הַגְּדוֹלִים)?' The answer is not to interpret 'great' with regard to size; only, with regard to their light. And the light of the moon is many, many times brighter because it is close to the earth.⁵³

We have here again the problem of the planets' size. If all planets except Mercury and Venus are larger than the moon, and if they are all in one location, i.e., the firmament, why do they not appear larger to our eyes? Why, in fact, do the other planets appear many times smaller? If they are indeed all in one location, this logically cannot be. The passage also points to another logical difficulty. Ibn Ezra informs us that the term "great" refers to the amount of light transmitted to earth; the moon's light is therefore "great" because it is close to earth. Conversely, if a planet's perceived light is small, then it must be far from the earth. Thus we have different planets at different distances from the earth; yet how is this possible if they are all set in one place, the firmament? Obviously, this cannot be the location of the planets and stars; they must instead exist in another, higher realm, and, in addition, in different spheres within that realm.

⁵³ Mikraot Gadolot, Vol. 1, p. 7:a.

In fact, in The Beginning of Wisdom, one of Ibn Ezra's astronomical works, he describes the structure of this second, separate realm of the universe. (Bear in mind that for the medieval astronomers the sun and the moon were considered planets.) In all, there are eight spheres, with the planets comprising the first seven in the following ascending order: (1) Moon (closest to earth), (2) Mercury, (3) Venus, (4) Sun, (5) Mars, (6) Jupiter, and (7) Saturn. The eighth sphere is the uppermost sphere of this realm, and it contains all the stars of the twelve Zodiacal signs.⁵⁴ Ibn Ezra also informs us in this work that the heavenly bodies, like the intelligences, are composed of both form and matter; but their matter is corporeal, even though it is not subject to change and decay.⁵⁵

Finally we arrive at the third tier of the universe: our world. Like the other two tiers, it also is made of form and matter--yet the matter of this world is the lowest type, a matter that changes and decays, bringing sickness, evil, and, ultimately death. As we have seen, only this third realm was affected by the creative process of Genesis 1. Once a chaotic mixture of elements, it is now a world of order, growth, and of course, life.

⁵⁴Levy, The Beginning of Wisdom: An Astrological Treatise by Abraham Ibn Ezra, pp. 153-54.

⁵⁵Ibid., p. 155.

This three-fold division of the universe into the upper realm of the intelligences, the middle realm of the planets and stars, and the lower realm of earth and its atmosphere is mentioned throughout Ibn Ezra's Biblical commentary. He views Psalm 148 as a poetic description of this universe, dividing it into two parts: (1) verses 1-6, and (2) verses 7-13. The first group of verses address the beings of the two higher realms in descending order, beginning with the purest angels and concluding with the lowest planetary sphere. The second group addresses the beings of earth and its inhabitants in ascending order, beginning with the elements and concluding with the human soul.⁵⁶ The different aspects of the Garden of Eden are seen by Ibn Ezra as symbols for the universe's structure: Eden represents the world of the intelligences; the Garden symbolizes the intermediary realm of the planets; the river represents the sub-lunar world; and the river's four heads are seen as symbols of the four elements.⁵⁷ In his lengthy commentary on Exodus 25:40, Ibn Ezra draws a parallel between the three divisions of the Tabernacle and the three divisions of the universe.⁵⁸ And earlier, in his introductory remarks to Exodus 20, Ibn Ezra writes the following:

⁵⁶Friedlander, Essays on the Writings of Ibn Ezra, p. 12.

⁵⁷Husik, History of Medieval Jewish Philosophy, p. 188.

⁵⁸Mikraot Gadolot, Vol. 1, p. 126:b.

A man devoting himself to science, which is the ladder leading to the place of his wishes, finds the work of God displayed in minerals, plants, animals, and in the body of man himself; and he ascertains the natural function of each and the reason why it has such and such a form. He advances at length to study the nature of the spheres, which show the work of God in the intermediary realm; and from the ways of the Lord the wise will advance higher still, and obtain a knowledge of the Lord Himself.⁵⁹

For Ibn Ezra, it is precisely in our search for knowledge that we encounter the three realms of our universe.

At this point we must again pause and consider Ibn Ezra's source for this conception of the universe's structure; and again we shall turn to Neoplatonism. In Plotinus, we begin with the First Principle, an absolute unity that is beyond all being, utterly transcendent and completely unknowable. Below this first principle is a substance called Intelligence, an entity that embraces both Being and Knowledge; all ideas are imminent within Intelligence.⁶⁰ We next encounter another being, that of the World-Soul, which serves as a link between the intelligible world of Intelligence and the phenomenal world of nature. Finally, at the bottom of the chain, we have our world: the earth and its surroundings.⁶¹ This cosmic structure of First Principle, followed by Intelligence, World-Soul, and the natural world exactly parallels Ibn Ezra's universe of

⁵⁹Friedlander, Essays on the Writings of Ibn Ezra, pp. 22-23.

⁶⁰E. O. James, Creation and Cosmology: A Historical and Comparative Inquiry (Leiden: Brill, 1969), p. 86.

⁶¹For a more detailed discussion of Plotinus; theory, see Husik, History of Medieval Jewish Philosophy, pp. xxvi-xxviii.

intelligences, heavenly bodies, and our world, with God existing above all. Although the components that make up the different levels of the universe differ, it is reasonable to surmise that Plotinus' theory served, at the very least, as Ibn Ezra's starting point for his conception of the structure of the universe.

We must now investigate the relationship, if any, among our three different levels. How do they affect one another? While the creative process was forming our lower world, what was happening in the two higher realms? Were they "passive bystanders," or active participants in the cosmic process? We shall return to Ibn Ezra's commentary on Genesis 1 to answer this; and we shall see in the course of our investigation that the three-tiered universe works as an integrated and interconnected whole.

Before we can understand the role played by each realm, we must first understand the role played by God. Although God is above the whole universe and is ultimately the director of all, God is not viewed by Ibn Ezra as being directly involved in the creative process. For Ibn Ezra, God works indirectly through agents, these agents being the different components of the three realms. This is a surprising conception, even for Ibn Ezra; for rabbinic tradition, due to the influence of Gnosticism, fought hard against the notion of any entity being involved in creation except God.⁶² Yet in Ibn Ezra's eyes God is too different,

⁶²Urbach, The Sages, pp. 203-05.

too pure a being, and too transcendent to have contact with the corporeal world of change, evil, sickness, and death. Instead, God wills various agents to perform the necessary functions. The clues in our Genesis commentary all point to this conclusion. First, we have his analysis of אלהים in Genesis 1:1:

From the way of wisdom: we know that things spoken may be called 'lip', because it appears that speech comes from it. Likewise, the supreme soul of man is called 'heart', although heart is physical and the soul is not, because the heart is its primary seat; and because all the work of God is done by angels doing His will, He is called thus.⁶³

Ibn Ezra is suggesting here that the term אלהים refers not to God, but to the angels, to those intelligences of the highest realm. The lips carry out the actions of speech; thus, speech is often called lip. The heart carries out the actions of the Soul; thus, the Soul is often called heart. And since the angels, the אלהים, carry out the actions of God, then God is often called אלהים. The key is the explicit statement that "all the work of God is done by angels." This is the reason why Genesis 1:1 reads ברא יהוה and ברא אלהים. However, the text is cautious to use ברא (and not בראו) to emphasize the one God directing all.

That אלהים refers to angels, and that these angels are among God's agents, is supported by another statement in the same passage:

⁶³ Mikraot Gadolot, Vol. 1, p. 2:a.

And the meaning of God of hosts is the same as God of אלהים, and the meaning of אלהים is the same as king, and people that busy themselves with a king's justice are also called thus and this name is an adjective and it is not a noun.⁶⁴

Recall that Ibn Ezra uses both the terms hosts and angels to refer to the intelligences; they are synonyms. Thus, if "God of hosts" is identical with "God of אלהים," and "hosts" is identical with "angels," then "angels" is identical with the term אלהים. Furthermore, Ibn Ezra tells us that אלהים can be an adjective; it is a descriptive term referring to function. Hence, people who carry out an earthly king's orders are called אלהים, denoting their role as the king's agents. Similarly, those beings who carry out the king of kings' orders are also called אלהים, with the term again signifying their role as God's agents; and, as we have seen, at least some of these agents are the intelligences.

Another clue comes from Ibn Ezra's comment on Genesis 1:1:

[There are those] who said that the heaven and the earth were created at one time, and as testimony they offer: 'When I call unto them, they will stand up together' (Isaiah 48:13). But this testimony is not valid, for the meaning of the verse is not as such . . . for how can He speak to chaos?⁶⁵

We must remember here that the earth was an unordered mass of elements before the creative process began. This chaos is totally passive; it can only be transformed by an

⁶⁴Ibid., Vol. 1, p. 2:a.

⁶⁵Ibid., Vol. 1, p. 3:a.

external force. (If not, then it could have ordered itself into our world at any time.) This force is, of course, God. Yet we have a problem: how can the chaos, which is void of any "form of understanding,"⁶⁶ receive the commands of God? This is why Ibn Ezra asks how God can speak to chaos. Therefore, God must instead be speaking to beings who possess understanding, beings who are capable of responding and carrying out the commands according to God's will. These beings are the "angels"--the intelligences of the higher realm. This is further supported by Ibn Ezra's rejection of Saadya Gaon's interpretation of וַיֹּאמֶר in Genesis 1:3:

Saadya stated that the meaning of וַיֹּאמֶר is like 'He willed', but if this were the case, then it would have been appropriate to say וַיֹּאמֶר אֱלֹהִים לִהְיוֹת אוֹר, i.e., and God willed light to be. Rather, it is as it is heard [i.e., literal]. And thus 'with a word of the Lord the heavens were made' (Psalm 33:6), and 'And the commanded and they were created' (Psalm 148:5). And it is an expression about the work, that it was without labour, comparable to a king and his servants.⁶⁷

On the surface, Ibn Ezra rejects Saadya's view due to a grammatical point. Yet another reason for the rejection is that וַיֹּאמֶר, "and God said" supports his concept of the creative process. God's role was that of speaker, commander; the Psalms quoted provide further evidence for this. Thus, if God is literally commanding, then there must be beings capable of receiving and carrying out these

⁶⁶Friedlander, Essays on the Writings of Ibn Ezra, p. 9.

⁶⁷Mikraot Gadolot, Vol. 1, p. 4:a.

commands. As Ibn Ezra states, *למלאכה* indicates that God does no labor; the labor is instead done by those beings who receive the commands. Just as a king's commands are carried out by his servants, so too are God's commands carried out by agents. It is these agents--the intelligencies, and, as we shall see, even the planets and elements--who, obeying the commands of God, directly mold the primeval chaos into our world of form and order.

Having established that the creative process of Genesis 1 was carried out by agents obeying God's will, we must now try to construct the actual role of each of the agents involved. The passages quoted above have already revealed the role of one group of agents, the intelligences. It is these intelligent beings who receive the commands directly from God. Of course, as a totally incorporeal being, God does not speak to the intelligences as one human being speaks to another; the communication is rather a mental one. When dealing with God and the beings of the highest realm, "to speak" is equivalent to "to think" or "to reason" for Ibn Ezra,⁶⁸ and he uses the analogy of light to explain this mental process:

Behold the sun; the light which is perceived comes from it and is received by others. Yet the sun produces the light without labor or movement, without losing part of its own substance.⁶⁹

⁶⁸Friedlander, Essays on the Writings of Ibn Ezra, p. 51.

⁶⁹Ibid., p. 17.

After receiving the commands of God, the invisible, non-dimensional intelligences transfer God's will to more visible, corporeal agents: the planets and the stars.⁷⁰ As transmitters of God's word, they are therefore sometimes called *זוֹרֵי* or *גִּזְרֵי* of the Lord, and Ibn Ezra will interpret these terms as the intelligences in the course of his Biblical commentary.⁷¹ (See his comment on Psalm 119:89, for example.)

Yet the term *גִּזְרֵי* points to an additional function of the highest realm: *גִּזְרֵי* comes from *גָּזַר*, meaning "to cut, make outlines" or "to form." Within the world of the intelligences are found all the forms, the ideas, by which all things having structure and organization in the lower realm are made.⁷² The intelligences are thus more than the executors of God's will--they are at the same time the modes for all created beings. Furthermore, the intelligences continue this dual role even after the creative process is complete; they constantly fashion the world and govern according to the commands of the Supreme Being. Ibn Ezra hints at this in the following comments. First, in his comment on Genesis 2:4, he writes: "He endowed them with the power of reproducing according to their own form."⁷³ On Ecclesiastes 1:10, Ibn Ezra states:

⁷⁰Ibid., p. 9.

⁷¹Ibid., p. 17.

⁷²Ibid., pp. 16-17.

⁷³Mikraot Gadolot, Vol. 1, p. 10:a.

"All genera that arise are [modelled] after the form of the intelligences."⁷⁴ Third, he says in his comment on Exodus 23:21: "Every angel continues to do what God commands him, no more and no less."⁷⁵

Having received God's commands, the intelligences then transmit them to our second realm of heavenly agents, the planets and the stars. In this realm the mental commands are transformed into physical movements; that is, the intelligences will move the planets and stars in accordance with the divine will. The planets and stars are the "instrument," so to speak, by which the intelligences mold and fashion the lower world; it is through their various movements and positions that the sub-lunar world is formed and consequently governed. All natural events and occurrences on earth are caused by the stars and planets, whose movements are in turn caused by the intelligences carrying out the will of God: "Know that all the plants and all the lives on earth, the birds, cattle, beasts . . . and human beings are dependent on the beings above" (comment on Exodus 33:21).⁷⁶ For example, when God wished the dry land to appear, this wish was communicated to the intelligences, who then moved the stars and planets in such a way so as to cause the waters of the lower world to draw back and be gathered.

⁷⁴Friedlander, Essays on the Writings of Ibn Ezra, p. 16.

⁷⁵Ibid., p. 18.

⁷⁶Ibid., p. 10.

Like the role of the intelligences, the role of the heavenly bodies does not cease once creation is complete; the stars and the planets continue to exercise their influence below. Natural processes, world events, the history of nations, and fate of individuals are all determined by the heavenly spheres:

A poor philosopher may derive his contentment from his wisdom, and need not fret because of his poverty, seeing that his destiny was fixed at the creation of the world, a fact obvious to astrologers and suggested by Genesis 2:3--that is, God gave to His work (the heavens) the power of continuing to act according to the same primary law. (Comment on Ecclesiastes 7:11.)⁷⁷

Even small, day-to-day occurrences are set:

The time when an event is to take place is predetermined; and when that time approaches, the persons concerned move in the direction of that which has been prepared for them . . . in accordance with the motion of the constellation of their birth . . . even desire and its reverse are predetermined. (Comment on Ecclesiastes 3:1.)⁷⁸

We need only glance at one of Ibn Ezra's astronomical treatises to gauge the enormous extent of the determining powers that he attributed to the planets and stars. In The Beginning of Wisdom, Ibn Ezra lists the following areas as totally controlled by the planets' positions: all human activity, geographic regions, professions, metals, animals, insects, trees, shrubs, smells, tastes, personality traits, physical characteristics, colors,

⁷⁷Ibid., p. 10.

⁷⁸Ibid., p. 10.

and even one's clothing.⁷⁹ Each zodiac sign and star are also described as controlling a lengthy list of places, living beings, and physical affects.⁸⁰

We must add a word of caution, however. Even though the planets and stars determine almost everything that occurs on earth, we must not attribute to them any independent power or will. Ibn Ezra cautions us against worshipping or praying to the heavenly bodies, who are more like machines which, once set in motion, perform the work with precision. He reminds us that no prayer can change them, for their motion is determined from above and not from their will:

The ministers cannot alter their way or transgress the law given by the Lord; the spheres of heaven and all the lower creatures . . . derive their movement from these ministers, and they therefore are unable to do good or evil.⁸¹

Even though God works through agents, all is still ultimately determined by God's will alone.

In addition to the intelligences and the heavenly spheres, we have a third and final group of agents who played an active part in the creative process of Genesis 1: the elements earth, water, wind, and fire. We know from statements discussed earlier that the elements were part of the pre-existent chaos; once creation began, they

⁷⁹Levy, The Beginning of Wisdom: An Astrological Treatise by Abraham Ibn Ezra, pp. 193-202.

⁸⁰Ibid., pp. 156-86.

⁸¹Friedlander, Essays on the Writings of Ibn Ezra, p. 10.

performed specialized functions in accordance with God's will. Wind and fire are portrayed as obedient servants.

In his comment on Genesis 1:1, Ibn Ezra states:

And he [David] says that the wind is the messenger of God, going to any place He sends him; and thus the fire is among his servants . . . and therefore it is written 'the stormy wind, doing His word'. (Psalm 148:8)⁸²

Commenting on the term רוח אלהים in Genesis 1:2, Ibn Ezra tells us what role the wind played during creation: "The wind is connected to God because it functioned as His servant, according to God's will, to dry up the waters."⁸³ And in Genesis 1:6, he gives us the role of the fire as well: "And this firmament is the air; for when the light became strong upon the earth and the wind dried up [the waters of] the earth, the flash reversed and became the firmament."⁸⁴ The flashes of heat from the elemental fire struck the newly-exposed earth and rebounded, carrying with them the particles of dust and water vapor that make up the atmosphere.

The role of earth and water is somewhat different from that of fire and wind. Rather than affecting the physical properties of our world, the earth and water actually bring forth life itself. Ibn Ezra hints at this in his comment on Genesis 1:11:

⁸² Mikraot Gadolot, Vol. 1, p. 2:a.

⁸³ Ibid., Vol. 1, p. 4:a.

⁸⁴ Ibid., Vol. 1, p. 5:a.

Scripture says 'Let the earth put forth', 'Let the waters swarm' (Genesis 1:20), 'Let the earth bring forth' (Genesis 1:24); and behold He placed a power in the earth and in the waters to fulfill the commands of God, and it is 'the generations'. (Genesis 2:4)⁸⁵

It is not God directly who brings forth life; instead, the earth and water use their God-given power to produce the life forms of our world. These are 'the generations' of Genesis 2:4--i.e., the life generated by earth and water. This idea is supported by his comment on Genesis 1:20:

יִסְרוּ (let them swarm) is a transitive verb. And similar to it is 'and the river will swarm with frogs'. (Exodus 7:28); and its meaning is that it will multiply offspring along with lifting.⁸⁶

Not only does the water generate those forms of life appropriate to it; it also provides support for the birds by letting them float.⁸⁷ Furthermore, in defining the term נֶפֶשׁ חַיָּה in Genesis 1:24, Ibn Ezra states explicitly: "A general principle for that which the water and the earth bring forth . . ."⁸⁸

There is but one notable exception to this generative process of earth and water, and that exception is humankind. Unlike the rest of life in our world, humankind is created directly by God and the intelligences. In his comment on Genesis 1:26, Ibn Ezra writes:

⁸⁵ Ibid., Vol. 1, p. 6:a.

⁸⁶ Ibid., Vol. 1, p. 7:a.

⁸⁷ Oles, Translation of the Commentary of Abraham Ibn Ezra, p. 36.

⁸⁸ Mikraot Gadolot, Vol. 1, p. 8:a.

And now I will explain. Know that all of creation was created for the honor of man. And the earth and the water brought forth the plants and all living things. And after this God said to the angels, 'Let us make man'--we will busy ourselves with him and not the water and the earth.⁸⁹

It is this special creation that sets us apart from all else, enabling us to possess a rational soul and the ability to communicate with the divine.⁹⁰

We have at this point a fairly complete conception of Ibn Ezra's view of the structure of our universe. It is a universe made up of three levels; each level is unique, yet closely interrelated to the other two; each level has a role in the ordering of primeval chaos that constitutes the creative process of Genesis; and each level is ultimately controlled by God. Yet there remains still one vital question: if our lower world was the only level formed in the Biblical creation, what is the origin of the other two levels? Were they also once chaotic masses that were somehow formed at a prior point in time? Or are they indeed eternal, existing with God forever? Unfortunatley, Ibn Ezra gives us but one clue in his commentary on Genesis 1; to answer this question we will have to rely on comments made elsewhere and on our own speculation based on a knowledge of the philosophical sources for Ibn Ezra's thought.

⁸⁹ Ibid., Vol. 1, p. 9:a.

⁹⁰ For more on Ibn Ezra's view of the soul, see Husik, History of Medieval Jewish Philosophy, pp. 191-92.

Our single clue is found in his comment on Genesis 1:26: "God is the One, and He is the creator of all, and He is everything; and I cannot explain."⁹¹ What does Ibn Ezra mean by identifying God as the One--is there a specific, unparalleled unity that is designated as such? How can God be "everything"--including the lowest matter--if God is so transcendent and only indirectly connected to the lower realm? And finally, why does Ibn Ezra refuse to discuss his statement further? These questions can be answered if we work with the hypothesis that Ibn Ezra is subtly referring to the philosophical concept of emanation. This concept was extremely widespread and popular in medieval Jewish philosophical circles, and there is no reason to believe that Ibn Ezra would not be thoroughly familiar with it. Briefly stated, the concept of emanation posits a universe that unfolds gradually through a series of stages; at each stage a greater multiplicity emerges from a proceeding, more unified substance. It can be conceived as a huge ladder, with each lower rung increasing in complexity and corporeality. At the top of this ladder is the Godhead, or The One. God is the most unified and simplest being of all--that is, there exists within God no diversity, division, corporeality, or components. This God is totally unknowable, totally

⁹¹Mikraot Gadolot, Vol. 1, p. 9:a.

beyond all, including our comprehension; we know only that God is the most perfect of all beings, for in philosophic circles perfection is determined by the degree of unity and simplicity. This most perfect of all beings would not--could not--begrudge others a share in its perfection, a share of existence.⁹² Hence, its superabundance overflows, producing the next level of being--a being less perfect, less unified than God, yet still greater in its perfection than all else. Two images are frequently used to describe this process: the overflow of a bathtub, and the radiation of light from the sun.

The process continues down the scale of being, with each substance producing another that is less simple, less perfect than before. This increasing imperfection is due to both the growing number of components (which increases the likelihood of malfunction) and the growing amount of corporeality (which inevitably leads to change and decay). Yet even the most corrupt being, the most corporeal substance, is still linked to God, for all ultimately comes from God; God is literally the source of all being. A "spark of the divine," no matter how diluted, therefore exists in all beings of the universe. This is why Ibn Ezra can say that "God is everything"--God is

⁹²R. J. Wallis, Neoplatonism (New York: Scribner's Sons, 1972), p. 61.

the source for all; all being comes not from nothing, nor from an eternal matter, but from the Godhead itself.

Comments made elsewhere in Ibn Ezra's Biblical works add support to our hypothesis that he is referring to emanation. In his remarks on Exodus 23:21 in Yesod Morah, he writes: "God is one with the world, for God is the primeval force from which all separate beings flow, and whose effects penetrate all things."⁹³ In his large Biblical commentary, Ibn Ezra will often use the analogy of the number system as a way to describe or hint at emanation. In his comments on Exodus 3:15, he writes: "One, as a number, operates in a single direction, while all other numbers operate in both directions."⁹⁴ The parallel between the number one and God is obvious: both represent an absolute unity, and both are the terminus ad quo from which all else proceed. Furthermore, in commenting on Exodus 33:3, Ibn Ezra states:

And this name of God signifies the One that is self-existing, requiring no cause for His existence; and if it be considered that from an arithmetical point of view one is the beginning of all numbers, and that all of them are composed of units, it will be found that this is the One which at the same time is the whole.⁹⁵

Just as one is the beginning of all numbers, so too is God the beginning of all being; and just as the number one can

⁹³Guttmann, Philosophies of Judaism, p. 135.

⁹⁴Friedlander, Essays on the Writings of Ibn Ezra, p. 12.

⁹⁵Ibid., p. 21.

be found within all subsequent numbers, so too can God be found in all subsequent beings.

In addition to these passages, we can turn to Ibn Ezra's known philosophical sources as further evidence for his belief in emanation. The great influence of Neoplatonism on Ibn Ezra has been mentioned previously. The concept of emanation is first fully developed here, and it is one of the cardinal principles of Plotinus' philosophical system. The universe comes into existence by "falling away from the One"⁹⁶ through the series of gradations described above, all harmonized into a grand teleological scheme. Plotinus' system is dynamic, monistic, and, in certain respects, also pantheistic; all comes from the One whose powers pervade the entire gradation of being. Plotinus' thought may have not only affected Ibn Ezra directly, but also indirectly through the works of Solomon Ibn Gabirol. Another influence on Ibn Ezra, Gabirol is viewed by many as being that medieval Jewish philosopher most influenced by Neoplatonism. He carefully reworked and clarified many aspects of emanation, and added the innovative idea that even matter itself directly emerges from the Godhead (in Plotinus' system, matter emerges at a far later stage).⁹⁷ We must also mention two other sources: the Islamic philosophers Al-Farabi

⁹⁶James, Creation and Cosmology: A Historical and Comparative Inquiry, p. 86.

⁹⁷Julius R. Weinberg, Short History of Medieval Philosophy (Princeton: Princeton University Press, 1964), p. 148.

and Avicenna. Al-Farabi developed a version of emanation called "emergent emanation"⁹⁸; in this system the emergence of matter arises from the duality of thought that appears in the first group of beings that emanate from God.

Avicenna refined this idea even further, adding a third aspect to the first group of beings that explains not only the emergence of matter but the emergence of form as well.⁹⁹

It is unclear which of these different versions of emanation Ibn Ezra followed exactly; perhaps he combined various elements of each. Nevertheless, we can surmise that the basic aspects of his system are as follows: first, the emanation of the first realm, the intelligences, from God, with their unique form and matter discussed previously. Second, the emergence of the corporeal heavenly spheres from the intelligences: "The stars are created for the glory of God by the angels."¹⁰⁰ Third, the final emanation of the corporeal matter and four elements that make up the primeval chaos which eventually becomes our lower realm. While its origin lies in the ordering of that chaos, the origin of

⁹⁸Harry A. Wolfson, The Problem of the Origin of Matter in Medieval Jewish Philosophy and its Analogy to Modern Problems of the Origins of Life (New York: Longmans, Green, and Co., 1927), pp. 603-04.

⁹⁹Weinberg, Short History of Medieval Philosophy, p. 116.

¹⁰⁰Abraham Ibn Ezra, Yesod Mora (Frankfurt: J. Baer, 1840), p. 12.

the upper two realms lies in emanation. These upper realms are therefore, in a certain sense, "uncreated"; instead they flow from the Godhead itself. It is now easy to understand Ibn Ezra's hesitation in discussing this very non-traditional view of the universe's origin in a commentary to Scripture.

But are these two "uncreated" upper realms eternal? Have they been emanating from God always, or did that emerge at a particular point in the past? (Recall that, for Ibn Ezra, time did not originate with the creative process of Genesis, but instead existed before.) Ibn Ezra says nothing regarding this in our Genesis commentary; but statements made elsewhere indicate that Ibn Ezra believed the two upper realms to indeed be eternal. On Daniel 10:21, in referring to the heavenly spheres, he writes: "They are without beginning and without end."¹⁰¹ In attempting to explain the words of Psalm 119:88, Ibn Ezra says that "his word, namely the tenants of the upper heavens [i.e., the intelligences], are everlasting."¹⁰² The same idea is expressed in his comment on Psalm 148:6: "The intelligences, which are called the statutes, have been established by Him for all eternity."¹⁰³ Other comments emphasize the changeless nature of the upper realms; and if they are incapable of

¹⁰¹Friedlander, Essays on the Writings of Ibn Ezra, p. 13.

¹⁰²Ibid., p. 17.

¹⁰³Ibid., p. 15.

change, they must therefore be eternal. Again, on Daniel 10:21, Ibn Ezra states: ". . . the upper world . . . is subject to no change, whether in substance or relation; it is limited neither by time or place."¹⁰⁴ In the continuation of his comment on Psalm 148:6, he says: "They [the heavenly spheres] never change, for they are not composed of the four elements."¹⁰⁵ The intelligences are referred to as עומדים, "standing" or everlasting, and he writes in Exodus 3:15: "All of them are עומדים everlasting, and are without change in nature or place."¹⁰⁶

Furthermore, all of Ibn Ezra's philosophical sources view the emanation as an eternal process without beginning or end. For thinkers such as Plotinus, emanation is not the result of a decision made by the One at a particular point in time to "overflow"; this overflow happens automatically and by necessity "in the best, indeed the only possible way."¹⁰⁷ Due to its nature the One can do nothing else but emanate; and since God has existed for all eternity, God's necessary power of emanation must be eternal as well. Unless Ibn Ezra desired to make a radical departure from the system he so often adhered to, and we have no evidence for such a departure, it is probable that he too viewed the upper two realms as eternal--that is, without a beginning or end in time.

¹⁰⁴Ibid., p. 18.

¹⁰⁵Ibid., p. 12.

¹⁰⁶Ibid., p. 15.

¹⁰⁷Wallis, Neoplatonism, p. 63.

Yet Ibn Ezra does introduce one divergent element, and this element deals with the free will of God. In other Neoplatonic systems, the universe that results from emanation is an unchangeable one; natural processes and natural law can neither be altered nor interfered with. God does not and cannot intervene at any step along the way--all is automatic, generated by absolute necessity. By contrast, Ibn Ezra will maintain that a change in one of these absolute, natural laws can, if so desired, be effected by God. In his analysis of the word 'טו, Ibn Ezra derives it from טו, "to overpower," and says it denotes a Being able to overpower the force of the heavenly agents. In his comment on Exodus 6:3, he writes: "The Almighty God ('טו לך), He who defeats the constellations above."¹⁰⁸ Perhaps the source of this divergence is in Ibn Gabirol's use of the concept "Will"; by making will a divine attribute instead of an instrument, Ibn Gabirol is able to argue for "volitional emanation"--i.e., an eternal emanation that is freely willed by God rather than one that is mechanically and automatically caused.¹⁰⁹ Yet regardless of its possible source, Ibn Ezra's conception of divine interference is his attempt to preserve the free will of God. This attempt is motivated in part by Ibn Ezra's affirmation of divine

¹⁰⁸Friedlander, Essays on the Writings of Ibn Ezra, p. 24.

¹⁰⁹Wolfson, The Problem of the Origin of Matter, p. 604.

justice. Recall that the stars and the planets determine every detail of life on earth; all that occurs is due to "fate," i.e., the particular location and combination of the heavenly spheres. This conception easily leads to an all-encompassing determinism and fatalism; prayer and repentance became irrelevant, and free will for humankind becomes impossible. Yet all this is totally incompatible with Ibn Ezra's conception of divine justice: God must be able to somehow punish the wicked, reward the righteous, and redeem the truly penitent. Hence, the same power who is the source of all the laws in the universe must be able to delay, accelerate, or change their application.¹¹⁰ In many places (see his comment on Exodus 33:23, for example) Ibn Ezra states that our destinies are dependent on both the stars and at the same time on certain conditions which are subject to interference by God.¹¹¹ (Whether or not God does indeed intervene is of course dependent on righteousness, prayer, sincere repentance, and the development of the soul and intellect.) Once divine intervention is possible, freedom of will, reward and punishment, and repentance are able to regain their importance and relevance for Ibn Ezra.

We must point out that there is an inconsistency here, for many will argue that a God who intervenes is incom-

¹¹⁰Friedlander, Essays on the Writings of Ibn Ezra, p. 116.

¹¹¹Ibid.

patible with two key elements of Ibn Ezra's system: (1) eternal emanation of the upper two realms, and (2) God's absolutely unified, simple, and eternal nature. If God decides to intervene for a certain person at a certain point in time, then a change occurs, both within the universe and within God; yet eternality implies changelessness. For emanation to be a truly eternal process, no alteration or stoppage can occur; and for God to be truly one, simple, and eternal, no divergence or difference in the divine nature can appear. It is possible that Ibn Ezra did not realize this inconsistency; or it is possible that he was aware of its existence, yet tolerated it due to his desire to preserve the free will of both God and humankind. In either case, we find in Ibn Ezra two realms of eternal beings, evidently "produced" by an eternal process, that are nevertheless subject to divine interference.

We must be cautious here to avoid thinking of these eternal intelligences and spheres as independent beings with a status equal to God. God alone is absolutely self-existing--that is, totally independent of any other being for existence, requiring no outside cause or agent. Only God's existence is absolutely necessary--all other beings are only possible, for they all are dependent on God for existence. While both God and the upper two realms are eternal, the latter are causally dependent on God: they cannot arise or continue to exist without the One. This causal dependency renders the intelligences and

heavenly spheres as inferior beings; their inferior status is also confirmed by their total obedience to God's will discussed earlier. Although the supermundane world neither came into being nor will pass away, it functions and exists through God alone.¹¹²

We have now concluded our investigation of Ibn Ezra's view of the origin and structure of the universe. We have found that the creative process described in Genesis 1 involves the imposition of order on chaos, an event in time that produced our lower realm. We have encountered a three-tiered universe, made up of our world, the heavenly spheres, and intelligences; each tier acts as an agent of God, fulfilling specialized functions not only during the creation of our world but also throughout time. And we have briefly glimpsed a system of eternal emanation, where all being continually flows from God. What can we now say in retrospect regarding these aspects of Ibn Ezra's thought? What are the strengths, the weaknesses, the ambiguities of his system: Is his combination of religious and scientific thought a satisfactory one, or is it full of inconsistencies? Let us begin answering by first looking at the strong points of Ibn Ezra's system. First, he does not deal with the problems involved in creation ex nihilo by avoiding it altogether, positing instead a pre-existent "stuff" out

¹¹² Guttman, *Philosophies of Judaism*, p. 135. See also Ibn Ezra's comment on Exodus 3:15, Mikraot Gadolot, Vol. 2, pp. 11:6-15:a.

of which our world was formed. Second, he preserves God's free will by having the ordering of chaos occur at a certain point in time, and by advocating the possibility of divine interference with nature; hence both providence and miracles, two key religious beliefs are still possible. Third, due to the three levels of the universe and their various functions, God's transcendence is assured; yet due to his concept of emanation, the equally important religious idea of God's imminence is assured as well.

But, unfortunately, there are an equal number of weak points. First, although God may indeed be "everything," we are lacking that personal, involved God that is so crucial to Jewish tradition. For the most part, God is only indirectly involved with the runnings of our universe, or with the day-to-day events of our lives. God is so different, so distant and unknowable, that a personal relationship with God is difficult if not impossible. Second, Ibn Ezra leaves unsolved the classic Neoplatonic problem of how matter, even a different kind of matter, can emerge from the pure form of God; he assumes that matter is part of the emanational chain without explaining how this is possible. Third, at the very end of this chain we find the primeval corporeal matter that will eventually be molded into our world. This matter is described as chaotic and without order; hence, after all those careful stages of emanation from the most perfect being, we are left with chaos as a final result. How could an overflow

from the perfect One produce a chaotic end result? We might defend Ibn Ezra by suggesting that by the time the process reached our lower realm, it was too far removed from the heavenly spheres to be influenced by their order and harmony. Yet the implications of an emanation from the divine resulting in chaos are still disturbing, casting doubts on both God's perfection and the "best possible way" of emanation.

We are also left with one grave inconsistency. We have the eternal procession of intelligences, heavenly spheres, and primeval matter from God on one hand, and the one-time ordering of that matter into our world on the other. If the emanation process is indeed continual, what has happened to the primeval matter that has emerged from the process since the formation of our world? Is it somehow integrated into the new life that is generated on earth? Yet how can the same amount of primeval matter that was once sufficient for an entire world be reduced to serve as a mere replacement part? In addition, as mentioned earlier, there is a conflict between eternal emanation, which required an unchangeable, constant, and necessary universe, and the one-time ordering of chaos, which requires a changeable, flexible universe affected by God's will. Furthermore, why did God decide to order that primeval chaos? Was it motivated by some grand scheme, or was the ordering part of a necessary process? Finally, why did God decide to form our world at a certain point in time, i.e., why did God act at point X and not at point Y?

Despite these problems, we can conclude that Ibn Ezra has achieved a very important goal for any medieval Jewish thinker. Through his fusion of Neoplatonic emanation and Platonic, willed creation, Ibn Ezra is able to subscribe to the scientific and philosophical ideas of his time, yet still remain a devout and believing Jew. Merging what he sees as the best of both worlds, Ibn Ezra molds a conception of the origin and structure of the universe which satisfies his intellect while guiding and sustaining his soul.

Moses ben Maimon, known as Maimonides, has been called "the most illustrious Jewish figure in the Post-Talmudic era."¹ His reputation as physician, philosopher, halackhist, and spiritual leader was known throughout the Middle East, Northern Africa, and parts of Europe. Maimonides' influence on medieval Jewish life was immeasurable; even today his works and ideas continue to shape and affect Jewish thought. Born to a learned family in Cordova, Spain in 1135, Maimonides spent his early years studying Bible and Talmud, as well as other subjects characteristic of enlightened Spanish Jewry: science, languages, mathematics, and philosophy. Yet Maimonides quickly experienced another characteristic of Jewry in Spain: persecution and exile. Due to the invasion in 1148 of the Almohads (whose initial policies demanded Islamic conversion or pain of death or exile), Maimonides and his family fled Cordova, and spent the next several years wandering throughout Spain. In 1160 the family settled in Fez, Morocco, where Maimonides continued his previous studies, and began the study of medicine as well. Yet in 1165 persecution again forced

¹Encyclopedia Judaica, 1971 ed. (Jerusalem: Keter Publishing House, Ltd.), Vol. 11, p. 755.

Maimonides and his family to flee; they traveled to Israel, and, after many more months of wandering, finally settled in Fostat, the old city of Cairo.²

The next few years were calm ones for Maimonides; supported by his brother David, Maimonides continued his scholarly activities, and eventually became the religious and lay leader of the Jewish community. However, his brother's sudden death in 1168 left Maimonides with grave financial burdens; he thus began to actively practice medicine. His reputation as a physician grew substantially over the years, and in 1185 he was appointed physician to the grand vizier of Saladin.³ Yet despite the great demands of his profession, Maimonides still found time to continue both his scholarly work and his role as leader of the Jewish community. His immense literary output, his teaching, his guidance in times of crisis, and his genuine concern for the community endeared Maimonides to many; when he died in 1204, public mourning was proclaimed throughout the Jewish world.

The accomplishments of Maimonides in all fields were immense. As a physician, he ministered not only to the powerful, but also to the poor, spending many a late even-

²Ibid., Vol. 11, p. 755.

³Ibid., Vol. 11, pp. 756-57.

ing visiting and caring for the sick throughout Cairo.⁴ He wrote a compendium of Galen's works, as well as a commentary on the writings of Hippocrates. He composed medical treatises on a wide variety of topics, and collected and organized the latest knowledge on drugs and other treatments. As the religious head of the community, Maimonides provided strong and decisive leadership. He dealt vigorously with the challenges of the Karaites, and helped re-establish rabbinic authority in several areas; he alerted communities to the danger of false messiahs, and made many attempts to stamp out what he believed to be superstitious or idolatrous practices. In times of financial or political crisis, Maimonides helped mediate between the parties involved, easing tensions and offering solutions. His advice on a broad spectrum of topics was sought by religious and lay leaders from all over the Jewish world, and Maimonides diligently answered all requests.⁵ As a man knowledgeable in mathematics and science, he was considered an expert in Ptolemaic astronomy; he wrote a treatise on the calendar, and produced a work on logic (Millot Higgayon).⁶

Yet it is in the fields of Jewish law and philosophy that Maimonides' accomplishments reached their height. He

⁴Ibid., Vol. 11, p. 777.

⁵Ibid., Vol. 11, p. 760.

⁶Ibid., Vol. 11, p. 755.

sought to organize and clarify the vast amount of halackhic literature produced throughout the centuries, and his works continue to this day to influence Jewish halackhic development. Although only fragments survive, a commentary to the Babylonian Talmud was begun in his early youth. In his Commentary to the Mishnah (Sirāj), Maimonides provided explanations for the meaning of each section, delineating underlying principles and demonstrating the connections between the various topics discussed. In the Sefer Ha-Mitzvot, he sought to explain the meaning of all מצוות 613. All these were forerunners to the greatest of Maimonides' halackhic works, the Mishnah Torah, which took ten years to complete. In this work Maimonides classified the entire body of Talmudic and post-Talmudic halackhic literature; written in Hebrew, the work is a model of logical method and clear, succinct language. Maimonides' halachic expertise is demonstrated not only by these large literary works, but also by the great volume of Responsa; writing in both Hebrew and Arabic, Maimonides answered over four hundred halackhic inquiries sent by learned scholars and rabbis of all lands.⁷

Maimonides philosophic achievements are all embodied within one work: The Guide for the Perplexed, completed in 1190. Many consider the Guide to be the most important Jewish philosophic work ever produced. Maimonides wrote

⁷ Ibid., Vol. 11, pp. 765-67.

the Guide in response to what he felt was an urgent need within the intellectual Jewish community. Like Maimonides, many had been trained not only in Bible and Talmud, but also in science and philosophy. A tension soon arose between these two divergent fields, with the "truths" of reason often differing with and even contradicting the "truths" of revelation; hence, many found themselves perplexed, not knowing what to believe or what to reject. An easy solution would be to totally abandon one source of truth for another; yet many desired to retain their religious beliefs while still remaining within the circle of rational, enlightened thinkers. They longed for a resolution to their perplexity, for a satisfactory accommodation between "the science of rational thought and the art of revealed belief."⁸ The Guide is Maimonides' endeavor at this reconciliation. Specifically addressing his most promising students, Maimonides attempts to demonstrate that the relationship between the core of revelation and reason was one of identity--i.e., that they represent two forms of the same truth. Their apparent contradiction stems not from the truths they teach but from our faulty reasoning and misunderstanding; when properly comprehended, both revelation and reason will reveal the same view of us and our universe. Furthermore, according to Maimonides, the

⁸ Leon Roth, Spinoza, Descartes, and Maimonides (New York: Russell and Russell, 1963), p. 67.

relationship is more than one of mere identity; reason becomes the sole tool by which we interpret revelation itself. Only through the understanding of science and philosophy can we arrive at the real internal meaning of the revelation. Maimonides argued that an ignorance of philosophic doctrines was detrimental to an understanding of God, thus hindering religious action and belief. In his introduction to part 1 of the Guide, Maimonides states:

He wished to perfect us and improve the matters of our masses with His law regarding actions, which is only possible after intellectual beliefs, the first of them being His apprehension . . . which is only possible through divine science [metaphysics]--and this is only possible after natural science [physics].⁹

Philosophic study is thus viewed as the central element of religion itself, with the degree of faith proportional to the amount of philosophic knowledge. It is Maimonides' hope that the Guide will clarify and reveal this unique relationship, thereby causing the perplexity to ease and eventually vanish.

Yet we can ask the following question: if revelation and reason are both teaching the same truths, why are two forms of expression necessary? Would not reason alone be sufficient? Maimonides anticipates this question, and answers it in his introduction to the Guide. The acquisition of philosophic knowledge is a long and arduous task; most have neither the time nor energy, and many do not possess the necessary intellectual capabilities. If

⁹Moses Maimonides, Moreh Nebuchim (Jerusalem: Ibn Tibbon translation, 1960), pp. 6:a-6:b.

reason alone existed, the majority of people would be condemned to ignorance and erroneous belief. Yet this undesirable state of affairs was avoided, due to a unique method that enabled the ignorant and busy to grasp the results of more powerful thinkers--and this unique method was revelation, specifically the revelation embodied in the prophetic writings of Scripture. For Maimonides, the Bible was intended for many readers, with different layers of meaning embedded in its text. The untrained reader is given the proper beliefs and doctrines via methods appropriate to his level of apprehension: powerful images, anthropomorphic descriptions, and stories. Yet at the same time the enlightened reader, possessing the intellectual tools needed, is able to delve deeply into the text and perceive the philosophic truths hidden within.¹⁰ These truths are the same truths of reason--concealed from the ignorant, yet waiting to be discovered by enlightened minds. Throughout the Guide, Maimonides strives to show this correlation between the truths of reason and the hidden truths of revelation that lie beneath the surface of the Biblical text.

The method of the Guide is neither commentary nor philosophic treatise; rather, it takes the form of an exegesis between philosophy and Scripture, "in which reason

¹⁰ See Maimonides' comment in Moreh Nebuchim, Introduction to Part I, p. 6:b.

and revelation argue and alternate to enlighten and inform each other."¹¹ The teachings of science and philosophy are presupposed, with Maimonides either accepting or rejecting them. If a teaching is to be accepted, Maimonides will demonstrate how this teaching is found within the Biblical and Jewish tradition; if it is to be rejected, he will show how the teaching has not truly been demonstrated or proven. Many chapters are devoted to explaining the proper meaning of words and anthropomorphic phrases in the Bible; others involve a thorough critique of different theological systems, such as that of the Mutakallimun; and still other chapters present a straightforward discussion of the principles of mathematics and science. Yet all this is not done in a clear-cut, straightforward manner; instead, Maimonides will frequently write in a cryptic fashion, giving only hints or clues, and deliberately contradicting himself. Often the same subject will be discussed in several different places, and in several different ways, with Maimonides leaving it up to the reader to place the proper pieces together. In many ways the Guide resembles one huge intellectual jigsaw puzzle; the puzzle is so well constructed, so intriguing, that debates concerning its proper solution continue even today, with no clear resolution in sight.

¹¹Lenn E. Goodman, Readings in the Philosophy of Moses Maimonides (New York: Viking Press, 1975), p. 34.

This enigmatic character of the Guide is due to several factors. The first of these is the difficulty of the material involved. The topics of metaphysical speculation include the existence of deity, the nature of deity, the origin and structure of the universe, and the inter-relationship between the deity and the universe. These are not topics easily conceived; they demand the full extent of our intellectual capacities of reasoning and conceptualization, and often even this is not sufficient. Hence, the truths of metaphysical speculation will not lend themselves to straightforward, conceptual formulation; rather, they will appear only in short glimpses, or flashes:

And know that, when one of the perfect one wishes, according to the level of his perfection, to mention a thing from what he has understood from these secrets . . . he is not able to explain even a little of the portion which he has perceived [with] clarity and complete order . . . it will be that the subject appears, flashes, and afterwards it will be hidden . . .¹²

The second factor is the traditional prohibition of teaching scientific and philosophical concepts to the public. According to Maimonides, this prohibition began with the Bible itself, which, as mentioned above, conceals certain truths from the unenlightened mind. The prohibition was continued and strengthened by the rabbis, who forbade the teaching of "Ma'aseh Bereshit" and "Ma'aseh Merkabah" to more than one or two worthy students.¹³ "Ma'aseh

¹²Maimonides, Moreh Nebuchim, Introduction to Part I, p. 6:a.

¹³See Babylonian Talmud, Hagigah 11:b.

Bereshit" and "Ma'aseh Merkabah" are identified by Maimonides as the study of physics and metaphysics; thus, Maimonides hesitates to reveal and clearly discuss subjects so carefully guarded by his tradition:

We mentioned that the 'Account of the Beginning' is the natural science [physics] and the 'Account of the Chariot' is the divine science [metaphysics] . . . Do not request of me here anything but the chapter headings; and even these headings are not ordered in these treatise, and are not arranged logically, but are scattered and compounded with other subjects that we seek to clarify. For my intention is that the truths will be visible and afterwards hidden . . .¹⁴

The third factor is Maimonides' desire to conceal from the general public views which would cause discord and controversy. As we shall see, many of the Guide's views differ sharply with the common beliefs of the average Jew, and many of its conceptions are beyond the comprehension of the untrained thinker. If clearly and openly stated, these views and conceptions would be upsetting to most, misunderstood by many, and distorted by a few; severe attack and persecution could easily result (as, in fact, it did in several communities after the Guide's publication). In light of his position in the Jewish community, Maimonides naturally wished to avoid all this. Therefore, he deliberately wrote the Guide in an enigmatic fashion in order to protect himself and his work from unnecessary attack. Like the Bible, it too conceals certain truths from the

¹⁴Maimonides, Moreh Nebuchim, Introduction to Part I, pp. 4:b-5:a.

masses, while revealing them to the few capable of grasping their proper meaning.

It is to this carefully constructed Guide that we will turn in our search for Maimonides' view on the question of the origin and structure of the universe. To examine and analyze the entire context of the Guide is quite beyond the scope of our present project; yet we must begin somewhere. Our direction is given to us by Maimonides himself, in his identification of "Ma'aseh Bereshit" as natural science. For Maimonides, the account of the beginning--the chapters on creation of the book of Genesis--contain a treatment of philosophical physics beneath the simple narrative. The properly trained mind should be able to find clues regarding the universe's origin, composition, and function embedded within the Biblical text. Hence, we will examine those portions of the Guide in which Maimonides discusses any phrase of Genesis 1, particularly chapter thirty of the second part. Although we cannot emerge with a complete or definitive picture of Maimonides' thought, we can at the very least perceive some indications of his beliefs. In our examination we will look for his answers to the following questions: What is the nature of the universe's origin (if it had an origin at all)? Of what is the universe composed and how is it structured? How does the entire system work? We will also be looking for indications of Maimonides' sources, of those former thinkers who influenced Maimonides' work. We do not expect to

solve the puzzle of the Guide; nor do we expect to settle the controversy surrounding Maimonides' thought. However, we do expect to gain a clearer insight into the mind of one of the great Jewish philosophical thinkers of medieval times.

When we begin to examine the text of II:30, we find three explicit statements by Maimonides that the universe was created, i.e., that it had an origin. Commenting on Genesis 1:1, Maimonides states:

. . . the true interpretation of this verse is: With the principle the Deity created (וְיָ) the higher things and the lower things. This is the interpretation that agrees with the coming-into-existence of the world.¹⁵

In discussing the term אֵל, Maimonides again openly states that all was created:

And from that which is necessary that you should know is the word 'אֵל', that is said in the saying (Genesis 1:1) אֵל הָאֵלִים וְאֵל הָאָרֶץ. Already the sages explained that it has the meaning of 'with', and the meaning is this: that He created in the heavens all that which is in the heavens, and with the earth all that which is in the earth. And already you know their statement that the heaven and earth were created together . . .¹⁶

And, while reviewing the differences between "to create" (בָּרָא), "to make" (עָשָׂה), and "to possess" (קָנָה), Maimonides says:

¹⁵Ibid., II:30, p. 58:a. Maimonides uses the Arabic term "hudūth," which had many interpretations. Some, like the Mutakallimun, said it could only mean creation ex nihilo; others, such as Avicenna and Al-Farabi, claimed it meant eternal emanation. It is not clear here which meaning Maimonides intended; yet its use does indicate some sort of origin or dependence.

¹⁶Ibid., II:30, p. 58:b.

As for this existence which is specific with respect to the entire world, i.e., the heavens and the earth, 'to create' (נִרָא) is used, because according to us it connotes the bringing-into-existence from privation; and it also stated 'to make' (עָשָׂה), referring to the specific forms given to them. And it stated regarding them: 'to possess' (קָנָה), referring to His dominion over them as the dominion of a master over his slaves . . . and since He will not be a master unless he has a possession--and this inclines toward the belief in the eternity of matter--therefore it stated regarding them the words 'to create' (נִרָא) and 'to make' (עָשָׂה).¹⁷

One might erroneously infer that since God the master is eternal, then the master's possession would be eternal as well, or else God's nature would change (i.e., from non-master to master with the beginning of the universe). To avoid this, Scripture will therefore specifically use the term נִרָא, which, as stated earlier, refers to a coming-into-existence, an origination.

It thus appears from the statements in II:30 that Maimonides believed our universe had an origin; this view is repeatedly stated elsewhere in the Guide as well.¹⁸ Some scholars maintain that all this is mere camouflage, designed to conceal Maimonides' "real belief" in the eternality of the universe, which is the position of Aristotle. Yet other considerations may help support our contention that Maimonides did indeed believe in some sort of origin. First, we have his critique of Aristotle's

¹⁷Ibid., II:30, pp. 63:a-63:b.

¹⁸See III:10, III:13, and III:25 for examples.

arguments in favor of eternity. We must first point out that the Aristotelian view that Maimonides argues against was not the original Aristotelian position. Neoplatonic influences had transformed Aristotle's original concept of a universe eternally existing with God. Due to the erroneous identification of several Plotinian works as Aristotelian, medieval thinkers viewed the theory of emanation as an integral part of Aristotle's system. As a result, the medieval Aristotelian view of eternity implied the eternal, necessary emanation from God of the entire universe, including matter. The spheres, the separate Intellects, form, matter--all flow from God, and all are eternal. Even the laws governing the universe are eternal; there are no innovations, no changes within either God or the universe--all is automatic, acting in accordance with necessity. Existence has always been and will always be the same.

This somewhat amended view of Aristotle represented the strongest challenge to a belief in creation, and Maimonides exerts considerable efforts to challenge it and its supporting arguments. In II:15 Maimonides states that there is no definitive proof for Aristotle's theory; even Aristotle himself, Maimonides informs us, was aware that no decisive demonstration existed, and that his arguments were of a kind known as "probable."¹⁹ One of these argu-

¹⁹ Harry A. Wolfson, "The Platonic, Aristotelian, and Stoic Theories of Creation in Hallevi and Maimonides," Essays in Honor of J. H. Hertz (London, 1942), p. 437.

ments raises the problem that in the act of creation God passed from potential to actual agent; yet this cannot be, for there can be no change in God. Hence, the universe must be eternal. Maimonides responds to this in II:18, stating that the transition from potentiality to actuality applies only to material beings; since God is incorporeal, God is always in actu. God is always an active, actual agent, whether the actions produce visible results or not. Furthermore, stresses Maimonides, our conception of action does not apply to God; God's action is of a totally different nature.²⁰ Another argument in support of eternity states that an agent who acts at one time but not another does so due to external influences that promote or hinder action; yet there are no external influences on God. Consequently, God could not have created the universe at one point and not another; God must always create--thus, the universe is eternal.

In answer to this argument, Maimonides concedes that an agent whose will is determined by external purposes is indeed subject to outside influences of action. But the agent whose will has no external purpose, such as God, is not influenced at all. If God does not act in the same manner at all times, it is because it is the nature of God's will to do so.²¹ A third argument for eternity observes

²⁰Isaac Husik, *History of Medieval Jewish Philosophy* (Philadelphia: Jewish Publication Society, 1946), p. 271.

²¹*Ibid.*

that all coming-into-being in our universe is preceded by motion. If motion came into being, then there was motion before motion even existed, which is absurd. Hence, motion must be eternal; and, since time is connected with motion, it must be eternal as well--and eternal motion and time imply an eternal universe. Maimonides responds that this argument is based on the erroneous assumption that the world must come into being in the same way that things in the world now come into being: "It is impossible to infer from the nature which a thing possesses after passing through all stages of development what the condition of this thing was at the moment this process commenced."²² In other words, the laws governing motion and time were not necessarily in existence at the time of the universe's coming-into-existence; they too were created by God.²³ Finally, Maimonides will point to the problems posed by the necessary emanation of the universe from God. According to the notion of causal necessity, a simple cause can only

²²M. Fakhry, "Antinomy of the Eternity of the World in Averroes, Maimonides, and Aquinas," Studies in Maimonides and St. Thomas Aquinas, Jacob I. Dienstag, ed. (New York: Ktav Publishing House, 1975), p. 114. Note the similarity of this concept to that of Hume, who argues that one cannot assume with any certainty that the future will be the same as the past. Maimonides argues that one cannot assume that the past is the same as the present.

²³Husik, History of Medieval Jewish Philosophy, p. 270.

produce a simple effect. Hence, the First Intelligence alone will emerge from God; yet from this Intelligence there emerges not only a second Intelligence but a sphere with stars as well. In II:22, Maimonides questions how a simple,²⁴ incorporeal being can produce the composite, corporeal sphere and its star. No matter how many Intelligences emerge, the last one would still be a simple substance. Where, therefore, does composition and corporeality arise?²⁵ Maimonides will also point out that on the assumption of necessity, according to which the effect cannot be greater than the cause, there are not enough entities in the Intelligences to account for the variety of entities found in the spheres that emanate from the Intelligences. Even if we view the Intelligence as having two aspects (in thinking of itself and another), with one producing the sphere and the other producing the second Intelligences, the one that produces the sphere is only one in number, whereas the sphere contains four: the form and matter of the sphere, and the form and matter of its

²⁴See Harry A. Wolfson, "Hallevi and Maimonides on Design, Chance, and Necessity" (New York: American Academy for Jewish Research, 1941), p. 118. Although there may be two objects of thought, the thinker and the object of thought are identical in an incorporeal intelligence; hence it still remains a simple substance.

²⁵Ibid., pp. 117-18.

star.²⁶ Maimonides thereby concludes that there is not enough multiplicity in the Intelligences to account for the multiplicity of the spheres.

Hence, it would seem from the above that Maimonides made a sincere effort to combat the theory of the universe's eternity; his arguments against it are carefully worded and emphatically stated. He repeatedly points out its flaws and inadequacies. This lends support to our contention that Maimonides ascribed to some type of origin for our universe. A second consideration that also lends support is the set of arguments Maimonides puts forth to demonstrate the plausibility of creation. Maimonides tries to show that there are phenomena in the universe that Aristotle's theory of eternal necessity cannot explain; the phenomena make sense only when we assume an intelligent being working with design and free will--i.e., a being who can create, not being bound by causal necessity. Maimonides begins by delineating the three types of matter in the universe: (1) sublunar, which has rectilinear motion; (2) the matter of the spheres, which has circular motion; and (3) the matter of the stars, which has no motion of its own.²⁷ Like the sublunar world, all celestial objects will

²⁶Ibid., pp. 118-19.

²⁷Maimonides, Moreh Nebuchim, II:19. Maimonides assumes Aristotelian physics throughout his presentation.

be composed of matter and form. Thus, each sphere will contain the common matter of all spheres plus an individual form, and each star will contain the common matter of all stars plus an individual form. We know, Maimonides says, that matter can receive any appropriate form; if the spheres (or stars) all share a common matter, then each sphere is as equally ready to receive the form of another sphere as it is to receive its own. The celestial matter, although different from earthly matter, possesses the same basic characteristic of all matter: the shedding of one form and the taking on of another. With this interchange of forms, the spheres would periodically change the direction and/or velocity of their movements, and the stars would change their luminosity. Yet none of these changes ever occur. Neither the matter of the spheres nor the matter of the stars behave as they should--Aristotle's physical laws do not hold here. Since natural law cannot explain this, Maimonides concludes that it must be the work of a voluntary agent who permanently assigns each sphere and star their particular form.²⁸

Maimonides next points to the problem of the spheres' movements. Each sphere rotates at a constant velocity; yet in order to correspond to the observed movement of

²⁸H. Davidson, "Maimonides Secret Position on Creation," Studies in Medieval Jewish History and Literature, Isadore Twersky, ed. (Cambridge: Harvard University Press, 1979), pp. 30-31. See also Moreh Nebuchim, II:22.

planets and stars, Aristotle posited that some spheres move faster than others, with some moving east to west and others moving west to east. Since the spheres are all composed of the same matter, the diversity in motion cannot be due to a diversity of material. Furthermore, the movement of each sphere was said to influence the movement of the sphere below. Now, says Maimonides, if a regular pattern of fast/slow, east/west could be seen, we could devise a system of natural law that would explain how each sphere causes the motion of the next. Yet no such pattern exists--the sequences of fast/slow, east/west are totally at random. Since there is no regular pattern, Maimonides reasons, there can be no natural law to explain the movement. We are instead seeing the work of a voluntary agent who assigned each sphere "whatever direction or velocity it wished."²⁹

The last phenomenon that Maimonides examines is the stars. As stated earlier, the matter of the stars and planets is a different kind from that of the spheres: the spheres rotate constantly, whereas the stars cannot move on their own; the spheres are transparent, but the stars are luminous. Maimonides states that there is no natural law or principle that can explain how the stars of matter X can be conjoined with the spheres of matter Y.

²⁹See Maimonides, Moreh Nebuchim, II:19 and Davidson, p. 28.

Nor can any law explain the random, haphazard distribution of the stars fixed in the ninth sphere--in some areas there are great clusters of stars, while in others there are none. Insomuch as the presence and distribution of the stars in the spheres follows no natural law, Maimonides again attributes this to an act of choice by a voluntary agent.³⁰

All these phenomena cannot be explained by Aristotle's theory of eternity, which demands a universe maintained by absolute natural law and causal necessity. Rather, they are better suited to a universe designed and maintained not by necessity, but by the free will of a voluntary agent. Hence, states Maimonides, given the existence of this agent and of free will and design, creation becomes not only possible, but also more plausible than the theory of eternity.³¹

Our final consideration in support of Maimonides' belief in an origin is the issue of necessity versus free will. Upon close analysis, it will be seen that the real crux of the eternity vs. creation debate is not the universe's origin, but rather the nature of the Godhead itself. The difference between eternity and creation resolves into a more fundamental difference between a God

³⁰ Maimonides, Moreh Nebuchim, II:19; also Davidson, "Maimonides Secret Position on Creation," p. 28.

³¹ Davidson, "Maimonides Secret Position on Creation," pp. 29-30.

bound by law and necessity and a God acting with free will and design. In Aristotle's universe, nature and law are identical. No supernatural entity exists: all is part of nature, and all is bound by nature's unchanging character. Even the prime mover, the "Godhead" of Aristotle's system, is bound by these laws. It acts not by free will, but by causal necessity--i.e., it cannot do anything else. The entire universe, including the Godhead, is one huge "automatic compulsion of which God is part, and all is law and necessity and causality."³² The result of this system is clear: a God who is totally void of free will, who cannot choose, deliberate or decide anything. This image of God stands in great contrast to the voluntaristic God of Jewish tradition, and Maimonides appears to resist this view of an "automatic" God. Throughout the Guide, even in its most philosophical sections. Maimonides will again and again use the phrase "the will of God," or "God willed it so."³³ How can this phrase be interpreted, even figuratively, if no such will even exists? If all is due to nature's unchangeable laws, then it is illegitimate to attribute any event in the universe to God's will. The

³²Israel Efros, "Nature and Spirit in Maimonides' Philosophy," Studies in Medieval Jewish Philosophy (New York: Columbia University Press, 1974), p. 161.

³³See Maimonides, Moreh Nebuchim, III:13-15.

entire system of the *מלחמה*, which Maimonides carefully observed and studied, would become entirely without meaning. A universe void of free will encompasses humankind as well. If our conduct and character are all determined by causal necessity, all the *מלחמה* are in vain and represent a cruel joke; for without the freedom of will to act, a command has no effect.³⁴ Furthermore, Scripture itself would be judged as totally false. Belief in eternal necessity with its automatic God would make belief in the contents of the revelation at Sinai impossible. Maimonides writes: "If the philosophers would succeed in demonstrating eternity as Aristotle understands it, then the Scripture as a whole becomes void . . ."³⁵ This is so because Scripture attributes all action ultimately to God, and not to nature. Let us use the following two sentences as an illustration: "God revealed this knowledge to a prophet" and "God brought this event about in the universe." Maimonides makes it clear in the *Guide* that all knowledge and action are the result of nature and her laws, and thus all such statements must be viewed figuratively as referring to natural processes.³⁶ Yet what do we do with the part

³⁴ See Husik's discussion of this matter, *History of Medieval Jewish Philosophy*, pp. 286-87.

³⁵ David Hartman, *Maimonides: Torah and Philosophic Quest* (Philadelphia: Jewish Publication Society, 1976), pp. 132-33.

³⁶ Maimonides, *Moreh Nebuchim*, II:48; see also A. Reines, "Maimonides' Concept of Miracles," *HUCA*, #43 (Cincinnati: Hebrew Union College-Jewish Institute of Religion, 1972), pp. 248-86 and Reines, "Maimonides' Concept of Providence and Theodicy," *HUCA*, #45 (Cincinnati

of the statement that mentions God? It can't be ignored or dismissed; rather, it means that although knowledge and action are natural events, Scripture attributes them to God because God is the creator of nature and her laws, and thus ultimately the true source of everything nature produces. God cannot be seen as the ultimate cause unless God is the cause--i.e., the being who freely created the natural universe. If no act of creation occurred, and if God is thus also bound by nature, then there is no satisfactory interpretation for each time Scripture says "God said" or "God did"; Scripture would have to be rejected in its entirety as false and misleading.³⁷ Now we know that Maimonides spent much time, energy, and devotion to the Bible. Furthermore, it is reasonable to assume that Maimonides was consistent in his views and actions, that no dichotomy existed between his beliefs and life's work. This consistence demands a belief in the free will of God, and with it the concomitant belief in an origin for the universe. Maimonides recognizes this intrinsic connection when he writes: ". . . this is proof for the intention of the One who wills, and intention cannot be conceived of except with the coming-into-existence of a created thing."³⁸

Hebrew Union College-Jewish Institute of Religion, 1974), pp. 169-206.

³⁷ Reines, "Maimonides, Concept of Miracles," pp. 281-84.

³⁸ Maimonides, Moreh Nebuchim, III:13, p. 17:b.

Thus, his direct statements in II:30, plus the above considerations, indicate that Maimonides viewed the universe not as eternal, but as an entity that had an origin. This is further supported by his discussion of the concept of time. He writes: "And the world was not created in a temporal beginning, as we have explained: for time is one of the created things."³⁹ In other words, there was not a point on the measurable time scale during which creation occurred; if this was so, time-flow itself would have to exist before creation, and could therefore be seen as eternal. Maimonides wishes to avoid this erroneous view, for it supports Aristotle's theory of the eternality of the universe. Rather, the initial act of creation occurred when there was no time-flow at all; hence, there was no "temporal beginning." Time proper comes into existence with the formation of the heavenly sphere:

I have already made known to you that the foundation of the entire Torah is that Deity brought the world into being not from a thing, without a temporal beginning, but time is created, for it is attached to the movement of the sphere, and the sphere is created.⁴⁰

One of the philosophic principles of Aristotle accepted by Maimonides is that time is an accident following motion connected with it.⁴¹ One cannot be without the other:

³⁹Ibid., II:30, p. 58:a.

⁴⁰Ibid., II:30, p. 58:b.

⁴¹Ibid., Introduction to II, p. 2:b.

there is no motion without time, nor time without motion. Hence, since measurable time is linked to the motion of the sphere, it cannot exist until that sphere comes into existence. The sphere is created; thus time cannot be eternal, but must be created as well.

Not only does Maimonides clearly state his own position on time, he rebukes those who disagree. Writing on the word *וְהַיּוֹם*, he states:

Regarding that which you will find written by some of the sages (about) the permanence of time existing before the creation of the world--it is very doubtful, for this is the opinion of Aristotle, who says that time cannot be conceived as having a beginning--and this is disgraceful.⁴²

Yet Maimonides acknowledges how they were misled, and seeks to solve the dilemma. The phrases "the first day" (Genesis 1:5) and "the second day" (Genesis 1:8) raised the following question: since there was not yet a revolving sun or moon, by what were these first days measured? Some of the sages therefore concluded that an order of time must have existed before creation itself. Yet this solution is unacceptable to Maimonides, for, as stated earlier, an eternal order of time implies an eternal universe. Maimonides will instead offer a different solution, one that has its roots in Rabbinic tradition: the sun, the moon, all the heavenly spheres were brought into existence at the very beginning of the creative process,

⁴²Ibid., II:30, pp. 58:a-b.

and they were given their proper place and function in a gradual unfolding that occurred during the first six days.

Commenting on the word "נח", Maimonides writes:

And already you know their [the sages] explanation that the heaven and the earth were created together, for Scripture says: 'I call unto them, they stand up together' (Isaiah 48:13)--thus, all was created together, and all things became separate one by one. They have made a parable of this to a sower of seeds who sowed different seeds in the earth at once; some of them sprouted after one day, and some of them after three--yet all were sowed at the same hour. And according to this opinion, the true one without a doubt, the . . . difficulty will be solved: by what thing were the first and second day measured? And the sages stated an interpretation in Bereshit Rabba regarding the 'light' that is mentioned in the Torah, that 'it was created on the first day' (Genesis 1:3)--they said regarding this: 'These are the luminaries that were created on the first day, and they were not suspended until the fourth'. (B. Hagigah, 12:a)⁴³

Although the sun and moon were not "suspended" until later, they and their respective spheres did exist from the beginning of the process, and time could thus be measured by their motion. Hence, there is no reason to posit the existence of an order of time before the creative process began--like the heaven and the earth, time is a created entity with a beginning.

Maimonides' source for his belief in an origin of the universe can be found not only in Jewish tradition; it can be traced to Plato as well. If we look at Plato's Timaeus, we find the premise that the cosmos was not always in existence, but was instead generated by the Divine

⁴³ Ibid., II:30, p. 58:b.

craftsman. It has been cogently argued⁴⁴ that Plato did not view this as an allegory, but as a firm metaphysical doctrine. In addition to positing an origin for the universe, Plato also posits a beginning for uniform and measurable time-flow, as does Maimonides. For Plato, however, this does not mean a beginning of time itself, as some sort of temporal succession existed with the primeval and pre-existent chaos that He proposed. Yet all notions there were disorderly; no periodic, uniform movements occurred by which time could be measured. This measurable and uniform flow that we call time is brought into existence by the craftsman. Hence, like Maimonides, Plato states that the creative act did not occur in time proper (i.e., measurable time).⁴⁵

The influence of Plato's thought will be even more evident when we raise the following issue. We have concluded that Maimonides believed in some sort of origin for our universe, i.e., that it was brought into existence, or created. Yet what type of creation was involved? Exactly how and from what was the universe formed? At first glance, it would appear that Maimonides follows the traditional view: that creation occurred ex nihilo, from absolutely nothing at all. We have already seen the

⁴⁴See Gregory Vlastos, "Creation in the *Timaeus*: Is it a Fiction?" *Studies in Plato's Metaphysics*, R. E. Allen, ed. (London: Routledge and Kegan Paul, 1965), pp. 401-19.

⁴⁵*Ibid.*, pp. 409-11.

statements in which he states that God brought the world into existence "from privation" and "not from a thing."

Yet his comment on the word "נראשית" raises our suspicions that the case is not so simple:

Know that there is a difference between 'the first' and 'the principle', and it is this: that the principle exists in that of which it is the principle, even though it does not proceed it in time--as that which is said: that the heart is the principle of the living, and the element is the principle of that of which it is an element . . . But 'the first' (הראשון) is truly said about one that is before in time alone, without that which is prior in time being the cause of what comes after it . . . And the word that teaches about 'the first' in our language is תחלה . . . and the word that teaches about the principle is ראשית, that it is derived from (ראש) head, which is the principle of the living, because of its position.⁴⁶

For Maimonides, the word ראשית does not suggest a temporal beginning at all; rather, it seems to suggest the absolutely necessary part of a thing that makes it what it is. He continues:

. . . Scripture stated 'נראשית', and the 'נ' is like the 'נ' of instrument; and this is the true interpretation of this verse: With the principle the Deity created the higher things and the lower things. This is the interpretation that agrees with the coming-into-existence of the world.⁴⁷

The implication here is clear: that some entity, some existent, was used by God in the creative process, as an

⁴⁶ Maimonides, Moreh Nebuchim, II:30, pp. 57:b-58:a.

⁴⁷ Ibid., II:30, p. 58:a.

author uses a pen to create a novel. Yet unlike the pen, this entity is deemed the principle of the created universe.

What could this entity possibly be? Does it signify merely God's will, or miraculous power? Or could it be an entity distinct from God entirely? The clue to the answer lies in Maimonides use of the word "privation", *העדר*, when he states: "'to create' (*נרא*) is used, because according to us it connotes the bringing-into-existence from privation."⁴⁸ The identical thought is echoed in a statement in III:10:

It [i.e., *נרא*] is a word that has a connection with privation in the Hebrew language--as it is stated: 'In the beginning God created (*נרא*), and so on' (Genesis 1:1)--that it is from privation.⁴⁹

The word privation, *העדר*, is an equivocal term--i.e., it possesses a variety of meanings. It can indicate absolute nothingness, as in the phrase "*העדר הגומר והמחלט*"; yet it can also indicate the particular privation that is the privation of form, which, according to Maimonides,⁵⁰ is always joined with matter. This is indicated by the word *העדר* alone. We must now recall Maimonides' warning in his introduction to the Guide that contradictions were

⁴⁸ Ibid., II:30, p. 63:a.

⁴⁹ Ibid., III:10, p. 13:a.

⁵⁰ Ibid., I:17.

deliberately used in order to hide esoteric beliefs from the masses; and, as we shall see, his use of העדר represents one such contradiction. Whenever Maimonides mentions the traditional view of creation ex nihilo, the view of "all those who believe in the Torah of Moshe Rabbenu",⁵¹ he is careful to add to the word העדר the adjectives הגמור (absolutely) and המוחלט (purely): ". . . the world as a whole . . . was brought into existence after having been purely and absolutely nonexistent . . ."⁵² Yet in our passages from II:10, and in other parts of the Guide in which Maimonides analyzes and discusses creation itself, he will drop these adjectives and only use the word העדר:

. . . the bringing into existence of a being out of privation (העדר) is for the Deity not an impossibility . . .⁵³

. . . truly, with regard to our opinion of the creation of the world in its entirety after privation (העדר) . . .⁵⁴

Hence, a contradiction exists between the use of העדר with the aforementioned adjectives and its use alone. In a contradiction, there is an inaccurate proposition designed to "screen" or hide the true belief, and an accurate proposition designed to reveal that belief to a few. Now

⁵¹Ibid., II:13.

⁵²Ibid., II:13.

⁵³Ibid., II:13.

⁵⁴Ibid., III:13.

Maimonides would have no reason to hide a belief in creation ex nihilo, denoted by the phrase "העדר הגומר והמוחלט"; rather, this is the screen, while his real belief is in creation from that specific privation denoted by the single word העדר.⁵⁵ Now this special privation is always conjoined with pure matter; this matter is not part of an existing thing per se, for it must first be joined with form. Yet it does not signify an absolute nothingness either. It is an entity that many have described as the potentiality for corporeal existence which is subsequently actualized by form. It is possible that Maimonides' use of the word privation is to signify this pure matter, and that this pure matter is the principle that God used to create the universe.

Support for this hypothesis can be found in other aspects of Maimonides' thought. First, he agrees with the philosophers that God cannot do what is logically impossible:

. . . there are impossible things whose existence cannot logically be admitted. Power to bring them about cannot be ascribed to the Deity.⁵⁶

To create matter itself from absolutely nothing is physically impossible: atoms, molecules, etc. cannot

⁵⁵ See Sara Klein-Braslavy, Perush HaRambam L'Sipur Beri'at HaOlam (Jerusalem: Ha Chevrah L'Heker HaMikrah B'Yisrael, 1978), pp. 81-85 for an excellent discussion of this issue.

⁵⁶ Maimonides, Moreh Nebuchim, III:15.

materialize from a vacuum. Creation ex nihilo would violate this; yet creation from pure matter would not. Corporeality already exists, although in potentiality alone; all that is needed is the incorporeal form, which can come directly from an intelligent being such as God.

Second, we have Maimonides' designation of Plato's concept of creation from pre-existent matter as "not incompatible with the principles of our religion."⁵⁷ He writes in II:25:

. . . this opinion [i.e., of Plato] would not destroy the foundations of the Law . . . it would also be possible to interpret figuratively the texts in accordance with this opinion. And many obscure passages can be found in the texts of the Torah and others with which this opinion . . . could be proved.⁵⁸

Why does Maimonides leave an opening for those who adhere to a belief in a pre-existent matter if creation ex nihilo is the only proper belief? This opening could be seen as a clue to Maimonides' real conviction in creation from pure matter.

Third, all the contradictions within the Guide regarding the issue of creation revolve not around Aristotle's theory, but around Plato's. As stated earlier, Maimonides himself tells us that a contradiction will be deliberately used to hide an esoteric belief that would be

⁵⁷Wolfson, "The Platonic, Aristotelian, and Stoic Theories of Creation in Hallevi and Maimonides," p. 429.

⁵⁸Maimonides, Moreh Nebuchim, II:25.

unacceptable to the masses. When we examine these contradictions, we will find that the hidden belief in each one is Plato's concept of creation from pre-existent matter. In opening his discussion of creation in II:13, Maimonides presents three different views: the view of "our Torah," that of Aristotle, and that of Plato.⁵⁹ He carefully gives the position of each, delineating the differences between them. Yet towards the end, he states that Plato's position can be "lumped together" with Aristotle, since no real difference between them exists. Yet this is strange, for Maimonides himself pointed out key differences between Aristotle and Plato, especially with regard to free will and creation; we thus have a contradiction. In one place Plato is different than Aristotle, in another he is the same. Furthermore, in the previous citation, Plato's position is compatible with the Bible; whereas Aristotle's theory is completely rejected;⁶⁰ how then can Maimonides say there is no real difference between them? We know that in every contradiction lies a hidden, true proposition. Now Maimonides would not need to hide a proposal that equates Plato with Aristotle, deeming them both unacceptable; rather, the hidden, true proposition is that Plato's view indeed differs from Aristotle, and that this view is compatible with the view of Scripture.

⁵⁹Ibid., II:13.

⁶⁰Ibid., II:25.

⁶¹Davidson, "Maimonides Secret Position on Creation," pp. 19-22.

The second contradiction arises in Maimonides' discussion of prophecy. He states that the three positions on prophecy correspond with the three positions of creation.⁶² Now a reason must exist why Maimonides specifically mentions the three creation theories; he must see some clear-cut parallels and similarities. The parallels can be drawn as follows: the first view of prophecy states that prophecy requires no preparation; God chooses whomever God wants. This is parallel to creation ex nihilo, where there is also no preparation, and where all is dependent on God's will. A second view of prophecy sees it as a totally natural phenomenon, with no supernatural element at all; this corresponds to Aristotle's theory of eternity, where all proceeds by natural law without any change or innovation by God. The third view of prophecy sees it as an interaction between the natural and supernatural, with intense natural preparation and divine action as part of a preventive process. This is parallel to Plato's theory, where a natural substance (i.e., pre-existent matter) is needed along with the direct intervention and action of God. Yet we have a problem: for the first view of prophecy that corresponds with creation ex nihilo is called the view of the ignoramus! Furthermore, the third view of prophecy corresponding to Plato's creation theory is called the view of "our Law." Again,

⁶² Maimonides, Moreh Nebuchim, II:32.

we have a terrible contradiction. In II:13, creation ex nihilo is identified with our law; yet in II:32, it is joined to the view of the ignorant, whereas Plato's theory is joined with "our Law." Which one is really "our Law"? Again, Maimonides has no reason to hide a belief in creation ex nihilo or in miraculous prophecy--both would be perfectly acceptable to the masses. Thus, the belief he is hiding is his belief in creation from pure matter, a belief based on and corresponding to Plato's theory of creation.⁶³

The third contradiction comes at the end of II:19. After analyzing the weaknesses of Aristotle's position of eternal necessity, Maimonides says that he has "tipped the scales in favor of our position," who advocate the "creation of the world."⁶⁴ Yet in II:13, Maimonides states that our position is creation ex nihilo, not just creation per se.⁶⁵ Knowing the care and precision with which Maimonides wrote the Guide, this difference in wording cannot be dismissed. Rather, we seem to again have a contradiction, and again it is "just" creation and not creation ex nihilo that Maimonides seems to be secretly advocating. This non-ex nihilo creation can easily be one from pure matter.⁶⁶

⁶³Davidson, "Maimonides Secret Position on Creation," pp. 21-26.

⁶⁴Ibid., p. 27.

⁶⁵Maimonides, Moreh Nebuchim, III:13, end.

⁶⁶Davidson, "Maimonides Secret Position on Creation," pp. 27-28.

The fourth item of evidence that supports our hypothesis of Maimonides' belief in creation from pure matter is the set of arguments given to demonstrate the plausibility of creation. All these arguments could equally be applied to a creation from pure matter, for they do not establish creation ex nihilo--only creation itself. We have discussed these arguments previously, and thus need only briefly mention them here. We recall the argument dealing with the matters of the spheres and the stars; it established that an agent creating with free will satisfactorily explained the phenomena involved. Yet it said nothing about the source of the matter itself. Since creation from pure matter also must have an agent with free will, the first argument only establishes creation per se, and not necessarily creation ex nihilo. This is also true of the second argument, dealing with the movement of the spheres; again, all that is demonstrated is an agent acting with free will, and not an agent creating from nothing. And the same is true for the third argument, which deals with the stars. All these arguments demonstrate the plausibility of creation, of an agent acting with free will and design; creation ex nihilo is not demonstrated. Hence, the arguments that "tip the scales in favor of our position" demonstrate creation, and nothing more. It is thus possible that Maimonides believed "our position" to be one similar to Plato's: the freely-willed creation of the universe from pure matter.

We must now ask the following question: was this pure matter itself created, or is it co-eternal with God? On the one hand, we have indications that this pure matter was also brought into existence. Writing on the concept of privation in III:10, Maimonides states:

And all the privations are evil, (to which) an act will not be attached except in the aspect we have explained--in His bringing into existence the matter according to this nature which is upon it, and it is: privation always being connected with it.⁶⁷

It is possible that Maimonides is speaking about matter in general; yet he could be referring in a subtle way to that initial pure matter from which all else is created.

We also have the following statement from III:13:

Scripture stated: I have formed that first thing, which must come first, like matter, by way of example; afterwards I made in that thing which came first or after it that which I had intended to bring into existence.⁶⁸

Again, Maimonides could be speaking in a general sense; but he might be referring to the very first thing--the pure matter. On the other hand, it is clear that the bringing into existence of this matter would violate the "principle of impossibility" discussed above, for it would be brought forth not even from privation, but from absolute nothingness. We also have Maimonides' defense of those who advocate Plato's eternal pre-existent matter; he states in II:13:

⁶⁷ Maimonides, Moreh Nebuchim, III:10, p. 13:b.

⁶⁸ Ibid., III:13, p. 19:a.

They do not believe that it [the eternal matter] has the same rank as God, may He be exalted, but that He is the cause of its existence; and that it has the same relation toward Him as, for instance, clay has toward a potter . . .⁶⁹

Even if the pure matter were eternal, it would not be seen as a competing or co-equal entity with God, but, like Plato's pre-existent matter, as an entity dependent of God. There would thus be nothing objectionable about its ongoing existence. Yet we do not have enough evidence at this point to clearly answer this question one way or the other; we will need further investigation in the future in order to determine if Maimonides' pure matter is eternal or not.

Now that we have tried to establish Maimonides' belief in the creation of our universe from pure matter, we can proceed to examine exactly what was created. We recall Maimonides' interpretation of Genesis 1:1: "With the principle the Deity created the higher things and the lower things."⁷⁰ What are these "higher things"? First, we have the heavenly spheres and their stars. Maimonides assumes their existence throughout the Guide, mentioning them frequently in his discussions on creation and physics. (We have an excellent example of this in the critique of Aristotle's theory of eternity discussed earlier.) The detailed structure of the heavenly realm is given not in II:30, but in I:72; Maimonides also describes it in the

⁶⁹Ibid., II:13, p. 30:b.

⁷⁰Ibid., II:30, p. 58:a.

third chapter of Hilkhot Yesodei Ha-Torah.⁷¹ He presents the standard medieval version of Aristotle's cosmology as transmitted by the Arabic commentators Alfarabi, Avicenna, and Averroes. According to Maimonides, the heavens consist of nine major spheres. The first seven are the planetary spheres, and they are in ascending order: the moon, Mercury, Venus, the sun, Mars, Jupiter, and Saturn. Next we have the eighth sphere of the fixed stars, and the whole system is encompassed by the ninth sphere. This final great sphere revolves each day from east to west, and its movement causes the motions of the other spheres. Each of the eight lower spheres is sub-divided into many other spheres, "like the layers of an onion";⁷² some of these minor spheres revolve east to west, while others move west to east. The sphere of the fixed stars is divided into twelve equal parts, which are the areas of the twelve signs of the zodiac.⁷³ Maimonides even gives us some dimensions: the earth is forty times larger than the moon, and the sun is one hundred and seventy times larger than the earth; Mercury is designated as the smallest "star" of all.⁷⁴

⁷¹C. Blacker and M. Loewe, Ancient Cosmologies (London: G. Allen and Unwin, 1975), p. 77. See also Maimonides, Moreh Nebuchim, I:72, pp. 110:b-115:b.

⁷²Blacker and Loewe, Ancient Cosmologies, p. 77. See also Maimonides, Yesodei Ha-Torah (B'nai Brak: Agudat N'Tivot HaTorah V'HaChesid, 1978), 3:1-3.

⁷³Blacker and Loewe, Ancient Cosmologies, p. 77 and Maimonides, Yesodei Ha-Torah, 3:6.

⁷⁴Blacker and Loewe, Ancient Cosmologies, p. 77. See also Maimonides, Yesodei Ha-Torah, 3:8.

These different spheres and stars are corporeal beings made up of matter. Maimonides writes in III:13:

Scripture stated: 'Behold, He puts no trust in His servants, and His angels He charges with deficiency. How much less in them that dwell in houses of clay, whose foundation is the dust.' (Job 4:18-19) . . . 'His angels' that are hinted upon in this verse are the spheres, without a doubt . . . and the meaning of 'deficiency' is like the meaning 'are not clear in His sight'--I mean to say: their being possessors of matter.⁷⁵

Yet the matter of the spheres and stars is a different type of matter than that of the lower world. It is not made up of the four elements earth, water, air, and fire, but instead of a fifth element, which Aristotle identified as ether.⁷⁶ Because of this fifth element, the spheres possess perfect circular motion, rather than the rectilinear motion found in the lower realm. They are weightless and translucent; thus, when stars are seen from the earth, all appear to be attached to a single sphere.⁷⁷

The spheres do more than provide opportunities for stargazing, however. They play a crucial role in the determination of activities in the lower realm (i.e., all existents below the lunar sphere). Maimonides states:

Know that all the philosophers agree with regard to the governance of this lower world being perfected by the powers that emanate onto it from the spheres, and that the spheres apprehend that which they govern, knowing it. And this is also what is

⁷⁵Maimonides, Moreh Nebuchim, III:13, p. 19:b.

⁷⁶Ibid., I:72, p. 111:a.

⁷⁷Blacker and Loewe, Ancient Cosmologies, p. 77.

written in the Torah, and it is said 'which the Lord thy God has allotted unto all the peoples' (Deuteronomy 4:19). It means to say: that He set them as intermediaries for the governance of the created things, and not that thy will be worshipped. And it said clearly: 'To rule over the day and over the night, and to divide, and so on' (Genesis 1:18). And the meaning of ruling: dominion through governance.⁷⁸

Through their movements, the spheres influence terrestrial phenomena, affecting all according to the natural laws that pervade the created universe. Their key function is in relation to the four elements:

. . . through the movement of the sphere, the elements will be mixed together, and in the light and the darkness their mixtures will change. And the first of the mixtures that will be created from them--are the two mists, which are the first of the causes of all the meteorological phenomena, from which rain is from, and they are also the cause of the minerals; and afterwards--the compound of the plants; and after the plants--the living animal beings; and the last compound is man.⁷⁹

A more detailed account of this mixture of the elements is given in I:72:

Insomuch as the fifth body [i.e., the lunar sphere] is engaged perpetually in a circular motion, it thus engenders forced motion in the elements because of which they leave their places; I have in view fire and air which are pushing toward the water. All of them penetrate toward the body of the earth, in the valleys. In consequence a mixture of the elements comes about. Afterwards they start to move in order to return to their places; and because of this portions of the earth in their turn are made to leave their places as they accompany the water, the air, and the fire. In all this, the elements exert influence on each other and are influenced by one another. Accordingly, changes occur in that mixture so that, in the first place, the various species of vapors came into being from it, then

⁷⁸Maimonides, Moreh Nebuchim, II:5, p. 22:b.

⁷⁹Ibid., II:30, p. 60:b.

the various species of minerals, then all the species of plants, then many species of living beings in accordance with what is determined by the temperament of the mixture. Everything that is subject to generation and corruption is generated from the elements and, being corrupted, passes away into them.⁸⁰

Hence, due to their influence on the elements, the movement of the spheres is ultimately the source of all life and death on earth.

We may erroneously assume that these spheres, despite their tremendous influence, are nothing more than inanimate beings; however, for Maimonides, as for Aristotle, they are very much alive:

It is true that the spheres are living (and) endowed with intellect--I mean to say: they apprehend. This is true and certain also from the side of the Torah, and they are not dead bodies, as fire and earth like that which the ignorant ones thought . . .³¹

Each sphere possesses an intelligence. These intelligences, as we shall see, comprise another group of "higher things" created by God. Maimonides occasionally refers to these intelligences as the spheres' souls, and feels that their existence has been taught by Jewish tradition as well as by philosophy. Writing in II:5, Maimonides states: "Behold already it has been explained to you that what Aristotle said regarding the spheres' apprehending agrees with the words of our prophets and the wise of the Torah . . ."⁸²

In his Letter on Astrology, he writes:

⁸⁰ Ibid., I:72, p. 111:b.

⁸¹ Ibid., II:5, p. 21:b.

⁸² Ibid., II:5, p. 22:a.

They [i.e., the philosophers] maintain that the spheres and stars possess souls and intellect. All these things are true. I myself have already made it clear with proofs that all these things involve no damage to religion . . . I have understood from the sayings of the sages in all the midrashim that they maintained as the philosophers maintained.⁸³

One of these sayings is the sages' interpretation of the phrase הוּ וְהוּ (Genesis 1:2), to which Maimonides gives his full support:

Truly, regarding the opinions of the sages in this, I do not see it necessary to prove . . . in Bereshit Rabba (2) they said regarding His saying, may He be blessed: 'And the earth was 'tohu' and 'bohu' (הוּ וְהוּ) (Genesis 1:2)--and they said: 'mourning' (הוּ) and 'crying' (וְהוּ)'. It means to say that the earth will mourn because of her evil position. 'It [the earth] said: I and they were created together' (Bereshit Rabba 2). It means to say: the earth and the heaven. 'The upper ones are alive and the lower ones are dead' (Bereshit Rabba 2). Behold, they have already revealed the heavens being living bodies, not dead bodies like the elements.⁸⁴

The earth, being "dead," i.e., not possessing an intelligence, is metaphorically seen as mourning and protesting her status. Only the heavenly bodies, the "higher things," are endowed with intellect.

Yet what do these intelligences comprehend? What knowledge do they possess? First, they comprehend the Godhead itself. Maimonides states:

They [the spheres] are living beings serving their master, praising Him, and glorifying Him (with) great praise and powerful glorifications, as Scripture says:

⁸³Isadore Twersky, A Maimonides Reader (New York: Behrman House, Inc., 1972), p. 469.

⁸⁴Maimonides, Moreh Nebuchim, II:5, p. 22:a.

'The heavens tell of the glory of God and so on' (Psalm 10:2). And how far from conception of truth is someone who thinks that this is the language which is literally descriptive. The terms 'speaking and telling' are such that Hebrew only applies them together to a being endowed with intellect. The clear proof of their states being described according to their essences--I mean to say: the state of the spheres--and not the state according to the people's point of view is the saying: 'There is no speech, there are no words, neither is their voice heard' (Psalm 19:4). Behold, already it is clear and explained that it describes their essences, that they are praising God and telling of His wonders without words of lip and tongue. And it is the truth--for the one that will praise with words truly will tell what he conceived, and the essence of that conception is true praise: truly, the expression of it is to make others understand, or to show to oneself that one has apprehended. Already Scripture stated: 'Commune with your own heart upon your bed, and be quiet' (Psalm 4:5), as we have explained. And this is a legal proof that cannot be denied except by the ignorant or the stubborn.⁸⁵

The praise of the spheres does not consist of words or speech. Rather, it consists of the accurate comprehension of God: and for Maimonides, true comprehension is the highest form of praise possible.

Second, the intelligences of the spheres comprehend that which the spheres govern: the sub-lunar world and all its activity. Maimonides states:

Know that all the philosophers agree . . . that the spheres apprehend that which they govern, knowing it. And this is also what is written in the Torah . . . and it is absurd that one will be a governor of a thing and not know that thing which one governs, as the truth of governance as it is applied here is known.⁸⁶

⁸⁵Ibid., II:5, pp. 21:b-22:a.

⁸⁶Ibid., II:5, p. 22:b.

Although the intelligences are connected with the spheres, they constitute a separate class of beings; for, unlike the spheres, the intelligences are incorporeal, i.e., they are not made of any type of matter at all. (Before we examine Maimonides' statements regarding this, we must first note that he often uses the term "angel" as a code word for the intelligences. He writes: "Our words are truly about the 'angels', which are the separate intelligences . . .";⁸⁷ and ". . . he [Aristotle] speaks of 'separate intelligences', and we speak of 'angels'".⁸⁸ Regarding their incorporeality, Maimonides states: "The angels are not endowed with bodies, but are intellects separate from matter."⁸⁹ In II:6, he writes: "And already before you in this treatise is a chapter that explains that the angels are not matter."⁹⁰ And although it is not stated explicitly, the incorporeality of the intelligences is implied in the following passage from III:13:

And know your essence and the essence of the spheres and the stars and the separate intellects, and the truth will be clear to you. And you will know that man is the most perfect of all that which will be from this lowly matter . . . but as you compare his existence to the existence of the spheres--all the more so to the separate intellects--he will be greatly, greatly inferior.⁹¹

⁸⁷ Ibid., II:6, p. 23:a.

⁸⁸ Ibid., II:6, p. 22:b.

⁸⁹ Ibid., I:49, p. 67:b.

⁹⁰ Ibid., II:6, p. 23:a.

⁹¹ Ibid., III:13, p. 19:b.

When we compare ourselves to the spheres, which are composed of superior matter, and to the intelligences, which are devoid of matter completely, our inferiority and lowly statue become clear.

Yet we must not assume that these incorporeal intelligences are unlike the spheres in their origin as well. Like all beings in the universe, they too are created by God: "They [the intelligences] are objects of an act, for God has created them."⁹² Maimonides also states this in the passage from III:13 quoted earlier:

Scripture stated: 'Behold, He puts no trust in His servants, and His angels He changes with deficiency. How much less in them that dwell in houses of clay, whose foundation is dust' (Job 4:18-19). . . . 'His servants' that are mentioned in this verse are the angels . . . and His saying about the angels 'Behold, He puts no trust in His servants', its meaning is-- that there is no strength of existence in them, because they are made . . .⁹³

This assertion that the separate intelligences, as well as the spheres, are created constitutes a key difference between the theories of Aristotle and "our opinion," according to Maimonides:

But that which he [Aristotle] disagrees with us in all this is his believing that these things are eternal, and these matters come necessarily from Him, may He be blessed; and we believe that all this is created, and that Deity created the separate intelligences and set in the sphere the power of desire for them, and He was the one who created these beings endowed with intellect and the spheres and placed in them the governing powers--and in this we will disagree with him.⁹⁴

⁹² Ibid., I:49, p. 67:b.

⁹³ Ibid., III:13, p. 19:b.

⁹⁴ Ibid., II:6, p. 24:a.

We can now ask: what is the role of these incorporeal, created intelligences? Is it the same as that of the spheres, discussed previously, or do they perform additional and different functions in our universe? Maimonides describes the separate intelligences as intermediaries between God and the rest of the universe. The first of their key functions is to move the spheres of the heavens:

And truly, his [Aristotle] saying that the separate intelligences are intermediaries between the Deity, may He be blessed, and the existents, and that it is through their intermediation that the spheres will move, which is the reason for the being of those that come into existence--this is also true written in all the books.⁹⁵

We have noted earlier that the spheres' intelligences comprehend God. This true and marvelous conception arouses a desire, or a love, for God, and it is this desire that causes each intelligence to move its sphere, just as a loved object moves the thing that loves it.⁹⁶

Yet the intelligences do much more than provide a continual "energy source" for the movement of the spheres. We know from our previous discussion that the movement of the spheres influences natural activity in the sub-lunar realm. As the comprehending movers of the spheres, the separate intelligences direct and determine that influence. This rational governance of the lower realm via the move-

⁹⁵ Ibid., II:6, pp. 22:b-23:a.

⁹⁶ Husik, History of Medieval Jewish Philosophy, p. 267.

ments of the spheres constitutes the second key function of the separate intelligences. However, this governance is not done independently. As stated above, the intelligences are God's intermediaries, or messengers; all is carried out according to the wishes and will of God. This second function is described in the following passage from II:6:

You will never find that the Deity will perform an act except by means of an 'angel'. And you already know that the meaning of 'angel' is messenger, and that all that fulfills a commandment is an 'angel'; so that the movements of living beings, and even of those that do not speak, Scripture tells of them that they are by means of an 'angel', since the movement that is produced is according to the intention of the Deity . . . and our words here are truly about the 'angels', which are the separate intelligences. Our Torah does not deny that He, may He be blessed, governs this relatively through the intermediation of the 'angels'.⁹⁷

God does not use the separate intelligences as advisors or consultants, for they have no independent will of their own. Rather, the intelligences are the "rational tools" that God uses to maintain and control the universe He created:

The intention in all these sayings is not that which the fools thought, that He, may He be blessed, has words or thoughts or a question of advice or help with an opinion of others--for how could the Creator be helped by that which He created? But all this is explained, that even parts of all that which exists, even the creation of the limbs of living beings according to as they are--all this is through the intermediation of the angels.⁹⁸

⁹⁷ Maimonides, Moreh Nebuchim, II:6, p. 23:a.

⁹⁸ Ibid., II:6, p. 23:a.

Yet God's use of these intelligences as intermediaries is not limited to the continual governance of the sub-lunar realm; there are indications that God used these intelligences in the creation process itself. This would constitute their third key function. Maimonides hints at this in the following passage:

The sages wrote about the saying of the Torah: 'Let us make man in our image' (Genesis 1:26) . . . which is in plural--they said: 'as it were, the Holy One, Blessed be He, does not do a thing until He looks to the heavenly entourage'. And be amazed at their saying 'looks at', for with the very same expression Plato says that the Deity looks to the world of the intelligences and what exists emanates from Him. And in other places they [the sages] definitely said: 'The Holy One, Blessed be He, does not do anything until He has consulted with the heavenly entourage'. (B. Sanhedrin, 38:b, J. Sanhedrin, I)⁹⁹

Maimonides seems to be saying that the intelligences, the "heavenly entourage," provided the model by which God created humankind. Now this modeling cannot occur in the areas of shape or structure, for we know that the intelligences have no shape whatsoever--they are incorporeal; rather, the modeling occurs in the area of intellect. Like the intelligences, we too are endowed with comprehension and understanding; like the intelligences, we too are unique in our own realm, due to our intellectual possession; and like the intelligences, we too can praise God through our accurate apprehension of God's essence. It is the form of the separate intelligences, "the notion through which a thing becomes a substance and becomes what it is in its essence,"¹⁰⁰ that God uses in our

⁹⁹Ibid., II:6, p. 23:a.

¹⁰⁰Ibid., I;1, p. 12:b.

creation: "And what was meant in the saying: 'Let us make man in our image' (Genesis 1:26)--is the specific form, which is intellectual apprehension . . ." ¹⁰¹

Yet there is another implication in the passage. Not only does God "look at" the intelligences for the creation of humankind; the reference to Plato and the latter quote from the sages imply that the intelligences are used for the creation of all else as well. As in the governance of the sub-lunar realm, God uses these separate intelligences in the creation of the rest of the universe (i.e., after they themselves are first brought into existence by God). Exactly how they are used is not indicated by the passages we examined; further study is needed in order to clarify their exact role in creation. Yet a role did indeed exist. Perhaps this is why the Genesis text states *וַיִּבְרָא אֱלֹהִים* and not *וַיִּבְרָא יְהוָה*; for as we see in the following passage, *אֱלֹהִים* can also indicate the "angels"--i.e., the separate intelligences:

Truly the angels exist--this is from that which does not need a legal proof brought to it, for this is written in the Torah in many places. And already you know that 'Elohim' is a term of judges: 'The cause of both parties shall come before Elohim [the judges]' (Exodus 22:8). And for this, the term is applied figuratively to the angels and to the Deity--for His being the judge of the angels; and regarding this it is said: 'For the Lord your Elohim' (Deuteronomy 10:17) and this is told to the entire species of man--

¹⁰¹ Ibid., I:1, p. 13:a.

and after this it stated: 'He is the Elohim of Elohim'--it means to say 'The God of the angels' . . . what is intended is that He, may He be blessed, is the judge of the judges--I mean to say: the angels.¹⁰²

Hence, the use of the word Elohim in Genesis 1:1 may refer not only the vital role of God, but to that of the separate intelligences as well.

The influence of Aristotle on Maimonides' concept of the heavens is clear. The existence of the spheres themselves, their numbers, their stars, their role regarding the elements--all this accurately reflects the medieval conception of Aristotle's physics. The existence of separate intelligences and their roles as movers and governors also reveal the strong influence of Aristotelian thought. Although a major difference exists concerning the heavens' origin, we see that Maimonides agrees with and follows Aristotelian thought regarding the components, characteristics, and function of the "higher things."

Aristotle's strong influence will also be seen when we look at Maimonides' concept of the "lower things" created by God. When we examine his comment on the term *הארץ* of Genesis 1:1, we realize that these "lower things" are not the different existents of our sub-lunar realm (i.e., rocks, flowers, plants, animals, etc.), but only the four basic elements:

¹⁰²Ibid., II:6, p. 22:b.

And from that which is necessary that you should know: that 'the earth' is an equivocal term, used in the general sense and in the particular sense. It speaks in a general sense about all that which is under the sphere of the moon--I mean to say: the four elements--and it speaks in a particular sense about the last one of them, and this is the earth. Teaching about this [i.e., the equivocality] is the saying: 'And the earth was unformed and void, and the darkness was upon the face of the deep, and the spirit of God and so on' (Genesis 1:2)--already all of them are called 'earth'; and after this it is said: 'And God called the dry land earth' (Genesis 1:10). And this is a great secret from among the secrets; for everywhere that you will find that it says: 'And God called something thus'--truly, it is to distinguish it from the other meaning, the one equally meant by the term. And for this reason I have interpreted for you this verse: With the principle the Deity created the upper things and the lower things--and 'the earth' that was spoken of first will be the lower things--I mean to say: the four elements. And the one that is spoken of in: 'And God called the dry land earth' is the earth alone. Behold, this is already clear.¹⁰³

We see that only the four elements are brought into existence by God at the beginning of the creative process. As we have seen in our discussion of the spheres, it is from the different mixtures of these elements that all other existents of the lower realm arise. Maimonides then proceeds to identify these elements and to give their natural position:

And from that which is necessary that you should know--that the four elements which the first term 'earth' teaches about are first mentioned after the heavens. For Scripture says 'earth' and 'water' and 'air'¹⁰⁴ and 'darkness'--and darkness is the elemental fire--do not think anything but this! It stated: 'And thou did hear His words out of the midst of the fire' (Deuteronomy 4:36) and it stated: 'When ye

¹⁰³ Ibid., II:30, p. 59:a.

¹⁰⁴ For the identification of אֵו as air, see Ibid., I:40, p. 60:b.

heard the voice out of the midst of the darkness' (Deuteronomy 5:20), and it stated: 'All darkness is laid up for his treasures; a fire not blown by man shall consume him'. (Job 20:26)--And truly, the elemental fire is called by this term, for its being without shining, but transparent. For if the elemental fire was shining, we would have seen all the air at night aflame in fire.

And their mentioning comes according to their natural position: the earth, and above it, the water, and the air that clings to the water, and the fire--above the air. For with the air being "upon the face of the waters", the darkness which is 'on the face of the deep' will be above the air without a doubt.¹⁰⁵

Once the earth, water, air, and fire come into existence, they begin to form the basic physical components of our sub-lunar world. First, Maimonides describes the formation of the seas from the elemental water:

And from that which is necessary that you should know--that the saying 'and He divided between the waters and so on' (Genesis 1:7) does not refer to a division of place, that this will be above and that below, and their nature is the same; rather, its interpretation is: that He divided between them with a natural division--I mean to say: with form--and He made some of that which was called 'water' first into a particular thing with the natural form with which he invested it, and he made that other part into a different form, and this is the water. And about this it is said: 'And the gathering of the waters He called seas' (Genesis 1:10). Behold, it was already revealed to you that the first 'water' spoken of in 'on the face of the waters' is not that which is in the seas, but that part which is distinguished by a particular form above the atmosphere, and the other part is the water. And the saying: 'And He divided between the waters that were under the firmament and so on' (Genesis 1:7) will be like the saying 'And God divided between the light and the darkness' (Genesis 1:14) which entails the division with a particular form.¹⁰⁶

¹⁰⁵Ibid., II:30, p. 59:a.

¹⁰⁶Ibid., II:30, p. 59:b.

We learn from this passage that the element water is the source for the water we have in our seas and rivers; yet the two "waters" are not identical in form, and thus represent two different existents: one, the pure element called "water," is found not on earth but above the atmosphere below the sphere of the moon; the other, the clear liquid that we call water, is found in the seas.

Another physical component to emerge from this elemental water is the firmament: "And the firmament itself was made from the water, as the Sages said: 'the middle group congealed' (Bereshit Rabba 4)."¹⁰⁷ We thus have three different existents that all emerge from the elemental water created by God--the seas, the firmament, and the pure element itself:

Behold, it has already been made clear that there was one common matter, and it was called 'water', and afterwards it was divided into three forms: a part of it became 'seas', and part of it--'firmament'; and a part of it (became) that which is above the firmament; and this is beyond the earth. Behold, He took with the subject in question a different method leading to wonderful secrets. Truly, that which is above the firmament is called 'water' in name only, and it is not the specific water, for already the Sages, may their memory be for a blessing, have said it also: 'Four ventured into Paradise, and so on'; Rabbi Akiba said to them: 'When you come to the stones of pure marble, do not say--water, water! For it is written: The one who speaks falsehood shall not be established before Mine eyes'. (Psalm 101:7) (B. Hagigah 14:b)¹⁰⁸

¹⁰⁷ Ibid., II:30, p. 59-b.

¹⁰⁸ Ibid., II:30, pp. 59:b-60:a.

With the gathering of the seas, we have the visible appearance of the "earth"--i.e., of the lowest of the four elements. As we noted earlier, the four elements now combine in different compounds to produce the weather, the minerals, and all life in the sub-lunar realm. The "mists" will be formed first, and the rest then follows:

And of that which is necessary that you should know--is that the Sages have already explained that the grasses and the trees which the Deity caused to sprout from the earth, truly He caused them to sprout after He caused rain to fall upon it, and that its saying 'and there went up a mist from the earth' (Genesis 2:6)--truly, it is a description of the first state which was before 'Let the earth put forth grass' (Genesis 1:11). And for this reason Onkelos translated: 'And there had gone up a mist from there earth'. And this is also explained by Scripture, in its saying 'and no shrub of the field was yet in the earth' (Genesis 2:5) . . . And already you know, you who speculate, that . . . through the movement of the sphere the elements will mix together, and . . . their mixtures will change; and the first of the mixtures that will be produced from them--are the two mists, which are the first of the causes of all the meteorological phenomena, from which rain is from, and they are also the cause of the minerals; and afterwards--the compound of the plants; and after the plants--the living beings; and the last compound is man.¹⁰⁹

As stated earlier, the influence of Aristotelian thought on Maimonides is evident. The existence of the elements, their identification as the basic components of earth's physical properties and their vital part in the generation of life forms are all key aspects of Aristotle's system, as understood by his medieval interpreters. Maimonides himself, in his discussion of the three existents formed from the elemental water, refers us to his source:

¹⁰⁹Ibid., II:30, p. 60:b.

"You will consider it well and understand all that has been made clear with proof in the book Meteorologica [by Aristotle]."¹¹⁰ And on two different occasions, Maimonides explicitly states his total agreement with Aristotle with one major exception. In concluding his discussion of the spheres and their intelligences in II:6, he writes:

And there is not a thing in that which Aristotle writes regarding this subject that will disagree with the Torah. But that which he disagrees with us in all this is his believing that all these things are eternal . . .¹¹¹

And in his chapter dealing with the purposes of earthly existents, Maimonides ends with the following words:

And when you investigate this [i.e., our] opinion and the philosophic opinion, in consideration of all the preceding chapters in this treatise connected with this subject, you will not find a difference except in that which we explained--the eternality of the world with them and its creation with us. Understand this.¹¹²

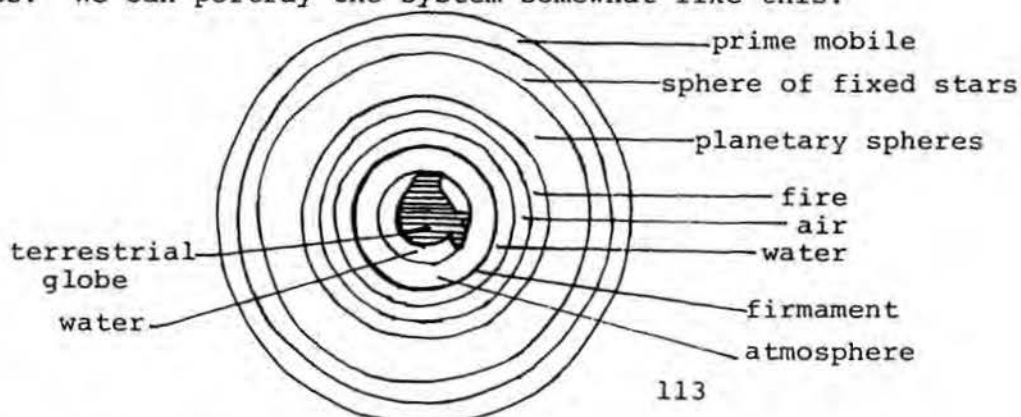
We thus emerge with the following picture of the "higher things" and "lower things" created by God--i.e., of our universe's structure. We have the element earth at the very center, partially covered by seas and encompassed by an atmosphere. Encircling this is the firmament, above which are found the three higher elements of water, air, and fire. All this is within the sub-lunar realm--that is, below the sphere of the moon. We next have the seven main planetary spheres, followed by the sphere of

¹¹⁰ Ibid., II:30, p. 60:a.

¹¹¹ Ibid., II:30, p. 60:a.

¹¹² Ibid., III:25, p. 39:b.

the fixed stars and the great ninth sphere that moves the entire system. In addition, there are many smaller spheres within the system which help explain some of the varieties of heavenly motion. Every sphere possesses an intelligence that guides and directs the sphere's movements. We can portray the system somewhat like this:



Although the universe is divided into two different realms, the lofty heavens with the spheres and intelligences, and the sub-lunar realm with its inferior matter, the entire universe is nevertheless one system. Just as God is one, unified being, so too is our universe:

The universe in its entirety . . . is nothing else but one individual being; that is to say, the outermost heavenly sphere, together with all included therein, is as regards individuality beyond all question a single being . . . The variety of its substances . . . is like the variety in the substances of a human being . . . there is no vacuum whatever therein, and the whole system is filled with matter . . . existing beings stand in relation to that sphere as a part of a thing stands to a whole.¹¹⁴

¹¹³ Charles Joseph Singer, *A Short History of Scientific Ideas to 1900* (Oxford: Clarendon Press, 1959), p. 165.

¹¹⁴ Maimonides, *Moreh Nebuchim*, I:72, pp. 110:b-111:a.

The entire physical universe is penetrated throughout by one order, and all functions according to one set of natural laws. It is these laws that determine what is possible or impossible, what will result from a sphere's movements, what will be generated or what will perish, etc.¹¹⁵ We must remember, however, that according to Maimonides, these laws themselves were created by God, and thus have no affect or power over the Deity.

Furthermore, we must not erroneously assume that God "sits back" and does nothing once the universe and its laws are created and begin to function. First, we know from our previous discussion that the intelligences move the spheres in accordance with God's will, which in turn produces the desired effect in the sub-lunar realm. Thus, God is the ultimate director of the entire, unified system: "All this reality is intended by Him, may He be blessed, in accordance with His will."¹¹⁶ Yet God plays an even more crucial role than this. Not only is the universe dependent on God for its initial creation; the entire universe is dependent on God for its continual existence as well. Only God is the "Absolutely Necessary Existent"¹¹⁷-- i.e., only God must exist, and only God is dependent on no other entity for existence. All other existents are only

¹¹⁵ Julius Guttman, Philosophies of Judaism (New York: Schocken Books, 1964), p. 191.

¹¹⁶ Maimonides, Moreh Nebuchim, III:13, p. 19:b.

¹¹⁷ Ibid., III:13, p. 19:b.

possible--that is, they can exist, but don't have to; their existence is totally dependent on God. This is illustrated by the first three "Basic Principles"

Maimonides gives in the first chapter of his Mishnah Torah:

- (1) The basic principle of all basic principles, and the pillar of all the sciences, is to realize that there is a First Being who brought every existing being into existence. All existing things, whether celestial, terrestrial, or belonging to an intermediate class, continue to exist only through His true existence.
- (2) If it could be supposed that He did not exist, it would follow that nothing else could possibly exist.
- (3) If it was supposed that other beings were non-existent, He alone would still exist. Their non-existence would not involve His non-existence. For all beings are in need of Him.¹¹⁸

Hence, without God, the entire universe, with its laws and its spheres and its elements, would cease to be. Only through God, the ultimate source of all existence, does our universe continue to be and to function.

This dependency of the universe on God for existence entails a very positive bonus. Since God must always exist, then an entity as a whole that is dependent on God will also always exist from the time of its creation. The universe is therefore eternal a parte post:

We agree with Aristotle in half of his theory. For we believe that the universe remains perpetually with the same properties with which the Creator endowed it . . . The universe had, however, a beginning.¹¹⁹

¹¹⁸Twersky, A Maimonides Reader, p. 43.

¹¹⁹Efros, "Nature and Spirit in Maimonides' Philosophy," p. 161. See also Maimonides, Moreh Nebuchim, II:29.

Although the components and laws of the universe are brought into existence by God, they become permanent and unchangeable. The universe as we know it will continue forever.

We are now ready to ask the final question in our examination of Maimonides' views: Why did God create the universe at all? Is there a discernible purpose or end to all existence? Or does creation represent a "whim" exercised by God? Before presenting his own answer, Maimonides criticizes a common response:

There are those who think that this question is obligatory--I mean to say: the seeking of the purpose for all of this reality. And thus they will think that the purpose of all reality--is the existence of the species of man alone, to serve the Deity, and that all else that was made truly was made on account of him, so that the spheres do not revolve except for his benefit and to bring into existence his needs . . . and if the spheres are for the sake of man, all the more so the remainder of the species of living creatures and plants. But when this opinion will be examined, as it is necessary that intelligent people will examine the opinions, the mistake that is in it will be clear.¹²⁰

For Maimonides, the universe could not have been created for our sake alone, and he gives three reasons to support this view. The first is our inferior nature in comparison to that of the spheres and the intelligences:

¹²⁰ Maimonides, *Moreh Nebuchim*, III:13, p. 18:b. Maimonides is probably criticizing Saadia here, along with the Mutakallimun generally.

Do not go astray in your soul and think that the spheres were created for our sake--behold already our level has been explained: 'Behold, the nations are as a drop in the bucket' (Isaiah 40:15). Regard your essence and the essence of the spheres and the stars and the intelligences, and then the truth will be clear to you . . . when you compare man's existence to the existence of the spheres, all the more so the existence of the separate intellects--he will be greatly, greatly, inferior.¹²¹

Since the universe contains beings far superior to ourselves, then we cannot be the final purpose of creation. According to Maimonides, all God's actions are perfect--that is, each act of God achieves the most perfect thing that is possible from that act.¹²² How, then, could the final purpose of God's creation be a most imperfect being? This would render God's action as both flawed and foolish.

The second reason given involves the relationship between humankind and the rest of the universe:

Is the Creator able to bring him into existence without all these preparations, or it impossible that the will bring (man) into existence except after them? And if one says that it is possible, and that the Deity is able to bring man into existence without heaven, for example, then one must ask: If so, what is His benefit regarding all these things since they are not the purpose, but are because of a thing whose existence is possible without any of them?¹²³

The creation of a large part of the universe was not necessary for our existence; God could have just as easily created us before the heavens, seas, animals, etc.

¹²¹ Ibid., III:13, p. 19:b.

¹²² Ibid., III:25.

¹²³ Ibid., III:13, p. 18:b.

Therefore, if we are the final intention of creation, and if other existents play no crucial role in the attainment of that intention, then the creation of other existents would seem to have been without purpose. Yet God does nothing without a purpose; hence the assumption that we are the final purpose of creation must be rejected, for it leads to an absurd conclusion.

The final reason for Maimonides' rejection of humankind as the final purpose of creation is the problem of infinite regression. The positing of humankind as creation's goal leads to an endless series of questions:

And even if all was because of man, and the purpose of man is to worship the Deity, as has been stated, the question then arises: what is the purpose of his being a worshipper, since He, may He be blessed will not gain perfection if all that He created would worship Him and apprehend Him as the purpose of apprehension, and a deficiency will not be apprehended if there would be no other existent at all except Him? And if one says: this is not for His perfection, but for this is the best for us . . . the same question in its essence will be obligatory: what is the purpose of our existence regarding this perfection?¹²⁴

Regardless of the answer to Maimonides last question, the next question will always arise--i.e., what then is the purpose of the previous answer? There would be no end to this process of question and answer. In Maimonides' view, this is just one of the many problems caused by viewing man as the final purpose of creation:

Know that the majority of doubts that bring perplexity regarding the seeking of the purpose of the works in its entirety, or the purpose of each of its

¹²⁴Ibid., III:13, p. 18:b.

parts, truly their roots are--an error of man regarding himself, and his imagining that all of reality is for his sake alone . . .¹²⁵

After critiquing this common yet faulty view, Maimonides then moves to a discussion of the final purpose of each individual existent, rather than the universe as a whole. Maimonides agrees with Aristotle that "there is not a thing among the natural matters that is on the side of uselessness"¹²⁶--everything, from the smallest to the largest, has a purpose. Yet lest we think that this final purpose is for our sake, Maimonides explicitly says:

It should not be believed that all the beings exist for the sake of the existence of man. On the contrary, all other beings have been intended for their own sakes and not for the sake of something else.¹²⁷

This point is re-emphasized in the following passage:

And when you consider that book which guides all who possess true intention, and for this it is called Torah, this matter that we have in mind will become clear to you from the beginning of the "Account of the Beginning" until its end. And it is--that it was not stated at all regarding anyone of the created things that it is for the sake of another thing. Rather, it mentioned that each individual part of the world that He brought into existence was brought into existence according to its own purpose. And this is the meaning of the saying: 'And God saw that it was good'. (Genesis 1:10, 12, 18, 21, 25)¹²⁸

¹²⁵Ibid., III:25, p. 39:a.

¹²⁶Ibid., III:25, p. 38:b.

¹²⁷Ibid., III:13, p. 19:a.

¹²⁸Ibid., III:13, p. 19:a.

Although we may receive clear benefits from the existence of another being, those benefits do not constitute the reason for that being's creation. Benefits are rather like an extra bonus, for, as stated above, each existent is created for its own purpose, for its own sake.

Maimonides illustrates this with a parable:

It is similar to one of the people from the state who will think that the purpose of the king is to guard his house from robbers . . . because his house is guarded and this benefit came to him because of the king being there, it appears as if the purpose of the king is to guard this man's house.¹²⁹

Even when another being is not seen as beneficial or suitable to us whatsoever, its existence nevertheless fulfills the purpose intended for it by God:

The 'good' can also be said of that which suits our intentions. And about everything it stated: And God saw everything that He had made, and behold it was very good' (Genesis 1:31)--that is to say: all that is created was created according to its purpose, and nothing will be spoiled, and this is in the saying 'very'; for sometimes the thing will be good and suitable for our intentions for a time, and afterwards its purpose will be unclear; thus it told that all that which was made was suitable for His intention, and does not cease from continuing according to that which was intended for it.¹³⁰

Yet we are still left with our original question: what is the purpose of the entire universe? Maimonides finally answers this by not answering at all, as it were. In III:13 he writes:

And after this introduction, know: that there is no way to seek the purpose of all reality, not

¹²⁹Ibid., III:13, p. 19:b.

¹³⁰Ibid., III:13, p. 19:a.

according to our opinion, which speaks of creation, and not according to the opinion of Aristotle regarding the eternality of the world. For according to his opinion, one cannot seek a final purpose for the world . . . for everything with him is on the side of eternal necessity.¹³¹

For Aristotle, all happens and comes into existence because it must happen; there can be no other outcome, for there are no choices or alternatives involved. But the concept of intention implies choice--i.e., we intend X and not Y, we choose purpose A and not B. Hence, the discussion of a final purpose in Aristotle's system is not possible. Yet we know that choice and intent are integral parts of the belief in a Creator who possesses free will; why then does Maimonides state that we cannot determine a final purpose according to this viewpoint as well? The explanation can be found in the following quote:

And we will be careful to believe that all this reality is intended by Him, may He be blessed, according to his will, and we will not seek a cause for it or another purpose at all. Just as we will not see the purpose of His existence, may He be blessed, thus we will not seek the purpose of His will, through which everything that has been and will be created is created according to it.¹³²

After a long analysis and critique of various proposals for the purpose of creation as a whole, Maimonides concludes that the only possible answer is the divine will. Yet any clear apprehension of God's will is beyond human capabilities; we cannot fully understand it, nor can we

¹³¹Ibid., III:13, pp. 17:a-17:b.

¹³²Ibid., III:13, p. 19:b.

conceive it. Therefore we cannot grasp the purpose or intention of that will. Our search for the final purpose of all creation must cease when we reach the unfathomable divine will. Hence:

The question of the purpose of . . . all existents will be cancelled, even according to our opinion regarding creation, for we say: He brought into existence all parts of the world according to His will . . . and just as He willed that the species of man should exist, thus He willed that the heavens and their stars should exist, and thus He willed that the angels should exist--and every existent, truly He willed that existent . . . and already this opinion has been said in the books of prophecy--it stated: 'The Lord has made every thing for its [or His] sake'--it is possible that this pronoun refers to the subject, and its interpretation will be: for the sake of His essence, may He be blessed--I mean to say: His will, which is His essence . . .¹³³

Maimonides insistence that "there is nothing but the Will alone"¹³⁴ does more than close the door on the search for a final purpose; it also helps re-emphasize God's total freedom and lack of restraint in the creative process itself:

There is no purpose but the Will alone. And because the matter is thus, and with the belief in creation--it is impossible that we will not say, that He was able to bring into existence in an opposite way that which exists, its causes, and its effects . . .¹³⁵

It would thus seem that the issue of the final purpose for creation has been settled: we cannot determine the final purpose, for all was and is created

¹³³ Ibid., III:13, p. 19:a.

¹³⁴ Ibid., III:13, p. 19:a.

¹³⁵ Ibid., III:13, p. 18:b.

according to the divine will. But in another chapter of the Guide, Maimonides mentions divine wisdom as the determinant factor in creation. In III:25 he states:

All things that the Deity has willed will be done, and there is no obstacle that prevents the doing of His will except that He, may He be blessed, does not wish except for what is possible, and not all that is possible, but only that which His Wisdom decreed to be thus . . . and this is the opinion of all those who adhere to the Law, and also the philosophers, and thus it is our opinion. For with that which we believe, that the world is created, a majority of our sages and knowledgeable ones do not believe that this was done by will alone; but they will say: that His wisdom, may He be blessed, whose apprehension is inaccessible to us, obligated the existence of this world in its entirety . . . and this very wisdom that does not change necessitated privation before the world came into existence.¹³⁶

Like God's will, God's wisdom is also "inaccessible to us." We cannot grasp its true essence, nor understand its processes:

There is no absurdity in our saying that all activities--their existence and their non-existence--is according to His wisdom, may He be blessed, but we are ignorant of many of the ways of the wisdom in His activities.¹³⁷

Since we cannot fathom God's wisdom, once again our search for the final purpose will be cancelled.

We thus appear to have two separate responses: on the one hand, Maimonides states that all creation is according to God's will; on the other hand, he states that all is according to divine wisdom. Both responses halt our search for the final purpose, since both divine will and

¹³⁶Ibid., III:25, p. 39:a.

¹³⁷Ibid., III:25, p. 39:b.

wisdom are beyond our apprehension. Yet why two responses? Does God use will as His guide for some existents, and wisdom for others? Is Maimonides deliberately contradicting himself? The answer can be gleaned from the final sentence of III:13:

Thus it is necessary that one will believe, that a man when he will know his essence, and will not go astray regarding it, and will understand every existent according to what it is--will be calm and his thoughts will not be confused to seek . . . the purpose for that which has no purpose except its existence, which is determined by the divine will--or if you want, you may say: by the divine wisdom.¹³⁸

By using will and wisdom as interchangeable terms, Maimonides is hinting that they are two designations for the same entity. Divine will and wisdom are not two separate responses to the seeking of a final purpose; rather, they are two different versions of the same response: "It is impossible by necessity for the matter regarding the giving of the final purpose not to arrive at 'thus the Deity willed it' or 'thus His wisdom decreed', and this is the truth."¹³⁹ This identification of will with wisdom has its basis in Maimonides' concept of God's absolute unity. God is one, and hence God's essence must be one, or unified, as well. God cannot be part will and part wisdom, for this would constitute a plurality within the divine essence. All of

¹³⁸ Ibid., III:13, p. 20:a.

¹³⁹ Ibid., III:13, p. 18:b.

God's attributes and activities must be one--hence, God's essence = God's will = God's wisdom. However, due to the limitations of human language, we have no one word that can adequately express this equation. Therefore, Maimonides uses the term will in one place and wisdom in another in order to help us see that when speaking of God, will and wisdom are merely two names for the same entity. It is this will--wisdom that God employs in the creation of the universe; and it is this inapprehensible will--wisdom that prevents us from finding the final purpose for all.

We can now summarize the main elements of Maimonides' view of the origin and structure of the universe. It is created in the sense that it is formed out of privation that always accompanies pure, formless matter. Out of the creative process emerged measured time-flow, numerous corporeal spheres and stars, and incorporeal separate intelligences. The basic four elements of our lower realm were created as well; directed by God, the intelligences move the spheres, which in turn bring about the intermixing of these elements. It is from this intermixing that the earth's physical properties and life forms emerge. Our universe is one huge, living entity, with one system of natural law ruling all but God. Finally, although we can never determine the final purpose for the creation of the universe, Maimonides argues that we do know all is according to the will-wisdom of the Deity.

The influence of Aristotle on this conception of Maimonides has been mentioned numerous times. The structure of the universe, with its spheres and separate intelligences; the role of the elements; the system of causality that govern all natural processes--all are adapted from Aristotle's physics. Yet the influence of Plato is strong as well, especially in two crucial areas. First, like Plato but unlike Aristotle, Maimonides seems to affirm the creation of the universe out of some sort of pure matter. Second, like Plato, Maimonides conceives of the Creator not as mere though bound by law and necessity, but as an artist who freely forms the universe with aesthetic insights and creativity.¹⁴⁰

What can we say in evaluation of Maimonides' view? Granted, we have examined but a small portion of his work, looking only at those chapters of the Guide which explicitly mention Genesis 1. In addition, due to the cryptic and enigmatic style of the Guide, we can never be absolutely positive that we have totally understood Maimonides' beliefs correctly. Nevertheless, we can attempt to identify the strengths and weaknesses of his view as we have understood it here. There are many positive aspects to point to. First, Maimonides solves the chronic problem shared by all who advocated the emanation of the universe from God: the coming-into-existence of matter from form.

¹⁴⁰ Efros, "Nature and Spirit in Maimonides' Philosophy," p. 165.

Since God is pure form, from where does the matter which will comprise much of our universe arise? Even if the intelligences, and not God, are suggested as a possible source, we are still dealing with the logical absurdity of incorporeal beings giving rise to corporeality. By positing the existence of the pure matter attached to privation, Maimonides is able to keep matter far away from the most incorporeal of all existents, i.e., God, and to avoid the logical difficulties involved in attributing the rise of matter to the separate intelligences. This existence of pure matter also avoids the difficulties of creation ex nihilo, which demands that God do the impossible--i.e., create matter itself from absolutely nothing.

Second, by advocating the creation of the universe, although from an already-existing entity, Maimonides preserves God's free will. The universe comes into being not by necessity or compulsion, but by the freely-willed creative powers of God. Without a God possessing free will, the entire belief structure of Judaism would collapse. Human choice and decision, the content of revelation, even the Torah itself would become at best a noble fiction and philosophically irrelevant. By positing creation, Maimonides reaffirms God's freedom of will, and remains true to the basic fundamentals of his religious convictions.

Third, Maimonides' system represents a successful integration of the worlds of the philosopher and the Jew.

By carefully synthesizing the teachings of Scripture with those of physics and metaphysics, Maimonides is able to build a rational foundation for the retention of traditional Jewish beliefs. By showing that tradition-based convictions are never in discord with the demonstrable truths of reason, Maimonides makes it possible for the medieval Jew to participate in two communities: the universal community of rational people, who inquire into the course of things, and the particular community of Israel, which takes upon itself the task of living in accord with God's expressed teaching and will.¹⁴¹

Fourth, Maimonides bridges another important gap as well: the gap between "nature and spirit,"¹⁴² between necessity and free will. The medieval thinker was often pulled between two extremes. On the one hand, Aristotle and his followers claimed that all is nature, even God--i.e., that all is law and compulsion and necessity. On the other hand, the Mutakallimun maintained that nature doesn't exist at all--i.e., that there are no specific natures in things characterized by causal necessity at all! For these Islamic theologians all is totally dependent on God's will alone. Maimonides' view is an attempt to mediate between these two extreme positions.

¹⁴¹Hartman, Maimonides: Torah and Philosophic Quest, p. 123.

¹⁴²Efros, "Nature and Spirit in Maimonides' Philosophy," p. 162.

Like Aristotle, Maimonides strongly maintains the notion of specific natures in things of causal sequences that pervade and regulate the entire created universe. Yet like the Mutakallimun, Maimonides views God's will as ultimately above and not limited by this system. It is by God's directions that the intelligences move the spheres, and God's activity in any regard is not bound by even one of the laws that run the universe. Thus, Maimonides is able to weave both "nature" and "spirit" into his system, preserving what he believes to be the best of both, and achieving a delicate balance between them.

The problems of Maimonides' view of the origin and structure of the universe are few, but they are serious nevertheless. First, Maimonides' God is distant, far removed from us and our daily experience. The Deity is not a God who is directly involved with activity on earth, for God's will and intentions are carried out through intermediaries. In a sense, God is too busy comprehending the universe and communication with the separate intelligences to engage in direct contact with us. Furthermore, Maimonides firmly believes that we can never directly apprehend God or understand God's essence; hence, not only is God unaccessible to us--God's nature is ultimately unknowable as well. This transcendent, unknowable Deity is very different than the imminent, personal God portrayed in parts of Jewish tradition. It is a God that only the

"most enlightened" can relate to, a God essentially cut off from the average person's life. This is an unfortunate result.

Second, it is difficult not to suspect Maimonides of delicately "dodging the issue" of the final purpose of creation. By placing God's unknowable will-wisdom in the path of our search, Maimonides abruptly ends all further discussion or speculation. Yet the halting of an investigation is not the same as solving it. The question of creation's final purpose may indeed be extremely complicated and difficult--it may even be impossible or absurd. Throughout the Guide Maimonides does not hesitate dealing with many other complicated and difficult issues. Yet for some reason, he avoids dealing with this question, screening himself behind God's will-wisdom. We are left longing for more, and feeling disappointed.

Finally, there are still lingering questions regarding a possible change within God's essence due to the creative process. We have already discussed Maimonides' arguments regarding this,¹⁴³ in which he points out the error of applying the universe's natural laws to the One who created the laws themselves. Yet these arguments are not conclusive, and new concerns arise. Maimonides states that God, as a continually active agent, always acts, whether visible results are produced or not; hence, God

¹⁴³See pp. 72-74.

does not change from a potential to an actual agent in the creative process. The problem with this lies in the phrase "whether visible results are produced or not."

A visible result is not the same as an invisible one--the visibility itself constitutes the key difference. When a result becomes visible after not being so, a change has indeed occurred. Something must be different from before to produce the visibility itself. When the creative process began, invisible results of God's never-ending action became visible, for other existents were produced. Therefore, some change had to occur to transform invisible results to visible ones. Yet what is the location for that change? It cannot be in the pure matter, for it is passive and cannot produce change by itself; nor can it be in God, for a God that changes is a notion intolerable to Maimonides; and it cannot be within a third agent, for no such entity existed. Hence, we are ultimately left without any explanation for this change at all.

Furthermore, Maimonides responds to another challenge of Aristotle by saying that if God does not act in the same manner always, it is because of a characteristic of God's will. God's actions are not influenced by anything external; rather, it is the nature of God's will to act in one way at one time, and in another way at another time. Therefore, he states, this does not argue change. Once more it is the final phrase that is troubling. If God's

will acts at time X and not at time Y, then some sort of alteration must occur within the will itself in order to cease action. Even if we attribute that alteration to the will's nature, and not to any external factor, we are in effect saying that it is the nature of God's will to change. Yet we have seen that God's will is identical to God's essence, and God's essence cannot change for Maimonides. Again we are left with an unacceptable outcome.

Yet these few remaining questions by no means detract from the enormous achievement of Maimonides' thought. No other medieval Jewish philosopher was able to so successfully integrate philosophical thought and traditional belief, to weave together the life of reason and revelation. No other medieval work can compare with the depth, complexity, and sophistication of the Guide, which will continue its centuries-old tradition of provoking close examination and debate. And no other medieval Jewish thinker exerted a greater influence on the thought of the community as a whole, affecting both opponent and adherent, both lovers of Torah and lovers of philosophy. Maimonides' work continues to influence us as well; debate and discussion about his thought will continue for years to come. We look forward to the needed reflection and growth that such discussion provides.

Obadia ben Jacob Sforno (Ca. 1470-1550) lived at a most opportune time for religious and philosophic thought. The Italian Renaissance was at its height, marked by a ferment of artistic activity, intellectual curiosity, philosophic discussion, and literary research. Relations between Jews and Christians were in many respects exemplary, with Jews participating in all aspects of Renaissance life. Jewish education included not only the traditional studies, but philosophy, poetry, art, and literature as well. Wealthier Jews hired tutors, supported scholars, founded centers of learning, and funded research.¹ Even the humblest Jewish scholar had a key role to play. The Italian Renaissance sparked an interest in all aspects of Greek thought as well. Jewish scholars had already translated many standard scientific and philosophic texts into Hebrew and/or Latin; hence Jews were viewed as experts in Greek thought all over Italy, and were employed as scribes, copiers, translators, and teachers in various courts throughout the land.² The study of Hebrew became a branch of humanism, and Christians

¹Cecil Roth, Jews in the Renaissance (New York: Harper and Row, 1959), p. 16.

²Cecil Roth, History of the Jews in Italy (Philadelphia: Jewish Publication Society, 1946), p. 205.

interested in the Hebraic influence on European civilization sought out their Jewish neighbors as instructors.

We might suppose that this broadening of intellectual and cultural activity would bring about a decrease in religious study and interest among the Jewish community; yet quite the opposite occurred. Traditional Jewish studies in Italy flourished side by side with secular learning. Every major city had its own Yeshivah; serious study of the Talmud was to be found everywhere; and funds for Jewish literary research were plentiful. Jews engaged in public debates and discussions on all aspects of traditional Jewish belief, expounding on the Rabbinic or Biblical view of various matters.³ In all, the Italian Jews were able to achieve a synthesis between the humanistic culture of the Renaissance and their traditional Jewish heritage. "There has been no period in history where the Jews achieved so successful a blending of traditional Hebrew culture with that of the general environment as in the Italian Renaissance."⁴

Yet this blending was not without problems. The Jews of Italy found themselves pulled by opposing waves of humanism and religiosity. On the one hand, secular learning and culture often led to assimilation, and to a weakening of the traditional belief in a particularistic religion.

³Ibid., p. 209.

⁴Samuel Stahl, Translation of Sforzo's Commentary on the Book of Deuteronomy (Cincinnati: Hebrew Union College - Jewish Institute of Religion, 1975), p. 7.

The "common element of merit and truth"⁵ of all religions was stressed instead and the observance of Jewish customs among many Jews became lax. On the other hand, the simultaneous growth of Jewish studies produced religious fervor and enthusiasm: Judaism's traditional beliefs regarding God, revelation, halacha, etc. received renewed emphasis and attention, and many Jews found themselves returning to ways of life once forgotten or abandoned. Still others desired to live in both realms, and were constantly struggling, both intellectually and practically, to reach a satisfactory compromise. Furthermore, the tension between these two aspects of Jewish Renaissance life was exasperated by the ethnic division within the Jewish community itself. The Askenazic Jews of Italy were generally bankers or wealthy tradesmen; their time and energy were largely invested in Talmudic and religious studies.⁶ Many Askenazim originally came from Germany and southern France, where Talmudic study had flourished for centuries. The Sephardic community was made up of wanderers, small merchants, or artisans; they had come to Italy mostly from Spain and Portugal, and had brought with them the cultivation of scientific and philosophic studies that had

⁵Daniel Breslauer, The Philosophy of Ovadia Sforza, as Reflected in his Commentary on the Torah (Cincinnati: Hebrew Union College-Jewish Institute of Religion, 1968), p. 16.

⁶Ibid., p. 13.

once characterized the Iberian peninsula. In addition, due to the trauma of the exile, many Sephardim developed a view of God as transcendent, unknowable, and uninvolved.⁷ The Sephardim consequently supported and participated in the literary, scientific, and philosophic activities of the day. The cultural and economic conflicts that occasionally arose between the two groups only increased the tension that already existed between their differing intellectual outlooks. Group allegiance thus became a factor in the Italian Jew's struggle between a more or less secular form of humanism and religiosity.

The life of Obadia ben Jacob Sforno embodied all these aspects of Renaissance Jewish life. Born in 1475, he studied math and philosophy as well as Hebrew and Rabbinic literature in his native town of Cesena. In 1496 he left to pursue a career of medicine in Rome, where he continued to combine secular and religious learning: Talmud, Bible and Midrash were studied side by side with Arabic, Latin, philology, and metaphysics.⁸ During the years in Rome, Sforno worked not only as a physician and scholar, but at one time served as religious and political leader of the Jewish community as well.⁹ Sforno was also in papal

⁷ Ibid., pp. 24-25.

⁸ Stahl, Translation of Sforno's Commentary, pp. 8-9.

⁹ Roth, History of the Jews in Italy, p. 205.

service; at the recommendation of Cardinal Dominco Grimani, he taught Hebrew and Talmud to Johannes Reuchlin, who later played a crucial role in defending the Jews and the Talmud during troubled times in Germany.¹⁰ For reasons still unclear, Sforno left Rome in 1525 and, after months of traveling, finally settled in Bologna. Here he established a Talmudic academy and בית מדרש; in addition, he resurrected a Hebrew publishing house, reorganized the Jewish community, and served as the community rabbi. Sforno remained in Bologna for the rest of his life, teaching at and directing his school until his death in 1550.¹¹

During his lifetime, Sforno enjoyed a great reputation as a physician, philosopher, Biblical exegete, and causist, and this reputation enabled him to provide two vital services to the Jewish community of Italy. First, he was able to serve as a bridge between the different ethnic groups. As a man of science and philosophy who had experienced the pain of wandering, Sforno was similar to the Sephardim; yet as a Biblical scholar and head of a Talmudic school, he was similar to the Askenazim. Thus, he could understand and empathize with both groups, and he used

¹⁰ Encyclopedia Judaica, 1971 Ed. (Jerusalem: Keter Publishing House, Ltd.), Vol. 14, pp. 108-09.

¹¹ Stahl, Translation of Sforno's Commentary, p. 10.

this understanding to help solve conflicts and ease tensions.¹² Second, Sforno served as a key liaison between the Italian Jewish community and the Christian world. He was esteemed by local Italian rulers, by Catholic clergy, even by royalty of Western Europe.¹³ This allowed Sforno to have the extended contacts and influence needed for harmonious ecumenical relations, and for crucial times of conflict.

When we turn and consider Sforno's literary works, the multifaceted interests of his life are obvious. He translated eight books of Euclid's geometry from Arabic into Hebrew; in 1520 he wrote a textbook in Hebrew grammar. Commentaries were written on the Song of Songs, Ecclesiastes, Psalms, Job, Jonah, Zechariah, and Habbukuk, and his commentary on the five books of the Torah is an important part of Biblical study even today.¹⁴ Sforno also completed a major philosophical treatise entitled Or Amim, or "Light of [the] Peoples."

Of all his works, the commentary on the Torah and Or Amim are by far the most famous, and both were prompted by Sforno's genuine concern for his community. Sforno felt that the philosophic interest of the Italian Renaissance was centered almost exclusively on Aristotle,

¹²Breslauer, The Philosophy of Ovadiah Sforno, p. 15.

¹³Stahl, Translation of Sforno's Commentary, p. 4.

¹⁴Ibid., p. 11.

and that the Jewish intelligentsia paid too much allegiance to the Greek thinker's views. He grants in his introduction to Or Amim that Aristotle revolutionized Greek thought and corrected the errors of his predecessors; yet Sforino argued that Aristotle was being taken as the final word, while other Greek thinkers such as Plato were being ignored or misrepresented.¹⁵ In addition, Sforino felt that much of Aristotle's thought was detrimental to proper belief, for it denied creation, providence, and individual immortality. Sforino thus set out in Or Amim to provide a group of philosophically grounded arguments that would refute certain Aristotelian views; these arguments would also, at the same time, explain the inherent truths of Torah.¹⁶ Sforino used both rational proofs and Biblical quotations as his tools in Or Amim, and attempted to "assure his people that spiritual security was not to be found in secular, inherently contradictory (he felt) Aristotelian philosophy, but in the Torah's eternal truths."¹⁷

Yet these "eternal truths" were being scrutinized and called into question; widespread secular learning was casting doubt on the Torah's claim to possess all truth, and many wondered if the Torah had any relevance for the

¹⁵ Ibid., pp. 11-12.

¹⁶ Ibid., p. 11.

¹⁷ Mark Peilen, Sforino's Commentary on the Book of Numbers: An Annotated Commentary (Cincinnati: Hebrew Union College-Jewish Institute of Religion, 1980), p. 2.

"rational, modern thinker" of the Renaissance. It is this situation, among other reasons, that prompted Sforino to write his commentary on the Torah. He sought to reaffirm the value and relevance of the Bible's first five books for the Jewish intellectual community; this was done not by rejecting reason or the current scientific views of the day, but rather by using reason and science to clarify and demonstrate the truth of revelation--in other words, using "reason as the handmaiden of revelation."¹⁸ Sforino expressed this explicitly in his comment on Deuteronomy 17:19: "The portion of reason is that from her is understood the miracles and signs of God's greatness that necessitates awe."¹⁹

Sforino's method in his commentary is a simple one. Avoiding all mystical interpretation, Sforino engaged in a straight-forward, literal elucidation of the text. He used allegory rarely, employing it only when the literary sense of the verse contradicts reason. Sforino's goal in his commentary was threefold. First, he wished to demonstrate that the Torah is a theological and linguistic unity; Sforino did this by resolving contradictions, explaining repetitions, and drawing connections between seemingly unrelated verses or sections. Second, Sforino hoped to elucidate what he regarded as the central, unifying theme of the Torah: the continual moral and ethical elevation

¹⁸Breslauer, The Philosophy of Ovadia Sforino, p. 19.

¹⁹*Ibid.*, p. 21.

of humankind in order to make the free human will act as God acts--with justice, mercy, and righteousness. Sforno spent much time outlining and introducing each section of the Torah in order to show how this theme is developed throughout. Third, Sforno sought to justify the beliefs and observances based on the Torah by demonstrating their rational and scientific foundations. His aim was to provide a theological and philosophical basis for Judaism which would unite all the elements within the Jewish community. By presenting a philosophic rationale for Jewish living, Sforno hoped to bring back many assimilated Sephardim; and by emphasizing reason as a foundation for Jewish belief and custom, Sforno tried to bring a greater understanding of philosophy and science to the Askenazi world.²⁰

It is not surprising, therefore, that many of Sforno's philosophic views are embedded in his commentary on the Torah; and it is to this work that we shall turn for our glimpse into Sforno's beliefs regarding the origin and structure of the universe. In our examination of his comments on Genesis 1, we shall try to determine whether Sforno openly states his views, or conceals them in an enigmatic fashion. What does he posit as the origin of our universe? What is his conception of creation, and how does the process work? Does Sforno provide an explanation of the universe's structure? What or who serve as Sforno's philosophic

²⁰Ibid., p. 23.

sources? And finally, is the use of reason as a justification for revelation successful? Hopefully, we shall be able to answer these questions and more, thereby gaining some insights into the views and beliefs of Obadia ben Jacob Sforno.

As our examination begins, we should note that, in his comment on Genesis 1:1, Sforno affirms what was regarded as the traditional Jewish viewpoint: creation ex nihilo--i.e., the production of the entire universe by God from absolutely nothing. Writing on the word נִרָא, he states: "He made what is not [nothing] into what is [something]." ²¹ Throughout the commentary on the first chapter, Sforno repeatedly uses the adjective "created" before any substance that might be mistakenly conceived as pre-existent; for example, on Genesis 1:2, Sforno writes: "The same created earth . . ." and ". . . it was explained with regard to this that the primary matter is a created thing." ²² We can see in his words a conscious effort to combat both Aristotle's concept of eternal prime matter and Plato's concept of a pre-existent chaos.

Another key concept of Aristotle is challenged by Sforno's opening words: the eternality of time. Commenting on the word נִרָא שֵׁית in Genesis 1:1, Sforno writes: "In the beginning of time; and this is the indivisible

²¹ Mikraot Gadolot, 5-Vol. ed. (Jerusalem: J. Weinfield and Co., 1976), Vol. 1, p. 1:b.

²² Ibid., Vol. 1, p. 2:b.

first moment, since there was no time before it."²³ It is thus obvious that for Sforno time itself is created with the heaven and earth; yet there is another point here that is not so obvious at first glance. The clue is in the words: "the indivisible first moment"; why is it necessary to mention that this moment is indivisible? The answer becomes clear when we look at his words on וְנִרְאָה: ". . . and during this [i.e., creation] no time at all passed."²⁴ For Sforno, both the heavens and the earth were created at the same time, with one action, in one instantaneous moment; heaven and earth were formed simultaneously. This conception has implications not only for cosmology, but theology as well; for if there was only one, singular, instantaneous creation, then, Sforno reasons, there must be only one, single Creator. The uniqueness of creation implies the uniqueness of the Creator: "And just as the creation is one, so too is the Creator one, singular, and unique . . . and there is none like Him in heaven or earth--there is none else."²⁵

Yet we are left with one problem. If the creation of heaven and earth occurred in one instantaneous moment, what transpired during the "six days" mentioned in Genesis

²³Ibid., Vol. 1, p. 1:b.

²⁴Ibid., Vol. 1, p. 1:b.

²⁵Obadia ben Jacob Sforno, Or Amim (Israel: Ramat Gan Press, 1970), 12, end.

1? Are they nothing but a poetic allegory to be dismissed, or do they represent an important part of the process?

Sforno answers this in his comment on Genesis 2:4. He writes:

In the day that he ordered the behavior of the earth and its generations from the heavens upon a stable, fixed order, and this is after six days of creation, and at that time God was called 'Elohim' through whose ordering He made existence permanent.²⁶

The six days of the Bible are thus a time when all the components and inhabitants of earth are arranged in their provisional order, each emerging and making its appearance at the appropriate stage in the process. At the end of six days this process was completed, and the resulting order became the permanent order of the natural world. This is supported by two additional comments on the opening chapters of Genesis. Writing on the words "the sixth day" in Genesis 1:31, Sforno states: "The first sixth day, which is the beginning of every sixth day in which all actions are finished."²⁷ The seventh day thus marks the beginning of this completed, permanent order for the future; in his comment on Genesis 2:2, Sforno writes: "In the beginning of the seventh day, which is the moment without division that is the beginning of all time in the future."²⁸

²⁶ Mikraot Gadolot, Vol. 1, p. 10:a.

²⁷ Ibid., Vol. 1, p. 8:b.

²⁸ Ibid., Vol. 1, p. 10:a.

It is possible that Sforno's source for this conception lies in the writings of the rabbis. In Genesis Rabba 12:4 we find the theory that although all things were created simultaneously, each individual existent made its appearance at a different point in time during the first six days.²⁹ The rabbis present two examples to illustrate this: figs gathered at once but selected separately, and seeds planted at once which sprout at different times. Another possible source may be the works of Saadya Gaon, who, in his desire to avoid any hint of gradation in the creative process, also insists on all existence coming into being at once; for Saadya, only the transition from potentiality to actuality occurred during the first six days.³⁰

We will now turn our attention to the heavens. What are the components of the upper realm? Do they too emerge gradually, or do they appear all at once in that first creative instant? Sforno first speaks of the upper realm when he comments on שמים in Genesis 1:1:

Behold, the word there (שם) teaches about a far place, and every plural form with a first patach and penultimate accent indicates two equal things. Therefore the word 'heaven' (שמים) teaches about a far essence in relation to us, equidistant from every side. And this does not happen except in a sphere revolving in a complete circle. It is said: if it is so that He created the same essence which is now far from us, equidistant from every side, then it is a sphere. Therefore it is not said 'He created

²⁹ C. Blacker and M. Loewe, Ancient Cosmologies (London: G. Allen and Unwin, 1975), p. 72.

³⁰ Israel Efros, Studies in Medieval Jewish Philosophy (New York: Columbia University Press, 1974), p. 46.

the heavens' alone, for He will not say thus from His side only, but in relation to our place. And it is said 'and the earth', the fitting center of the sphere.³¹

Thus, Sforno combines philology and grammar to give us a portrayal of heaven as a distant, spherical body with earth as its center, and equidistant from us on all sides. In his Genesis commentary Sforno does not explicitly list exactly what this heavenly sphere contains; yet some indication of its contents can be seen in his remarks regarding the מאורות, the "lights" mentioned in the Biblical text.

Commenting on Genesis 1:14, Sforno states:

In the same firmament that was formed on the second day, let there be a spark from the lights and there it will increase and mix together to make in the lower spheres all that is mentioned in the chapter, just as sense perception perceives that the light of the spark increases when it passes through clear water.³²

Note that Sforno does not place the lights themselves in the firmament; only a spark from them enters, passing through the water vapors of earth's upper atmosphere. By doing so it produces the effect illustrated by Sforno's example: an increased amount of light for the earth. This light that grows from the spark produced by the heavenly lights is beneficial and needed for the creatures of earth. Writing on Genesis 1:15, Sforno states: "That from the מאורות there will come upon it [i.e., the earth] a temperate light suitable for its inhabitants."³³ And in his comment on Genesis 1:18, Sforno writes: "To create

³¹Mikraot Gadolot, Vol. 1, pp. 1:b-2:b.

³²Ibid., Vol. 1, pp. 6:a-6:b.

³³Ibid., Vol. 1, p. 7:a.

existents in the lower realms; and they were required along with the primary light for the existence of living creatures that are nobler than plants."³⁴ Furthermore, these heavenly lights are helpful not only in the bringing forth of life, but also in the ordering of time. In his comment on Genesis 1:18, Sforno states:

To divide in the lower realms by their rising and setting between the time of darkness that is called night, [and the time of light], as it was said above, 'to divide the day from the night' (Genesis 1:14).³⁵

Sforno sums up the role of the lights in his comment on Genesis 1:8:

Because the celestial activities will reach us by means of it [i.e., the firmament], as it is said, 'and God set them in the firmament of the heaven to give light upon the earth, and to rule over the day and over the night, and to divide the light from the darkness'.³⁶

We must again note that the celestial lights are not actually in the firmament, which merely functions as a magnifier and transmitter of their illumination. They must be somewhere above the firmament, somewhere within the heavenly sphere Sforno mentions in Genesis 1:1. But where? Are they just floating around, or are they fixed at certain points? Sforno does not answer this in his Genesis commentary, but he does discuss the matter in Or Amim. In this work he lists nine spheres in all: the seven spheres

³⁴Ibid., Vol. 1, p. 7:a.

³⁵Ibid., Vol. 1, p. 7:a.

³⁶Ibid., Vol. 1, pp. 4:b-6:a.

of the planets [i.e., including the "lights" discussed above], an eighth sphere containing the stars, and a ninth sphere that contains nothing but which moves all the other spheres beneath it.³⁷ It is this ninth sphere that Sforno is referring to in his comment on Genesis 1:1.

Unlike the different components of earth, the celestial bodies do not seem to emerge in a gradual process; rather, they come into existence all at once during that first moment of creation. In his comment on Genesis 1:16, Sforno writes:

Regarding the lights and the remainder of the stars it stated 'and He made' (וַיַּעַשׂ) for they were included in the parts of the spheres or 'the heaven' (הַשָּׁמַיִם) whose creation has already been related (verse one); and accordingly it is not said of them 'creation' (בְּרִיאָה), but rather 'making' (עֲשִׂיָּה).³⁸

It is likely that this "making" involved only the assignment of various functions or specific locations within the celestial realm. Another difference between earth and the spheres is the matter from which each is made. Instead of primary matter and form, a fifth substance is proposed by Sforno in a passage in Or Amim as the special matter of the planets and spheres.³⁹

One further comment is made regarding the celestial spheres. Writing on the phrase רוּחַ אֱלֹהִים in Genesis 1:2, Sforno states: "Movers of the sphere, which were called

³⁷ Sforno, Or Amim, 8:14.

³⁸ Obadiah ben Jacob Sforno, Kitvei Sforno al Ha-Torah (Jerusalem: Mosad HaRav Cook), Vol. 1, p. 13.

³⁹ Sforno, Or Amim, 9:10.

'wind' (רוח) as it is said, 'who makes רוח His messengers; (Psalm 104:4).'⁴⁰ It is unclear exactly who or what these movers are. It is possible that they are incorporeal intelligences connected with the spheres who keep them in motion, which was still a widely held "scientific" theory in Sforino's time.

Before we continue, we must pause and note the philosophic sources for Sforino's conception of the heavens above. Once again we see the influence of Aristotle. The medieval conception of his cosmology posits a universe in the shape of a sphere with the earth at its center; there are nine major spheres within this universe, representing the seven planets, fixed, stars, and outer sphere.⁴¹ These spheres are composed of a fifth element which Aristotle identifies as ether; this fifth element bestows special qualities on the spheres, circular motion being one of them.⁴² This Aristotelian cosmology was still widely accepted in Sforino's time (although it had been subjected to serious criticism, especially by Hasdai Crescas). This conception of the spheres therefore became part of Sforino's

⁴⁰ Mikraot Gadolot, Vol. 1, p. 3:b.

⁴¹ Isaac Husik, History of Medieval Jewish Philosophy (Philadelphia: Jewish Publication Society, 1946), pp. xxxiii-xxxiv.

⁴² Lenn E. Goodman, Readings in the Philosophy of Moses Maimonides (New York: Viking Press, 1975), p. 157. Also see Husik, History of Medieval Jewish Philosophy, p. xxxiv.

thinking. We can also suggest Maimonides as an additional source. In Chapter 72, part 1 of his Guide for the Perplexed, Maimonides gives a detailed description of the universe's structure.⁴³

After our examination of the upper realms, we now can begin to examine the earth. As mentioned above, life unfolds not all at once, but instead in a gradual process. For Sforno, the first stage of this process is the emergence of the physical properties of our earth. His description of this stage opens with a discussion of the two basic components from which all things will eventually emerge: primary matter and form. In his comment on Genesis 1:2, Sforno writes:

The same created earth at that time was a thing compounded of primary matter, called הוה, and the created primary form, הוה. For truly, there was nothing suitable for primary matter except one form, which was the first of all forms that are compounded [with matter] through necessity. And it was explained regarding this that the primary matter is a created thing. And the matter of that same first compound is called הוה, being from His side a potential thing only, without being found in actuality, as it is said: 'for they are vain' (I Samuel 12:21)--that is to say, without being found in actuality but in imagination only; and the form that is joined in that same first compound is called הוה for through it, the הוה is found in actuality . . . and it cannot remain with its form for a considerable [amount] of time . . . and this is what happened to the subject of the first form which instantaneously took on the changing, elementary forms.⁴⁴

⁴³ Moses Maimonides, The Guide for the Perplexed, Pines ed. (Chicago: University of Chicago Press, 1963), Vol. I, Chapter 72, pp. 184-94.

⁴⁴ Mikraot Gadolot, Vol. 1, pp. 2:b-3:b.

In this lengthy passage we learn not only that the earth was created as a mixture of primary matter and form, but also the characteristics of each of these initial components. We see that primary matter has no real existence unless it is joined with form; it is like pure potentiality. The primary form, on the other hand, is similar to indeterminate tri-dimensionality; it gives corporeal existence to primary matter by joining with it and bringing it to actuality. This initial union is short-lived, however, for primary matter is unstable, due to its being indeterminate; it seems to constantly shed one form and take on another.

Yet this process of exchange is a necessary one, for it is through these various combinations of primary matter and form that four elements of earth will emerge. In his comment on the term *אוויר* of Genesis 1:2, Sforzo writes:

This is the dark air, which emanated at that time from the primary compound, which was on the surface of the deep--i.e., in the surface of the two lower elements which had also emanated at that time from the primary compound, and they were surrounding one another.⁴⁵

We seem to have the appearance of three elements here: the two lower elements of water and earth (with the water above the earth), and an upper element of "dark air." Yet this dark air does not remain; rather, it is transformed into the two upper elements of air and fire. Writing on the phrase *אוויר חושך* of Genesis 1:2, Sforzo says:

⁴⁵ Ibid., Vol. 1, p. 3:b.

They [i.e., the spheres] moved at that time the dark air on the surface of the waters [where were] encompassing at the time the element of the earth. And therefore when a part of it joined to the sphere, it was kindled through its [the sphere's] movements, and this is the elemental fire; and the part of it that is close to the water acquired at the same time a certain coldness from the water, except for a small part of it, which becomes hot in the turning of sparks of the sources of light.⁴⁶

Evidently the energy produced by the movement of the sphere ignites a part of the dark air, thereby transforming it into the element of fire. The remainder becomes the cooler element of air. Thus all four elements--earth, water, air and fire--are generated either directly or indirectly, by the primary compound of matter and form.

Before we continue with our examination of Sforino's comments on Genesis 1, we must pause and note the sources for his conceptions of primary matter, form, and the four elements. Despite Sforino's opposition to several of Aristotle's views, the influence of the Greek thinker is unmistakable here. For Aristotle, all objects of our world are composed of matter and form; matter is portrayed as an unchanging substratum that takes on one form after another.⁴⁷ It has no actual existence unless it is combined with a form, and Aristotle often used the terms potentiality and actuality as correlatives for matter and form.⁴⁸ The

⁴⁶Ibid., Vol. 1, p. 3:b.

⁴⁷Husik, History of Medieval Jewish Philosophy, p. xxx.

⁴⁸Ibid., p. xxxi.

elements and their order are also from Aristotle, with each succeeding element encompassing the others like a concentric sphere.⁴⁹ These aspects of Aristotle's thought were a key part of the accepted science of the day, and it is therefore not surprising to find them appearing in the works of an "anti-Aristotelian thinker" such as Sforno.

In addition to matter, form, and the four elements, one additional ingredient is required before the emergent process can continue: light. In his comment on the words וַיְהִי אֹר in Genesis 1:3, Sforno writes: "It is the light of the seven days which was necessary for those being brought into existence without a seed . . ."⁵⁰ Since no "primordial seed" existed for the first plant and animal life that would later emerge, a supernatural generative force is needed, and Sforno views this force as light. The source of this light is not a heavenly body; rather, it seems to be specially created by God in order to bring needed periods of illumination and darkness during the first few days of the creative process. Writing on Genesis 1:4, Sforno states:

And it was so, for God saw and chose its existence . . . those days in which the first light functioned were times of light and darkness, which were not by means of the power of the revolving of the sphere, but by the will of God who divided between the time of light and the time of darkness.⁵¹

⁴⁹Ibid., p. xxxiv.

⁵⁰Mikraot Gadolot, Vol. 1, p. 3:b.

⁵¹Ibid., Vol. 1, p. 3:b.

It is this initial light and its absence that the Genesis text refers to when it mentions the words יום, לילה, בקר, and ערב, rather than our usual conception of these terms. This is the meaning of Sforno's remarks on Genesis 1:5.

Writing on the phrase ויקרא אלהים לאור יום, he says:

"Despite the fact that there was not then a time of the light and the darkness behaving in the same way that time behaves with us, which we call by the names 'day' and 'night'."⁵² And on the words ויהי ערב ויהי בקר

Sforno writes:

Despite the fact that He divided the first light and the darkness so that they will serve in successive and separate times, He divided them in a gradual way so that there will be between them a time of evening with the coming of night and a time of morning with the coming of day.⁵³

The next major physical component of earth to emerge is the atmosphere, which is formed by the interaction of the elements water and air. Sforno describes the atmosphere's formation in his comment on Genesis 1:6:

Let there be a nature in the midst of the waters, something like a revolving sphere, dividing in form some parts from other parts, in such a way that a certain elevated part of the waters which [faces towards] the air reverts to a vaporous nature, and in this way this part rose by necessity toward a certain border in the elemental air; and the air received some compression by necessity in order to provide a place for that part [of the waters] that had changed into vapor, and it [the air] expanded to a place greater in extent than the first place.⁵⁴

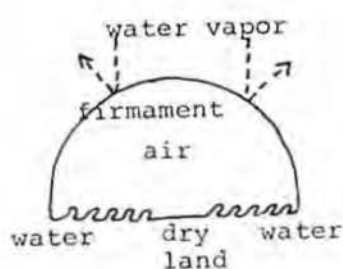
⁵² Ibid., Vol. 1, pp. 3:b-4:b.

⁵³ Ibid., Vol. 1, p. 4:b.

⁵⁴ Ibid., Vol. 1, p. 4:b.

It is not clear from this passage exactly what this "nature like a revolving sphere" is; yet its actions cause part of the waters to change into water vapor. This water vapor rises through the surrounding air until it reaches a border (possibly the border between the elemental air and fire); in doing so the vapor displaces the air, forcing it downwards toward the waters, where it then re-expands. We are thus left with three distinct regions: the elemental waters, the level of air surrounding them, and the water vapor above the air.

Yet this is a very tenuous arrangement, for water vapor is heavier than air. How is it stabilized? And what is that "nature like a revolving sphere?" The text of the Bible itself gives us the clue we need, for it says: *ויהי רקיע כסוי*. It is this *רקיע*, the firmament, that may provide the answer to both our questions. Sforno explains this further in his comment on Genesis 1:7:



And it came to pass as a small part of the elemental waters receded from under that same section of them that had turned to water vapor, as it was when He said, 'Let the waters under the heaven be gathered together'-- it would have been proper at that time for the vaporous part to go down to the place that the waters had vacated, and it was done, so that the same dividing firmament would have a resistant, arresting power in it, and prevent the vaporous part, i.e., that is, the water above the firmament--from descending, in such a way that the compressed section of air went down, and the vaporous part remained in its initial place.⁵⁵

⁵⁵Ibid., Vol. 1, p. 4:b.

Once a new physical space was created by the gathering of the waters, it would have been natural for the water vapor, the heavier of the two upper layers, to descend and fill the new space. But the firmament prevented this by serving as a border, as a restraining boundary between the level of water vapor and the level of air. It may be the same firmament that initially divided the waters, acting as a "nature like a revolving sphere"; and it is this same firmament that continues to hold and lift the water vapor above the air, thereby forming the earth's upper and lower atmospheres. Not only is this higher region of water vapor the obvious source of the sky's blue color, it is also the source of the earth's weather. Two types of water vapor exist in this upper atmosphere: cooler, very moist vapor, and heated, less moist vapor. Each type will produce different meteorological effects. Sforno describes this in his comment on Genesis 1:7:

With regard to this [i.e., the vapor], in arriving there [i.e., in the upper atmosphere], the moist vapor will become thick and will bring forth the rain and the snow and the hail, and they will go down, as it is said, 'at the sound of His giving a multitude of water in the heavens' (Jeremiah 10:13) . . . And in arriving there, the steamy and heated vapor will bring forth the thunder and lightning, as it is said, 'when He causes the vapors to ascend from the ends of the earth; when He made lightnings with the rain'⁵⁶

Having finished his description of the first stage of the emergent process--i.e., the appearance of the basic physical properties of the earth, Sforno then briefly

⁵⁶Ibid., Vol. 1, p. 4:b.

discusses the second stage: the emergence of plant and animal life. In his comments on Genesis 1:9, Sforino speaks of the appearance of the dry land, a necessary prerequisite for the emergence of plants:

Not that they [i.e., the waters] will dry, as many thought . . . but rather He commanded that they will be gathered to one place, and they will not pass over, and therefore, they went away from upon the earth and did not fall upon it, as the sense will testify, as it is said, 'Thou didst set a bound which they should not pass over, that they might not return to cover the earth'.⁵⁷

After this, species of grasses (אֵשֶׁת) "for the food of the beasts of the field"⁵⁸ arise, followed by seed-bearing grasses "for the food of man,"⁵⁹ and seed-bearing trees. For Sforino, the plant life on earth seem to have a built-in-guarantee that each species will maintain its unique nature; this guarantee is implicitly found in the phrase על פרי עשה פרי למינו. Commenting on this phrase in Genesis 1:11, Sforino writes:

For the composite of two species will not reproduce . . . and it was thus established without receiving reduction or increase in any way that if a plant compounded from two species does occur, it will not reproduce.⁶⁰

After the emergence of plant life, the first animal life appears in the sea; Sforino does not discuss this explicitly in his commentary; instead, he allows the

⁵⁷Ibid., Vol. 1, p. 6:a.

⁵⁸Ibid., Vol. 1, p. 6:a.

⁵⁹Ibid., Vol. 1, p. 6:a.

⁶⁰Ibid., Vol. 1, p. 6:a.

Biblical text to speak for itself, with the exception of two instances. In the first instance, Sforno delineates a role for the birds (which seem to arise from the water as well): "to clean the air for its inhabitants of whatever remaining moisture sent forth from the firmament . . ."⁶¹ In the second instance, Sforno comments on the formation of the sea monsters by God in Genesis 1:21: "Insomuch as the power of bringing forth established in the waters was not enough to bring forth the first sea monsters without a seed, He created at that time a power sufficient for this."⁶² The innate generative powers of the waters were able to bring forth the fish and the birds; yet they could not produce the great and powerful sea monsters without a little help from the divine, which bestowed upon them the necessary power.

Animal life then appears on land, with "the animal soul then being added to the vegetive soul."⁶³ Not only do the animals possess the same guarantee as the plants, which preserves the uniqueness of each species by preventing the reproduction of hybrids; the animals are also given sensitivities and distinguishing characteristics corresponding to the needs of each species.

⁶¹Ibid., Vol. 1, p. 7:a.

⁶²Ibid., Vol. 1, pp. 7:a-8:a.

⁶³Ibid., Vol. 1, p. 8:a.

The third and final stage in the 6-day emergence of earth's characteristics and life forms is the creation of humankind. Unlike plant and animal life, human life does not spring forth from the basic elements of the earth; rather, human life is formed directly by God and the "divine entourage."⁶⁴ Commenting on the word אָדָם in Genesis 1:26, Sforino writes: "A species from the species of living beings I formed whose name is man, as it is said, 'and man will become a living soul' (Genesis 2:7)--thus we will make him."⁶⁵ This formation of humankind is the culmination of the emergent process of life on earth. It is interesting to note here the striking parallels between Sforino's conception of this process and our modern scientific theory of evolution: both begin with the formation of earth's physical properties; and both see animal life as first arising in the sea.

One crucial topic still remains in our examination of Sforino's views regarding the origin and structure of the universe. Throughout his commentary on Genesis 1 Sforino scatters enigmatic remarks about the existence of eternal substances other than God. Unlike the majority of his remarks, which are generally clearly and fully stated, these remarks are vague and abbreviated, resembling hidden clues. The first of these remarks occurs in his commentary on the word אֱלֹהִים in Genesis 1:1:

⁶⁴ Ibid., Vol. 1, p. 8:a.

⁶⁵ Ibid., Vol. 1, p. 8:a.

And it is said about it [i.e., the word], that **אלהים** is in the plural, teaching that He is the form of all eternal forms, but apart from them, as it is said, 'The whole earth is full of His glory' (Isaiah 6:3); . . . And by way of similarity, all that is separated from matter is called **אלהים**; the expert judges are called **אלהים**, for they judge through the image of God. And to teach about the degress of His eternity from which emanates the remainder of the separate eternal things, it is said that He is the **אלהי האלהים**, ('Eternal of Eternals').⁶⁶

What are these "separate, eternal things?" Are they found in a separate realm of the universe? Are they the incorporeal intelligences that move the spheres? Or are they other, incorporeal beings that exist side-by-side with the Creator? Sforino does not tell us their identity, but only adds more clues. In his comment on Genesis 1:26, Sforino calls them the "divine entourage" who "overflowed with the image for the subject ready for it"⁶⁷--i.e., humankind. Writing on the term **בצלמנו**, "in our image," he says that this is fitting "since he [i.e., humankind] possesses an intellectual and eternal substance."⁶⁸ This similarity between the heavenly entourage and us is again expressed in his comment on the word **כדמותנו**, "in our likeness." Sforino states: "We (humankind) will resemble the heavenly entourage insofar as they act through knowledge."⁶⁹ And in his comment on Genesis 1:27, Sforino writes:

⁶⁶Ibid., Vol. 1, p. 1:b.

⁶⁷Ibid., Vol. 1, p. 8:a.

⁶⁸Ibid., Vol. 1, p. 8:a.

⁶⁹Ibid., Vol. 1, p. 8:a.

Behold, the word *אלהים*, from the standpoint of resemblance, will be predicated of every intelligent, actualized complete substance separate from matter. And in this respect it is eternal by necessity. And therefore, it is predicated of God and His angels, and similarly, it is said of the judges due to the intelligent, human part that is proper to them.⁷⁰

These clues give rise to two key questions: first, what or who are these substances that are intelligent, incorporeal, and eternal, and where are they in the universe? Second, what do we possess that enables a comparison to be made between humankind and these substances? In answer to these questions, let us hypothesize that the terms "divine entourage," "angels," and "eternal forms" are Sforzo's code words not for a group of separate beings, but rather for the thoughts of God. These do not exist in a separate realm of the universe; instead they are found within God's mind. We must recall, however, that although they are within God, they are not equal to God, for God is "apart from them." Thoughts are obviously "intelligent"; they are incorporeal; and, since God is eternal, the thoughts of God's mind are also eternal. Thinking is the one activity that humankind shares in common with God; hence the basis of similarity between humankind and the divine entourage of God mentioned in Genesis 1:26. By conceiving of these "eternal forms" as thoughts, we can now clearly understand the references to judges, and the statement that the heavenly entourage acts through knowledge; and we can also now understand the following passage from Sforzo's comments

⁷⁰ Ibid., Vol. 1, p. 8:a.

on Genesis 1:27, in which he presents a description of the human activity that renders us similar to אלהים:

. . . its action is without any corporeal instrument, and it extends over that which is not sensuous, and over a part of future events; nor will it grow weak when it increases its activities of intellection, nor even in the time of the aging of the body, but vigor will be added to it; and from all this it was explained that it was incorporeal, without a doubt.⁷¹

What else could Sforino be describing here other than thinking?

This hypothesis that the eternal substances hinted at in Genesis 1 are the thoughts of God is supported by Sforino's comment on Numbers 7:89: "Every act of the Lord is for Himself, and for His own intellectual experience, and by this He will know and cause good to something else."⁷² Sforino is hinting here that God's sole activity is thinking. Hence, there can be no consultation with separate, eternal beings in Genesis 1:26; God is instead thinking, conceiving of the infinite number of forms and ideas contained within the divine mind--God creates by thinking. This idea is explicitly expressed in Sforino's comment on Genesis 1:4: "He brought them into existence with His active knowledge."⁷³ This is also why God is the form of all eternal forms: God is the one intellectual, eternal, incorporeal being in which all ideas or forms are contained.

⁷¹Ibid., Vol. 1, p. 8:a.

⁷²Peilen, Sforino's Commentary on the Book of Numbers, p. 29.

⁷³Mikraot Gadolot, Vol. 1, p. 3:b.

Hence, God knows the entire universe "not from an acquired knowledge from all existence--an objective knowledge--but He knows it with the same knowledge with which He knows Himself--a subjective knowledge."⁷⁴

Our hypothesis also helps clarify the following comment from Genesis 1:1: "For there is nothing beside Him that has existence unless it emanates from His existence, as it is said, 'and you cause everything to live' (Nehemiah 9:6)."⁷⁵ The idea, or form of every existent in the universe is contained within God's mind. We have seen previously that the form is the actualizing agent for existence; i.e., a form is required for all matter--even the different matter of the spheres--to exist in actuality. Thus, without the mind of God, from which comes the forms for all existents, nothing would ever come to be; the entire universe is dependent on God for its existence. This dependency is expressed in a comment on Numbers 15:41:

I am the Lord from the perspective that I am God, and that it is incumbent upon you to understand that I am the first . . . the continuity of your existence emanates solely from me without intermediaries.⁷⁶

It is fitting that we pause at this point to discuss Sforno's sources for the hypothesis discussed above. The

⁷⁴Sforno, Or Amim, 13:14.

⁷⁵Mikraot Gadolot, Vol. 1, p. 1:a.

⁷⁶Peilen, Sforno's Commentary on the Book of Numbers, p. 69.

existence of incorporeal ideas or forms has its origin, of course, in Plato.⁷⁷ Yet Plato posited these forms in a separate realm; it is rather Aristotle who places these forms in a self-sufficient mind. For Aristotle, God is conceived as a disembodied mind, as "Thought-Thinking-Itself."⁷⁸ God is the only object worthy of God's thought; hence all of God's activity is self-reflective and contemplative.⁷⁹ Maimonides is surely a source as well, for in Chapter 68, part 1 of The Guide for the Perplexed, he discusses both God's intellectual activity as well as the forms being thoughts in God's mind.⁸⁰ An additional source may be the Arabic philosopher Averroes, "The Commentor"⁸¹ to Aristotle; he also speaks of God's self-knowledge, and of the "hidden doctrine" that the forms are the thoughts of God's mind.⁸²

We must now ask how this self-contemplative God coheres with the rest of Sforzo's system. How did this God, thinking of self and thus various forms, bring forth the heaven and earth in one instant? What relation exists

⁷⁷ Goodman, Readings in the Philosophy of Moses Maimonides, p. 18.

⁷⁸ Ibid., p. 20.

⁷⁹ Stahl, Translation of Sforzo's Commentary, p. 35.

⁸⁰ Maimonides, The Guide for the Perplexed, Vol. 1, Chapter 68, pp. 163-66.

⁸¹ Husik, History of Medieval Jewish Philosophy, p. xx.

⁸² Averroes, Tahafut al Tahafut, S. Van den Bergh, ed. (London: Luzac and Co.), p. 463.

between this God and the spheres? And what role does God play in the emergent process of life on earth? Based on Sforino's comments discussed previously, and on their implications, we can propose the following system for the creation and sustainment of the universe. The concept, the idea, of the heavens and earth had always existed in God's mind; all that was lacking was the corporeal matter needed to form the physical components of each. It is this matter that is formed from nothing; it is then instantaneously combined with the forms which originate in God's mind, producing the heavens and the earth. The emergent process of life on earth proceeds in a similar manner: matter is combined with various forms originating in the mind of God to bring about the different physical properties, plants, and animals of earth. This combining of matter and various forms does not proceed by necessity, i.e., due to the unreflective operation of causal laws; rather, it is due to the free will of God--to God's freely-chosen thought of a specific form. This is indicated by Sforino's use of phrases such as "He ordered,"⁸³ "He commanded,"⁸⁴ "God's will,"⁸⁵ and by Sforino's comment on Genesis 1:7:

⁸³ Mikraot Gadolot, Vol. 1, p. 10:a.

⁸⁴ Ibid., Vol. 1, p. 6:a.

⁸⁵ Ibid., Vol. 1, p. 3:b.

And since a small part of the heavier, watery element is above the light air which is with us, against their natures, this teaches about the activity of a willing agent who sets the direction without a doubt . . .⁸⁶

Finally, the continual, eternal intellectual activity of God sustains the entire system: it moves the spheres, sustains the planets, and preserves the basic building blocks for the processes of destruction and generation on earth. Since God is eternally thinking of self, then God is continually thinking of the forms necessary to bring matter to actuality; hence the universe will be everlasting from the time of matter's initial creation.

Before we complete our examination, we must ask one final question: Why does God decide to create matter at all? What was the divine motivation? What is the ultimate purpose of all creation? Sforno answers this only by positing "The Good" as God's purpose for all. In his comment on Genesis 1:4, he states: "And it was so, for God saw and chose its existence because of the purpose, which is the Good . . ."⁸⁷ Writing on Genesis 1:31, Sforno says: "The purpose of existence in its entirety is very good, better than the individual purposes of existences as such."⁸⁸ This idea of the Good has its source in Plato, yet it is not clear here whether Sforno is using the term

⁸⁶Ibid., Vol. 1, p. 4:b.

⁸⁷Ibid., Vol. 1, p. 3:b.

⁸⁸Ibid., Vol. 1, p. 8:b.

in a similar manner. It is more probable that Sforno is working with a conception of "The Good" which entails the bestowing of existence on all possible existents, which is the greatest good there is.

We have now reached the end of our inquiry into Sforno's views of the origin and structure of the universe. What can we say in evaluation? There are three very positive aspects to Sforno's system. First, he successfully integrates revelation and reason in many of his comments, especially in his description of the emergence of earth's properties and inhabitants. This integration helps bridge the wide gap that existed between the outlook of the philosophical Sephardim and the outlook of the traditional Askenazim. Second, Sforno is able to preserve what he believes to be key concepts of Judaism. The free will of God and the creation of the universe are both affirmed; and with their affirmation, the correlative concepts of miracles, providence, and revelation remain possible. God's transcendence is maintained by the role as creator, and by the conception of God as an eternal, incorporeal mind; yet God's imminence is also maintained by the thoughts of that divine mind, which literally fill the universe. Third, Sforno avoids the problem of matter emerging from the God-head itself by positing its creation from absolutely nothing.

Yet there are problems in Sforno's system as well. First, why does God decide to create matter at that certain

point in time? The idea of the universe always existed in God's mind; hence, what made God bring this idea to fruition by the creation of matter at point X, and not before? Second, we have seen that the forms represent God's thoughts. When God conceives of the sphere of the moon, for example, in order to bring it into existence, this is a different conception than when God conceives humankind. Hence, God's thoughts seem to change; and since God's thoughts are found within God, then a change in God has occurred as well. Yet God is an eternal being, and eternality entails changelessness; thus, change within God should be--must be--impossible. Third, Sforno offers no scientific or philosophical explanation regarding how something can come from nothing, how existence can come from non-existence. To say that it is a miraculous act of God is to avoid trying to explain the process itself. It is indeed difficult for our minds to grasp how matter--molecules, atoms, even sub-atomic particles--can emerge from a vacuum, and Sforno offers no explanation to help us conceive of this.

Yet despite the problems we still come away with a feeling of admiration for this Renaissance Jewish thinker. His desire to unite the various intellectual camps of his community is commendable. His clear commentary is a pleasurable change from the obscure style of some of his predecessors, such as Maimonides. Most importantly, his attempt to integrate the worlds of reason and revelation

is thought-provoking and sincere, providing a helpful guide to all modern synthesizers of science and revelation.

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