A Study on the Rabbinic Perspective of Life and Living Beyond Earth

By: YOSSI ROTH

Part I: Life beyond Earth¹

Introduction

Up until the 16th century, it was generally believed that the planet Earth is stationary and is orbited by the sun and other planets. This model is called the Ptolemaic model or the Geocentric model.² The Ptolemaic model organized the universe into nine spheres, with Earth at its center.

It was also widely believed that the stars were not suns and there existed no other planets besides the ones beyond the eighth sphere.

In 1543 Nicolaus Copernicus published *De revolutionibus orbium* coelestium. In this book he offered an alternative to the geocentric model. He theorized a heliocentric model with the sun positioned near the center of the Universe, motionless while Earth and the other planets rotated around it in circular paths.

The question of what the Torah regards as the correct position of the earth, in relation to the sun and planets, has been widely debated since Copernicus introduced his theory with both sides of the dispute furnishing various proofs.³

Regardless of the Torah view of his theory, Copernicus did not expand our concept of the universe with his theory. He did not explain

Part one is devoted to the question what the rabbinic view on extraterrestrial life beyond Earth is. The idea of whether Humankind itself will live beyond Earth in a future age, is discussed in Part two, which will hopefully be published in the future.

² There were other models which also based on the belief that Earth was at the center, but the most common one was the Ptolemaic model and this is the model the Rambam uses.

For a complete overview of the Jewish approach to Copernicus, see והארץ לעולם עומדת מאת ר' חיים רפפורט, קובץ אור ישראל נה. יחסה של הספרות היהודית אפירה אליעזר בראדט קובץ חקירה. New Heavens and New Earth by Jeremy Brown.

Yossi Roth studied in Israel for ten years where he received *semikha* from various *rabbonim*. He currently resides in London.

that the stars were in reality suns with the possibility of having planets orbiting around them.

That conceptual leap was left to the Italian philosopher Giordano Bruno, in his 1584 *De l'infinito universo et Mondi,* where he extended his cosmological theories beyond the then-novel Copernican model, correctly proposing that the sun was just another star moving in space. He then went on to claim that the universe contained an infinite number of planets orbiting other stars.⁴

As time passed, the theory of Copernicus became more and more accepted, until it became the predominant theory of understanding the movement of the planets. Subsequently, mankind began to question if perhaps there may be other life in our vast galaxy, as Earth was not believed to hold anymore the unique position in the universe with everything orbiting around it. No longer was it believed that the stars were different from our suns, so why would only Earth be host to intelligent life?

Before we began to examine and explore what the rabbinic perspective on extraterrestrial life is, we must understand what exactly is the question that is being asked. In modern society the mystery if extraterrestrial life exists, is purely a scientific question, or a probability question. If life formed on our planet, it may have formed on one of the endless number of planets in the universe. Others believe the right conditions to host life are too difficult, therefore the chance of that happening again are minuscule.

However, when a religious person approaches this mystery, the question he asks is very different, it is a theological question. Did Hashem create other civilizations besides ours? The question is not *can* Hashem create, for nothing is beyond the capabilities of Hashem. The question is, *did* Hashem? If that is the question, it is irrelevant how difficult it is for life to form, or how few planets have the capabilities of hosting life, since ultimately it all depends on Hashem's Will.

The purpose of this monograph is not to prove if life actually exists on other planets or not, as the answer to that is hardly relevant in our daily lives and will almost certainly not be answered until the days of *Moshiach*. However, what we can learn from this discussion is how to

In fact, Bruno is credited as being one of the first proponents of life on other planets. He wrote: "For it is impossible that a rational being, fairly vigilant, can imagine that these innumerable worlds, manifest as like to our own or yet more magnificent, should be destitute of similar and even superior inhabitants." On February 17, 1600, Bruno was burned at the stake by the Church for his heretical beliefs, amongst them the claim of the existence of other planets.

approach a question as such, by looking at the words of *Chazal* and seeing if the possibility of life on other planets can coexist with the Torah.

First Discussions of Life on Other Planets: Baal Halttim

The first⁵ explicit Jewish mention of life on other planets is from the *Baal HaIttim*, also known as the Ri MiBarcelona (Yehudah ben Barzillai, Spain, 11th century).

In his commentary on the *Sefer Yittzirah*, Ri discusses the following passage in the Talmud:

והא אמר רב יהודה אמר רב שתים עשרה שעות הוי היום שלש הראשונות הקב"ה יושב ועוסק בתורה שניות יושב ודן את כל העולם כולו... ובליליא מאי עביד ואיבעית אימא רוכב על כרוב קל שלו ושט בשמונה עשר אלף עולמות שנאמר רכב אלהים רבותים אלפי שנאן אל תקרי שנאן אלא שאינן. (עבודה זרה דף ג:)

Based on this Talmud Ri writes:

We must first understand why these 18,000 worlds are not included in the first 12 hours of the day when Hashem judges and provides for our world. For this should include all of the 18,000 worlds. For even an infinite number of worlds, is not impossible for Hashem to judge and provide for all in the blink of an eye...

Some have cited Rav Saadiah Gaon (892–942) as the earliest source regarding life on other planets. In his *sefer Emunah V das* (chapter 1) he writes, "Perhaps there are many other lands and many heavens, each of the many heavens surrounding its land. However, the laws of nature would not allow this, for how is it possible to have earth on top of fire, or water beneath air, for fire and water are light, whilst earth and water are heavy. I know, if there were a lump of earth beyond this earth, it would have penetrated all the heavens until it reached our land... I have found the real truth, that there is no heaven and no earth besides this one."

While this may seem to be suggesting the singularity of human life on earth, I do not believe this to be the case. For it is most likely that Rav Saadiah Gaon was referring to a belief that our world is made up of spheres within spheres, being earth, sky, earth, sky and so on. This the Gaon found impossible to be, since the earth would fall through, but what happens within our sphere he did not discuss. If one would insist that the Gaon was in fact referring to the disbelief of any planet existing within our sphere—for if the element of earth cannot be above in the sky then no planets can exists beyond ours—it would still be irrelevant to our discussion. Rav Saadiah Gaon does not deliberate on the concept of life, rather his discussion is in relation to a scientific question, if the element of earth can exist beyond Earth. Whilst his theory has seemingly been refuted, we do not find in his argument any additional opposition or credence to the idea of life beyond Earth.

It is possible to give for this, two explanations. The first one is that our world is more favorable in Hashem's eyes than all the other worlds, since perhaps on these other worlds the Torah was not given, and for this reason Hashem favors our world. Which is why he judges and provides our world first (although Hashem can do everything in the blink of an eye, in order to honor our world he occupies Himself with our world first)...

And even if you would say that the Torah was given to these 18,000 worlds, it is still possible that Hashem favors our world more the other worlds [for another unknown reason-YR].

The second explanation he gives is:

It is possible that these 18,000 worlds are not inhabited with life which is capable of sin like on our world. Perhaps these creatures [on those words-YR] are angels and spirits which Hashem created for His Glory, or they are like them [i.e. the angles-YR] and are without sin due to the absence of the evil inclination. Therefore, Hashem judges our world first since it is full of sin, Hashem must forgive us before our world is destroyed because of all the sins.

The Ri then discusses the nature of these 18,000 worlds.

It is not clear if this answer [in the Talmud regarding the question what Hashem does by night-YR] is the true answer [since the Talmud gives a few answers-YR], and *Chazal* did not tell us if these worlds contains life with an evil inclination like on our world, or perhaps they are angels. However, if these beings are like angles, then one might ask, if they are like angels, then why they need worlds like ours, the Heaven itself should be enough for them. All of this is not clear, and we cannot explain this matter properly.

There are those who believe that these 18,000 worlds are within the spheres surrounding our worlds, but in my humble opinion this is not possible...⁶

Rather the correct way to understand these 18,000 worlds is, that these worlds were created outside our world [i.e. outside all of the nine spheres-YR]. Each of these 18,000 worlds is like ours with its

⁶ He gives a scientific reason why it is impossible. It is based on the idea that only what is exactly in the center of all the spheres can stay afloat.

The word *Olam* can mean an individual planet, galaxy, or universe. I believe that is evident from the Ri's words that when he uses the word *Olam*, it should be translated as a universe (since he writes that on each of the 18,000 worlds Hashem said '7', it is implied that each *Olam* is a separate universe), and according to the Ri there exists the possibility of multiple universes.

spheres and seven skies... and each of these worlds expanded on forever until Hashem said ""7" "Enough"!8

Rabbi Chasdai Crescas

Amongst the Rishonim we find another mention of the possibility of extraterrestrial life. This is found in the *Sefer* of Rabbi Chasdai Crescas (c.1340–1410/1411).

In his *Sefer Ohr Hashem*⁹ after a lengthy discussion¹⁰ he writes: As we see there is no absolute proof, whether other worlds exist or not, but it is a possibility. However, one should not dismiss the proof brought from the Talmudic teaching that Hashem flies through 18,000 worlds. The meaning of that Talmudic teaching is that His providence is amongst these worlds.¹¹,¹²

Rabbi Yosef Albo

The Sefer HaBris¹³ quotes the Sefer HaIkkarim written by Rabbi Yosef Albo (1380–1444), a student of Rabbi Chasdai Crescas, that there exist no other worlds. He writes:

With this [my arguments against life on other planets], I believe I have taken away the fear from the *Baal Halkkarim*, which says, "I fear to say that there are no other worlds."

However, these words "I fear to say that there are no other worlds" do not appear anywhere in the Sefer Halkkarim.¹⁴ It is evident that the

9 Mamar 4, Drush 2.

⁸ P. 171–173.

The discussion there revolves around the question why Hashem created the world, for necessity or because of His Will. In each of these reasons he discusses whether they are a reason that other worlds should exist or they are reason why they can't exist.

Since they require His providence, we may assume that they are inhabited (Rabbi Areyh Kaplan).

Rabbi Aryeh Kaplan in his book *The Aryeh Kaplan Reader* (page 170) writes, "Of course, this Talmudic quotation is by no means absolute proof, for it may be speaking of spiritual worlds, of which an infinite number were created." Rabbi Chasdai Crescas was of the opinion that these meant physical worlds, perhaps because if the Talmud was talking about spiritual worlds then there are an infinite number of worlds, not just 18,000.

¹³ Part 1, *mamar* 3, chap. 3.

There are those who write that although the Sefer Halkkarim does not write these words, elsewhere is his sefer (Maamar 4, perek 2) the Baal Halkkarim does

Sefer Habris did not see this passage in the Sefer Halkkarim, rather he saw it in the Sefer Ma'aseh Tuvia¹⁵ which quotes these exact words in the name of Sefer Halkkarim.¹⁶

The misquotation of the *Sefer HaIkkarim* goes even further than this. Rabbi Aryeh Kaplan¹⁷ quotes the *Baal HaIkkarim* as saying that life does not exist on other planets. This is since the universe was created for the sake of man, no other creature can exist possessing free will, hence they would have no reason for existing and therefore these creations would be totally superfluous. This idea is somewhat based on the argument of the *Sefer HaBris*, but Rabbi Kaplan seems to believe that the *Sefer HaBris* is actually quoting this idea from the *Sefer HaIkkarim*. However, in truth after the *Sefer HaBris* (mis)quotes the *Baal HaIkkarim* which says, 'I fear to say that there are no other worlds,"' he then goes on to give his *own* reason that other worlds cannot exist, due to the lack of free will.¹⁸

discus this and concludes that they don't exist. This too however is not true. For his discussion is purely a scientific question regarding the orbits of all the spheres and is of no relevance to our question. In the Ptolemaic system, the planets are assumed to move in a small circle called an epicycle, which in turn moves along a larger circle called a deferent. The Sefer HaIkkarim writes that the natural philosopher believes that only three movements exist: from an object, to an object, and around an object. If this is true, then it would mean that the epicycle must orbit around another planet, for according to the philosopher no movement can exist if not one of these three ways. This would mean that there exist more planets than we see in the sky, something untrue according to the Sefer HaIkkarim. This does not mean that he believes that no life exists on the existing planets, rather there do not exist more planets than the ones we see (below what we call 8th sphere).

¹⁵ Vol. 1, part 3, chap. 1.

The Sefer Ma'aseh Twia gives a page reference (page 107 Amsterdam print). Rabbi Avtalion Lampronti also quotes this Sefer Halkkarim in name of Ma'aseh Twia. I have not been able to check that particular print. Perhaps the mystery of the misquotation may be solved by inspecting that edition.

¹⁷ The Aryeh Kaplan Reader, p. 171.

Many have mistakenly used the *Baal Halkkarim* as a source for disproving life on other planets. It is very important to establish whether the *Baal Halkkarim* really had this belief. For we will then have a *Rishon* who explicitly writes that life on other planets cannot exist. If the *Baal Halkkarim* did not argue against other worlds, then I have not found any opinion amongst the *Rishonim* against extraterrestrial life.

Acharonim: Sefer Elim

Rabbi Yosef Shlomo Delmedigo (1591–1655) or as he was more commonly known Yashar Mi-Qandia:

Yashar wandered all over the world. At the age of fifteen he left Candia for Padua where he studied in the university there. His studies included astronomy with Galileo Galilei. In 1616 he moved to Cario, and from there to Constantinople. He eventually moved to Poland where he was appointed as the court physician to Prince Radziwill of Poland. Yashar then became Rabbi of Hamburg, a position he did not retain for long due to a plague that hit the town. From there he left for Amsterdam in 1628. In 1631 he moved to Frankfurt where he married and had a daughter. In 1650 he settled in Prague where he died in 1655.

Now let us examine what he writes in his Sefer Elim.

For the Handiwork of Hashem is greater than what we know, as it is written, "Great is Hashem, and highly to be praised, and His greatness is unsearchable." Even if all the people of the world know Hashem, they are not all equal in their knowledge of his greatness. For the cultured man will praise and exalt Hashem more than the simple man does. The philosopher will see even more the greatness than the cultured man, the kabbalist more than the philosopher, the angel more than the prophet, and as the greatness of the angel grows, so does his knowledge of the greatness of Hashem...

Yashar Mi-Qandia believes the more knowledge a person has the more he can see the greatness of Hashem and the more he can praise Him. With this in mind Yashar Mi-Qandia writes:

Now listen to my wisdom, for my thoughts are greater than yours. For to me, all of this world is not comparable to the greatness of Hashem.

All my life I did not want believe that our world is the only one and that here are no other worlds from the center to the eighth, ninth, or tenth sphere... For it is not proper to say that Hashem limited Himself to a designated place. Although to us it may seem wondrous and awesome, before Hashem all of our world is nothing and adds no value to His greatness.

Yashar Mi-Qandia argues that, by limiting Hashem's providence to our world, we are limiting his greatness.

¹⁹ Yashar Mi-Qandia calls him "Galileo my teacher" (p. 148 in Sefer Elim).

He continues to write that with the recent astronomical discoveries, the idea of life on other planets is not that implausible:

I was overjoyed when I heard that today there are scholars who believe that the universe is like a lantern, and the candle in the middle of it is the sun. Its light reaches to the sphere of Saturn, which is the outermost sphere... It is thought that the stars in the eight sphere are far more distant than was thought by Copernicus, and that is the reason they appear so small... and the light that is seen coming from them is from suns which is their lantern, and who knows how these other worlds are, if they have land that is inhabited like ours or in a different manner, blessed is the Creator that only He knows.²⁰

Now that it was believed that the universe is full of stars that are in reality Suns, the possibility of life on other planets was much greater. He then cites a Talmud in *Uktzin*:

This will teach you to pay attention to the words of the Talmud which should not appear strange to you, what is taught from the *posuk* that Hashem will give to each person who loves Him three hundred and ten worlds.²¹

The Talmud that Yshar is referring to is:

אמר רבי יהושוע בן לוי, עתיד הקדוש ברוך הוא להנחיל לכל צדיק וצדיק שלוש מאות ועשרה עולמות, שנאמר "להנחיל אוהביי יש ואוצרותיהם אמלא" (משלי ח,כא).

Yashar Mi-Qandia believed that these worlds might mean physical worlds and these worlds are all part of our vast universe. Since we see that the Talmud believes that there exist other planets capable of hosting human life, it stands to reason that there exist planets that have on them other life forms.²²

For Yashar the belief in the possibly of life on other planets was part of his faith in the greatness of Hashem's providence which he could not see limited to one world; he needed no further proof of their existence.

²⁰ This translation is based on Brown's New Heavens.

P. 141 in the Amsterdam print.

²² In Part Two, I cite many sources who believe these worlds are to be inhabited in the messianic age.

Ma'aseh Tuvia

Rabbi Tuviah Cohen (1652–1729) or Rabbi Tuvia HaRofeh was born in Metz and studied in Cracow, Frankfurt, and Padua. He lived in Turkey and moved to Jerusalem in 1715 where he died in 1729. His *Sefer Ma'aseh Tuvia* is an encyclopedia dealing with scientific matters such as medicine and astronomy. One chapter of the *Sefer Ma'aseh Tuvia* is devoted to the question of life on other planets.

He starts by stating five reasons people give to explain why there should be life on other planets. They are as follows:

- 1. If on our small world there exists life, then on larger planets there surely must be life.
- 2. If all the planets are desolate and only on our planet there exists life, it would be similar to a large forest that has only one little bird living in it. This would be illogical.
- 3. What is the purpose of all these stars if no life exists on them?
- 4. Through telescopes astronomers were able to see on the moon, hills, valleys, forests, and water. If there is no life there then why does it all exist?²³
- 5. With the recent discovery that all the stars are sitting in the center with everything orbiting around them, and since according to Copernicus the planets orbit the sun [therefore it is possible that just as our sun has planets with life orbiting around it, so too all these suns might have planets with life orbiting around them -YR].²⁴

To answer all this, he writes:

The answer to these questions according to the Torah is, that it is impossible for a world besides ours to exist. This is for a few reasons.

- 1. Hashem created the moon, and stars to illuminate the night, and to be a sign for the festivals. This gave them more honor than being inhabited by men and animals.
- 2. What is known does not need proof, after the Torah testifies that all mankind come from Adam HaRishon as it is written: (א, בראשית ו, א). ויהי כי החל האדם לרוב על פני האדמה ובנות ילדו להם (בראשית ו, א).

This myth was commonly reported with the development of telescopes.

²⁴ The last reason he gives is that within the Ptolemaic model all the stars orbit our world in a daily cycle. This would make the possibility of life on other planets highly improbable. The Copernican theory that they do not orbit Earth as well as the theory that all the stars have their own planets orbiting them increases the possibility of life on other planets.

This cannot be said about Men living on other planets. We also cannot say that they were somehow transported from our world to other worlds, for this is impossible...

- 3. Dovid HaMelech already answered this question when he said: (תהלים קטו). השמים שמים לה' והארץ נתן לבני אדם
- 4. Do not be bewildered why Hashem chose to put life on one of the smaller worlds, for we find Hashem gave the Torah on Har Sini and not on a bigger mountain. We also find that the Torah and wisdom was not given to taller people as *Chazal* tell us כל ארוך שוטה ²⁵...
- Since it is impossible for life to exist on at least two different planets, on the sun because of its heat, and Saturn because of its cold. This should bear witness that no life exists on any other worlds.

With this we have proven that only our planet Earth was created to host mankind and no other planet.²⁶

Now let us analyze the reasons he gives to prove that life on other planets does not exist. To address the question why Hashem created all of the heavenly bodies, he says that they were all created to serve our world by illuminating it, and to be a sign for the festivals. In the opinion of Rabbi Tuvia Cohen that purpose is an even greater honor then hosting life.

The second reason he gives is that the Torah implies that the descendants of Adam multiplied only on Earth. If that is the case how did these life forms reach these other planets? This reasoning is very difficult to understand, for if life does exist on other planets, they are not necessarily descendants of Adam. This same question can be asked about the third reason, for the *possuk* says בוני אדם 27.

The fourth reason is given in answer to those who claimed that it does not make sense to say that life exists on a small world and not a bigger world.

The fifth reason he gives is another answer to the first question. To answer he writes that since we know for sure that on at least two of these heavenly bodies life cannot exist, then obliviously they were not

On the other hand, we find that *Chazal* tell us אין השכינה שורה אלא על בעלי קומה, אין מושיבין לסנהדרין אלא בעלי קומה. For a lengthy discussion about this contradiction see *Margulios HaYam Sanhedrin* 17.

²⁶ Vol. 1, Part 3, Chap. 1.

In part 2 where I discus the question if humankind will live beyond earth in the messianic age, I bring many sources regarding how to interpret this *possuk*.

created for the purpose of hosting life, and must have been created for a different purpose. If this is the case, then all other planets might have that same purpose and one cannot ask what the purpose of all the planets is.

Matteh Dan

One of the strongest proponents for the idea of life on other planets is Rabbi David Nieto (1654–1728).²⁸

In 1714 Rabbi Nieto published his *Sefer Matteh Dan*, known as *Kuzari Hashenei*.²⁹ The main focus of *Matteh Dan* is defending the legitimacy of *Torah Shel bal Peh* (against the Karaite community). It was written in the debate format used by the Kuzari, which is why it is also called *Kuzari ha-Sheni*. What is of interest to our discussion is what he writes in the Fourth section:³⁰

Chaver: From the creation until the present age or thereabout, everyone believed that the six planets were opaque bodies that received their light from the sun, which is the seventh and largest of them. Modern philosophers assert they are lands like the earth we inhabit, which is one of the planets; because by their system they suppose the sun remains immovable in the midst of them like a king on his throne. That the six revolve round it; that there are mountains, hills, valleys, seas and rivers in the said planets, which experience cold and heat, summer and winter, day and night; that men and animals live in them; that they cultivate the ground, sow, reap, eat, drink, propagate and die as we do. Were a man to deny

Rabbi David Nieto was born in Venice in 1654, in 1701 he moved to London where he became the Rabbi of the Spanish and Portuguese Synagogue. In November 1703 he became involved in a major controversy after preaching that Hashem's Divine Providence worked through nature. Many members of the congregation accused him of heretical beliefs that aligned with that of the heretic Spinoza who claimed that that Hashem is nature. The issue was eventually brought to the *Chacham Tzvi (Shu"t Chacham Tzvi Siman* 18) who strongly defended Rabbi David Nieto.

²⁹ Matteh Dan was reprinted in 1779 with an Haskama from the Shages Aryeh. For an overview of the see http://seforim.blogspot.co.il/2009/09/r-david-nietomatteh-dan.html.

For the purpose of this article I have condensed the debate and have left only the most relevant passages. The translation is taken from an article in Commentary Magazine by Jakob J. Petuchowski, and from the 2008 edition of Matteh Dan published by the Spanish and Portuguese Congregation of London and Mechon Haktav of Jerusalem.

the former opinion and adopt this, would you consider him to be a heretic?

Kuzari: Hashem deliver me from doing so.

Chaver: Why? Is not all that philosophers say heresies and atheism?

Kuzari: Your words are contradictory for you have proved that the external works prohibited by *Chazal* are not those on philosophy, and shown that the Kabbalists favor the authority of the philosophers.

Chaver: I do not retract what I said, but I said that to discover your opinion. But in reality what you say is very proper, because it is not contrary to the Law of Moses to believe that the planets are inhabited worlds.

Kuzari: That is the case. But that opinion is vain, ideal and chimerical, for no one ever ascended to heaven to see, or descended from it to manifest these things to mankind...

Chaver: Then if the earth we inhabit is a planet that has seas, rivers, mountains, hills, valleys, rational and irrational creatures, and four seasons of the year, why should not the other planets which are stars like it, not have them?

Kuzari: I would never have thought that the claims of the latter-day astronomers were sound.

Chaver: They certainly do recommend themselves to Reason. It is just that we are unable to accept that particular aspect of the modern concept which denies the revolution of the sun. For in the Book of *Yehoshua* it is written: Sun, stand still upon *Giveon*... And the sun stayed in the midst of heaven, and hastened not to go down about a whole day [*Yehoshua* 10:12]. From this it follows that normally the Sun does revolve like the rest of the planets. And even though the protagonists of this view have gone into contortions to resolve this contradiction, they have labored in vain, for their reply is unsatisfactory. I have, therefore, rejected this view, and prevented it from being grafted onto the Heritage of Hashem.³¹

Kuzari: Do let me hear how they attempt this harmonization.

Chaver: They argue that the Prophet said, "Sun, stand still upon *Giveon*" only on account of the multitude who consider the Sun to be a moving body, and who do not know about the movement of the earth.

Kuzari: There is no substance to this attempt at harmonization... But I do want to know whether you believe what they say about the planets being inhabited worlds.

³¹ To see more about Rabbi Nieto's opinion about Copernicus see *New Heavens* and *New Earth* chapter 5.

Chaver: This latter greatly appeals to my mind. For I concur heartily in the words of *Chazal* who taught us: "Rabbi Meir found a nut. Its kernel he ate, its shell he discarded." We ought to do the same with the arguments of the Gentile sages. Whatever is opposed to our holy and perfect Torah, whether it be the Written or the Oral Law, we must not believe. But in matters that do not contradict its words or its amplifications every individual Jew is free to believe or to reject as his reason sees fit. And, since there can be no possible harm in the belief that all the stars—be they planets or fixed in the Eighth Sphere—are worlds containing all kinds of living creatures, I maintain strongly, and without fail, the correctness of this view. It is, moreover, possible that our Rabbis, of blessed memory, had just this in mind when they wrote, at the end of the Tractate *Uktzin*, that "Hashem will in the future cause every single righteous person to inherit 310 worlds."

Kuzari: The words of the Sages cannot serve as sufficient proof. Perhaps they referred to spiritual worlds.

Chaver: It is for this very reason that I spoke of the possibility that such might have been their intention rather than of the certainty.

Kuzari: Such is the duty of a person like you who fears Hashem.

Chaver: I remember seeing long ago in the days of my prime, words in a book by Yedaiah ben Avraham Bedersi in his *Sefer Bechinas Olam* that would tend to support this modern view.³²

Kuzari: Let the word of the wise man be spoken, and we shall honor you for it!

Chaver: This sage, speaking with his incomparable elegance on the celestial bodies, says: "The Creator has invested them with powers. Not to serve perishable creatures were they created, for they are more glorious than them. It is far from the design of the Creator to humble those exalted ones to the abject and vile, and the immortal to those that perish. For who could suppose that a wise manufacturer would prepare tools worth thousands to make an iron needle? Hashem created them in wisdom, and has reserved to Himself

³² Yedaiah ben Avraham Bedersi (c. 1270 – c. 1340) wrote *Sefer ha-Pardes* and *Bechinas Olam* amongst other *seforim*. He was against the ban of the Rashba banning anyone under the age of 25 from the study of philosophy. He wrote to the Rashaba an *Iggeret Hisnatlut* (Apologetical Letter) that is published in *Shu"t Rashba siman* 418. In all the editions I came across, the Chaver says that he saw it in a *sefer* and does not mention the author. I was surprised to see that in this translation the author was named. I then checked the 1714 edition which had a Spanish version printed as well and saw that in the Spanish section he does mention the author. I am not sure why in the Hebrew section Rabbi Nieto chose to omit the name of the author.

alone the cognizance of them; yet in the movements they make and the appointments they fulfill, they are designated with the commission and satiated with the benevolence of the Creator, who qualified them to communicate to others, by the appointment of the Eternal."

Kuzari: This learned author says nothing to our purpose.

Chaver: On the contrary! His words are the very essence from which everything is derived. For Reason could not tolerate the thought that the Divine Creator created bodies myriads of times bigger and more valuable than the earth for the sole purpose of giving light to those who dwell on it. Particularly so would this apply to the tremendous number of stars suspended from the Eighth Sphere that have no relation to, or influence upon, the earth except to teach the children of man the strength of Hashem's power and wisdom. This being so, we must say that they were created for some other purpose as well. The author, however, could not mention this other purpose in his book, for, in his day, about 400 years ago, everybody believed in the words of Aristotle as though the very spirit of Hashem were talking through him.

But closer to our day and age, about 150 years ago, wise and understanding sages arose, and they said: Why is this philosopher different from all other philosophers? . . . And they arose and invented a new science, more rational... With this new science they refuted the words of Aristotle and the early astronomers, particularly the view of those who maintained that the forms of the eighth sphere exert an influence, by means of their light, upon all the dwellers on earth. They suggested instead that the stars of that sphere and their constellations are each and every one of them a sun in its own right, which gives light and heat to the particular world immediately underneath it. This cannot, of course, be seen by us on account of their great distance from us...

It is, indeed, possible that Bedersi did not know anything about this, and it is for this reason that he did not mention it in his book. But it is, at any rate, certain that he thought these stars and constellations served a great purpose that is unknown to us.

Kuzari: I am convinced that this is the correct and logical view.³³

As we see from this, Rabbi Nieto had a very positive view about life on other planets and held that since there is no proof from the Torah against this idea, there is no reason that one must reject it. He believed

Fourth Debate, 110.

that when the *Sefer Bechinas Olam* wrote that the stars existed for some purpose, this purpose was most likely for hosting life.

It should be noted however that Rabbi Reuven Landau, who was against the idea of life on other planets, as we will soon discuss, questioned this passage in the *Matteh Dan*. In his *Sefer Mahalach Hacochovim* he writes:

The author [of the *sefer Matteh Dan*, Rabbi David Nieto] was a great man and famous in Torah and wisdom, but I am very suspicious of this and it is certainly possible that a later astronomer added these words into the book.³⁴

In truth, this accusation is very unlikely as *Matteb Dan* was printed fourteen years before Rabbi Nieto died and that edition contained this passage. It is hard to believe that this entire passage was entered without Rabbi Nieto's knowledge.

Rabbi Avtalion Lampronti

In 2008, an English edition of the *Matteh Dan* was printed in London by the Spanish and Portuguese Synagogue. The work was edited and prepared for publication by Yehuda Hershokwitz. In this edition, Yehuda Hershokwitz printed for the first time an 1819 manuscript written by Rabbi Avtalion Lampronti³⁵ about life on other planets.³⁶

This short manuscript was written after Rabbi Lampronti read the Sefer Matteh Dan's words regarding life on other planets. Rabbi Lampronti writes that many people claim that they saw, through telescopes, life on other planets and the Moon. Regarding this claim he writes that Christiaan Hugygens, whom Rabbi Lampronti describes as a great philosopher, was not able to see through a telescope any life forms. Why then, asks Rabbi Lampronti, should we believe these people who claim they did see life forms? He also gives many reasons that scientifically life cannot exist on the Moon or other planets. In summary these reasons are that the planets are too close to or too far from the Sun; the planets lack the right atmosphere, lack light; days and nights on other planets are too long.

³⁴ Part 2 p. 25b.

Rabbi Avtalion Lampronti was a student of Rabbi Shlomo Lampronti who was a son of the Pachad Yitzchak, Rabbi Yitschok Lampronti.

³⁶ I thank Yehuda Hershkowitz for sending me this work.

Regarding the proof from the Talmud in Uktzin, he writes there are other ways to learn that Talmudic teaching (see Rambam and Barturnara). He concludes his argument and writes:

And now my dear reader, listen to the words of Chazal: שכן כתוב במה בספר בן סירא במופלא ממך אל תדרוש ובמכוסה ממך אל תחקור במה בספר בן סירא במופלא ממך אל תדרוש ובמכוסה ממך אל תחקור שהורשית התבונן אין לך עסק בנסתרות (חגיגה דף יג.) We are like blind men in the dark, until Hashem will send us Moshiach and then our eyes will be open, our hearts open to wisdom, our eyes to see, and ears to hear if there exist life on other planets.

In the entire manuscript he does not give a single theological reason that life cannot exist. The only reasons against life are scientific. Thus, it is possible that if a planet capable of hosting life *would* be found in a different solar system, he would not disagree with Rabbi Nieto in this matter. However, in his 8th point he writes:

Who is greater the Rabbi Tuvia HaCohen who weighed and explored this matter, if other worlds exist besides ours, and concluded that no other worlds exist besides the one we live in...Look at his reasoning and all his proofs and you will that they are all true... He also brings the opinion of the *Sefer HaIkkarim*... We therefore have two giants who agree that there are no other worlds capable of hosting life bedsides our world, and it is impossible to find other worlds bedside ours that are enough.

This implies that he agrees with the Sefer Ma'aseh Tuvia entirely in his belief that no life exists because of theological reasons.

Sefer HaBris

Rabbi Pinchas Eliyahu Horowitz was born on Vilna in 1765. He lived for some time in Frankfurt, Amsterdam, and London before eventually returning to Vilna where he published his *Sefer HaBris* in 1797.

Sefer Habris is divided into two parts, the first and larger part a scientific encyclopedia and the second part an analysis of Divine wisdom. Sefer HaBris was and remains extremely popular. Regarding life on other planets he writes:

There are some Gentiles, distinguished and prominent philosophers, who foolishly ascribe corporeality to the stars. They say that all the stars, fixed and mobile alike [i.e., stars and planets], are corporeal worlds that contain humans and animals in great number, flowers and inanimate objects, all coming into existence and then perishing, just as in this world...

Their argument runs as follows: If the small is inhabited, surely the large is so. Is it possible that, of all the many and great spheres that Hashem created, it is this tiny one alone that is inhabited, all the others remaining useless and idle? Why, it would be like a huge field that measures a thousand *parsoas*, yet is sown with one solitary ear of grain!

He then writes that the astronomer Johannes Hevelius³⁷ claimed to have seen life on other planets:

What happened to the early scholars who had convincing proof that no life existed below the equator...Happened to Hevelius who is convinced that civilizations exist in a place where it doesn't ...

In the next chapter Rabbi Horowitz returns to the possibility of life on other planets, and writes:

I am perfectly convinced that [the other worlds] were created not in vain but for the purpose of habitation, and that there are creatures living upon them. Not, however, for the reason they have given—their analogy with the huge field, their declaring it impossible that this little earth be inhabited and the stars, so many and great, without any dwellers. For I am able to retort to them, that all those worlds were created solely for this earth's benefit.

All things were created for the sake of earthly humanity, as it is written: ואת המאור הקטן לממשלת הלילה ואת הכוכבים. ויתן אותם אלקים (בראשית א טז-יז). Thus it is truly, they and all they contain were created solely for the sake of human perfection upon this earth.

None of us, to be sure, knows what benefit comes to us from those [extraterrestrial] creatures. Similarly, we do not know what benefit we gain from the celestial creatures, such as the angels, yet all Kabbalists agree that humans indeed derive benefit from them. This is humankind's superiority in that we are possessors of free will, just as the tiny mosquito is superior to all the mighty and many trees of the forest in that it has the power of life.

But the reason I believe they exist is because, why should the *Olam Assiah* not contain multiple worlds the same way *Olam Hyetzirah*, *Breri'ah*, and *Atziluth* do. For each of these *Olamos* contains an infinite number of worlds (as it is mentioned in *Zohar*, and the *Mishnah* in *Uktzin* that "Hashem will in the future cause every single righteous person to inherit 310 worlds, and the Talmud says that at night Hashem flies through 18,000 worlds).

³⁷ Johannes Hevelius (28 January 1611 – 28 January 1687) discussed these findings in his book *Selenographia*.

He then brings brilliant proof that life on other planets exists.

In the song of Devorah, we find the *posuk* (*Shoftim* 5:23), אורו מרוז מלאך ה' ארו ישביה כי לא באו לעזרת יהוה לעזרת יהוה בגבורים אמר מלאך ה' ארו ארור ישביה כי לא באו לעזרת יהוה לעזרת יהוה לעזרת יהוה לעזרת יהוה לעזרת יהוה לעזרת מלאך ה' אורו מושנים ה, כג). In the Talmud (*Moed Katan* 16a) we find an opinion, that *Meroz* is the name of a star. According to this opinion, the fact that Torah states, "Cursed is *Meroz* ... cursed are its habitants" is clear proof from the words of *Chazal* of life on other planets. Hence my view that the stars are inhabited and that they are worlds, as implied in the *Tikkunei Zohar*.³⁸

He further states:

And now I must express my opinion concerning the nature of the beings, by which those entities shall be carefully considered and the question evaluated, whether or not they are in human form

It is a foolish error indeed to say, as some do, that the stars and what they contain are exactly like this world, without any difference in nature, and that they are inhabited by human beings with free will, along with animals and plants and minerals, all of which come into existence and then perish. This is utter falsehood and non-sense. Anyone who believes it is a fool who will believe anything.

What need, in this case, would there be for a plurality of worlds? To encompass a great multitude of humans and animals, a throng of creatures so vast? This world might have been made so large as to contain them all, while remaining unique. Is it beyond Hashem's power to create a world either small or large? Yet there do exist many distinct spheres, from which it follows that, if indeed they are worlds, not one of them can possibly be identical with any of the others. Nor can two of them share a single nature...

It is false what they claim, that those creatures are composed of four elements, corporeal as in this world...

There can be no doubt, then, that not one of the stars can have human inhabitants of our form and shape. They may be endowed with intelligence and knowledge. What they cannot have is free will, for it is known that by the nature of creation free will is a property unique to human beings dwelling upon this earth, not those above or below it.

It follows that there is no place for the Torah or for worship other than in this world. Where there is no free will, Torah and worship

He does not state where it is implied that they exist, however in the 2014 edition the publisher writes that perhaps it is the *Tikkunei Zohar* in the preface page 14a.

have no relevance. That is why Hashem takes pleasure only in this world, and why it is the goal of all creation, the most sought-after of all the worlds. Even the holy, sublime worlds, like Beriah and Yetzirah and all the multiple worlds in them, were created only to serve the needs of this world. How much more so those worlds that are called by the name of stars, in accord with the saying of Chazal: אמר לה הקב"ה בתי י"ב מזלות בראתי ברקע ועל כל מזל ומזל בראתי לו שלשים היל ועל כל היל וחיל בראתי לו שלשים לגיון ולגיון ולגיון ולגיון ולגיון ועל כל לגיון ועל כל לגיון ועל כל לגיון וועל כל לגיון וועל כל למטרא וגסטרא תליתי בו שלש בראתי לו שלשים המטון ועל כל בכובים כנגד ימות החמה וכולן לא בראתי אלא מאות וששים והמשה אלפי רבוא כוכבים כנגד ימות החמה וכולן לא בראתי אלא בראתי לוב:) We see from this that they were all created for the sake of Man... This world, then, is the end and purpose of all the worlds...

He concludes with the following words:

Since they have no free will and hence no Torah, they are of no matter to us and are they are like the celestial beings high up in heaven.³⁹

To summarize the opinion of the *Sefer HaBris*, there is a possibility for life to exist on other planets, but not because it would be purposeless to create myriads of planets and keep them desolate. The *Sefer HaBris* instead argues that the *Olam Assiah* should be the same as the other *Olamos*. Added to this is the proof from the Talmud in *Moed Katan*. These life forms however may be intelligent but are of no relevance to us since they have no free will and no Torah.⁴⁰. They are similar to spiritual beings that exist in a corporeal form.

However, we still lack an explanation why it would be *impossible*, according to the *Sefer HaBris*, for these creatures to possess free will. The *Sefer HaBris* gives no explanation for this, he only states that humans alone can possess free will. This question on the *Sefer HaBris* is asked by the *Sefer Ginzei Hamelech*:

I am bewildered and do not know, why do these life forms not possess free will as we do? Do their souls not come from the same Throne of Glory that our souls come from? If it is because of their

Part 1, Mamar 3, Chap. 2–4. Translation is based on www.davidhalperin.net.

⁴⁰ There is however a difficulty with *Sefer HaBris's* opinion. If these life forms do not possess free will then why were the inhabitants of *Meroz* punished? They had no choice in their action when they did not come to the aid during the war. The answer to this question is beyond the scope of this paper.

different bodies, is this a reason they cannot have intelligent souls like us?41

On this topic, Rabbi Aryeh Kaplan writes that the basic premise is that only man, out of all of creation, possesses free will. This idea is well supported by the great Kabbalist Rabbi Moshe Cordovero in his *Pardes Rimonim*, and this opinion will be discussed in greater depth latter.

Mosedot Tevel

Rabbi David Friesenhausen was born in Friesenhausen, Germany in 1756 and studied in Fürth. Amongst his teachers were Rabbi Pinchas Horowitz (the Haflah) and Rabbi Nosan Adler. In 1786 he moved to Berlin where the Haskalah was beginning to taking hold. While he was in Berlin he taught himself mathematics and astronomy, writing on both subjects. In 1796 he left Berlin and moved to Hunsdrof, Hungary, and in 1808 he moved again to Ujhely (Ihel in Yiddish) and served on the Rabbinic court of the Chasidc Rebbe the Yismach Moshe (Rabbi Moshe Teitelbaum).⁴² In 1816 he left Ujhely to publish his magnum opus

This difficult matter has been raised by many, and perhaps it is not referring to Yismach Moshe. Perhaps it refers to another rabbi of whom we are unaware. While this may be highly unlikely, the lack of a persona, aside from the Yismach Moshe, to fit the bill does not in itself prove that the passage refers to the Yismach Moshe. However, recently I came across the book שוהרי השם בהרי . In chapter 6 the author talks at length about this contradiction. According to his account, the second part of Mosedot Tevel was never brought before the Yismach Moshe when he gave his haskamah. Only afterwards was it

⁴¹ P. 118.

In his ethical will, printed as the second part of Mosedot Tevel, Rabbi Friesenhausen describes at length an unnamed Chassidic Rebbe who is in his opinion nothing but a charlatan. Rabbi Friesenhausen has many harsh words to say about him, which goes on for a few pages, concluding, "I am concerned that such a person as this would be liable to the death penalty as a false prophet." Although Rabbi Friesenhausen doesn't write explicitly whom he is referring to, many have identified this to be the Yismach Moshe. While the details he gives seem to match to those of the Yismach Moshe, there remains a mystery. For how could he have written such negative statements about the Yismach Moshe when at the same time, in the list of subscribers printed in the beginning of the Sefer, we find the Yismach Moshe. To have the Yishamch Moshe as a subscriber to the very book that later violently attacks him would be very odd. To make the matter more difficult, the Sefer has a haskamah from the Yismach Moshe! How could the Yismach Moshe give a haskamah to a Sefer that outright attacks him? How would Rabbi Friesenhausen have the audacity to approach the Yismach Moshe for a haskamah after including such an attack in that very book he sought an approbation to?

Mosedot Tevel in Vienna. After he published Mosedot Tevel he retired from public activity and spent the last years in Karlsburg where he died in 1828.

Why he moved from Berlin the capital of *Haskalah* to Ujhely, its polar opposite, is a mystery. It has been suggested that he deliberately left Berlin as a protest against the new radical *Haskalah* and in search of a place where he could realize his educational goals free of its corrupting influences.⁴³

The Sefer Mosedot Tevel is a treatise on astronomy, in which he explains the Copernican heliocentrism. It also contains a proof for the eleventh axiom of Euclid and a 74-page ethical will to his children. For all its secular discussions, it is a deeply religious book. In Mosedot Tevel, Rabbi Friesenhausen discusses many times his great belief in the idea of life on other planets. He writes:

These planets are similar to ours in all ways, and they too are settled with all sorts of life. For if you believe that that these planets are desolate with no life, then for what purpose were they created? Why would Hashem create them?... are they created to give us a little light in the heaven at night, or to beautify our sky so we can praise Hashem for his wondrous kingdom? For such a small purpose did Hashem create them? If they were created so we can praise him and thus receive reward for this, then how much more would we praise Hashem if these planets were full of intelligent life.⁴⁴

He further writes:

If they were created only for the purpose of glorifying Hashem and so we can praise Him (something the majority of people seldom do, and had it not been for the few chapters of *Tehillim* that sing the praise of Hashem, almost no one would say any praise, Hashem forbid), then one must ask why did Hashem create them, that they should orbit around suns in order to create day and night? That is necessary only if life exists on these planets.⁴⁵

added. When the Yismach Moshe saw what was written about him, he asked to speak to Rabbi Friesenhausen. He was told that he had left town the night before, in great haste. According to the author Rabbi Friesenhausen never had a peaceful life after this episode, and wherever he went, a bad name followed him due his actions in Ujhely.

⁴³ Meir Gilon, Rabbi David Friesenhausen; Between the poles of Haskalah and Hasidut, in The Rabbinical Seminary of Budapest (Hebrew).

⁴⁴ Pp. 35b–37a.

Furthermore, he writes that we see the planets farther away from the Sun have more moons, perhaps in order to compensate for the lack of light due to the distance from the Sun.

Is it too difficult for Hashem to create on these large planets life with a soul? Intelligent life who can recognize their creator? Life that can be astounded at the greatness and kindness of Hashem, that can sanctify, admire, and praise Him according to their understanding of Hashem's ways? Life that prays and raises its hearts to Hashem...Can one really believe that we are the only life that exists? For why limit Hashem's glory, and suggest that He leaves large planets desolate of life?

Regarding what *Chazal* say that Hashem created the world for the sake of the Torah, and for the sake of Israel,⁴⁶ this would imply that the whole universe was created for the sake of man and not to host life. This is not the meaning of *Chazal*, rather they meant to say that in the merit of the Torah and in the merit of Israel who keep the Torah were all the worlds and their inhabitants created.⁴⁷

Later he discusses that these beings on other planets must be very different from the ones on our planet Earth, for even on our world there are so many different species that are so different from each other. Worlds so far from our planet must be extremely different in nature from ours.

One might think this does not make the *Bnei Yisrael* so unique, for we are but a speck in the universe, but Rabbi Friesenhausen believed the opposite. He writes:⁴⁸

Now pay attention to this, look at the skies and you will see Hashem's great works. This planet Earth is tiny and inconsequential, and it is lost among the infinite number of planets. But your soul should rejoice at Hashem's creation, and your young should praise his righteousness. For among all of these creations he chose Israel on this tiny dot and made them holy with holiness. He gave them his holy and pure Torah with its just laws and called them my firstborn children in order that He dwell with them forever.⁴⁹

Mahalach Hakochavim

Not much is known about Rabbi Reuven Landau's life. He was born in the early 1800s. He was the head of the Rabbinic Court in Padutark for some 40 years until his death in 1883.

⁴⁶ Bereishis Rabbah.

⁴⁷ P. 45b.

⁴⁸ P. 43b.

⁴⁹ Translation based on New Heavens.

He wrote several *seforim* on various subjects, but what is of relevance to us is the *Sefer Mahalach Hakochavim*, which was published in 1882 and dealt with astronomy. In the *sefer* he criticized heliocentrism and discusses the idea of life on other planets. He writes:

Do not pay attention to those whose say that all the planets are settled with life, and that all the stars are suns with planets orbiting around them... For these ideas are nonsense and have no basis or proof for this...

And do not bring proof from we have learned in Talmud *Moed Katan* (16a) that Meroz is the name of a star. According to this opinion, the fact that Torah states, "Cursed is *Meroz* ... cursed are its habitants" should be clear proof from the words of Chazal for life on other planets... For the *Zohar* also follows the opinion that *Meroz* is a star, yet states that "its inhabitants" refers to its "camp," that is to the planets surrounding it.

Some claim that life on other planets must exist, because if our planet which is a small one is full of life, then how can it be that there so many larger planets devoid of life? For the same reason these same people claim our planet orbits the sun just as other planets do. But I already explained that this not a sufficient reason to believe our planet orbits the Sun, and if our world is stationary and does not orbit the Sun, we cannot expect other planets [which are not stationary-YR] to be similar to ours.

The question is based on the assumption that all planets are the same, therefore if a small world possesses life we can assume the large one does too. However, if Earth proves to be different in other ways then we cannot make this assumption. Hence, says Rabbi Landau, since we know Earth to be stationary and the other planets to move in an orbit, they are not similar one to another, and we cannot assume that life exist on the larger planets. He then returns to the anthropocentric view:

The Talmud says: אמר לה הקב"ה בתי י"ב מזלות...וכולן לא בראתי אלא אמר לה בתי י"ב מזלות...וכולן לב מעבילך (ברכות: לב). We see from this that the Stars have no purpose to exist other than to serve us... 50

Every person knows that the sole reason that caused people to say this [that extraterrestrial life exists] is that they believed that Man is a small being not nearly as great as all the stars and planets... and so it did not seem right to say that everything orbits around our planet and has no purpose other than serving us. So, they conclud-

Rabbi Landau gives many Kabblistical explanations how they serve our planet; see p. 24a.

ed that all these planets are inhabited with life, and the reason they exist is for their own purpose...

But this is all a mistake for we the Children of Adam who live on this planet are greater than all the planets because of our souls which come from a very high world, and because of the Torah and *Mitzvot* we keep.⁵¹

Ginzai Hamelch

The Sefer Ginzai Hamelch is written by Rabbi Dov Ber Tursch. He was born in Warsaw in 1863 and owned a publishing house there. The Sefer is written as a defense of classical rabbinic Judaism, and deals with many subjects that were considered major threats in the nineteenth century.

The Sefer is written as a debate between two fictional Jews traveling on a ship from Eastern Europe. One, named Mehalalel, who comes from Warsaw, is traditionally observant. The other, She'altiel, was raised as an Orthodox Jew but later became secular. After the ship survives a heavy storm, the two enter into a series of theological discussions. A Gentile who hears the two arguing suggests that they engage in a proper debate about the merits of Judaism, and after some encouragement the two agree and shake hands.

In one debate She'altiel asks Mehalalel to explain to him the opinion of the Sefer HaBris which seems to believe that no life exists on other planets.⁵²

Regarding this Mehalalel answers that Rabbi Pinchos contradicts himself, for in chapter two he completely opposes the possibility of life on other planets, and in the next two chapters he agrees they exist. He writes:

And now Pinchos not only do your words contradict the opinion of the philosophers, they also contradict themselves...

I am bewildered and do not know why these life forms cannot possess free will as we do. Their souls come from the same Throne of Glory that our souls come from. If it is because of their different bodies, is this a reason they cannot have intelligent souls like us?

He then brings a very difficult Rambam and claims that the Rambam meant to say that life exist on other planets:

And to add to all this, the Rambam writes, "All the stars and spheres possess a soul, knowledge, and intellect. They are alive and

All these passages are taken from part 2 pp. 24a–27b

In part 1 mamar 3 chapter 2, it is implied that no life exists on other planets.

stand in recognition of the One who spoke and [thus brought] the world into being. According to their size and level, each one praises and glorifies its Creator as the angels do. Just as they are aware of the Holy One, blessed be He, they are also aware of themselves and of the angels which surpass them. The knowledge of the stars and the spheres is less than the knowledge of the angels, but greater than that of men."⁵³

Now every intelligent man knows that the Rambam did not mean to say that the stars themselves are intelligent beings... for we know today that all the Heavenly bodies are inanimate objects... rather the Rambam meant to say the life living on these Heavenly Bodies are with soul and mind and opinion, and they know their Creator.⁵⁴

He explains the same idea regarding the *posuk* הללוהו שמש וירח הללוהו שמש וירח הללוהו When, says Rabbi Tursch, it is stated that the stars are praising Hashem it refers to the life forms living on those worlds.

Rabbi Tursch then goes on to disagree with many more aspects of the *Sefer HaBris*'s opinions, such as the idea that these life forms have no resemblance to our nature and the concept that man is the pinnacle of creation. He also disagrees with what the *Sefer HaBris* says, that if these life forms resembled us then Hashem could have made this world large enough to contain them all. Rabbi Tursch writes that on every part of creation one can ask many questions. For example, why did Hashem create man with the need for food? Therefore, even if a question arises regarding humanoid life forms, this does not prove that it cannot be so. Regarding Torah on other worlds, he writes:

Rabbi Pinchos cannot tell us without doubt that only we are the chosen ones of all creation [meaning even beyond Earth-YR], and that there exists no Torah or wisdom on the stars... and I can only speculate if they too merited receiving the Torah, and perhaps they are more intelligent than we, with a Torah that is more spiritual than our Torah.⁵⁵

⁵³ Yesodei haTorah chapter three halacha 9.

This Rambam is difficult to understand and has been discussed by many. It is of interest to note what Rabbi Yaakov Kamenetsky wrote, that we are forced to say that the first four chapters in *Mishneh Torah* were not written from the wisdom of Torah and cannot be compared to the rest of the *Mishneh Torah* such as *Hilchos Shabbos* (*Emes Lyakov Breishes*). See also Rabbi Mendel Kasher *Ha-Adam Al Ha-Yare'ach* chapter 4.

This idea may not be in line with the 13 principals of faith of the Rambam.

He then returns to the question of free will, disagreeing harshly with the *Sefer HaBris*, and writes:

There are no creatures who have intelligence and do not have a free will... For even animals who have no *yetzer hara* still possess a free will. They know what to throw away and what to keep, what is good for them and what is bad for them.

Gan Yerushalim

The Sefer Gan Yerushalim was written by Rabbi Gedaliah Breder and was printed in Yerushalim in 1899 with a Haskamah from Rabbi Yosef Chaim Sonnenfeld. The sefer deals with many interesting subjects, and has a whole section devoted to scientific matters. Regarding life on other worlds he writes:

If you will claim, that it must be that there are other life forms, we will have no obligation to deny this, for we were promised that in the future Hashem will give each *tzadik* 310 worlds, and how can there exist worlds without beings?⁵⁶

Later on he writes:

Regarding what the wise men say that there exist an endless number of worlds, we have known this for a long time, as we see from what *Chazal* told us that Hashem will give each *tzadik* 310 worlds. We also find that *Chazal* tell us that Hashem flies in 18,000 worlds.⁵⁷

Although he does not discuss here if these worlds have life or not, we already know from the previous passage that he believes that if there are worlds then there exists life on them.

Yad VaShem

Rabbi Reuven Israel writes in his Sefer Yad VaShem:58

It is almost certain that all the stars are inhabited with life like on our world. They are full of vegetation and life like our world, albeit

⁵⁶ P. 15b.

⁵⁷ P. 27b.

⁵⁸ Printed in 1908 in Vilna. I couldn't't find any details about the author's life, the *Sefer Yad VaShem* is a small *sefer* (40 pages) that discusses various interesting subjects such as Torah and science, and the existence of שדים.

they may be slightly different depending on the nature of their worlds.

How, and what will we forfeit, if we say that on every one of these worlds Hashem chose a nation, as He chose the *Bnei Yisrael* on our world, and gave them the Torah and *mitzyos* as He gave it to us...

After thinking about this matter at depth, and after immersing one-self into thoughts about Hashem, you will find that there exists no contradiction in the Torah to this... And all the times in the Torah which it is implied that Earth is the only place where free will was given, that there is no other place where the Torah was given, that the Nation of Israel is the chosen of all nations, and other such statements, can be understood to mean, from the perspective from our world. Meaning that on our world, all these statements are true... For we have no relationship and connection to these other worlds, and from our perspective they don't exist...

In my opinion the honor of Hashem would be greater by thousands upon thousands times more, if we say that lands like our land, and worlds like our world, exist, and all of them are like us (perhaps even greater than we) which recognize the one creator. All of them sing and exalt His Great Name, praise Him, speak of His greatness and wonders, and serve Him.⁵⁹

Rabbi Avraham Yitzchak HaCohen Kook

In the Sefer Otzrot HaRaya, Rabbi Kook devotes an entire chapter to the subject of astronomy. He writes at length that there exists a possibility for life on other planets and brings many of the proofs we have seen mentioned by others. He writes:

Chazal knew besod Hashem Iyeraiov all of nature at its truth... and Chazal reveled to us in Sefer Yetzirah and in Tikun Zohar that every planet is a world for itself, and it cannot be called a world if it does contain in it what requires to be a world [meaning the term world can be applied only to a planet containing life-YR].⁶⁰

All that was created was for the sake of Man

Before we move on to the next era, it is important we digress a little and understand one the main points in most of the disagreements. While many of the arguments were based on proof from the Torah or from various Talmudic sayings, one argument comes up repeatedly. It is re-

⁵⁹ P. 25

⁶⁰ Mamar Chinuch, Mamar al Astronomy p. 3.

garding the philosophical debate on anthropocentrism. Phrased differently, it is a debate whether the universe in its vastness is created to reflect the glory of Hashem or whether it was created simply to serve mankind.

As is evident from many of their arguments, this same disagreement is applied to a different argument, the heliocentric model versus the geocentric model. Regarding this question, Rabbi Landau writes:

The modern astronomers claim that it is not logical for the sun and the other planets to orbit the Earth, for they are hundreds of times larger than it... Is it possible that these planets should serve the Earth and orbit it in order to illuminate it and give it all it needed... Therefore, this [Geocentric view] is not surprising at all. For it is certainly appropriate and correct that the stars and planets should orbit Earth for us, for our needs, and to light our way and serve all our wants... As the *posuk* states, "He placed them in the heavens to shine down on Earth."⁶¹

The Chasam Sofer also rejected the heliocentric model purely because of this philosophical reasoning. He writes:

But the idea that springs from his (Copernicus's) thoughts, namely that the greater should not serve the lesser only makes sense according to Gentile thoughts. But we the *Bnei Yisrael* believe the opposite... Humanity and Israel, Hashem's holy people, are the entire reason for the creation, and the world was created only for them. The land and all that's on it, the spheres of the heavens and the firmaments were all created for the benefit of Earth.⁶²

However, even if one believes that all was created for the sake of man, this does not mean he is bound to believe that the Sun orbits the Earth. Rabbi Eliezer Lipman Neustaz⁶³ wrote an analysis of the new heliocentric astronomy in his *Sefer Mei Menuchot*. Regarding the argument that the universe was created for man he writes:⁶⁴

And regarding the idea that all of creation is because of Mankind living on this Earth, which the sun and stars were created to serve, as it is written, "And Hashem put them (the sun and moon) in the skies to light up the Earth," this does not mean that the Sun must

⁶¹ P. 21a.

⁶² Toras Moshe, Devorim 4, 19.

⁶³ It should be noted that Rabbi Neustaz was a student of the Chasam Sofer.

⁶⁴ P. 38a

revolve around the Earth. For only the Creator knows the best way to arrange things.⁶⁵

Rabbi Yaakov Kamenetsky expresses the same idea:

If Hashem saw in His wisdom not to put Earth at the center of the Universe, then Hashem had a very good reason for that. Even if we believe that all the worlds are dependent on our actions for better or for worse, this does not mean that the Earth must be at the center.⁶⁶

These arguments regarding the purpose of the stars in relation to mankind are discussed already by the *Rishonim*. The Rambam writes in *Moreh Nevochim*:

I consider therefore the following opinion as most correct according to the teaching of the Torah, and best in accordance with the results of philosophy; namely, that the Universe does not exist for man's sake, but that each being exists for its own sake, and not because of some other thing...You must not be mistaken and think that the spheres and the angels were created for our sake.⁶⁷

In the next chapter the Rambam continues and writes:

Now consider the enormous dimensions and the large number of these material beings. If the whole earth is infinitely small in comparison with the sphere of the stars, what is man compared with all these created beings! Then, could any one of us imagine that these things exist for his sake and benefit, and that they are his tools?

Perhaps this is the reason the Rambam writes in Mishna Torah:

All the stars and spheres possess a soul, knowledge, and intellect. They are alive and stand in recognition of the One who spoke and [thus brought] the world into being

According to their size and level, each one praises and glorifies their Creator as the angels do. Just as they are aware of the Holy One, blessed be He, they are also aware of themselves and of the angels that surpass them. The knowledge of the stars and the spheres is less than the knowledge of the angels, but greater than that of men.⁶⁸

⁶⁵ These last few translations are taken from New Heavens and New Earth by Jeremy Brown.

⁶⁶ Bemechitzas Rabenu, p. 71.

⁶⁷ Book 3, chapter 13, 452.

⁶⁸ Yesodei HaTorah, chapter 3, halacha 9.

Rambam could not conceive that the stars are here just to serve us, therefore he believed that all the stars possess soul, knowledge, and intellect.⁶⁹

The Abarbanel disagrees with Rambam and believes that the *posuk*: ואת המאור הקטן לממשלת הלילה ואת הכוכבים. ויתן אותם אלקים ברקיע השמים ואת המאור הקטן לממשלת הלילה ואת הכוכבים. ויתן אותם אלקים ברקיע א, טו-יז) here is literal: Hashem created the sun and stars only for the sake of our world. He brings many proofs from various saying from Chazal that Man is the pinnacle of all creation and greater than all other beings, earthly or celestial. The Abarbanel is not bothered by the enormous dimensions and the large number of these material beings against man who is so small in comparison. He writes:

Rambam concluded from this that the heaven is alive with intelligent beings... and all his proofs are not convincing...For we find that a small insect is greater and more alive than all the great trees... The soul of a Man is eternal and the heaven will one day cease to exist...⁷⁰

The Ba'al Hakedah brings the opinion of the Rambam and brings some Rishonim who agree with the Rambam such as Rabbi Yedaiah ben Avraham Bedersi in the *Sefer Bechinas Olem*⁷¹ and the Ralbag. He however disagrees at length with the Rambam, and believes like the Abarbanel that all was created for Man. He writes:

Everything is there for the sake of Man and for his benefit, as the *posuk* tells us, "And Hashem put them in the skies to light up the Earth."⁷²

We see from this, that the disagreement on how to view Mankind's place in creation is an old argument and there are Rishonim on both sides of the argument.

We generally find that those who believed in heliocentrism were more open to the idea of life on other planets. This is true with Yashar,⁷³ Rabbi Friesenhausen,⁷⁴ Yad VaShem,⁷⁵ and Gan Yerushalim.⁷⁶ Those who

⁶⁹ This is based on what Rabbi Landau writes in Mahalach Hakochovim part 2 page 26b.

⁷⁰ Peirush Abarbanel al HaTorah, Breishis.

Rabbi Yedaiah ben Avraham Bedersi's opinion is mentioned by Rabbi D. Nieto.

⁷² Breishes Shaar 5. See there a lengthy discussion in this matter.

In Sefer Elim, page 141, 148, he expresses his belief in the heliocentric model.

⁷⁴ The Sefer Mosedot Tevel was written to explain the Copernican heliocentrism.

On p. 24 he writes that heliocentric model is the correct one.

believed in geocentrism found it difficult to believe in the possibility of life on other planets, such as Rabbi Tuviah HaRofeh⁷⁷ and Rabbi Reuven Landau.⁷⁸ We do however find exceptions to this, for instance Rabbi D. Nieto,⁷⁹ and *Ginzai HaMelech* did believe in geocentrism while accepting the possibility of life on other planets.

The reason for these exceptions is clear. The correlation between acceptance of extraterrestrial life and heliocentrism is really based on the reasoning that some of these Rabbis were open to the idea of heliocentrism. As we have shown above, the argument usually came down to their anti-anthropocentric views. If mankind was not at the pinnacle of creation, then the earth need not be at the center of the universe. Now the creation of such a vast universe needed a purpose beyond being there for mankind, and myriads of planets teeming with life reflecting the glory of Hashem can be one such purpose.

So, although Rabbi Nieto and *Ginzai HaMelech* believed in geocentrism, they did not have the usual matching anthropocentric views. Rabbi Nieto quoted the *Sefer Bechinas Olam* who wrote that one should not say that all the stars were created for man. Likewise, the *Sefer Ginzai HaMelech* disagreed very strongly with the anthropocentric view. Therefore their belief in the geocentric model sprang not from anthropocentrism but from their belief that this was the Torah's view of the universe.⁸⁰

There is then the *Sefer HaBris* who was a staunch believer in the geocentric model⁸¹ and who cited his belief in the anthropocentric view yet still believed in the possibility of life on other planets. However, from a closer look at his words it is evident that his belief in the possibility of

Nee p. 23 where he expresses that the heliocentric model is not conflicting to the Torah.

Ma'aseh Tuvia, perek 4. He goes so far as to call Copernicus son of Satan.

Mahalach Hakochovim part 2 chapter 5, where Rabbi Landau writes, "It would be preferable to let the astronomer Copernicus and another thousand like him to be removed from the world, rather than one letter of the holy Torah be annulled."

Rabbi Nieto's opinion is not entirely clear, for although he seems to have rejected the heliocentric model, he finishes his analysis of this matter by saying, "Kuzari; ...I prefer it (the Copernican model) except that it makes the Sun motionless." See *New Heavens and New Earth* chapter 6, which make this conjecture.

Rabbi Nieto cited the *posuk* in *Yehosuha*, and *Ginzai HaMelech* quotes a total of 34 *pissukim* that imply that the Torah believes in the geocentric model.

Although the *Sefer HaBris* held that one may believe in a Heliocentric model and not be called a heretic, he could even be considered a *tzadik*. Ultimately he himself sided against Copernicus (part 1, *mamar* 9, chapter 8).

these life forms does not contradict his anthropocentric views, for ultimately, he believed that these life forms are similar to angels in their purpose and are of no relevance to us. Which means that these life forms do not move mankind from its place as the pinnacle of creation. It would be comparable to the spiritual worlds which do exist yet in a way that serves Earth.

Thus, the debate does not fall along the lines of geocentrism and heliocentrism but on anthropocentrism. The correct way to summarize this would be that those who did not believe in the idea that all of creation was created for man, believed in the possibility of other independent-of-man life forms. This would include the Rambam,⁸² Sefer Bechinas Olam,⁸³ Rabbi D. Neito, Rabbi D. Friesenhausen, and Ginzei HaMelech. Those who believe in the anthropocentric view did not believe in the possibility of independent life on other planets. This would include Rabbi Tuviah HaRofeh, Sefer HaBris, and Rabbi Reuven Landau.

However, the argument for or against extraterrestrial life *need* not be bound strictly to the argument for or against anthropocentrism. Even if one believes that everything *was* created for the sake of man, this might not contradict the possible existence of life on other planets, even with free will. As was mentioned before, this is the opinion of Rabbi Eliezer Lipman Neustaz who agreed that while all creation was created for man, that did not mean that the Sun needed to orbit the Earth. This same reasoning can be applied here.

In fact, Rabbi Kook who writes very strongly about the possibility of life on other planets, at the same time writes explicitly that he believes in the anthropocentric in an extreme way. After discussing at length the idea that all was created for man he writes:

Therefore, we must know this, since this belief is not explicit in the Torah and the *Anshei Kenesess HaGedolah* did not place this idea in *Tefilah* the same way they placed other ideas in *Tefilah*, we can then conclude that it is not a basic faith that one must believe in. If someone does not believe so [in the anthropocentric view-YR], even though he is obviously mistaken in this, we cannot consider him as one who left the Torah. We find even amongst the *Gedolai Yisroel* who were mistaken in this matter... As we see in *Moreh Nevochim.*..

⁸² According to what the Sefer Ginzai Hamelech writes.

⁸³ This is implied by Rabbi Nieto.

Kabbalah

With the Kabbalah, our arguments can be taken to the next level, the mystical objections or reasoning for extraterrestrial life. Here the arguments are even more obscure and difficult to conclusively pin to one position or another.

Zohar

The Kabbalist Rabbi Mordechai Sharabi was asked if it is possible for life to exist on other planets. He answered that it is impossible, and he brought proof from a passage in *Tikkunei Zohar*. It is written there:

You created Heaven and Earth, and drew forth from them (the Heavens), the sun, the moon, the stars, and the constellations. And on Earth (you drew forth) the trees, the vegetation, the Garden of Eden, grasses, beasts, cattle, birds, fish, and human beings.⁸⁴

From this passage in the *Zohar* it seems that only on Earth was life brought forth, and not elsewhere such as in Heaven.⁸⁵

Rabbi Mordechai Sharabi believes that the opinion of the Zohar is that it is impossible for life to exist on other planets. Rabbi Aryeh Kaplan quotes a different Zohar that does imply the existence of other planets. He writes:

The *Midrash*⁸⁶ teaches us that there are seven earths. Although the Ibn Ezra tries to argue that these refer to the seven continents, the *Zohar* clearly states⁸⁷ that the seven are separated by a firmament⁸⁸ and are inhabited. Although they are not inhabited by man, they are the domain of intelligent creatures.⁸⁹

Derech Tzadikim, page 211. It may be that Rabbi Sharabi never said this statement. I will discuss this later while explaining the opinion of Rabbi Mordechai Elivahu.

The *Zohar* writes that each of these worlds is separated by a firmament. Rabbi Avroham Korman in his *Sefer Evulteseh V'Yehadut* (Evolution and Judaism) page 140 writes that perhaps these firmaments are Galaxies, meaning the space between Galaxies.

⁸⁴ Pesach Eliyhu.

Vayikra Rabbah 29:9, Shir HaShirim Rabbah 6:19, Avos Rabbi Nassan 37.
Cf. Pirkei DeRabbi Eliezer 18, but see HaGra on Sefer HaYetzirah 4:15 that these refer to spiritual worlds.

⁸⁷ Zohar 3:10a

⁸⁹ Rabbi Aryeh Kaplan Reader, p. 170.

Rabbi Moshe Cordovero

Rabbi Aryeh Kaplan discusses Rabbi Moshe Cordovero's opinion of life on other planets. He writes:

Rabbi Moshe Cordovero in his *Pardes Rimonim*⁹⁰ uses tight logical arguments to demonstrate that there can be only one set of spiritual worlds. Although Hashem would want to maximize the number of recipients of His good, His very unity precludes the existence of more than one such set. Since this set of worlds deals specifically with Hashem's providence toward man because of his free will, this also precludes the existence of another species sharing this quality.⁹¹

Modern Era

The Lubavitcher Rebbe

The opinion of the Lubavitcher Rebbe, Rabbi Menachem Mendel Schneerson, regarding extraterrestrial life was first published in Russian in *HaTechiya* 5736. He was asked if according to the Torah, there is a possibility that there exist other civilizations besides on Earth. His response:

According to the Torah, there may be extraterrestrial life forms. Mention of this is found in the Talmud. Civilizations, however, which would mean intelligent life forms, are a different story.

According to the Torah, a defining quality of intelligent life is—as is the case with man—the presence of free choice. Moreover, the existence of free choice and man's ability to utilize it is possible only by virtue of the Torah.

Therefore, if we were to assume that there was intelligent life somewhere else in the universe they would have to have Torah. That is impossible. They cannot have their own, different Torah, since the Torah is truth, and there can be only one truth. Yet it is also impossible to assume that they have our Torah.

After all, the story of how the Torah was given to the Jewish people here on earth is described in the Torah in great detail. Much attention is focused on these details, because they are important for

⁹⁰ Pardes Rimonim 2:7.

⁹¹ Ibid.

our very understanding of the Torah.92

During this private audience the Rebbe expounded on why free will can exist only where there is Torah:

Since everything happens by Divine Providence, free choice would really be impossible. It is only because of the Torah that G-d established that we should have free choice, since without it there is no meaning to the Torah's commandements.

In other words, the Lubavitcher Rebbe believed that, according to Judaism's viewpoint, it is possible that life exists elsewhere in the universe, but societies of intelligent or human-like life do not exist anywhere but on Earth. On a different occasion the Lubavitcher Rebbe wrote:⁹³

The question as to whether life exists on other planets is not directly related to the Torah and *mitzeos*. However, since people are interested in knowing the Torah's view on this issue, we must fulfill the Sages' promise⁹⁴ that as long as there are questions and debates, someone will be found to provide an answer...

I therefore responded that it is clearly dealt with in the Talmud...

He then brings proof from the Talmud in *Moed Katan* that the *Sefer HaBris* discussed, and we mentioned before. The Rebbe was also approached by Dr. Velvl Greene who was a biologist enlisted by NASA in their project to determine if there is life on Mars. He asked the Lubavitcher Rebbe privately if this was something he should be doing. The Rebbe replied:

Dr. Greene, look for life on Mars! And if you don't find it there, look somewhere else in the universe for it. Because for you to sit here and say there is no life outside of planet Earth, is to put limitations on the Creator and that is not something any of His creatures can do!⁹⁵

The Lubavitcher Rebbe's opinion is very similar to that of the *Sefer HaBris*: they both believe that while life on other planets may exist, it is without free will. Although on the reason they do not have a free will,

This exchange was heard first hand by Professor Herman Branover. This was latter published in the Sefer Emunah U'Mada, page 137. Later it was all collected in Mind over Matter, p. 306.

⁹³ Kefar Chabad, Issue 121.

⁹⁴ Chagigah 5b.

⁹⁵ Sichat HaShavua, 100 (Shoftim, 5749).

they disagree. The *Sefer HaBris* did not say why they do not have a free will, but writes that since they have no free will they cannot have the Torah, for the Torah has a place only amongst beings who have a free will. It is evident from his words that the lack of Torah is not the cause for the lack of free will, on the contrary the lack of free will is what makes having the Torah impossible. The Lubavitcher Rebbe believed that the sole reason they cannot have a free will is because of the lack of Torah. He was sure that it is impossible for them to have our Torah, and since they do not have our Torah they do not have free will.

One may ask, however, that we find entire groups of people on our world who have had no contact with the Torah and still had free will. For instance, the indigenous people of North and South America, or the Aborigines from Australia. They were completely detached from main civilization and had no possibility to be in contact with Torah and yet these people still had a free will. If you would say that they had a free will since technically they could have built ships and traveled across the ocean to the Torah (something they were most likely incapable of doing), then perhaps these other life forms also have a free will, since they can technically build spaceships and travel to our world and see our Torah.⁹⁶

Rabbi Yosef Ber Soloveitchik

Rabbi Yosef Ber Soloveitchik had perhaps the most accepting view regarding life on other planets. In the book *The Rav: Thinking Aloud*, which is based on transcripts of personal conversations with Rabbi Soloveitchik, the author brings a discussion he had with The Rav regarding life on other planets. He writes:

Q: Would the discovery of alien life be an issue in terms of the Torah view?

A: It is possible that Hashem created other life form on other planets. It is no problem to *Yahadus*. The reason man likes to think he is the only created Being in the entire universe is because of his egotistical nature.

Even the concept of Am HaNinchar may only be relative to our world, our small section of the universe. The Torah is written from the viewpoint of our sun, moon, and stars. It would not detract

As Rashi writes on the *posuk* (*Devorim* 30:12) It is not in heaven: for if it were in heaven, you would have to climb up after it [in order] to learn it. (*Erwin* 55a).

from our being the Am HaNivchar of this region of space if there are other Am HaNivchar in a distant Galaxy.⁹⁷

Rabbi Solovetechik was anti the anthropocentric view, even calling it egotistical. As we mentioned before, many opinions regarding extraterrestrial life hinged upon the belief in anthropocentrism. This view is already mentioned in the Rishnoim.

Rabbi Yaakov Kamenetsky

The Sefer Bemchitsas Rabbenu is a collection of sayings on various matters that were heard from Rabbi Yaakov Kamenetsky. Regarding what would be if life would be found on Mars, he had the following to say:

After Man made its first voyage to the moon, many Jews felt that perhaps we lost our uniqueness since now the scientist will discover many new worlds. This reaction was similar to the one when the astronomers proved that the Earth orbits the sun and not the other way around. On this Rabbi Kamenetsky said, If Hashem saw in His wisdom not to put Earth at the center of the Universe, then Hashem had a very good reason for that. Even if we believe that all the worlds are dependent on our actions for better or for worse, this does not mean that the Earth must be at the center. Even if life would be found on Mars, this would not be a contradiction to our belief that the Torah is from Hashem. There is but one Torah that was given from heaven and this Torah is found only on our world. Only we have the freedom of will to choose between good, evil, reward, and punishment, and there are no other beings in the universe that have a free will.⁹⁹

Rabbi Mordechai Eliyahu

In a speech on Chanukkah 5766, Rabbi Mordechai Eliyahu stated that he does not believe that life existed on other worlds. He said:

In 1969 for the first time, Man went up to the moon. [Before the landing-YR] all over the world pictures were shown that there exist

⁹⁷ P. 92. In the footnotes the author (David Holzer) writes: Man would like to think he is the only creature on which Hashem bestowed His *chessed*. But from the perspective of Hashem and considering the vastness of the universe He chose to create, it is hard to understand why he would limit his role as a *mativ* to the infinitesimal speck of Creation which Man inhabits.

⁹⁸ As heard by Rabbi Moshe Tzvi Jacobs.

⁹⁹ P. 71.

life, vegetation, and water on the Moon. 100 Everybody was waiting eagerly for the moment when Man will walk on the moon.

At that point in time, Rabbi Mordecahi Sharabi called me and told me, "we are in great danger." As we were speaking, a professor walked in and challenged us on what we say in Kiddush Levanah and "I can't touch you," for soon enough the exact opposite will happen as man will walk and touch the moon, 101 and especially since were shown with life on the moon. that professor that I do not care for the pictures and it is all lies, for the Zohar which already revealed to us great things (such as that the world is round and there exist day and night at the same time) tells us, "You created Heaven and Earth, and drew forth from them (the Heavens), the sun, the moon, the stars, and the constellations. And on Earth (you drew forth) the trees, the vegetation, the Garden of Eden, grass, beasts, cattle, birds, fish, and human beings.¹⁰² From this passage in the Zohar it is evident that only on Earth was life brought forth, and not elsewhere such as in Heaven. 103

I am entirely unsure what he means, for no pictures were shown at that point in time and no one believed that life exists on the moon.

This question is discussed by many. See *Mind over Matter* (p. 304) where the Lubavitcher Rebbe says: "Some people were taken aback by the moon landing, and they felt that they must now alter the prayers we recite monthly to sanctify the moon, since in it we say: 'Just as I jump towards you and I cannot touch you, so should my enemies not be able to reach me for harm...' At any rate, one who does not understand the hidden meanings, and who does not know even the simple interpretation, is certainly not competent to make changes to the accepted liturgy. If you ask even a five-year-old the meaning of this passage, he would reply: 'Just as I now jump towards you and cannot — with this jump — reach you, so should my enemies not be able to reach me for harm'."

¹⁰² Pesach Eliyahu.

As mentioned before, it is evident that this was said by Rabbi Eliyahu and not by Rabbi Sharabi. The *Sefer Derech Tzadikim* writes that Rabbi Eliyahu at a hesped for the shloshim of Rabbi Sharabi said this statement in the name of Rabbi Sharabi. I was not able to locate the hesped and am not sure if Rabbi Eliyahu contradicted himself or if the Sefer Derech Tzadikim misunderstood the hesped. Afterwards I came across a sefer called HaRav Sharabi. On page 154 he brings

this story with more details. It may be that that version holds the answer to the discrepancies between the two other stories. In *HaRav Sharabi* the author writes that this professor approached Rabbi Sharabi the day before the landing on the Moon and told him that life will be found there. At that point Rabbi Sharabi gave Rabbi Eliyahu a sealed envelope containing the answer to what the professor said and requested from Rabbi Eliyahu that he open the envelope after the landing on the moon. The following day after they landed on the moon and no life was found, Rabbi Eliyahu opened the envelope and found

In the end when they landed on the Moon it was proven to the whole world that no life exists on the moon and that the words of the *Zohar* are holy.¹⁰⁴

Rabbi Avigdor Miller

In a lecture Rabbi Avigdor Miller was asked if life existed on other planets. He answered:

They are spending millions of dollars, from taxes which we pay, to investigate this matter, because they believe that if life came about on our world then why not on other worlds, as there are millions of the worlds. But that did not happen, because in order to have life, you have to have an endless amount of details in an exact way. The fact that we live in this world is the most obvious proof that there is a Hashem...

And considering the huge number of details required, it is hard to believe that they also exist somewhere else. Therefore, there is no doubt that no life exists on other planets.¹⁰⁵

Rabbi Miller's statement is difficult to understand, for on the contrary, one who believes in a Creator should find it *less* difficult to believe in the existence of other planets suitable for hosting life. The same Creator who created our world, with all the exact details needed for hosting life, can create other worlds with the exact requirements to host life. Rabbi Miller is also assuming that these other life forms must be exactly the same as those we are familiar with and would require them to live on a similar planet. It is theoretically possible that life forms on other planets would be extremely different and not require what our Earth life forms require.

Rabbi Meir Isaacson

In his Sefer Mevaser Tov, after citing the pasuk השמים שמים לה' והארץ נתן he writes:

I am one hundred percent sure that there exist no other life forms in any of the planets in the sky that are similar to Mankind, which

the passage from the Zohar in which it is implied that no life exists beyond Earth. He then told the professor what was written in the envelope. This might explain the two different versions, for both are true: while Rabbi Sharabi wrote this statement, it was Rabbi Eliyahu who told it to the professor.

Kol Tzofaich Mekeits 5766, available here: http://www.harav.org/img/Contents/10072014094331_1096119610.pdf.
 Sefer Or Olam.

are the chosen of the creation, we who were created in the form of the Holy one blessed be He. And only on Earth did Hashem create people who are filled with wisdom, understanding, and knowledge to think.¹⁰⁶

Rabbi Chaim Kanievsky

In Kovets Moriah Rabbi Chaim Kanievsky was asked his opinion regarding this matter:

Rabbi Chaim was asked about Aliens and UFOs which we have been hearing about in recent years if they exist, to which he answered: It is nonsense.¹⁰⁷

However, it is possible to say that he meant to say that the rumors and conspiracies of Aliens and UFO visitations are nonsense but did not answer regarding possible extraterrestrial life.

Conclusion

Whether or not life on other planets exists, it is unlikely we will ever know the answer before the coming of Moshiach. As with many ideas within Judaism, it is a debate amongst the Rabbis, and one may choose to believe as he understands. There have been those who have predicted that should life be found on other planets it will engender a crisis of faith, proving that we are not unique and questioning our most basic beliefs. Yet I believe, based on the sources we have seen, that if such a discovery would ever be made, the existence of life on other planets would only strengthen the belief in Hashem. The greater our understanding of the complexity and vastness of the universe the more we will see the greatness and glory of Hashem. If more intelligent life forms are found, it will only prove how much more complex the universe is than we understood till then, bringing new meaning to the praises we sing daily, (חַהַיִּלִים שֵׁתְּ שֵׁתְּ שֵׁתְּ שֵׁתְּ שֵׁתְ שֵּתְ שֵׁתְ שֵּתְ שֵׁתְ שֵּתְ שֵׁתְ שִׁתְ שֵׁתְ שֵׁתְ שֵׁתְ שִׁתְ שֵּתְ שֵׁתְ שֵׁתְ שֵׁתְ שִׁתְ שִׁתְ שֵׁתְ שֵּ

¹⁰⁶ Vol. 1 Siman 88.

¹⁰⁷ *Moriah*, Teves 5759.