



REBBE RESPONSA

The Rebbe's English Letters

Torah and Science | Part 2

Evolution, Geocentrism, Shape of Earth, Talmudic
Medicine, Spontaneous Generation

Issue 109
Behaalosecha, 5785

A Word from the Publishers

We hereby present *Issue 109* of *Rebbe Responsa*, a compilation of letters originally authored by the Lubavitcher Rebbe in English, culled from the Rebbe Responsa app.

This issue is the second in a two-part series on *Torah and science*. While the previous installment focused on apologetics and reinterpretation, this week's letters take up specific areas of scientific theory – including evolution, cosmology, medicine, and spontaneous generation – and the question of how to approach them through a Torah lens.

Across these letters, the Rebbe offers a clear and original approach: scientific theory is provisional and limited by its own methods; Torah speaks with certainty. Rather than reinterpret Torah to fit scientific theory, the Rebbe calls for a more honest reading of science.

Note: The Rebbe's primary letters addressing evolution and the age of the universe were previously published in *Issue 76*. Readers interested in those foundational discussions are encouraged to look there for a fuller treatment of those topics.

* * *

The Rebbe's English letters represent a little-known facet of the Rebbe's Torah, containing profound wisdom and practical guidance expressed in clear, accessible language. We encourage you to download the Rebbe Responsa app, which offers the only comprehensive collection of the Rebbe's English letters available to date. With of over 5,000 organized by both topic and date, the app makes finding the Rebbe's guidance and opinion simple and accessible.

The Rebbe Responsa Team

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Table of Contents

1 | On Science and Facts3

Some scientists unscientifically present speculation and theory as fact; A case in point is teaching Copernican theory as definitive, while greater relativity shows it to be unprovable

2 | Theory of Evolution.....7

Empirical approach as basis of modern science; scientific deductions are not certainties; historical evidence never exceeds six thousand years.

3 | Flat Earth?9

Explaining Talmudic passages about the sun's movement alongside Earth being spherical; Zohar's knowledge of Earth's shape and climate differences.

4 | Ancient Accuracy.....10

Addressing claims that Torah describes flat Earth; Zohar's scientific accuracy predating European university debates by centuries.

5 | Rediscovered Knowledge11

Modern scientific discoveries and the messianic era; Numerous rediscoveries of knowledge already found in Torah sources; examples from Earth's shape, astronomy, and medicine.

6 | Talmudic Medicine.....12

Theory of evolution; Validity of medical advice in Talmud; changes in human constitution over time; why ancient remedies may no longer be effective.

7 | Spontaneous Generation14

Science's actual position on spontaneous generation; How to approach seeming contradictions between halacha and science; Torah's absolute truth versus scientific limitations.

8 | The Limits of the Lab17

Limit of a laboratory in disproving spontaneous generation; 'uncertainty principle' in modern science; comparing Torah Sages' certainty to scientists.

1

On Science and Facts

Some scientists unscientifically present speculation and theory as fact; A case in point is teaching Copernican theory as definitive, while greater relativity shows it to be unprovable

B.H.
15th of Elul, 5724
Brooklyn. N.Y.

Dr. Velvl Greene¹
1476 Independence South
St. Louis Park 26, Minn.

...P.S. You refer, in passing, to my letter relating to the theory of evolution.² I am prompted to reveal to you that the letter was written in reserved and guarded terms, inasmuch as my purpose is to win adherents to the Jewish viewpoint. Hence I try to avoid anything which might deter some individuals from a deeper commitment to Yiddishkeit. In writing to you, however, I will be more candid, being certain that you will not take my remarks amiss.

You write that your secular background and scientific training prevent you from immediate acceptance of some of the concepts

Source: Photocopy of the original. This letter was previously published in issue 90 (Geocentrism).

¹ Dr. Velvl Greene (1928–2011) was a distinguished scientist who specialized in public health and bacteriology. He served as a professor at the University of Minnesota and later at Ben-Gurion University of the Negev in Israel. As part of NASA's pioneering exobiology program, Dr. Greene conducted significant research to detect microbial life in outer space. Though raised in a secular environment, Greene underwent a profound spiritual transformation in the 1960s, becoming a *baal teshuvah* and devoted Lubavitcher *chassid*.

² Letter dated [18 Teves, 5722](#) (published in *Rebbe Responsa*, issue 76).

In his letter Greene wrote: "My secular background and my scientific training prevents my immediate and unquestioning acceptance of many of your concepts, for example some of those you have outlined in your famous letter on evolution, (although I agree completely that acceptance or non- acceptance of those concepts in no way modifies my obligation to perform mitzos)."

outlined in my said letter (although acceptance or non-acceptance of same in no way modifies your obligation to perform Mitzvos). Frankly, it surprises me very much that you cannot accept those concepts.

My said letter does not appeal to "belief"; its premises are scientific, based on my years of scientific study, first at the University of Berlin, and later at Paris. I upheld the admissibility of the account of the Creation in Bereishis on scientific grounds. On the other hand, I pointed out that the so-called scientific arguments which purport to deny the possibility of the Torah account of Creation are **not** scientific, since in truth science does not, and cannot, make such a claim. Moreover, modern science declares that it can **never** offer an unequivocal scientific solution to this and similar problems. The reason for this is not that modern science is still incomplete, but rather because of the very nature of science which can never speak in absolute terms; it can only offer working theories and hypotheses. Science can only examine and classify phenomena, and make **probable** deductions and predictions. If these are eventually substantiated by experiment, the theories are confirmed as approximate verities. But never can science claim to speak from terms of absolute truths, for it would be a contradiction in itself.

The above is true in all areas of scientific inquiry. When it comes to the theory of evolution, dealing with an effort to reconstruct the distant past, science lacks even that degree of probability which it has in regard to future predictions, as explained at some length in my said letter. Here science can only **speculate**. If such speculations are represented in text-books as "facts," then it is a **gross** and **unscientific misrepresentation**.

To cite one illustration: For years the Ptolemaic system was accepted as true, according to which the sun revolves around the earth. Later Copernicus evolved the theory that the earth revolves around the sun. This is the theory which is now given in all text-books as an indisputable fact.

But what are the facts? Aside from the fact that even the Copernican sun centered system is no more than a theory, subject to a variety of reservations, as all scientific theories must be; apart, also, from the fact that the Copernican theory did not presume to settle all the questions relating to astro-physical observations, but

only answered more questions, and more simply, than the Ptolemaic - modern science has reached some revolutionary conclusions in the wake of the General Relativity Theory. Specifically, modern science is now convinced that when two systems are in motion relative to one another, it could never be ascertained, from the scientific viewpoint, as to which is in motion and which at rest, or whether both are in motion. Let it be remembered that the General Relativity Theory has been accepted as fundamental to all exact sciences without dissent.

Yet - and it is surely no revelation to you - this new orientation in science is **ignored** in discussions relating to the Ptolemaic and Copernican theories not only on the high school level, but even in specialized studies of astronomy and physics in colleges and universities. In other words, science in many domains is still taught in terms of a scientific orientation which prevailed at the close of the 19th century, when two cardinal principles of modern science were yet unknown, namely the relativity theory, and that all scientific conclusions necessarily belong in the realm of probability, not certainty.

I once asked a professor of science why he did not tell his students that from the viewpoint of the relativity theory the Ptolemaic system could claim just as much validity as the Copernican. He answered candidly that if he did that, he would lose his standing in the academic world, since he would be at variance with the prevalent legacy from the 19th century. I countered, "What about the moral issue?" The answer was silence.

In discussing this question with another scientist, he expressed surprise that there should be an individual in the 20th century who could still think that the earth stood still and the sun revolved around it. When I protested that from the viewpoint of modern science this could be as valid as the opposite theory, he could not refute it.

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מנחם מענדל שניאורסאן
ליובאוויטש

אדסטון פארק 770
ברוקלין 13

B.H. 15th of Elul, 5724
Brooklyn, N.Y.

Dr. Velvl Greene
1476 Independence South
St. Louis Park 26, Minn.

Sholom uBrocho:

Thank you very much for your letter of July 29th. I wish to express again my regret at having had to defer the pleasure of receiving you personally during your recent visit. It happened to be a time when

You write that your secular background and scientific training prevent you from immediate acceptance of ~~the~~ some of the concepts outlined in my said letter (although acceptance or non-acceptance of same in no way modifies your obligation to perform Mitzvos). Frankly, it surprises me very much that you cannot accept those concepts.

My said letter does not appeal to "belief"; its premises are scientific, based on my years of scientific study, first at the University of Berlin, and later at Paris. I upheld the ~~validity~~ of the Creation account in Bereishis on scientific grounds. On the other hand, I pointed out that the so-called scientific arguments which purport to deny the ~~possibility~~ of the Torah account of Creation are not scientific, since in truth science does not, and cannot, make such a claim. Moreover, modern science declares that it can never offer an unequivocal scientific solution to this and similar problems. The reason for this is not that modern science is still incomplete, but rather because of the very nature of science which can never speak in absolute terms; it can only offer working theories and hypotheses. Science can only examine and classify phenomena, and make probable deductions and predictions. If these are eventually substantiated by experiment, the theories are confirmed as approximate verities. But never can science claim to speak in terms of absolute truths, for it would be a contradiction in itself.

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To cite one illustration: For years the Ptolomaic system was accepted as true, according to which the sun revolves around the earth. Later Copernicus evolved the theory that the earth revolves around the sun. This is the theory which is now given in all text-books as an indisputable fact.

But what are the facts? Aside from the fact that even the Copernican sun centered system is no more than a theory, subject to a variety of reservations, as all scientific theories must be; apart, also, from the fact that the Copernican theory did not presume to settle all the questions relating to astro-physical observations, but only answered more questions, and more simply, than the Ptolomaic - modern science has reached some revolutionary conclusions in the wake of the General Relativity Theory. Specifically, modern science is now convinced that when two systems ~~are~~ are in motion relative to one another, it could never be ascertained, from the scientific viewpoint, as to which is in motion and which at rest, or whether both are in motion. Let it be remembered that the General Relativity Theory has been accepted as fundamental to all exact sciences without dissent.

Yet - and it is surely no revelation to you - this new orientation in science is ignored in discussions relating to the Ptolomaic and Copernican theories, on the high school level, but even in specialized studies of astronomy and physics in colleges and universities. In

1

Theory of Evolution

Empirical approach as basis of modern science; scientific deductions are not certainties; historical evidence never exceeds six thousand years.

By the Grace of G-d
8th Day of Chanukah,
5726 Brooklyn, N.Y

Mr. ...

Silver Springs, Md. 20901

Greeting and Blessing:

I am in receipt of your letter in which you ask a number of questions having to do with the Torah, "evolution," etc.

Needless to say, it is impossible in a single letter to go into all those questions, nor is correspondence altogether the best medium to discuss such matters. As a matter of fact it is not even necessary inasmuch as there are many printed seforim wherein some of the questions are discussed. Among them I suggest you read Dr. S.B. Ullman's book mentioned below.³

In order not to leave you without any answer at all, I can give you here a general principle which can basically answer all your

Published: *The Letter and the Spirit*, Vol. 2, p. 256. **Note:** Letters printed in *The Letter and the Spirit* are from the Archives of Rabbi Nissan Mindel the Rebbe's personal secretary entrusted with writing up the Rebbe's orally dictated responses. The archive is made up of secretarial copies, that may not include final edits and corrections.

For an in-depth study of the Rebbe's teachings addressing evolution and the age of the universe, see the letters found under those tags on the Rebbe Responsa app; *Rebbe Responsa*, issue 76.

See also Friedman, Daniel (ed.), *Truth: The Rebbe on Torah and Science*; Gotfryd, A. (ed.), *Mind Over Matter: The Lubavitcher Rebbe on Science, Technology and Medicine* (F.R.E.E. Publishing House, 2015), pp. 27 ff.

³ Dr. Shlomo (Solomon) Baruch Ullman was a religious scientist and cancer researcher who authored several books on Torah and science. A month later, the Rebbe wrote to Ullman that at times he directs individuals to consult his books (*Igros Kodesh* vol. 26 letter 9082)

questions. I put it to you on the basis of my study at the University of Berlin and subsequently at Paris. I am referring to the empirical approach which is the basis of all branches of modern science. What I mean by referring to my university studies is that I merely wanted to verify this principle insofar as the professors are concerned, and I found them unanimously agreed on the following:

All deductions made on the basis of experiments in order to predict the behavior of things under certain circumstances are only a matter of **probability** and are not considered as absolutely certain. Moreover, if on the basis of deductions relating to conditions as we now find them we wish to infer what conditions might have been hundreds of years or more in the past, the results must be considered even with a lesser degree of probability. Therefore, inferences made from conditions today as to conditions that might have existed thousands of years ago have no scientific value and cannot be scientifically verified to have actually existed that way. All such theories must be regarded from what they are, namely working theories, or some hypothetical explanations in the absence of better ones. By way of example, if you want to find oil deposits in the soil, we look for likely places on the basis of a hypothesis which suggests how oil deposits were formed in the soil. Without this explanation, it would be impossible to make even the first start. Incidentally, this method is not always a sure guarantee of success, as is well known.

A further point. It is significant, and this too contains an answer to your questions, that direct historical evidence, either in the form of writing or pottery and the like, which can be dated with certainty, which has been unearthed so far, has never been older than six thousand years. In other words, nothing has been found which definitely points to human civilization beyond this said date approximately. At the same time we have massive evidence which is younger. All the so-called evidence which you cite, which are purported to be ten thousand years old or more, are derived from calculations based on various theories or hypotheses, which in themselves are not accepted as absolute truth, and are used only as working theories in the absence of better ones. I say in the absence of better ones because the scientists do not wish to accept the Biblical explanations by reason of it being too simple...

2

Flat Earth?

Explaining Talmudic passages about the sun's movement alongside Earth being spherical; Zohar's knowledge of Earth's shape and climate differences.

11th of Teves 5712
Brooklyn, N.Y.

Mr. Yehudo Meir Schechter⁴
1271 Carroll Street
Brooklyn N.Y.

Sholom u'Brocho:

I'm in receipt of your letter of 29th of Kislev, in which you ask for an explanation of the Gemoro in Pesochim 94b, regarding the statement, "During the day the sun travels under the firmament, and during the night above the firmament, etc." You also wish to be enlightened on the Gemoro in B.B. 25a, and how it can be reconciled with the fact that the Earth is a sphere, as stated in Tosefoth in Aovodo-zoro,⁵ based on the Jerushalmi.⁶

In reply, please refer to Zohar, part III, 10a, where we find the following statement:

"The earth turns about like a ball, now this side up, now down; and all creatures differ from each other because of different climatic conditions... There are places on this earth where it is light, while it is dark in other places; day here, night there. There is a place where there is one long day, and where night comes only once in a while for a short time."

Source: Typed copy.

⁴ Mr. Yehudah Meir (Martin) Schechter (5690–5781 (1930–2021)) was a former student of the United Lubavitcher Yeshivos. He later became a professor of mathematics at various universities and was a member of the Association of Orthodox Jewish Scientists.

⁵ *Avodah Zara* 41a, s.v. *KiKadur*.

⁶ *Talmud Yerushalmi, Avodah Zara*, ch. 3, sec. 1.

The Zohar thus clearly states both facts: that the earth is a sphere, and that it turns around its own orbit.

As to the Talmudic passages mentioned above, various commentators have dealt with them, of who I would recommend the most easily accessible, the Maharal of Prague in his “Be’er Hagoloh” Be’er 6; also the ReMO in his “Torath Ho’oloh”, part I, chapter 2, where the Gemoro is explained

With blessing,

3

Ancient Accuracy

Addressing claims that Torah describes flat Earth; Zohar's scientific accuracy predating European university debates by centuries.

By the Grace of G-d
11th of Shevat, 5720
Brooklyn, N. Y.

...With regard to your question whether you are obliged to accept the opinion which, you write, is expressed in our Torah to the effect that the earth is flat, I am not aware of such a statement in the Torah. On the contrary, we have a clear statement diametrically different which, is found in the Zohar, part 3, page 10a, to the effect that “the earth spins around as a globe, and that creatures differ from one another by reason of climate, and there are parts on the earth where there is light, while there is darkness in others, it is day for some and night for others, and there is a place where there is always light throughout the year except for a brief period of darkness.” It is noteworthy that hundreds of years after this was written in the Zohar, debates were still carried on in outstanding universities of Europe, in Paris, and others, as to whether the earth had four corners, rests on pillars, etc. If one still wants additional proof that the Torah is from Heaven, the above may serve as scientifically irrefutable proof.

4

Rediscovered Knowledge

Modern scientific discoveries and the messianic era; Numerous rediscoveries of knowledge already found in Torah sources; examples from Earth's shape, astronomy, and medicine.

By the Grace of G-d
Rosh Chodesh Elul, 5736
Brooklyn, N.Y.

Miss
Long Beach, N.Y. 11561

Blessing and Greeting:

This is to acknowledge receipt of your letter.

I am gratified to note that you read the Sichot and benefit from them greatly. No doubt you mean the real kind of benefit, in accordance with the principle of our Sages Godol limud shemeivi lidei masseh - in terms of the daily life and conduct in conformity with the Shulchan Aruch. And, needless to say, there is always room for advancement in Torah and mitzvos, which are infinite, being derived from the Infinite.

With regard to your observation concerning the discoveries in modern science and their possible connection with עקבתא דמישחא to which you found an allusion in the Sichot on Balak, 5736 - this idea is not original to the Sichot, for it is already mentioned in Zohar (Vayera, 3. 117a) though, as in many instances in Torah, it is mentioned there very briefly.

A propos of the above it should be mentioned that while the Zohar speaks there of new discoveries in the natural sciences, many scientific discoveries are actually re-discovered of things that had been known and forgotten. A classic example of this is the discovery several centuries ago that the Earth is round, and that while it is day in one part of it, it is night in another, etc. This, too, is already stated in the Zohar (Vayikra, 10a). Similarly in certain

areas of astronomy, as alluded to by the Rambam (Hil. Kiddushe Hachodesh, beg.ch.11) similarly also in various areas of medicine, as can be seen from many Talmudic references, and so forth.

Among authors who made a study of this subject, Yekusiel Arye Camelhaar comes to mind.

With blessing,

5

Talmudic Medicine

Theory of evolution; Validity of medical advice in Talmud; changes in human constitution over time; why ancient remedies may no longer be effective.

By the Grace of G-d
11 Tishrei, 5712
Brooklyn, N.Y.

In reply to your letter and questions contained therein:...

II. Re your question as to my opinion of the theory of Evolution. You do not mention what Evolution you are referring to. Presumably the evolution of vegetable and animal life.

My opinion is, as stated in the Torah, that during the Six Days of Creation, G-d created the Four Kingdoms (minerals, vegetation, animal and man) independently of each other. Our Sages have enlarged upon this question in detail. However, this Creation does not deny the possibility of evolution **after that** of particular species through various mutations.

III. With regard to your question concerning the role of Aggadah in the Talmud, particularly those dealing with medicine, I want to point out that you are touching upon two distinct questions: Aggadah in the Talmud, and Medicine in the Talmud.

As to Aggadah, not all Aggadoth can be treated equally. In the introductions to various editions of Ein Yaakov you will find how our Sages classify the Aggadoth of the Talmud.

As the question of Medicine in the Talmud, they are not at all as fantastic as they may appear. As a matter of fact, many medical suggestions in the Talmud have been confirmed in recent years as to their therapeutic value, although medical science had long derided them.

Generally speaking, however, inasmuch as the nature of the human organism had undergone many changes since those days, the medical advice contained in the Talmud cannot be applied nowadays. But it is quite certain that in their days the remedies were quite effective.

For references consult: Tosefot Moed Koton 11a (ד"ה כוורא),⁷ Kesef-Mishnah, ch. 4 of Hilechoth Deoth, ch.18,⁸ and the sources mentioned in Sdei-Chamed, vol. of Kololim, under "R," klal 54, where it is stated that due to physical and climatic changes, medical treatment and remedies of old no longer hold good generally.

In the History of Medical Science many illustrations are cited as to changes in both in man's susceptibility to disease and treatment, the development of virus attack, new diseases, etc. There is quite a literature on the subject, and there is no need for me to enlarge upon this subject.⁹

I am surprised that you do not mention in your letter anything about your activities in influencing others to bring them nearer to Torah and Yiddishkeit, which serves also to strengthen one's own convictions.

With blessing,

⁷ Translation: Perhaps [the health benefits of those things] changed similar to the medicines in the Talmud which are no longer effective.

⁸ Translation: The medicine and conduct of the Babylonians, the nationality of the Sages of the Talmud, is different than that of other nationalities. As we find in *Moed Katan* (11a), the healthy way is to drink after eating fish, whereas in other nationalities the healthy way is not to drink water afterward.

⁹ See also *Likkutei Sichos*, vol. 23, p. 33, ff.

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For references consult: Tosefot Haad-Moten Ila (Hama - fish), Kesef-Mishnah, ch.4 of Bilecheth Deeth, ch.18, and the sources mentioned in Sdei-Chemed, vol. of Kelolim, under "R" Klal 54, where it is stated that due to physical and climatic changes, medical treatment and remedies of old no longer hold good generally.

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With blessing,

6

Spontaneous Generation

Science's actual position on spontaneous generation; How to approach seeming contradictions between halacha and science; Torah's absolute truth versus scientific limitations.

By the Grace of G-d
9th of Iyar, 5724
[Brooklyn, N. Y.]

Mr. ...

New York, N.Y.

Greeting and Blessing:

I am in receipt of your letter, in which you refer to the question about **spontaneous generation**, which you had brought up during

our conversation some time ago, and which you take up again in said letter.

During our conversation, I told you that I had studied this matter from the scientific point of view when I was in France, and have acquainted myself with the authoritative scientific books and authors dealing with this question. The only thing that I was able to ascertain scientifically is that science does not deny the possibility of spontaneous generation, but only declares that so far observation has only shown that **certain** instances of what was believed in the past to be spontaneous generation, were in fact not spontaneous.

In raising the question again in your letter, you seem to ignore this very basic fact and ask again if what the Talmud says about spontaneous generation¹⁰ is true even if it is in conflict with what you think is the scientific view. Surely it should be axiomatic that so long as science does not come out with a categorical declaration that spontaneous generation is impossible, there is no need to attempt to reinterpret the sayings of our Sages. I repeat, I carefully studied this matter in France, where most of the scientific research in this area was done, and I have not found any scientific conclusion that certain low forms of living matter cannot come into being from non-living material. As a matter of fact, many modern biologists believe that it is possible that certain low forms may have developed through chemical processes from non living matter, even if this cannot be demonstrated under satisfactorily controlled conditions.

So much for the general principle that where there is an imagined contradiction between science and Torah, there is no need to reinterpret or allegorize the statements of our sages. However, in regard to the question of spontaneous generation, there is no room whatsoever to explain away the position of our Sages in this matter, inasmuch as it comes in the area of the practical Halacha, and in plain categorical terms. In other words, it is not a case of conjecture (as you write about the explanation which you heard), namely "If there were spontaneous generation, then the Halacha would be

¹⁰ See *Toras Kohanim*, Shmini, 11:44; *Shabbos* 107b; *Mishneh Torah*, Hilchos Shabbos, 11:2; *Sefer HaMitsvos*, Mitvas Lo Sa'asei, 179; *Shulchan Aruch Admur HaZaken*, *Orach Chayim*, 316:20.

such and such.” The Halacha states explicitly that there are species which come into being from nonliving matter, and therefore the Din is such and such.

You are, of course right that the purpose of the Torah, both the *Torah SheBe'al Peh*, and the *Torah SheBiktav*, is to teach the observance of the mitzvot and the proper daily conduct for a Jew, in accordance with the will of G-d, and not that the Torah is, G-d forbid, a textbook of physics or the like. On the other hand, it is equally obvious that what the Torah declares as the truth is true in all particulars. At the same time, science does not deal with absolutes, and can therefore never challenge the truth of the Torah.

There are many verses in the *Torah SheBiktav*, and statements in the Mishnah, the *Torah SheBe'al Peh*, which are the basis for Halacha, or are Halacha in themselves, and which are of a scientific nature, or rather have to do with matters of interest to science. Yet, regardless of what the scientific **theories** might be, they cannot possibly affect the truth of the Torah.

A case in point, in addition to the above, is the passage in Torah¹¹ which declares that there is only one species of animals which has Cloven hoofs but does not chew the cud, while there are only three species of animals which have one or the other of these characteristics, all the rest of the animals having either both characteristics or none. Although this statement in the Torah was made some thirty five hundred years ago, and although since that time new continents have been discovered with all sorts of species of animals, no additional species have ever been discovered which would refute the above mentioned statement of the Torah. A similar situation is in regard to the Mishnah Nidah Chapt. 6:9.¹² Similarly in regard to the principle relating to fishes in the sea, and many other statements of our Sages relating to nature.¹³

With blessing,

¹¹ *Vayikra* 11:4-7; *Devarim* 14:7-8.

¹² Translation: Any fish that has scales has fins, and there are fish that have fins but do not have scales. Any animal that has horns has hooves, and there are animals that have hooves but do not have horns.

¹³ See *Chullin* 63b. For other instances see p.s. of letter dated [11 Shevat, 5720](#), and letter dated [8th Day of Chanukah, 5726](#).

7

The Limits of the Lab

*Limit of a laboratory in disproving spontaneous generation;
'uncertainty principle' in modern science; comparing Torah Sages'
certainty to scientists.*

By the Grace of G-d
Erev Rosh Chodesh Nissan, 5740
Brooklyn, N.Y.

Dr. . . .

Greeting and Blessing:

...To illustrate further the unreliability of laboratory tests in many instances, consider the matter of “spontaneous generation,” cited in Sifra (Vayyikra, Shemini) and elsewhere, including Responsa. Some years ago I was asked how is this possible in the face of the contrary view of science which appears to categorically disprove it? Now, this subject was more familiar territory to me, since I lived for some years in France, where the science of bacteriology was given much attention under the influence of Pasteur, and I was interested in the subject of spontaneous generation also from the Halachic viewpoint. What emerged from scientific experiments was that in some cases of apparent spontaneous generation it was possible to discover, with the aid of a microscope, the existence of an egg or female which were invisible to the naked eye. Hence, it was concluded that there was no such thing as spontaneous generation. But needless to say, the fact that no evidence of spontaneous generation was found does not prove conclusively that such a possibility does not exist, and is certainly no argument to deny the specific case cited by our Sages. The principle of our Sages that “‘We have not seen’ is not proof”¹⁴ is also incontrovertible scientifically, certainly in modern science ever since the “principle of uncertainty” has been universally accepted.

¹⁴ **Published:** *The Letter and the Spirit*, Vol 2, p. 310. See note to letter 2. For the beginning of this letter, regarding the mutations caused by Yaakov Avinu's colored sticks, see *Rebbe Responsa*, [issue 28](#)).

¹⁴ *Eduyos* 2:2.

But we can rely on the evidence of our Sages who were ¹⁵עסקנים בדבר and whose honesty and sense of responsibility are beyond question, since they dedicated all their lives to the study of G-d's Torah, Toras Emes, and gave their very life for it. Thus, they would not make a statement, especially in a matter of halachah, unless they were absolutely sure of its truth. I doubt if even the most honest and responsible scientist can have a stronger sense of responsibility than that of our Torah authorities, lehavdil.

I have expanded on the subject, not because our G-d-given Torah, Toras Emes, needs any defense; nor do our Sages who expounded the Torah shebe'al Peh require support. The Rambam has clearly ruled that one who rejects any point in Torah shebe'al Peh as coming from Sinai (min hashomayim), even though willing to accept it as the truth, is—in his words—כופר בעיקר, that is to say, has no part in the Torah altogether.¹⁶ However, I trust that this lengthy discussion may be helpful to those who do not yet fully realize that the Torah is “our life,” and “it is your wisdom and understanding before the eyes of all the nation” (Deut. 4:6f), or those who are still under the impression that science in some aspects contradicts the Torah and consequently feel a need for reconciling the two. Hence if this discussion can help dispel such doubts or distractions and thus strengthen their commitment to Torah and mitzvos “one while sooner,” it is worth all the trouble, even if it helps one Jew fulfill one more mitzvah. Certainly in light of the Rambam's ruling to the effect that every person should at all times consider his record of good and not good actions, as well as the record of humanity at large as equi-balanced, and by doing just one more mitzvah one tips the scale in favor of merit, both for oneself and for the world as a whole. (Code, Hil. Teshuvah 3:4).

With blessing,¹⁷

¹⁵ = Involved in the matter.

¹⁶ *Mishneh Torah* Hilchos Teshuvah 3:8.

¹⁷ For more on the subject of spontaneous generation see *Emuna uMada* pp. 130 ff.; A. Gotfryd (ed.), *Mind Over Matter: The Lubavitcher Rebbe on Science, Technology and Medicine* (F.R.E.E. Publishing House, 2015) pp. 53 ff; *Igros Kodesh*, vol. 19, letter 7,242*.

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**Nachum and Menucha Rochel
Baron**

on the occasion of their wedding,
14 Sivan 5785

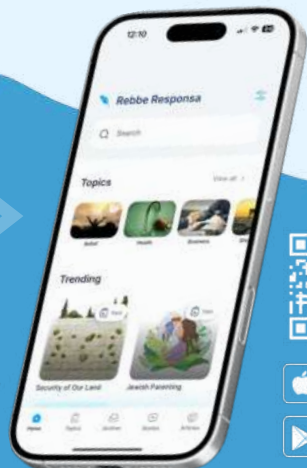
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