



1. Prof. John B. Shank, *Review: Intellectual Curiosity and the Scientific Revolution*, Journal of World History Sept. '12  
In the first thirty millennia or so of human history, planet Earth contained as many different accounts of the natural world as distinct human civilizations. Human knowledge of the celestial and terrestrial world was also diverse and ephemeral with systems of natural knowledge rising and falling in step with the human civilizations that gave birth to them. After 1500, however, this situation changed. Today we have only one authoritative account of the natural world—science—and this account is accepted by every modern person regardless of geographic location. So overwhelming, in fact, is the modern confidence that science offers us the final, eternal account of the cosmos that we imagine it as the only understanding that we would share with extraterrestrials were an encounter with them ever to occur. Moreover, while the ancient ebb and flow of civilizational change continues apace, the history of science appears to present us with a picture of a historical development completed. Science, the modern person says, will continue to discover new things, but the methods of science, have now been achieved once and for all and will never again be altered

#### What are the concerns?

2. Rabbi Yitzchak bar Sheshet Perfet (14<sup>th</sup> century Spain, Algeria), Responsum 447

We do not judge the laws and mitzvot of our Torah based on the words of scholars of nature and medicine. Were we to trust their words, we would say that – Gd-forbid – Torah is not from heaven! This is what they have said, with their false signs. If you would judge in *tereifot* based on medical scholars, you would receive much reward from the butchers!

3. Rabbi Yisrael David Margaliyot (19<sup>th</sup> century Pressburg), Yipach l'Ketz to Genesis 7:1

Our great master always had this response in his mouth: Copernicus' entire goal was to investigate the paths of the stars and the like, and in all of the wisdoms under the Sun he found no purpose for the earth. So why would the Sun circle the earth and serve it? But we, the Children of Israel, are not thus, with our involvement in Torah, which is above the Sun. To us, it is fitting that the Sun illuminate the Earth. Not for the Earth's sake, but for its inhabitants who are involved in pursuits which are above the Sun.

4. Rabbi Asher Weiss (21<sup>st</sup> century Israel), Minchat Asher 2:3

I know that this mode of thinking has been accepted in various scientific fields... The hypothesis which is most logical and acceptable to the heart is the accepted conclusion. But this is not the thought process of halachah and it is not its language. Hypothesis is not at all proof. Opposite every hypothesis one could bring other hypotheses... And even if our imagination could produce no hypothesis, these hypotheses would still have no meaning in the halachic calculus and the path of Torah.

5. Prof. Asa Kasher and Prof. Shlomo Biderman, *Why was Baruch de Spinoza excommunicated?*

The authorities of Amsterdam allowed the Jewish community to humbly maintain its way of life and they rejected the recurrent attempts made by the "Protestant Elders" to restrict the freedom of the Jews...

The Jewish community itself did its utmost to maintain a low-keyed demeanor. In August 1639, the first ma'amad of the Talmud Torah united congregation supplemented the basic regulations with additional ones, including a regulation which prohibited wedding or funeral processions. The reason for this, as provided in the regulation itself, was to prevent possible conflicts with non-Jews, who might be upset by the procession. A more important regulation prohibited against criticizing the Christian religion while talking with Christians or discussing religious matters with them in an attempt to convert them to Judaism, lest this would threaten the "freedom we enjoy" and would make the Jews hateful "for an act which they are not required to engage in according to religion."

6. *Enlightenment*, Stanford Encyclopedia of Philosophy (2010)

The explicit ideals of the French Revolution are the Enlightenment ideals of individual freedom and equality; but, as the revolutionaries attempt to devise rational, secular institutions to put in place of those they have violently overthrown, eventually they have recourse to violence and terror in order to control and govern the people. The devolution of the French Revolution into the Reign of Terror is perceived by many as proving the emptiness and hypocrisy of Enlightenment reason, and is one of the main factors which account for the end of the Enlightenment as an historical period.

### What are our options?

7. Rabbi Eliezer Waldenberg (20<sup>th</sup> century Israel), Tzitz Eliezer 13:104

As an added point, one should note that it appears that scientific findings via tests of blood types are only in the realm of current hypothesis. As we have seen many times, that which science establishes as certain today, science will later establish differently, cancelling that which had been certain the day before. This is because of the new developments and discoveries it reveals later. It is known that the great halachic authorities say not to rely upon and establish law based on medical estimate. Clearly, this is not the same as that which a doctor establishes from a scan or lens...

8. Rabbi Aryeh Carmell, citing Rabbi Eliyahu Dessler (20<sup>th</sup> century England), Michtav meiEliyahu IV pg. 355 fn 4  
Our master was asked about individual laws in which the reasons given for them do not match the reality revealed by scientific investigation in recent times... And our master said that in such cases the law never changes, even though the reason is not clear to us. One should maintain the law with both hands, whether strict or lenient. He explained that the reason is because the sages knew the law by tradition from the earliest generations... The explanation does not mandate the law, but the opposite, the law mandates the explanation, and the explanation given in the Talmud is not the only possible explanation...

9. Tosafot (12<sup>th</sup>-13<sup>th</sup> century Western Europe), Moed Katan 11a כוורא

"*Kavra* [fish] is good when close to rotting" – Today we believe it is dangerous to eat fish that is close to rotting... Perhaps this has changed, like the talmudic medicines which are not good today. Alternatively, perhaps the rivers of Bavel were better. Some explain that "*kavra*" does not refer to fish in general, but to a specific fish called "*kavra*," and it was different from other fish in this matter...

10. Rabbi Sherira Gaon (10<sup>th</sup> century Iraq), Otzar haGaonim, Eruvin, Teshuvah 376

As far as your request to record the medicines from the 7<sup>th</sup> chapter in Gittin, from Rav and Shemuel to the break of the mishnah, in terms of how they were received and to provide their translations: We must inform you that the rabbis were not doctors, and they stated general things they saw in their times, one by one. These are not mitzvah matters. Therefore, you shall not depend upon these medicines; one should not practice any of them until after they have been checked and we know with certainty from expert physicians that this will not harm or endanger someone. So our fathers and elders taught us and told us, not to practice any of these medicines other than *kibla* which we know causes no harm.

### The cow that wouldn't die

11. Rabbi Shlomo ibn Aderet (13<sup>th</sup> century Spain), Responsum 1:98

Question: An animal was found to have an extra eiver [*yeteret*], from one of those eivarim which renders the animal a tereifah, in a place which should render it a tereifah. It was clarified that twelve months had passed. Would we say that since twelve months passed it is not a tereifah, and it is kosher, for Chullin 58 says that a tereifah cannot live twelve months? Although I have seen and heard that some permit this and are lenient, I wish to know your view.

Response: If you saw or heard one who is lenient and permits a *yeteret*, or any other situation the sages listed as a tereifah, do not listen to him, do not agree with him, there should not be such in Israel. It appears to me that one who permits this is slandering the words of the sages. I will speak with you about this at length, so that a fence will be built for you and for all who tremble at the word of Gd, and the words of the holy sages of Israel will not be made like a fence that has been pushed aside, such that a fox could ascend and break through...

And if there is one whose heart disturbs him, saying that perhaps the sages only spoke of the majority of cases and most animals experiencing one of the listed tereifot will not survive, but some of them might survive due to their physical and constitutional strength, then you will have cancelled our mishnah's rule of, "None like this live." All of the cases listed by those sages, within the view of the mishnah's author, cannot live... And if this were true that we had seen it live, this would be testimony that the animal is not among the tereifot. Further, it would be testimony not only about this animal itself, but it would be testimony 'purifying' the animal and its peers. You cannot escape one of two possibilities: Either a tereifah cannot live and the fact that this animal lived testifies that it is not a tereifah, or this case resolves the debates [regarding whether a tereifah can live] and testifies that the law is against the author of the mishnah, and like the author of the baraita who stated that a tereifah can live...

And if you will reply: What can we do – we have seen a *yeteret* of the foot survive twelve months, with our own eyes! This is what Rabbi Yehoshua ben Levi told Rabbi Yosi ben Nehorai: "You depend on that?" Meaning: This is not possible.

It is as though you testify that you have seen the impossible. Or, there is another cause. So, too, here we ask the witness how he knows that this animal had, in fact, survived that period. Perhaps you forgot or erred, or perhaps you were confused regarding the time, or perhaps you confused this animal for another, for it is not possible for him to testify that this animal was in his sights for the entire twelve months. And if he will strengthen himself in his error and say, "No, for I love these foreign words, this is what I saw and this is what I will follow," then we will tell him that it is impossible to slander the words of the sages. The witness, and one thousand like him, should be cancelled, rather than cancel one point of the positions agreed upon by the holy Jewish Sages, the prophets and students of prophets, and statements given to Moshe at Sinai...

12. Rabbi Shlomo ibn Aderet (13<sup>th</sup> century Spain), Commentary to Talmud, Avodah Zarah 24b (Zaks edition)  
In this matter, nature has changed. The same is true for the *inonita d'varda*... which exists in all of our animals.

13. Rabbi Moses Maimonides (12<sup>th</sup> century Egypt), Laws of Slaughter 10:12-13

One may not add to this list of *tereifot* at all. For anything that happens to a domestic or wild animal or to a bird, aside from those conditions listed by the sages of early generations and agreed upon in Jewish courts, the creature may live – and even if we know, medically, that it will not live.

And for all of those listed where they said it is a *tereifah*, even if it appears based on our medicine that of these conditions are not fatal and they could live, we only have that which the Sages listed; as Deuteronomy 17:11 says, "Based on the Torah they will teach you."

14. Rabbi Avraham Yeshayah Karelitz (20<sup>th</sup> century Israel), Chazon Ish Yoreh Deah 5

One should not be shocked; in truth, it appears that Gd created cures even for *tereifot*... But they were not revealed in every generation and every place. Some were revealed and forgotten, but all was arranged by Gd from the beginning of Creation. The Sages were charged with identifying *tereifot* with their Divine inspiration, and it had to happen in the two thousand years of Torah, setting the laws of *tereifot* for all generations...

15. Rabbi Aryeh Carmell, *Comments*, B'chol Derachecha Da'ehu 6 (Winter 1998)

An interesting solution, and one relevant to our topic, is that of the author of *Sefer ha-Hinnukh*, who accepts that since human beings are fallible, giving absolute authority to one body of people must sometimes lead to error. He avers, however, that: "It is better to tolerate one error, with everyone relying on a single authority, rather than that each person should act [with regard to *mitzvo*] according to his own opinion. This course would lead to disruption of the law, disunity of the people and complete abrogation of the truth."

If we assume that Rambam would agree with *Sefer ha-Hinnukh* on this point, the difficulties raised above disappear. By citing the verse from Deuteronomy, Rambam indicated that halakhic decisions comprised in the Talmud, including the list of *tereifot*, are as binding on Israel as a decision of the Sanhedrin. Just as a decision of the Sanhedrin cannot be challenged for the reason adduced above, so the list of *tereifot* cannot be updated. To update the list from time to time in accordance with advances in veterinary medicine might well lead, in theory at least, to an increase in accuracy. But, in practice, it would most certainly lead to disruption and confusion in halakhic decision making. Questions of *tereifot* of fowl and animals occur frequently in every Torah-observant household (or did until recently). One cannot expect every local rabbi to be up-to-date on the latest medical advances, not to speak of differences in medical opinion which there would be no means of resolving. A fixed list enables him to decide every case with certainty. Paraphrasing the *Hinnukh* we might say: *Hazal* preferred to tolerate some factual errors and gain certainty in the decision-making process.

16. Rabbi Avraham Shapira (20<sup>th</sup> century Israel), cited by Rabbi Dr. Neria Gutel, *Hishtanut haTevaim* pg. 39 fn 55

The animal's life has been weakened and diminished, and this is no longer its normal life. For the halachic category of *tereifah*, and for the prohibitions against consumption which depend on it, this weakness is sufficient – even if today it will not necessarily lead to death.