

HALACHIC AND HASHKAFIC ISSUES IN CONTEMPORARY SOCIETY

77 - SCIENCE AND CHAZAL - PART 2

OU ISRAEL CENTER - WINTER 2017/2018

A] REVIEW FROM PART 1: KILLING LICE - THE HALACHA

1. דתניא ר"א אומר ההורג כינה בשבת כהורג גמל בשבת. מתקיף לה רב יוסף - עד כאן לא פליגי רבנן עליה דרבי אליעזר אלא בכינה דאינה פרה ורבה אבל שאר שקצים ורמשים דפרין ורביין לא פליגי ... א"ל אביי וכינה אין פרה ורבה!! והאמר מר יושב הקב"ה וזן מקרני ראמים ועד ביצי כינים! מינא הוא דמיקרי ביצי כינים

שבת קז.

Killing animals on Shabbat is one of the 39 melachot. However, according to one view in the Gemara, killing lice was not included in this prohibition since they do not reproduce sexually like other creatures, but rather generate spontaneously.

2. פרעוש ... אסור לצודו א"כ הוא על בשרו ועוקצו, ואסור להרגו ... אבל כנה, מותר להרגה

שו"ע אורח שטו"ט

This view is accepted as the halacha without any dissent and is ruled in the Shulchan Aruch and subsequently in the Mishna Berura - early 20th Century.

The modern scientific understanding however is that ALL biological life is generated only from other biological life and not spontaneously.

B] RESOLVING THE PROBLEM

We saw 3 possible solutions in Part 1:

- (i) That the lice that Chazal were talking about are different to those of today. This would also have to be true of the lice in the time of the Mishna Berura, which is a difficult proposition.
- (ii) Nishtane Hateva - that nature has changed and the lice which USED to spontaneously generate no longer do so.
- (iii) That science is simply incorrect and in fact lice still do spontaneously generate.

B1] SOLUTION 4 - SCIENCE MAY BE CORRECT: CHAZAL WERE SPIRITUAL GIANTS AND NOT SCIENTISTS

3. אי לאו דמסתפינא אמינא דבזמנינו שחכמי התולדות הביטו וראו וידעו וכתבו דכל בעל חי יהיה מי שיהיה הוה מן הביצים וכל זה הוכיחו בראיות ברורות א"כ שומר נפשו ירחק מהם ולא יהרוג לא פרעוש ולא כינה ואל יכניס עצמו בספק חיוב חאטת. ובדבר הזה אמינא דאם ישמעו חכמי ישראל ראיות א"ה יחזרו ויודו לדבריהם כמו בגלגל חוזר ומזל קבוע כי להחמיר ולא להקל אן קיימין בדבר וחכמי ישראל שחזרו והודו לחכמי א"ה בענין מזל קבוע וגלגל חוזר הורו באצבע דלאו כל מיילי דאיתמרו בגמ' מפי הקבלה הם אלא דחכמי ישראל דברו גם הם לפעמים מפי השכל והחקירה האנושית ולא מפי הקבלה דאל"כ למה להם להודות? היה להם להתחזק בקבלתם ולא לשוב מפני כל ראיות א"ה

פחד יצחק ערך צידה האסורה

Rav Yitzchak Lampronti (Italy 17C) took the view that the halacha should be altered (albeit to be more stringent) and that we should NOT kill lice on Shabbat. His argument is that Chazal were not scientists and did not receive their scientific understanding as part of the tradition from Har Sinai. Rather, Chazal adopted the scientific understanding of their time, which could have been flawed. He states that if Chazal were around today they would certainly alter their psak based on modern science. He brings as a proof for this a Gemara in Pesachim.

4. חכמי ישראל אומרים: ביום חמה מהלכת למטה מן הרקיע, ובלילה למעלה מן הרקיע. וחכמי אומות העולם אומרים: ביום חמה מהלכת למטה מן הרקיע, ובלילה למטה מן הקרקע. אמר רבי: ונראין דבריהן מדברינו

פסחים צד:

The Gemara records a debate between Chazal and sages of the non-Jewish world. Chazal felt that, at night, the sun moved out beyond the sky and returned (unseen) to its starting point for the next sunrise. The non-Jews thought that, at night, the sun was travelling unseen around the other side of the world.¹ Rabbi (Rabbi Yehudah Hanasi - the compiler of the Mishna) felt that the non-Jewish sages were correct and said as much!

5. ולא תבקש ממני שיסכים על מה שזכרוהו מענין התכונה למה שהענין נמצא. כי החכמות הלימודים היו בזמנים ההם חסרות ולא דברו בהם על דרך קבלה מן הנביאים. אבל מאשר הם חכמי הדורות ההם בענינים ההם או מאשר שמעום מחכמי הדורות ההם.

מורה הנבוכים ג"ד

Do not ask me to reconcile everything that they (the Sages) stated about astronomy with the actual reality, for the science of those days was deficient, and they did not speak out of traditions from the prophets regarding these matters, but rather as wise men in that generation on those issues or from what they had heard from the sages of that generation.

6.

רְבִיזָן לָאוּ אֶסְתָּא אֲנוּן וּמְלִין	מְנַהוּן מִדְּעַם אֱלֹא בְּתַר
בְּעֵלְמָא דְחֻזְוִין בְּזֻמְנִיהוּן וּבְחַד	דְּמִבְדִּיק וְיַדַּע בְּוִדְאֵי מַחְמַת
חַד קִצְרָא אֲמְרוּנִין, וְלֹאוּ דְבְרֵי	רוֹפְאִים בְּקִיאִים (אוֹצַר הַגְּאוֹנִים,
מִצְוָה אֲנוּן. הַלְבָּד לָא תִסְמְכוּן	גִּישׁוּן תְּשׁוּבָה שַׁ"ו).
עַל אֲלִין אֶסְתָּא, וְלִיבָא דְעֵבִיד	

Similarly, Rav Sherira Gaon (or possibly his son, Rav Hai Gaon) took the same approach regarding the medical cures suggested in the Talmud. N.B. this is an entirely different approach to this issue than that taken in 'nishtane hateva'.

7. The great excellence of the Sages of the Talmud in the interpretation of the Torah and the investigation of all its rules and details does not oblige us to accept all their statements in the spheres of medicine, natural science or astronomy. Nor need we believe them [in these matters] as we believe them in the interpretation of the Torah, since its deepest wisdom is theirs and it is their task to teach it to all

Maamar al ha-Derashot, Ein Yaakov, p. XIV. (trans from R. Aryeh Carmell - Freedom to Interpret p. 6)²

8. In my opinion, the first principle that every student of Chazal's statements must keep before his eyes is the following: Chazal were the sages of God's law - the receivers, transmitters and teachers of His *toros*, His mitzvos and His interpersonal laws. They did not especially master the natural sciences, geometry, astronomy or medicine - except insofar as they needed them for knowing, observing and fulfilling the Torah. We do not find that this knowledge was transmitted to them from Sinai We find that Chazal themselves considered the wisdom of the gentile scholars equal to their own in the natural sciences. To determine who was right in areas where the gentile sages disagreed with their own knowledge, they did not rely on their tradition but on reason. Moreover they even respected the opinion of the gentile scholars, admitting when the opinion of the latter seemed more correct than their own.

Rav S.R. Hirsch - Trusting the Torah's Sages, Chapter 4

1. This is not necessarily a debate as to whether the earth is round or flat.

2. See the full text of Rav Aryeh Carmell's Freedom to Interpret at <http://www.yasharbooks.com/freedom%20to%20interpret.pdf>

9. והלום ראיתי בס' נשמת אברהם פי"ד ס"ד שמביא דברי רב שרירא גאון ור' אברהם בן הרמב"ם. ומנה ענין זה כאחד מן הטעמים שאין להשתמש ברפואות המובאות בתלמוד. והגרש"ז איוערבאך שליט"א העיר ע"ז (בריש הספר) דנכון היה להביא שיטה זו בשם 'יש אומרים' והעיקר הוא כשאר הטעמים. ושאלתי להגרש"ז שליט"א מי הוא זה שחולק על דברי רב שרירא גאון ור' אברהם בן הרמב"ם? וכתב לי וז"ל: כעת אינני זוכר אם יש מישהו שממש חולק או אפילו אם יש מישהו שיכול לחלוק עליהם. אך יתכן שכוונתי דהואיל ורבים כתבו הטעם של שינוי הטבע ולא הזכירו כלל מפני שיפור הידע בדרכי הרפואה בזמנינו. לכן העירותי שראוי לכתוב בשם 'יש אומרים', ובפרט שבעניני שבת יש שמתירים מלאכת שבת אף שלדעת הרופאים אין שום סכנה עכ"ל

מבוא לספר שמירת הגוף והנפש בפרק ו'

Rav Shlomo Zalman Auerbach understood this view to be a minority opinion, the majority view being that nature has changed - Nishtane Hateva (see Part 1).

B2] SOLUTION 5 - HALACHA IS INDEPENDENT OF THE APPARENT 'REASONS' BEHIND IT

10. I have seen fit to note here that which I heard explicitly from Rav Dessler z'tl, when he was asked about certain laws for which the reasons that have been given for them are inconsistent with the reality determined by scientists of later generations ... It is ruled that one may kill a louse on Shabbos because the louse does not reproduce sexually (but spontaneously generates). Rav Dessler said that with these and with similar cases the law is never changed, even though the reason is not initially understandable to us. Rather, we must firmly grasp the law with both hands, whether for stringent or lenient ramifications.

The reason for this, explained Rav Dessler, is that Chazal knew the law as a tradition from earlier generations ... But with regard to scientific explanations, it is not that the explanation mandates the law, but rather the opposite: that the law mandates an explanation. The reason given in the Talmud is not the sole possible reason. And if, on occasion, they gave an explanation according to the scientific knowledge of *their* day, we are obligated to search for other explanations which establish the law on its basis according to the scientific knowledge of *our* day. Thus I heard from Rav Dessler z'tl.

According to this principle, we can perhaps say, for example, as follows:- ... it is a known principle that the halacha only considers that which can be detected by the senses. According to this, perhaps we can say that since the egg of a louse is extremely small, so much so that at the time of the giving of the Torah it could not be detected at all, the halacha does not consider it at all, and the louse is rated as if it was born from the material which it grows in and consumes, and thus it rates as a lower degree of life-form, for which there is no prohibition of taking a life. We can explain similarly for insects that grow in fruit. The egg that the parent lays in the fruit, from which the insect hatches, cannot be seen at all and is considered as if it does not exist.

Therefore, these insects are considered by the halacha as though they were born from the fruit itself, in which they grow, and they are permitted to eat

All such matters can be explained in similar ways. And even if we do not find an appropriate reason, we shall believe with perfect faithfulness that the law is a true law, and we shall look to Hashem to illuminate our eyes to find a fitting explanation.

מכתב מאליהו כרך ד' עמ' שנה

11. the Rav speaks of the two peaks, the two worlds of Torah and Western culture, and of the need for the individual to live on both of these peaks, in both of these worlds, and to move back and forth between the two. And the Rav adds that though on the one hand there is an abyss separating these two peaks, and that no one - not even the Rambam - succeeded in building a complete and fully adequate bridge between them, on the other hand the peaks must be brought into contact, into relationship with one another, they must understand one another. "We want the man who studies gemara to understand the other peak, the entire physical-mathematical world and the philosophical interpretation of the world, differently than the dry mathematical physicist who dwells entirely in the realm of the profane, in the secular work-a-day world; and we also want to bring that experience, that understanding, that depth and exactitude that we acquire while on the other peak, the peak of culture, into the peak of holiness, of Judaism, in order to deepen it and broaden it and gain new insights into it. We must bring the beauty of Yefet into the tents of Shem."

Summary and extract from a 1958 address by Rav J.B. Soloveitchik to the Rabbinical Council of America

12. I have not been perplexed by the impossibility of fitting the mystery of revelation into the framework of historical empiricism. Moreover, I have not even been troubled by the theories of Biblical criticism which contradict the very foundations upon which the sanctity and integrity of Scriptures rest. While it is true that in earlier generations the rabbinic scholars did feel it necessary to defend Judaism against attacks from Christianity, Science and academic scholars - this is not typical of contemporary Orthodoxy.

Rav Soloveitchik - *Lonely Man of Faith*, edited by David Shatz (New York: Doubleday, 1992), p. 10.

13. Science is about explanation. Religion is about meaning. Science analyses, religion integrates. Science breaks things down to their component parts. Religion binds people together in relationships of trust. Science tells us what is. Religion tells us what ought to be. Science describes. Religion beckons, summons, calls. Science sees objects. Religion speaks to us as subjects. Science practices detachment. Religion is the art of attachment, self to self, soul to soul. Science sees the underlying order of the physical world. Religion hears the music beneath the noise. Science is the conquest of ignorance. Religion is the redemption of solitude.

Rabbi Lord Jonathan Sacks *The Great Partnership* pp. 6-7

14. If science is about the world that is, and religion is about the world that ought to be, then religion needs science because we cannot apply God's will to the world if we do not understand the world. If we try to, the result will be magic or misplaced supernaturalism. We will rely on miracles - and the rabbis ruled, 'Don't rely on miracles.' By the same token, science needs religion, or at the very least, some philosophical understanding of the human condition and our place within the universe, for each fresh item of knowledge and each new accession of power raises the question of how it should be used, and for that we need another way of thinking.

The Great Partnership p. 214

15. Jewish scholarship has never regarded the Bible as a textbook of physical or even abstract doctrines. In its view the main emphasis of the Bible is always on the ethical and social structure and development of life on earth; that is, on the observance of laws through which the momentous events of our nation's history are converted from abstract truths into concrete convictions. That is why Jewish scholarship regards the Bible as speaking consistently in "human language;" the Bible does not describe things in terms of objective truths known only to God, but in terms of human understanding, which is, after all, the basis for human language and expression.

Rav S. R. Hirsch (*Collected Writings* vol 7 page 57)

16. This has absolutely nothing to do with the social and political status of the woman in antiquity. The *chazaka* is not based on sociological factors but on a [verse] in *Bereishit* "and your desire shall be to your husband" ... **It is not a psychological fact, it is an existential fact** ... To say that '*tav lemeitiv tan du milemeitiv armelu*' was due to the inferior political or social status of women at that time is simply misunderstanding the *chazaka* ... Not only the *halachot* but also the *chazakot* [our Sages of blessed memory] introduced are indestructible. You must not tamper, not only with the *halachot*, but even with the *chazakot*. For the *chazakot* spoke ... not upon transient psychological behavioral patterns, but on **permanent ontological principles rooted in the very depths of the metaphysical human personality, which is as changeless as the heavens above**³

"Surrendering to the Almighty" - an address delivered by Rav J.B. Soloveitchik to the Rabbinical Council of America in Nov 1975 - printed Jewish Press Oct 16 1998, p32

Rav Soloveitchik understood that halachic principles are existential halachic facts without a social or historical context.

17. Objectification reaches its highest expression in the *halacha*. *Halacha* is the act of seizing the subjective flow and converting it into enduring and tangible magnitudes. It is the crystallization of the fleeting individual experience into fixed principles and universal norms. In short, halacha is the objectifying instrument of our religious consciousness, the form-principle of the transcendental act, the matrix in which the amorphous religious *hylo* is cast.

Halachic Mind - Rav J.B. Soloveitchik Part IV:1 (p85)

3. My emphasis

18. קודשא בריך הוא אסתכל באורייתא וברא עלמא. בר נש מסתכל בה באורייתא ומקיים עלמא ...

זוהר כרך ב (שמות) פרשת תרומה קסא:

The principle of the objective reality of halacha is based on a mystical idea found in the Zohar that the Torah pre-existed the world and God used the Torah as a blueprint for the world. As such, Torah does not reflect the world but rather the physical world is a reflection of the reality of Torah.

19. ואבוא בזה לשאלתו השניה. וז"ל שאלתו השניה: ידוע שעל ידי בדיקות סוג הדם אפשר לשלול בודאות שראובן הוא האבא של ילד (אף פעם אי אפשר לוודא שהוא כן האבא - רק שיתכן שהוא האבא) האם בדיקה ותוצאותיה תופס מקום בדיני תורה עכ"ל. ואשיבנו כדלקמן: במס' נדה (לא) איתא: ת"ר שלשה שותפין יש באדם הקב"ה ואביו ואמו, אביו מזריע הלובן שממנו עצמות וגידים וצפרניים ומוח שבראשו ולובן שבעין, אמו מזרעת אודם שממנו עור ובשר ושערות ושחור שבעין, והקב"ה נותן בו רוח ונשמה וכו'. והנה באודם שהאשה מזרעת ברור שכלול בזה (ואולי עוד בראש ובראשונה) הדם. ובהגהות הגר"א ז"ל מגיה בהדיא בגמ': 'ודם' וכ"כ בהדיא גם בשאילתות (יתרו שאילתא נו) ... וא"כ מכיון שהדם בא מן האשה זיהות דם יכול להיות ולקבוע בין בן לאמו אבל לא בין בן לאביו בהיות שדם הבן לא בא ממנו. ... ואי אפשר מתוך זה להחליט שפלוני איננו אבי הילד.

שו"ת ציץ אליעזר חלק יג סימן קד (1977)

This can impact directly on halachic psak - here as to whether a medical blood test can be used to establish paternity issues, when the Gemara explicitly says that the blood comes to a child from the mother's side. The Gemara is not dictating medical reality but halachic reality.

This approach sees science and halacha as two entirely separate systems. The halacha commands an a priori validity which is entirely independent of scientific backing. In this way the threat of science to religion can be removed in order to give room for the Tora U'Mada philosophy of Rav Soloveitchik - the pursuit of both Torah and secular knowledge as a mutually beneficial exercise.

B3] SOLUTION 6 - HALACHA AS A DIVINE REVELATION OF THE '2000 YEARS OF TORAH'

The Torah forbids eating an animal which is a 'treifa'. Chazal (Chulin 57b) define a treifa as being an animal which has a physical defect such that it cannot live for 12 months and they go onto define those illnesses which fit into this category. According to modern science, animals with some of the signs of being a treifa are now able to live more than 12 months. Does that mean they are now kosher? Others animals which the Talmud says could live with a certain injury seem to us to have no chance of living. Does that mean they are now treif?

20. It appears that Hashem creates cures even for *treifot* ... but these were not revealed in every generation and in every place, and there were those that were revealed and then forgotten. Everything was arranged and set out by the Creator at the beginning of creation, and it was given over to the Sages to establish *treifot* according to the holy spirit that was displayed upon them ... The establishment of *treifot* was according to the Divine Providence at that time. And those diseases which were fatal at that time, for which the Holy One did not give a cure to his creations at that time, are the *treifot* which are forbidden by the Torah, whether at that time or in future generations.

חזון איש י"ד ה"ג

The poskim agree that (unlike the examples of 'nishtane hateva' seen above, where the halacha did change with a change in nature), certain other halachic definitions are fixed - in the case of treifot as a halacha leMoshe miSinai - and do not change. The Chazon Ish understands that the connection between science and halacha effectively expired at the end of the 2000 years of Torah (from Avraham to the writing of the Mishna). Whatever scientific understanding Chazal possessed at that stage will be the metaphysical basis for determining halacha for all time.

B4] SOLUTION 7 - CHAZAL ARE SPEAKING IN METAPHORS FOR DEEPER ISSUES

21. לפי שדברי כל בעלי החכמה בדברים הנשגבים שהם התכלית אינם אלא בדרך חידה ומשל. ומדוע נתפלא על שחברו את החכמה בדרך משל ודמו אותם בדברים שפלים המוניים?!

פירוש המשנה לרמב"ם מסכת סנהדרין פרק י משנה א

Chazal often cloak complex ideas in parables and the language of common people. In all cases, Chazal must not be taken simply at face-value!

B4] SOLUTION 8 - CHAZAL MAY BE DEALING WITH HALACHIC SCENARIOS TO COME ...

22. עכבר שחציו בשר וחציו אדמה, הנוגע בבשר - טמא; באדמה - טהור. רבי יהודה אומר: אף הנוגע באדמה שכנגד הבשר - טמא

משנה חולין טו

The Mishna deals with the case of a mouse which is half organic and half inorganic regarding the halachot of tumah. This kind of creature is unknown to science, but

Science has produced a mouse with an ear-shaped cartilage on its back. This is not a real human ear but was grown by seeding cow cartilage cells into a biodegradable ear-shaped mold and then implanted under the skin of the mouse.



23. הדביק שני רחמים ויצא מזה ונכנס לזה מהו? ידיה פטר דלאו ידיה לא פטר. או דלמא דלאו ידיה נמי פטר? תיקו!

חולין ע.

One of the strange cases discussed in Chazal is where two animals are backed together and a foetus leaves one and goes up into the other and then emerges for a second time. The question relates to the status of whether the second 'mother' is considered a halachic mother to the foetus or not.

24. ... כמה דברים אשכחן דלא שכיח ומיירי בהן הש"ס לדרוש ולקבל שבר כדאמרין ... הדביק שני רחמים וילא מזה לזה מהו אף על פי שלא יבא לעולם

תוס' כתובות ד: ד'ה עד

Tosafot regards this as one of those unfathomable discussions that Chazal gave us for the purposes of learning and receiving reward for talmud Torah, but which have no practical application. This gemara is now one of the key mekorot in the discussions surrounding surrogate motherhood!!

C] FURTHER READING

- All of the issues raised in these two shiurim can be found in much more detail in the books of Rabbi Natan Slifkin⁴ and (in response) Rabbi Moshe Meiselman.⁵
- Rabbi Meiselman was one of Rabbi Slifkin's greatest critics during the great Torah-Science controversy of 2004-5. He published his thoughts in full in Torah, Chazal and Science
- Rabbi Slifkin responded in kind with over 25 detailed articles reviewing and critiquing Rabbi Meiselman's book in detail.⁶
- The Great Partnership, R' Jonathan Sacks
- In The Beginning, Nathan Aviezer
- Fossils and Faith, Nathan Aviezer
- The Science of God, Gerald Schroeder
- The Science in Torah, R' Yehuda Levi
- Torah and Science, R' Yehuda Levi
- Challenge, Cyril Domb & R' Aryeh Carmell
- Encounter, H. Schimmel & R' Aryeh Carmell

4. Rabbi Slifkin's books can be found at <http://zootorah.com/books/>

5. His book - Torah, Chazal and Science can be found at <https://www.amazon.com/Torah-Chazal-Science-Rabbi-Meiselman/dp/1600912435>

6. These can be found at <http://www.rationalistjudaism.com/2013/10/torah-chazal-and-science.html>