

## ENGLISH ABSTRACTS

### HALACHIC STANDARDS OF THE CHAZON ISH AND THE DISPARITY BETWEEN ACTUAL SCIENTIFIC FINDINGS AND THE DETERMINATION OF THE HALACHA

*Uri Redman*

The halachic dispute among the authorities of the past generations regarding the correlation of halachic standards from the Torah (“shiurim”) with standard units of measure commonly used today, arises from a basic question: are halachic standards given in terms of natural measures (e.g., parts of the body, fruits, eggs, etc.) an attempt to express absolute units using the limited means of the ancient world, or are they themselves the true standards, and thus subject to change with time and place and even subjectively dependent on the individual? This dispute has been understood to have arisen from diverging community traditions; moreover, some view it as a dispute between the written word and the popular tradition (“minhag”). In this paper we suggest that the opinions of the Chazon Ish and Rabbi Chaim Naeh are two comprehensive approaches towards reconciling the mismatch among the various halachic units brought down by the sages, both within the Halachic framework, as well as vis-à-vis presently known values in nature. While both these approaches are based on halachic sources and various accepted traditions, their main innovation lies in each one's attempt to create a single consistent rule for halachic standards which actually depart from current common practice.

The viewpoint of the Chazon Ish, as described in his book *Handbook of Halachic Standards* (“*Kuntros Hashiurim*”), reveals an attempt to deal with central issues in the halachic world, e.g., an opposition to reliance on sources extraneous to Halacha – even physical, archaeological or scientific – for rendering halachic decisions. His opposition to adopting absolute methods of measure for halachic standards has been consistent, despite the development of modern methods of measurement.

Furthermore, the Chazon Ish understands the shiurim as natural estimates, and their estimation for the purpose of establishing a “shiur” is what empowers Chazal in their role of passing on the Halacha throughout the generations, not only as the authoritative expounders of the words of the sages, but also as a binding authority, similar to a decision of the High Court – when confronted with contradictions among the various shiurim, and additionally, even as an authority for creating and

establishing new standards for *mitzvot* from the Torah. On the other hand, in the opinion of Rabbi Chaim Naeh, the role of the sages regarding Halachic standards is purely explanatory, enabling the discovery of the standards that Moses received on Sinai and their formulation in terms of modern units of measure.

As an introduction to understanding the opinion of the Chazon Ish, this article reviews his unique approach towards understanding the concept of “natural world changes” (“*hishtanut hatevaim*”), as well as his opinion regarding the relationship between the halachic units described by natural objects, in contrast with those derived numerically from fruits or parts of the body.

“A MAN PREFERS A *KAB* OF HIS OWN ...”: THE ENDOWMENT EFFECT,  
THE STATUS QUO BIAS, AND LOSS AVERSION IN TALMUD AND  
*POSKIM*

*Tuvia Shlomo Bar Ilan and Nathan Keller*

Behavioral economics is the study of the effects of irrational factors on economic decisions in various fields. One of the phenomena which were found is the endowment effect. When people buy an item, they are ready to pay much less than the price they demand for a similar object of their own which they wish to sell. Another phenomenon is the status quo bias. People prefer to preserve economic situations or at least to change them as little as possible. Both phenomena can be explained by loss aversion. People value something they endow more than something they do not, even if it has exactly the same economic value. This effect holds, even though logically there seems to be no difference between the two options.

In this paper we show how these concepts serve as common ground for several seemingly unrelated themes in Talmud and *Poskim*. This common ground helps to enlighten each of the themes separately. The halachic principles we deal with and analyze according to the above phenomena include rules of *shomrim*, *ona'ah*, *ma'asrot*, assessment of damages, and more.

A NEW ALGORITHM FOR FINDING THE YEARS ON THE HEBREW  
CALENDAR WITH A GIVEN *MOLAD*

*Eran Raviv*

This paper presents a new, simple method for finding the years in the cycle of the Jewish calendar in which a given *Molad* Tishrei occurs.

Other authors (Pinsky, Chanoch Marzbach, Ajdler, and Wilk) presented methods based on the "month remainder" (1d, 12h, 793p), and their solutions were cumbersome. We present an elegant solution based on the "19-year-cycle remainder".

In previous articles, we examined the frequencies of year-types resulting from the distribution of *Molad* Tishrei throughout the week, but here we use this phenomenon to simplify the calculation of finding years with a given *Molad* Tishrei. We also show that any given *Molad* Tishrei will be repeated (in the calendar's cycle of 689,472 years) either three or four times.

ISRAEL'S INDEPENDENCE DAY AND THE HEBREW CALENDAR

*Shai Walter*

Independence Day is a national holiday that was established by the State of Israel, and carries religious significance for some Jews in Israel and around the world. It was decided by the state institutions that Independence Day would be determined by the Hebrew calendar. For this reason, Independence Day is affected by the unique characteristics and rules of the Hebrew calendar, and has entered its list of significant dates.

Notably, the determination of Independence Day's observance also takes the Jewish weekly cycle into consideration, with the intention of not allowing Independence Day to fall on or near the Sabbath due to the celebrations and rituals which would involve its desecration.

The purpose of this study is to examine the calendrical aspects of Independence Day, thereby gaining an appreciation of the history behind the determination of its date and of the interesting challenges arising with the advent of this new national religious observance.

THE YASHAR MI-QANDIA'S PROOF REGARDING THE TWO LINES

*Meir Sendik*

The article presents the issue of two lines in Maimonides' teachings, meaning the reality of two lines that approach each other but would never meet. The article presents the two lines' construction and the Yashar Mi-Qandia's geometrical proof with demonstrating illustrations as well as using an auxiliary construction to split an arbitrary angle into three different ones. It then brings the mathematical source to the Yashar Mi-Qandia's proof – Nicomedes' conchoid.

JEWISH TRADE LAW IN AN ONLINE WORLD

*Yehoshua Liebermann*

The emergence of the Internet generated a technological revolution of considerable ramifications in various areas. One of the most distinct outcomes of the Internet is a profound change that reshaped the market place. As compared with the traditional brick and mortar market, the online market is much less bound to space and time limitations. As a result, consumers (as well as suppliers) are able to collect abundant quantities of market information in practically no time, while geographic location became meaningless to operating a successful business. Both influences challenge the working assumptions underlying Talmudic market setup under a given technology. The present article examines the implications of an online market setting on Jewish trade law and claims that under certain conditions some parts of it become obsolete.

A FLOWCHART AS A MEANS FOR UNCOVERING MAIMONIDES'  
LOGIC ON THE *SUGYA* OF SELF-SACRIFICE IN JUDAISM

*Shalom Kolin*

The issue of self-sacrifice in Judaism (*yeihareg ve-al ya'avur*) has been discussed from every facet since the Middle Ages, in Ashkenaz as a result of *Gzerot Tatenu* (persecutions of 1096) and in Morocco because of the forced conversion by the Almohads. "Iggeret ha-Shemad" (Epistle on Martyrdom) that Maimonides sent

## Abstracts

to the Jews of Morocco contains an analysis of the *sugya* of self-sacrifice in Judaism found in BT Sanhedrin 74a. Yet, its being written in medieval Hebrew makes it difficult to understand. Presenting its content in a flow chart clarifies the epistle's analysis of the *sugya*, which differs from both that of the rabbis of Ashkenaz and those of Provence. The flow chart reveals unique logical additions by Maimonides to clarify his stance: The order of the questions is essential for the proper fulfillment of *kiddush HaShem*.