

Clear as Day

Reciting a B'rakha on the Sun and other Heavenly Bodies

Question:

Your Beth Din, headed by yourself and your colleague HaRav Y'hoshua Bukh, published an Halakhic opinion to the effect that the practice of reciting Birkath HaHama once every 28 years is mistaken. Could the Rav please elaborate?

Answer:

1. **The spurious concept of a 28-year cycle was unknown to Hazal and has no basis in Tora or reality as shall be demonstrated herein.** The B'raytha (Bavli B'rakhoth 59b 1) speaks of reciting the B'rakha '*Ose B'reshith* upon seeing certain heavenly bodies, one of which is "the Sun at its period/strength ('Bithquphatha')". In both manuscript and printed editions of the Talmud this is followed by an explanatory statement attributed to 'Abaye' which instructs us to recite this B'rakha on seeing the Sun on a given day once every 28 years., which statement is quoted by Rambam (MT B'rakhoth 10:20). One would naturally assume that the famous Amora Abaye is being quoted – but one would be wrong. None of the G'onim had such a statement before them: **Halakhoth G'dholoth** quotes only the B'raytha, offering no explanation or instruction whatever. The statement attributed to 'Abaye' is clearly unknown. **R. Sa'adhya Gaon** knew nothing of 'Abaye's statement and explains it very differently (see below no. 9). **R. Hananel** quotes the statement of 'Abaye' as "there are those who explain", a clear indication that such a statement did not appear in his Talmudic text. The same goes for **R. Yisshaq Alphasi** (Riph), a talmidh of R. Hananel, who, it should be noted, does not mention the 28-year cycle of 'Abaye' even as a possible interpretation. **Ra'avya** (146) likewise quotes only the B'raytha. Even **Rabenu Yona** and **Rosh** who agree with Rambam's view (below no. 3) do not quote it in the name of 'Abaye' but rather, like R. Hananel, as an interpretation. There can be only one explanation for these facts: **these early authorities had a substantively different text before them which did not include the statement attributed to 'Abaye'.**
2. The earliest authority to quote 'Abaye' is Rashi (ad loc). It has been suggested that Rashi's commentary on pseudo-Abaye was added by later hands. This speculative claim is belied by the fact that R. Sh'maya, a student of Rashi, writes in his commentary to a certain piyutt (liturgical poem) that in the year 4845 (1085), i.e. during Rashi's lifetime, on a Wednesday morning in the month of Nisan, he recited Birkath HaHama (see *Hakhme Ssorpath HaRishonim*, A. Grosman, p. 357). **This is the earliest record of Birkath HaHama**

being recited according to the stipulations of the Talmudic text as it appears before us today. Another two generations had to pass before we meet 'Abaye' again in Rambam's MT (loc. cit.); his ruling can only be understood if we assume that 'Abaye' appeared in his Talmudic text. The plain fact is that **until Rambam, not a single Halakhic codifier makes mention of a B'rakha connected to the Sun that is to be recited once every 28 years**

3. It follows that 'Abaye' was introduced into the Talmudic text at a very late period and cannot be attributed to S'voraim or S'thamaim, nor even to the G'onim. Based on the foregoing we can conclude that pseudo-Abaye entered at least some of the manuscripts towards the end of the 10th or some time during the 11th century. This statement cannot, therefore, lay any claim to authenticity or authority. No amount of intellectual gymnastics will make this fact go away.
4. Seeing that the B'raytha says nothing about reciting this B'rakha once every 28 years and that such a notion cannot be inferred from the B'raytha per se, it follows that any poseq (codifier) who quotes the B'raytha without comment or addition understood the matter differently, i.e. without reference to a 28-year cycle.
5. There are additional difficulties with Rambam's rulings relating to this matter. Rambam states further (B'rakhoth 10:20) that one is required to recite the very same B'rakha, '*Ose B'reshith*', for the moon and for each of the five planets that were known in ancient times. According to Rambam, one recites this B'rakha on the moon when certain astronomical events coincide – in practice this will occur next in 2015 at the equinox. How many people know this or intend to recite this B'rakha in 2015? Regarding the planets, Rambam continues, one recites this B'rakha when each planet returns to the beginning of its orbit around the Sun as observed from Earth. In practice this means: every 0.24 years for Mercury, every 0.62 years for Venus, every 1.88 years for Mars, every 11.86 years Jupiter and every 29.46 years for Saturn. There is, however, no clear textual basis for these rulings, and it comes as no surprise that no-one follows Rambam's p'saq regarding these issues.
6. The last clause in this problematic Halakha of Rambam z'l makes the following pronouncement: one recites this same B'rakha of '*Ose B'reshith*' "whenever" the constellation Aries (Mazal Ttalle) is seen rising from the eastern most point in the sky. **This astronomical 'event' occurs once every 25,800 years – not exactly "whenever"**. Put another way, this Halakha was stated for Jews 25,000 years in the future! (See the following brief article by Prof. Dershowitz and Yohai Maqbili for an explication of the astronomical facts.)

7. Clearly something is very much amiss with this Halakha as it appears before us in Rambam's Mishne Tora. These facts are all the more perplexing when one considers that Rambam, perhaps more than any other Halakhic authority, presents, as a rule, the plain and precise meaning of the Talmudic text without additions or modifications. Add to this the fact that Rambam was an accomplished astronomer, and one begins to appreciate the conundrum with which we are faced. It would be convenient if one could claim that Rambam never wrote these words and that the text of MT before us erroneous. Unfortunately, it appears thus in all manuscript and printed versions.
8. One might legitimately ask: Is it reasonable to recite this B'rakha for the Sun once every 28 years according to Rambam, but not recite the same B'rakha for other heavenly bodies as stipulated by Rambam in the same Halakha based on the same Talmudic passage?
9. There is **a more correct, more reasonable and more practical time to recite Birkath HaHama: each year at the summer solstice** (June 20 or June 21 in the Northern Hemisphere and December 21 or December 22 in the Southern Hemisphere). This year – 63, ט"ש, or 2010 – the solstice will occur on June 21 or December 21. This is the view of **Rav Sa'adhya Gaon** (Siddur p. 90), and it seems that many Hakhamim held this view: **Rabenu Bahye** in his Tora commentary (B'reshith1:14) mentions reciting Birkath HaHama at the summer solstice (T'quphath Tamuz) in a manner which clearly indicates that this was the accepted and well-known practice. It is reasonable to assume that the **Halakhoth G'doloth** (mentioned above no. 1) was of this opinion as well; the author of the HG, R. Shim'on Qaira, like R. Sa'adhya Gaon, hailed from the Babylonian y'shiva of Sura.
10. A few words of explanation as to the basis for this B'rakha are warranted. We praise HASHEM for the life-giving Sun, without which no life on Earth could exist, on the day that the Sun's rays are the most direct and powerful. The logic of reciting this B'rakha annually on this particular day is something which can be readily appreciated. (This past summer, on Monday 09-04-63, June 21 2010, we stepped outside and recited Birkath HaHama at the conclusion of our regular Nusah Eress Yisrael minyan. I would add that I believe one can say the B'rakha a couple of days before or after the actual solstice.) This as opposed to reciting a B'rakha on the Sun once in 28 years for no apparent reason – there is nothing out of the ordinary, nothing remarkable or special about the Sun on the day that most people recite Birkath HaHama.
11. It is unreasonable to suggest that Hazal would have instituted a B'rakha for a solar non-event of which one could not be aware without specialist knowledge. The same is true for astronomical non-events regarding other planets mentioned by Rambam of which the average person is oblivious. The Tora is for all, not just for astronomers. The day when the Sun is

higher in the sky than any other day of the year is an observable reality, particularly for people who told the time by looking at the Sun. (If today many people are unaware of such realities, this is due to the lamentable fact that many of us are not really in touch with HASHEM's Creation.) According to our explanation of the sources, Birkath 'Ose B'reshith is recited on readily observable events. Many have overlooked this obvious fact: the B'raytha instructs who he **sees ("HaRo'e")** the Sun or Moon at certain times to recite a B'rakha. We are dealing with observable phenomena. The task before us now is to explain how and why such a statement came to be in the first place.

12. **The Sectarian Calendar – the 28-Year Cycle:**

It is possible, and in my view probable, that **the statement attributed to Abaye was deliberately introduced into the Talmudic text by Jewish sectarians.** During the Second Temple period Jews referred to as Ssadhqim/Baythosim challenged Hazal on many issues. One such issue was the calendar.

The existence of deviant Jewish sects who believed that the Tora is to be understood and observed in terms of a **solar calendar** – and that Hazal misled the Jewish nation regarding the calculation of the Festivals by advocating a lunar calendar that is adjusted to keep pace with the solar year – is a well documented fact.

The Talmudh Bavli (M'nahoth 65a 35 onwards) relates that the Baythosim held that Shavuoth had to fall on a Sunday. They interpreted the passage "And you shall count from the morrow of the Shabath....until the morrow of the seventh Shabath shall you count 50 days" (Wayiqra 23:15-16) thus: count from the Sunday after the Shabath that falls during Pesah (Talmudh Bavli M'nahoth 65b 26 onwards); it follows that the 50th day after the 'Omer offering will always be a Sunday.

The sectarian calendar was based on a solar calendar of precisely 364 days, thus precisely 52 weeks. The year was divided into four equal quarters of 91 days each. (As will be seen, the sectarian calendar was based on time periods divisible by 7 or 4.) The first day of each quarter was designated a 'Yom Zikaron'; normative Judaism uses this term to refer to Rosh HaShana. Each quarter began on a Wednesday – the fourth day of creation when the Sun, moon and stars are first mentioned (B'reshith 1:16) – beginning with the first day of the first month (Nisan) of the Jewish year which by no coincidence was also the day of the vernal (spring) equinox (Yom T'quphath Nisan). The second quarter began with the first day (a Wednesday, of course) of the fourth month (Tamuz), which, by no coincidence, was the day of the summer solstice. The third quarter began on the (Wednes)day of the autumnal equinox, the first day of the seventh month (Tishre). The fourth quarter began on the first day (Wednesday) of the

tenth month (Teveth), the day of the winter solstice. The four quarters, it will be noted, correspond precisely to the four seasons of the year. (See the apocryphal books Hanokh I 82:6; Sepher HaYov'lim 6:32 or 6:47).

Each quarter (91 days) consisted of 3 months of 30 days, the first day of Month 1 being a Wednesday and the last day of Month 3 a Monday. At this point a 31st day, a Tuesday, referred to as 'Yom Paghua', was intercalated but did not count as part of any month.

The problem, of course, is that a solar year is not 364 days in length. (A 'year' is defined as the length of time that the Sun takes to return to the same position in the cycle of seasons, as seen from Earth; for example, the time from vernal equinox to vernal equinox, or from summer solstice to summer solstice). The mean tropical or solar year, as of January 1, 2000 was 365.2421897 or 365 days, 5 hours, 48 minutes, 45.19 seconds. The ancients, unable to achieve such a degree of accuracy, counted a year as 365.25 days, often referred to as a Julian year (after Julius Ceasar). This is the length of the year used by the Amora Sh'muel HaBavli (2nd-3rd centuries), also known as Sh'muel the Astronomer, in his calculations. This figure was well known in the ancient world and it is impossible that it was not known to the Jewish sectarians; it is, in fact, mentioned explicitly in the apocryphal Hanokh II, 6:21. It would have been impossible to ignore the significant shift of the seasons inherent in such a system (1.25 days/year), not to mention that the entire purpose of this calendar was that it correspond exactly to the actual seasons. Clearly the sectarians needed to address this issue.

It is widely assumed that once in seven years, during the Sabbatical year, the sectarians intercalated an uncounted week (similar the intercalated 91st day of each quarter) to make up for the 7 missing days of the previous 7 years. Once in 28 years two weeks were added, instead of one, to make up for the discrepancy of $\frac{1}{4}$ day/year ($28 \times \frac{1}{4} = 7$). We can now readily understand the significance of a 28-year cycle from the sectarian perspective. As previously mentioned, the first day of each quarter in the sectarian calendar was referred to as a 'Yom Zikaron'. The beginning of each 28-year cycle – when the Sun supposedly returned to its original position on the fourth day of Creation – was a 'Super Yom Zikaron'. It is equally clear why Hazal never speak of such a cycle; for us it has no relevance.

- 13. The 28-year sectarian cycle, based on a model divorced from reality, is fictitious and spurious: like many sectarian and mystical teachings, it sounds nice but means nothing.** Reciting Birkath HaHama once in 28 years as practiced today does not correspond to any astronomical reality. Even the Julian year of 365.25 days which formed the basis of the Christian world's calendar was deemed too inaccurate. It is due to this fact that the Catholic world, starting in 1582, and eventually the entire Western world, found it

necessary to reform their calendar and rename it the Gregorian calendar. How strange, even pathetic, that the Jewish people should work with a system that was discarded by the Nations, and for good reason, centuries ago.