

# SEPHARDIC INSTITUTE

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בס"ד

## On Bircat HaHamah, April 8, 2009

Shulhan Arukh, based on a Talmudic passage (BT *Ber.* 59b), states:

One who sees the sun in its “turning” (its change-of-season cycle), which is from 28 years to 28 years, at the time when the [Spring] equinox arrives at the beginning of the night [6:00 p.m.] of the fourth day of the week, upon seeing [the sun] in the morning of the fourth day (Wednesday), should recite “Blessed...the Maker of [the works of] Creation.” (O”H 229:2)

This blessing celebrates the creation of the sun and the heavenly bodies, which the Biblical account places at the beginning of the Fourth Day of Creation. Creation is taken to have occurred in the month of Nissan at the time of the Spring Equinox when day and night are equal. The beginning of the fourth day of the week was thus at exactly 6:00 p.m. The sun, orbiting through the heavens, is understood to return to the identical position relative to the earth that G-d placed it in at the time of its creation on the fourth day of the week at 6:00 p.m. only at the end of every 28 years.

The reason follows. Based on their respective orbits, the position of the sun and the earth relative to each other changes slightly each day only to realign with each other at the end of approximately 365 and a quarter days (a solar year). A proper commemoration of the creation of the sun would be when the sun-earth realignment is at the Spring Equinox at 6:00 p.m. entering the fourth day of the week. (The rabbis of Talmudic times accepted the “rule of thumb” length of the solar year of 365 days and six hours for such calculations, knowing it was imprecise.) Since 364 days are divisible by seven there are one and a

quarter days “left over” each year from complete weeks. Each year the sun-earth realignment occurs one and a quarter days later in the week than it did in the previous year. The one and a quarter days will not add up to a number of whole days divisible by seven until 28 years have passed. Thus, every 28 years from the creation of the sun we recite the blessing commemorating its creation. As we now complete 5768 years from the beginning of the count, this year is the 206<sup>th</sup> completion of the 28-year cycle.

The length of the solar year used by the rabbis for this calculation (that of Shemuel) is approximately 11 minutes and 14 seconds longer than the actual length of a solar year as determined by astronomers in modern times (365 days 5 hours 48 minutes and 46 seconds). This difference was not considered very relevant when the calculation was first used for a short number of years; however, after 128 years the minutes and seconds would have added up to a day and the actual date of the Equinox would be one day earlier than the commemoration. Thus the rabbis’ date of April 8 for this year was April 7 in the 19<sup>th</sup> century and will become April 9 at some point in the coming years, while the Spring Equinox remains March 20-21.

Although the early rabbis were not aware of the precise length of the solar year, in the 3<sup>rd</sup> century C.E. they were aware of a much more accurate measurement (that of Rab Ada) of 364 days 5 hours 55 minutes and 25 seconds. They used the more accurate measurement for the intercalating of the solar year with lunar months to establish the calendar such that lunar dates will continue falling out in the same season of the year (particularly that Passover should always occur in the spring month). They

tolerated the “error” in setting the day for the blessing of the sun (and in establishing the day to begin the annual recital of the prayer for rain which is also based on Shemuel) as they undoubtedly anticipated a future convocation of rabbis that would bring everything into alignment with reality, an event that we pray should be soon in our days.

Some leading early authorities, based on a variant Talmudic text that did not mention 28 years, codified the *halakha* in totally different ways. Saadia Gaon, in the 10<sup>th</sup> century, presented the law in his siddur as follows: “This blessing is recited on the day of the solstice of Tammuz” (June 21 or so in the Northern Hemisphere, the longest day of the year). According to Saadia, the blessing was apparently recited annually (see Y. Qapah’s commentary on Mishneh Torah, Hilkhoh Berakhot Ch.10, note 34). The Arukh, in the 11<sup>th</sup> century, states: “another interpretation...in the winter when there are three successive overcast days that the sun and the stars cannot be seen, when they are seen, we recite this blessing, and not otherwise. (In the Jerusalem Talmud) R. Huna cites: ‘And now, they do not see the bright light in the heavens, then a wind passes and clears them [of the clouds]’” (Job. 37:21).

Through the centuries, a substantial number of *posqim*, concerned that the 28-year cycle is not in accordance with the more accurate measurement of the year that is employed for the fixed calendar, refrained from reciting this berakha.

However, the majority of *posqim* have concluded that we should recite the blessing every 28 years in accordance with Shulhan Arukh despite the discrepancy in the calculation, and the powerful symbolic effect need not be affected. This is especially the case as the blessing is one of a general praise of the Almighty focused on His acts of creation and as the sun appears the same every day. The wording of the blessing (after the six-word formula that is usually recited at the beginning of a blessing) is, עוֹשֶׂה מַעֲשֵׂה בְרֵאשִׁית, which translates as “the Maker of the works of Creation.” (This is the same blessing recited upon seeing lightning or other signs of Creation such as the great mountains or deserts.)

The blessing is recited during the first three hours of the day beginning at sunrise, but if missed it may still be recited until noon. Women also recite this blessing. It is not like the blessings “dependent on time” from which they are exempt and upon which (in the Sephardic tradition) they do not recite the blessing even if they choose to fulfill the misvah, such as the case with lulab or succah, which are directed to the specific commandments. Here, the blessing is itself the misvah, a general praise of the Almighty for His works of Creation recited whenever the event that calls it to mind occurs, whether seeing lightning, a great mountain or the sun appearing in a context that commemorates its creation.

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