

NOTES

Witnesses may desecrate Shabbat for the fixing of two months – על שני חדשים מחללין את השבת – The early authorities ask: Why does the Gemara not raise this objection directly from the mishna, which states that messengers were sent in Nisan due to Passover? They answer that although most of the Jewish people may know that Adar is always short, they sent messengers for to the minority of people who did not know. However, if it is permitted for the witnesses to desecrate Shabbat and come, it is clear that sometimes the month was full and sometimes short (Rid; Rabbi Zerahya HaLevi).

The Meiri writes that proof cannot be brought from the month of Nisan, since the Torah writes the mitzva of sanctification of the month with regard to Nisan. Therefore, one may have thought that there is a special obligation to inform about Nisan directly and not make it secondary to the month of Adar.

למימרא: דחסרין עבדינן, מלאין לא עבדינן. לאפקי מדרש רב נחמן בר חסדא: העיד רבי סימאי משום חגי, זכריה ומלאכי על שני אדרים, שאם רצו לעשותן שניהן מלאין – עושין, שניהן חסרין – עושין, אחד מלא ואחד חסר – עושין, וכך היו נוהגין בגולה. ומשום רבינו אמרו: לעולם אחד מלא ואחד חסר, עד שיודע לך שהוקבע ראש חדש בזמנו.

The Gemara comments: That is to say that they make the two months of Adar short months, of twenty-nine days, but they do not make them full months, of thirty days. This is to the exclusion of what Rav Nahman bar Hisda taught, as Rav Nahman bar Hisda taught: Rabbi Simai testified in the name of Haggai, Zechariah, and Malachi about two months of Adar in a leap year, that if the members of the court wish to make them both full, they may do so; and if they wish to make them both short, they may do so; and if they wish to make one full and one short, they may do so. And this is what they would do in the Diaspora, when they did not know which day was established as the New Moon. And in the name of our teacher, Rav, they said: The two months of Adar are always observed, one full and one short, unless it is known to you that the New Moon was fixed in its proper time, i.e., the first Adar is also short.

שלחו ליה למר עוקבא: אדר הפמוד לניסן – לעולם חסר.

A ruling was sent from Eretz Yisrael to Mar Ukva, the Exilarch in Babylonia: The Adar that immediately precedes Nisan is always short, both in a regular year and in a leap year. But the first Adar in a leap year, which does not immediately precede Nisan, is sometimes full.

מתלב רב נחמן: על שני חדשים מחללין את השבת – על ניסן ועל תשרי. אי אמרת בשלמא זמנין מלא זמנין חסר – משום הכי מחללינן.

Rav Nahman raised an objection from what was taught in a mishna: Witnesses who saw the new moon may desecrate Shabbat for the fixing of the New Moon of two months,ⁿ for the month of Nisan and for the month of Tishrei, due to the important Festivals that occur in them. Granted, if you say that the Adar immediately preceding Nisan is sometimes full and sometimes short, due to that reason the witnesses may desecrate Shabbat, as if the witnesses come on the thirtieth, the month will be made short and that day will be declared the New Moon; otherwise, the month will be made full and the next day will be declared the New Moon.

Perek I
Daf 20 Amud a

NOTES

Have the court add an extra day to the month now – נעבריה האידינא – The Rosh points out that this is a relatively weak challenge. The Gemara could have answered: According to your reasoning, Elul is also sometimes full and sometimes short, and nevertheless the witnesses are permitted to desecrate Shabbat in order to testify with regard to the new moon. Nevertheless, the Gemara chose to give another answer.

אלא אי אמרת לעולם חסר – אמאי מחללינן? משום דמצוה לקדש על הראייה.

But if you say that the Adar immediately preceding Nisan is always short, why should they desecrate Shabbat? The court can calculate the time of the New Moon without witnesses. The Gemara answers: Because it is a mitzva to sanctify the New Moon on the basis of the testimony of witnesses who actually saw the new moon and not rely on calculations or established practices.

איכא דאמרי, אמר רב נחמן: אף אנן נמי תנינא: על שני חדשים מחללין את השבת, על ניסן ועל תשרי. אי אמרת בשלמא לעולם חסר – משום הכי מחללינן, דמצוה לקדש על הראייה.

Some say that Rav Nahman said: We, too, learn in a mishna: Witnesses who saw the new moon may desecrate Shabbat to establish the New Moon for two months, for the month of Nisan and for the month of Tishrei. Granted, if you say that the Adar immediately preceding Nisan is always short, due to that reason the witnesses may desecrate Shabbat, because it is a mitzva to sanctify the month on the basis of the testimony of witnesses who actually saw the new moon.

אלא אי אמרת זמנין מלא זמנין חסר – אמאי מחללינן? נעבריה האידינא, ונקדשיה למחר!

But if you say that the Adar immediately preceding Nisan is sometimes full and sometimes short, and there is no regularity to it, why should the witnesses desecrate Shabbat? Have the court add an extra day to the month now,ⁿ since it can decide whether the thirtieth day or the thirty-first day is the beginning of the new month, and let the members of the court sanctify the next day as the New Moon.

It is a mitzva to sanctify the month based on witnesses who saw the new moon – **מְצוּה לְקַדֵּשׁ עַל** – הראייה: It is a positive Torah mitzva for the court to calculate and know when the moon will be visible and when not. Based on this calculation, they must examine the witnesses so that the court is able to sanctify the New Moon (Rambam *Sefer Zemanim, Hilkhot Kiddush HaHodesh* 1:7).

NOTES

מאי טיבותא עבדינן – מה היתה הבעיה: The early authorities write that the matter of declaring a leap year or a whether a month is full or short depended on many factors. Some of the factors were made public, but others were revealed only to those in the select group of Sages who actually decided about the leap year or the length of each month. Although Ulla was one of the Sages of Eretz Yisrael, he did not know the specific reason a day was added to Elul, and only surmised an explanation (Rabbeinu Hananel; *ge'onim*). This fits with the Rambam's opinion. He holds that Rosh HaShana may be delayed due to four specific reasons, but ultimately the court's decision with regard to the New Moon of Elul is not bound by or limited to those factors. According to him, the New Moon was delayed in order to align the solar and lunar calendars. The Sages chose to do add days to the month only at specific times of the year, for the particular reasons applying to each time (see *Penei Yehoshua*).

Due to the dead – משום מתאי: The reason that gentiles may not bury the Jewish dead on Shabbat or on Yom Kippur is not because of any specific prohibition. Rather, it is because people view it as a dishonor for the deceased to be buried at a time when one is liable for *karet* if he performs prohibited labor. Since the reason for burying promptly is only for the honor of the dead, it is a greater honor not to bury him on Shabbat or Yom Kippur.

The practical difference between them is where the Festival occurs adjacent to Shabbat – איכא בינייהו יום: Some early commentaries note that if Rosh HaShana occurs on a Friday, Yom Kippur will be on a Sunday, in which case there is still a problem with regard to both the dead and vegetables. According to Rabbeinu Tam, the resolution requires emending the text. Alternatively, Rabbi Zerahya HaLevi and *Tosafot Yeshanim* explain that the Festival mentioned here is not Rosh HaShana but *Shavuot*. The Rid explains that the reason the Festival was mentioned is only in order to assist in defining this *halakha*; however, avoiding having a Festival adjacent to Shabbat is not a factor in whether or not to have a thirtieth day in the month. Others write that the word Festival here includes Yom Kippur (*Penei Yehoshua*).

אי דאקלע יום שלשים בשבת – הכי נמי. הכא במאי עסקינן? דאקלע יום שלשים ואחד בשבת, דמצוה לקדש על הראייה.

The Gemara rejects this argument: **If the thirtieth of Adar falls on Shabbat, this is indeed what is done.** The witnesses are not permitted to desecrate Shabbat. Rather, the month is made full and the next day is sanctified as the New Moon. **Here we are dealing with a case where the thirty-first of Adar falls on Shabbat,** and so the sanctification of the New Moon cannot be pushed off to the next day, as a month cannot be longer than thirty days. In that case, the witnesses may desecrate Shabbat **because it is a mitzva to sanctify the month based on testimony of witnesses who actually saw the new moon.**^H

מתיב רב כהנא: בשמקדש קיים מחללין אף על כולן, מפני תקנת הקרבן.

Rav Kahana raised an objection from the continuation of the mishna, which teaches: **When the Temple was standing, the witnesses would desecrate Shabbat for establishing the New Moon even for all the months, in order to rectify the offering of the New Moon, i.e., ensure that it is at the proper time.**

מדכולהו לאו משום דמצוה לקדש על הראייה – ניסן ותשרי נמי לאו משום דמצוה לקדש על הראייה.

From the fact that the reason that the witnesses are permitted to desecrate Shabbat for **all** the other months is **not because it is a mitzva to sanctify the month based on testimony of witnesses who saw the new moon,** the implication is that with regard to **Nisan and Tishrei as well,** the witnesses are permitted to desecrate Shabbat for another reason and **not because it is a mitzva to sanctify the month based on the testimony of witnesses who saw the new moon.**

אי אמרת בשלמא זמנו מלא וזמנו חסר – משום הכי מחללינן. אלא אי אמרת לעולם חסר אמאי מחללינן? תיובתא.

Granted, if you say that Adar is sometimes full and sometimes short, due to that reason the witnesses may desecrate Shabbat. But if you say that Adar is always short, why should they desecrate Shabbat? The court knows in advance when will be the New Moon of Nisan. The Gemara concludes: **This is indeed a conclusive refutation to the proof brought by Rav Nahman.**

כי אתא עולא אמר: עבריה לאלול. אמר עולא: ידעי חברין בבליאי מאי טיבותא עבדינן בהדיהו!

It is related that **when Ulla came from Eretz Yisrael to Babylonia, he said:** This year they added an extra day to the month of Elul. Ulla continued and said: **Do our Babylonian colleagues understand what benefit we did for them?**^N We pushed off Rosh HaShana for a day, so that the Festival would not occur adjacent to Shabbat.

מאי טיבותא? עולא אמר: משום ירקא. רבי אחא בר חנינא אמר: משום מתאי.

The Gemara asks: **What is the benefit** in having a weekday between Shabbat and a Festival? **Ulla said: Due to the vegetables** that would not be picked for two days and those picked beforehand that would no longer be fresh. **Rabbi Aḥa bar Hanina said: Due to the dead^N** who would not be buried for two days and consequently would begin to decompose.

מאי בינייהו? איכא בינייהו יום הכפורים שחל להיות אחר השבת. מאן דאמר משום מתאי – מעברינן. ומאן דאמר משום ירקא, לאימת קא בעי להו? לאורתא, לאורתא טרח ומייתי.

The Gemara asks: **What is the practical difference between these two concerns?** The Gemara answers: The practical difference **between them** is in the case where **Yom Kippur occurs directly after Shabbat.** According to **the one who said that the reason is due to the dead** that would go unburied for two days, the court **adds an extra day to Elul** so that Yom Kippur will not occur on Sunday. **But according to the one who said that the reason is due to the vegetables** that would not be fresh, there is no need to add an extra day to Elul. **When would he require the vegetables?** Only **in the evening** following Yom Kippur; and if Yom Kippur falls on Sunday, he can go out **in the evening** after the fast and **bring fresh vegetables.**

ולמאן דאמר משום ירקא, לעבריה משום מתאי! אלא איכא בינייהו יום טוב הקמוץ לשבת בין מלפניה בין מלאחריה; מאן דאמר משום ירקא מעברינן. ומאן דאמר משום מתאי – אפטר בעממי.

The Gemara asks: **But according to the one who says that the reason is due to vegetables,** the court **should still make Elul full due to the dead,** as this is also an important consideration. **Rather,** the practical difference **between them** is with regard to the case where **the Festival of Rosh HaShana occurs adjacent to Shabbat,^N either before it or after it.** According to **the one who said that the reason is due to the vegetables** that would wither, the court **adds an extra day to Elul.** **But according to the one who said that the reason is due to the dead** that would go unburied, there is no reason to make Elul full, because on a Festival **it is possible** to arrange that the dead be buried by gentiles.

NOTES

It is possible in hot water – אֶפְשֶׁר בְּהַמְיָמִי – Some explain that it means that it is possible to use vegetables cooked in hot water instead of raw, fresh vegetables (Arukh; see Ritva).

May intimidate witnesses – מְאַיִימִין עַל הָעֵדִים – Intimidating witnesses to invalidate their testimony makes sense, for example, in judgment of a capital case in which the court seeks to exonerate wherever possible. However, it seems strange to mention the intimidation of witnesses in a case where no one has yet witnessed the event. The Penei Yehoshua explains that since the court made an astronomical calculation and knows that the new moon should have been visible on a certain date, this knowledge is equivalent to visual testimony. One could ask: If so, why it is necessary to have witnesses at all? However, this can be resolved based on the opinion of Rav Sa'adia Gaon that testimony based on seeing the moon is only an external support, to remove the challenge of the heretics. The sanctification of the New Moon is based primarily on calculations, but it seems that in certain cases the Sages wanted the procedure of testifying to remain, even though they had no technical need for it. This may explain Rashi's interpretation of the Gemara.

Rabbeinu Hananel explains that the Gemara is not referring to intimidating the witnesses to testify about something that they did not see. Rather, the Gemara is referring to strengthening and encouraging a weak testimony. If the witnesses saw something that looked like the moon, but they themselves are not sure whether it was the moon or a small cloud, when necessary the court may strengthen their testimony through intimidation and base their decision on it.

The Rambam has a completely different opinion. He explains this entire discussion as referring not to the time of the sanctification of the month or to the decision to add an extra day to the month, but to several days later. If witnesses come and testify that they saw the moon on this day or another, in contradiction to the court's decision, they may be intimidated. He explained that intimidation means that if other witnesses came to disqualify the first witnesses who testified about seeing the new moon, the court intimidates these potentially disqualifying witnesses and disregards their testimony (see Rambam Sefer Zemanim, Hilkhot Kiddush HaHodesh 3:15; Lehem Mishne).

BACKGROUND

The weather is very hot – חֲבִיל לָהוּ עֲלֵמָא – The temperature at the height of summer in Babylonia, or modern-day Iraq, especially between the rivers, where the Jews lived, is higher than in Eretz Yisrael by 3–5°C. In addition, rain is sparse there, and due to the distance from the sea there are no frequent winds. Therefore, it is significantly hotter in Babylonia than in Eretz Yisrael.

וְלִמְאֵן דְּאָמַר מְשׁוּם מְתִיבָא לְעֵבְרֵיהּ מְשׁוּם יִרְקֵינָא! אֶפְשֶׁר בְּהַמְיָמִי.

אִי הָכִי מְאִי שָׁנָא לְדִידָן? אֶפְיֵלוּ לְדִידָהוּ נְמִי! לְדִידָן חֲבִיל לָן עֲלֵמָא; לְדִידָהוּ לָא חֲבִיל לָהוּ עֲלֵמָא.

אִינִי?! וְהִתְנִי רַבָּה בְּר שְׂמוּאֵל: יְכוּל בְּשֵׁם שְׂמַעְבְּרִין אֶת הַשְּׁנָה לְצוּרָךְ – כְּךָ מַעְבְּרִין אֶת הַחֹדֶשׁ לְצוּרָךְ. תְּלַמּוּד לֹאמַר: "הַחֹדֶשׁ הַזֶּה לָכֶם רֵאשׁ חֲדָשִׁים" – כְּזֶה רֵאשׁ וְקַדָּשׁ.

אָמַר רַבָּא: לָא קָשְׁיָא; כָּאן – לְעֵבְרוּ, כָּאן – לְקַדְשׁוּ. וְהָכִי קָאמַר: יְכוּל בְּשֵׁם שְׂמַעְבְּרִין אֶת הַשְּׁנָה וְאֶת הַחֹדֶשׁ לְצוּרָךְ – כְּךָ מְקַדְשִׁין אֶת הַחֹדֶשׁ לְצוּרָךְ? תְּלַמּוּד לֹאמַר "הַחֹדֶשׁ הַזֶּה לָכֶם" – כְּזֶה רֵאשׁ וְקַדָּשׁ.

וְכִי הָא דְאָמַר רַבִּי יְהוֹשֻׁעַ בֶּן לֵוִי: מְאַיִימִין עַל הָעֵדִים עַל הַחֹדֶשׁ שְׁנֵרָאָה בְּזִמְנֵוּ לְעֵבְרוּ, וְאִין מְאַיִימִין עַל הָעֵדִים עַל הַחֹדֶשׁ שְׁלֵא נִרְאָה בְּזִמְנֵוּ לְקַדְשׁוּ.

The Gemara asks: **But according to the one who said that the reason is due to the dead, the court should still add an extra day to Elul due to the vegetables.** The Gemara answers: According to him this is not an important consideration, **because it is possible** to soak the withered vegetables in hot water^N and thereby restore their freshness.

The Gemara asks: **If so, what is different** about those who live in Babylonia and those who live in Eretz Yisrael? Why did Ulla specifically say that adding an extra day to Elul was beneficial to us, in Babylonia; it was beneficial to them as well. The Gemara answers: **For us** in Babylonia the weather is very hot,^B and so vegetables wither and corpses decompose quickly. **But for them** in Eretz Yisrael, the weather is not as hot, and vegetables and corpses can be kept for two days.

S It was taught above that for various reasons a month can have an extra day added, even if the new moon was seen on the night before the thirtieth. The Gemara challenges this assumption: **Is that so? But didn't Rabba bar Shmuel teach in a baraita:** One might have thought that just as the court adds an extra month to a year for some pressing communal need, so too, the court adds an extra day to a month for some similar need.^H Therefore, the verse states: **"This month shall be to you the beginning of months"** (Exodus 12:2). This teaches that when there is a moon like this, see it and sanctify the month. When the new moon is seen, the month must be sanctified without delay.

Rava said: This is not difficult: Here it is speaking of adding an extra day to the month, although the new moon was seen on the thirtieth, which is permitted; whereas there it is speaking of sanctifying the month on the thirtieth, although the new moon was not yet seen, which is prohibited. **And this is what the baraita is saying:** One might have thought that just the court adds to a year or a month for some pressing communal need, so too, a month can be sanctified early on the thirtieth even without seeing the new moon. Therefore, the verse states: **"This month shall be to you the beginning of months,"** which teaches: Only when the moon appears like this, see it and sanctify the month, but not before.

The Gemara comments that this is like that which Rabbi Yehoshua ben Levi said: The court may intimidate witnesses^N through rigorous and confusing examination, so that they will give inadmissible testimony about the new moon that was seen at its due time, the thirtieth of the month. This is so that the court can add an extra day to it, and the New Moon will be sanctified on the thirty-first day. **But the court may not intimidate witnesses** into giving testimony about the new moon that was not seen on its due time, in order that to sanctify the New Moon early, on the thirtieth.

HALAKHA

Fixing the New Moon according to need – קְבִיעַת חֲדָשִׁים לְצוּרָךְ – The Rambam explains that if witnesses arrived after the court had already sanctified the New Moon and testified that they saw the new moon a day earlier, ordinarily the court intimidates the witnesses to confuse their testimony and avoid retroactively changing the calendar. Nevertheless, if the witnesses remain firm in their testimony, the court accepts their testimony and retroactively sets the New Moon on the earlier date. There are cases of need, however, when the court does not accept their testimony under any circumstances. Others claim that the court always sets the date of the month retroactively if witnesses come after the New Moon

has been set, even in cases of need. According to the Rambam, this dispute applies only to other months, or in Nisan and Tishrei after the Festival. However, if witnesses come before the middle of the month in Nisan or Tishrei, all agree that the court does not intimidate the witnesses but sets the dates of the month retroactively based on their testimony.

The court may intimidate the witnesses to confuse their testimony in order to sanctify the month on the thirtieth day after the previous New Moon. This follows the opinion of Rav Dimi from Neharde'a (Rambam Sefer Zemanim, Hilkhot Kiddush HaHodesh 3:15–18).

This ruling is referring to Nisan and Tishrei – **הָא בְּנִסָּן וְתִשְׁרֵי**: Rashi explains that in Nisan and Tishrei the court intimidates the witnesses because it is important to fix the New Moon due to the Festivals that occur in these months. However, the court does not do this for the other months. *Tosafot* and Rambam explain to the contrary: On the other months, the court may intimidate the witnesses, but on these months, when celebrating the Festival on the right day depends on sanctifying the New Moon on the right day, the court does not interfere with the testimony of witnesses.

איני? והא שלח ליה רבי יהודה נשיאה לרבי אמי: הווי יודעין שכל ימיו של רבי יוחנן היה מלמדנו: מאימין על העדים על החדש שלא נראה בזמנו לקדשו, אף על פי שלא ראוהו – יאמרו "ראינו".

The Gemara asks: **Is that so? But didn't Rabbi Yehuda Nesia,^p who was the *Nasi* of the Sanhedrin, send a message to Rabbi Ami: Be aware that all the days of Rabbi Yoḥanan^p he would teach us that witnesses may be intimidated into giving testimony about the new moon that was not seen in its due time.** This was done in order that the new month may be sanctified early, already on the thirtieth. **Although the witnesses did not see the moon, they may say: We saw it.**

אמר אביי: לא קשיא: הא – בניסן ותשרי, הא – בשאר ירחי.

Abaye said: **This is not difficult: This ruling is referring to Nisan and Tishrei,ⁿ which may be sanctified early in order to set the Festivals that occur in those months; that ruling is referring to the other months, which may not be sanctified early, even for some other pressing need.**

רבא אמר: הא דתני רבה בר שמואל – אחרים היא. דתניא, אחרים אומרים: אין בין עצרת לעצרת ואין בין ראש השנה לראש השנה אלא ארבעה ימים בלבד, ואם היתה שנה מעוברת – חמשה.

Rava said: **That which Rabba bar Shmuel taught, that the court may not lengthen or shorten the months for reason of communal need, follows the opinion of *Aherim*, as it is taught in a *baraita*: *Aherim* say: The difference between the festival of *Shavuot* of one year and the festival of *Shavuot* of the following year, and similarly, between *Rosh HaShana* of one year and *Rosh HaShana* of the following year, is only four days of the week.** There are 364 days in a lunar year, which are divided into twelve alternating months, six months that are thirty days long and six months that are twenty-nine days long. Therefore, every year is fifty weeks and four days long. **And if it was a leap year, in which case the year is comprised of 383 days, or fifty-four weeks and five days, there is a difference of five days between them.**

רב דימי מנהרדעא מתני איפקא: מאימין על העדים על החדש שלא נראה בזמנו לקדשו, ואין מאימין על העדים על החדש שנראה בזמנו לעברו.

Rav Dimi from Neharde'a taught the *baraita* in the opposite manner: **The court may intimidate the witnesses into giving testimony about the new moon that was not seen in its due time in order that the new month may be sanctified early, already on the thirtieth. But the court may not intimidate witnesses so that they do not give acceptable testimony about the new moon that was seen in its due time, in order to add an extra day to the old month, so that the New Moon is sanctified on the thirty-first.**

מאי טעמא?

The Gemara asks: **What is the reason for Rav Dimi's opinion? Intimidating witnesses into testifying about something that they did not see is worse than intimidating them to withhold testimony about something that they did see.**

PERSONALITIES

רבי יהודה נשיאה – Rabbi Yehuda Nesia was the son of Rabban Gamliel, who was the son of Rabbi Yehuda HaNasi. He was called Nesia to differentiate him from his illustrious grandfather, the redactor of the Mishna. In Rabbi Yehuda Nesia's time, the position of *Nasi* was a public appointment, whereas the head of the yeshiva and the head of the court were appointed by the leading Sages of the generation.

Rabbi Yehuda Nesia learned Torah from Rabbi Yoḥanan and others of his generation. From other sources, it is clear that he was subservient in matters of *halakha* to the rulings of greater students of Rabbi Yoḥanan, like Rabbi Abbahu and Rabbi Ami. Both in the Babylonian Talmud and the Jerusalem Talmud, many stories are brought about him, including his meeting with the Roman emperor Diocletian. Rabbi Yehuda Nesia served as *Nasi* for many years and was probably the last *Nasi* to have outstanding Torah knowledge and to serve as the head of the Sanhedrin.

רבי יוחנן – Rabbi Yoḥanan bar Nappaha was one of the greatest *amora'im*. His teachings are fundamental components of both the Babylonian and the Jerusalem Talmud. He resided in Tiberias and lived to an advanced age. Almost nothing is known of his family background. He was orphaned at a young age and, although his family apparently owned

considerable property, he spent virtually all of his resources in his devotion to the study of Torah and eventually became impoverished.

In his youth, he had the privilege of studying under Rabbi Yehuda HaNasi, the redactor of the Mishna, but most of his Torah learning came from Rabbi Yehuda HaNasi's students: Hizkiya ben Hiyya, Rabbi Oshaya, Rabbi Hanina, and Rabbi Yannai, who lavished praise upon him. In time, he became the head of the yeshiva in Tiberias, at which point his fame and influence increased greatly.

For a long time, Rabbi Yoḥanan was the leading rabbinic scholar in the entire Jewish world, not only in Eretz Yisrael, but in Babylonia as well, where he was respected by the Babylonian Sages. Many of them came to Eretz Yisrael and became his outstanding students. He was a master of both *halakha* and *aggada*, and his teachings in both disciplines are found throughout both the Babylonian Talmud and the Jerusalem Talmud. In recognition of his intellectual and spiritual stature, the *halakha* is ruled in accordance with his opinion in almost every case, even when Rav or Shmuel, the preeminent *amora'im* of Babylonia, whom he treated deferentially, disagree with him. Only in disputes with his teachers in Eretz Yisrael, such as Rabbi Yannai and Rabbi Yehoshua ben Levi, is the *halakha* not ruled in accordance with his opinion.

NOTES

To fix the calendar for the entire Diaspora – לתקוני – לכולה גולה: There are various opinions among the commentaries as to how to explain this statement of Shmuel. Some claimed that he wanted to establish a fixed calendar, similar to the calendar we currently use, which was set generations later by the second Hillel HaNasi, based on the median times of the lunar months and the movement of the sun (Rabbeinu Hananel). Others explain that Shmuel wanted to save the Babylonian people the trouble of waiting for the messengers from Eretz Yisrael. He therefore made a series of calculations based on the actual appearance of the moon, so that it would be possible to know the parameters by which testimony about a month would not be accepted by the court in the Eretz Yisrael (*Yesod Olam*).

The secret of addition – סוד העיבור: This piece of Gemara is one of the hardest and most complex in the entire Talmud. This is because it deals with different aspects of the secret of addition. There was a special court that fixed the calendar. Unlike the other courts, its deliberations were done only by a small group of Sages, never more than seven, and never before an audience. The traditions and considerations of this court were therefore clouded in great secrecy, to the extent that even as great a Rabbi and astronomer as Shmuel did not know all there was to know about these principles.

Sometimes that court gave certain explanations for their rulings while hiding other, secret reasons for what they did (see Rambam). Even as late as the generations of the *geonim*, there were Sages of Eretz Yisrael who had hidden traditions that were not publicly known. For this reason, this section of Gemara, which includes certain details from this encompassing system of the secret of addition, is difficult to understand.

Based on this piece of Gemara, disputes also arose with regard to setting the Jewish date line. The Rambam, after offering his explanation of the section, admits that he encountered difficulties that he could not resolve. Even Rav Hai Gaon, who had an oral tradition from the heads of the academies, writes in his responsa that he did not find a satisfactory solution that fits the whole section's flow and the astronomical facts.

The *molad* occurred after midday – נולד אחר חצות: According to most commentaries, this is referring to the *molad* occurring after midday, although in later generations some questioned this (see *Yeshua LeYisrael* and *Mirkevot HaMishne*). Some say that it refers to the mean conjunction, and if so this *halakha* is essentially similar to the regular delay for Rosh HaShana referred to as the old *molad* (see Rabbeinu Hananel). Others hold that there is a *halakha* specifically relating to the true conjunction of the moon at noon (*Yesod Olam*; Rabbi Zerahya HaLevi). There are many opinions about the details of this.

Since the Master does not know this – מדעה לא ידע: Rabbeinu Hananel initially suggests a simple way of explaining this: Indeed, Shmuel did not know this principle of the *molad* occurring after midday. However, he himself is not satisfied with this explanation, as this principle is simple and accepted. Some explain that what Shmuel did not know was this matter: A night and a day must be of the new month. It is related to the fundamental question of setting the date line and the place to which the *molad* is connected. Others claim that he did not know how to resolve the perspectives of Babylon and Eretz Yisrael (see *Ittim LaBina*; *Nava Kodesh*).

האי – מיחזי בשקרא; האי – לא מיחזי בשקרא.

In this case, where the witnesses withhold testimony about what they saw and the New Moon is pushed off to the next day, it looks like a lie, as the moon might have been seen by others as well, and people will wonder why the New Moon was not sanctified the previous day. In that case, where the witnesses testify about something that they did not see and the New Moon is a day early, it does not look like a lie, as everybody knows that it is possible that only a few people saw the new moon.

אמר שמואל: יבילנא לתקוני לכולה גולה.

Shmuel said: I am able to fix the calendar for the entire Diaspora^N without witnesses. Shmuel was an expert on the movement of the celestial bodies and on the principles governing leap years and additional days added to months.^N

אמר ליה אבא אבוה דרבבי שמלאי לשמואל: ידע מר האי מילתא דתנא בסוד העיבור: נולד קודם חצות או נולד אחר חצות? אמר ליה: לא. אמר ליה: מדעה לא ידע מר – איבא מי לי אחרנייתא דלא ידע מר.

Abba, the father of Rabbi Simlai, said to Shmuel: Does the Master know the meaning of this statement, as it is taught in a *baraita* dealing with the secret of addition, which discusses calendric calculations: Differentiate between when the *molad* occurred before midday and when the *molad* occurred after midday?^{NB} He said to him: No, I do not know what this means. He said to him: Since the Master does not know this,^N there are probably other matters that the Master does not know, and therefore you must not establish a calendar, relying upon calculations that were made based on faulty or insufficient knowledge.

כי סליק רבי זירא שלח להו: צריך שיהא לילה ויום מן החדש.

As for the meaning of this obscure *baraita*, when Rabbi Zeira went up from Babylonia to Eretz Yisrael, he sent back a letter to his colleagues in Babylonia: In order for a day to be sanctified as the New Moon, it is necessary that both the night and the day be of the new month. That is to say, the *molad* must occur before the beginning of the night.

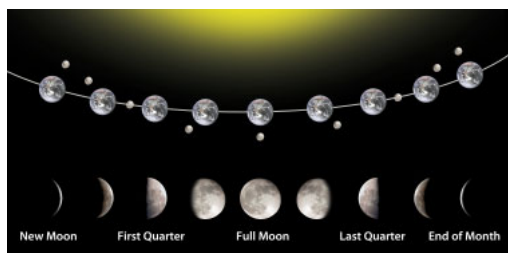
וזו שאמר אבא אבוה דרבבי שמלאי: מחשבין את תולדתו, נולד קודם חצות – בידוע שנראה סמוך לשקיעת החמה; לא נולד קודם חצות – בידוע שלא נראה סמוך לשקיעת החמה.

And this is what Abba, the father of Rabbi Simlai, said: The *baraita* means as follows: They calculate the *molad*; if the *molad* occurred before midday, so that there are at least six more hours left of the day, it is known that the moon will be visible close to sunset. If, however, the *molad* did not occur before midday, so that there are fewer than six hours left of the day, it is known that the moon will not be visible close to sunset.^B

BACKGROUND

מולד האמיתי ומולד אמת: The mean *molad* and true *molad*: The *molad* is defined as the time when a direct line is formed between the earth, moon, and sun. After the moon has deviated slightly from this line, it can be seen from earth. Since the orbit of the moon is not identical to the ecliptic plane but moves a few degrees from it, and since the earth-sun system is not unified all year, the times that pass from one *molad* to another are not equal; in certain months the *molad* is early and in other months it is late. The average time of the *molad* is in fact calculable, but only very infrequently are the true conjunction of the earth, moon, and sun and the mean conjunction identical. The difference between the average *molad* and the actual *molad* can be more than fourteen hours.

The place of the *molad* – מקום המולד: Although the true *molad* relates to well-defined events, there is a fundamental halakhic problem with regard to the mean *molad*: What is the geographical reference point of the *molad*? When it says that the *molad* begins on a specific day and time, it is unclear what point on earth that time is related to. Some think that the calculation point is the place called the navel of the earth, the center of the Eurasian continent, which was calculated at approximately 24° east of Jerusalem. This is the place of the hanging of the luminaries (*Yesod Olam*). An alternate opinion is that the place of the *molad* is the navel of the sea, meaning the antipode of the navel of the earth (*Yeshua LeYisrael*). Others say that the place for calculating the *molad* is at the eastern coast of China (Rabbi Avraham bar Hiyya HaNasi; *Tashbetz*). However, it seems that according to most authorities the *molad* is set by the longitude of Jerusalem (Rabbi Yehuda HaLevi, *Kuzari* and *Tzion Halo Tishali*; Rabbi Zerahya HaLevi; Ibn Ezra, *Sod Halbbur*).



Phases of the moon

לְמַאי נִפְקָא מִינָהּ? אָמַר רַב אֲשִׁי
לְאַכְחוּשֵׁי סַהְדֵי.

The Gemara asks: **What is the practical difference** that this statement makes? In any case, the court is dependent upon the testimony of witnesses. **Rav Ashi said:** This information is used to **refute the witnesses**,^N as if the witnesses claim that they saw the new moon at a time when it was not visible according to the calculations, they are clearly false witnesses.

אָמַר רַבִּי זֵירָא אָמַר רַב נַחְמָן: עֶשְׂרִים
וְאַרְבָּעָה שָׁעֵי מִכְּפֵי סִיְהָרָא. לְדִידָן –
שִׁית מִעֲתִיקָא וְתַמְנֵי סָרִי מַחְדָּתָא;
לְדִידָהּוּ – שִׁית מַחְדָּתָא וְתַמְנֵי סָרִי
מִעֲתִיקָא.

Rabbi Zeira said that Rav Nahman said: For **twenty-four hours the moon is covered**,^N i.e., not visible. This occurs between the last sighting of the old moon and the first sighting of the new moon. **For us**, in Babylonia, it is not visible for **six hours of the old moon and eighteen hours of the new**; **for them**,^N in Eretz Yisrael, it is not visible for **six hours of the new moon and eighteen hours of the old**.

לְמַאי נִפְקָא מִינָהּ? אָמַר רַב אֲשִׁי:
לְאַכְחוּשֵׁי סַהְדֵי.

The Gemara asks: **What is the practical difference** that this statement makes? **Rav Ashi said:** It is used to **refute the witnesses**, as if they testify that they saw two moons, the old and the new, within a single twenty-four hour period, they are certainly false witnesses.

אָמַר מַר: צְרִיךְ שִׁיְהֵא לַיְלָה וְיוֹם מִן
הַחֹדֶשׁ. מִנְלָן? רַבִּי יוֹחָנָן אָמַר: "מִעֶרֶב
עַד עֶרֶב".

The Master said above: In order for a day to be sanctified as the New Moon, **it is necessary that both the night and the day be of the new moon**.^N The Gemara asks: **From where do we derive this?** **Rabbi Yohanan said:** The verse states: **"From evening to evening shall you celebrate your Shabbat"** (Leviticus 23:32). This teaches that the day follows the night for all the calculations pertaining to the Festivals and New Moons.

רִישׁ לְקִישׁ אָמַר: "עַד יוֹם הָאָחָד
וְעֶשְׂרִים לַחֹדֶשׁ בְּעֶרֶב".

Reish Lakish said: It is derived from the verse that states: **"In the first month, on the fourteenth day of the month at the evening, you shall eat unleavened bread, until the twenty-first day of the month at the evening"** (Exodus 12:18). This teaches that the Festival terminates at the end of the day, and a new day begins in the evening.

מַאי בִּינְיֵיהוּ? אָבַי אָמַר: מִשְׁמַעוֹת
דְּוָרְשֵׁין אִיבָא בִּינְיֵיהוּ.

The Gemara asks: **What is the practical difference between** these two derivations? **Abaye said:** There is no practical difference between them. **The interpretation of the meaning** of the verse **is the difference between them**.

NOTES

To refute the witnesses – לְאַכְחוּשֵׁי סַהְדֵי: The explanation here depends on the question of whether or not the Gemara is referring to a real birth of the moon. If so, this statement is purely a factual observation: Within approximately six hours from the time of the true birth, it is impossible to see the new moon in the evening hours (see Rambam and *Meiri*). However, it is not clear whether the Gemara is speaking here about calculating the birth according to the longitude of Jerusalem or somewhere else. If it is from somewhere else, both the explanation of this issue and its relationship to the entire section would change accordingly (see *Yesod Olam* and *Sod Halbbur*).

For twenty-four hours the moon is covered – עֶשְׂרִים וְאַרְבָּעָה שָׁעֵי מִכְּפֵי סִיְהָרָא: The fundamental difficulty in explaining this statement is that it does not seem to match the physical reality. The covering of the moon, the time when it is not seen at all, is much longer than twenty-four hours; it is closer to two days.

In Rabbi Avraham Ibn Ezra's *Sod Halbbur*, it is explained that these are double hours (*Pirkei DeRabbi Eliezer*). Some understand that twenty-four hours is another term for a whole day. It therefore means that for an entire day there is no possibility of seeing the moon according to any calculation of days or in any spot on the planet. Even so, because of variations in the date due to the date line, the time is more than thirty-six hours (Rabbi Avraham bar Hiyya HaNasi, *Sod Halbbur*).

Alternatively, the moon is not considered from the

perspective of a person viewing it from the earth but from the variables which cause the moon to be covered. These include the relative position of the moon, the earth, and the sun as well as the size of the visible moon. The measure of twenty-four hours is set based on consideration for these factors (Rabbi Zerahya HaLevi; see *Be'er HaGola* and *Sefat Emet*).

For us...for them – לְדִידָן...לְדִידָהּוּ: Here there is a fundamental factual difficulty. The difference in longitude between Babylonia and Eretz Yisrael allows for a difference in visibility of an hour and a half at most, and the much greater stated difference of twelve hours is difficult to understand. Almost all the commentaries who raise this question agree that the comparison is not between Babylonia and Eretz Yisrael, but between the eastern and western tips of Eurasia. Some connect the dividing of the eighteen hours and the six hours with the issue of the date line, which, according to some opinions, is located eighteen hours from Jerusalem (see Rabbi Zerahya HaLevi).

The night and the day be of the new moon – לַיְלָה וְיוֹם מִן הַחֹדֶשׁ: This *halakha* and its relation to the rest of the discussion is not clear. Additionally, in explaining this section, a fundamental dispute appears in relation to the actual *halakhot* of sanctifying the New Moon. Is the day on which the new moon is seen set retroactively as the first day of the month (see *Yeshuat Yisrael*), or does the first day of the month always begin on the night following the actual sighting (see Rambam).

NOTES

The dispute of Rabbi Yoḥanan and Reish Lakish – מְחֻלְקֵת רַבִּי יוֹחָנָן וְרֵישׁ לָקִישׁ: Explaining this dispute and its relation to the whole section is not simple. Some explain that the dispute is whether the court must make their calculations according to when a day commences, which is nightfall, or whether their calculations may consider the day to begin any time after sunset, which means midnight may be considered the commencement of a new day (*Yesod Olam*; see Rabbeinu Ḥananel). Some see this dispute as an independent dispute that is connected only partially to the question of a moon born after midday (see Rambam).

רַבָּא אָמַר: חֲצוֹת לַיְלָה אֵיבָא בִּינְיֵהוּ.

Rava said: There is a practical difference between them with regard to the hours before **midnight**. According to Rabbi Yoḥanan, who derives the *halakha* from the verse: “From evening to evening,” the previous day ends at nightfall. Therefore, if the new moon was seen only at the beginning of the night of the thirtieth, the thirtieth is not sanctified as the New Moon. However, according to Reish Lakish, who derives the *halakha* from the verse with regard to Passover: “Until the twenty-first day of the month at the evening,” the moon may be sanctified if it was seen before midnight. Eating unleavened bread on Passover is an obligation only on the first night until midnight. After that time, it is optional. The verse states: “You shall eat unleavened bread, until the twenty-first day of the month at the evening,” implying that it is not obligatory but optional to eat unleavened bread. Since the optional time of eating unleavened bread begins at midnight, after the conclusion of the obligatory time, the conclusion of that time is also at midnight on the twenty-first day. This implies that there is a concept of a day beginning at midnight. Accordingly, if the new moon was seen at the beginning of the night of the thirtieth, the thirtieth can still be sanctified as the New Moon.^{NB}

אָמַר רַבִּי זֵירָא וְרַב נַחֲמָן: כָּל סְפִיקָא לְקַמֵּיה שְׁדִינָן. לְמִימְרָא דְחַמְיָסָר וְשִׁיתַסָּר עֲבָדִין, אַרְבֵּיסָר לֹא עֲבָדִין.

§ With regard to the extra Festival day of that is observed in the Diaspora, **Rabbi Zeira said that Rav Nahman said: Any** time that an extra Festival day is observed out of **uncertainty** with regard to the calendar, **we cast it forward**, i.e., it is observed on the following day and not on the preceding day. **That is to say**, owing to the uncertainty **we observe Sukkot** in the Diaspora **on the fifteenth and the sixteenth** of Tishrei, but **not on the fourteenth**.

וְלִיעֲבַד נְמִי אַרְבֵּיסָר, דְּלִמָּא חֲסְרוּהָ לְאַב וְחֲסְרוּהָ לְאַלוּ!

The Gemara asks: **But why not observe it also on the fourteenth**, as **perhaps** both the month of **Av** and the month of **Elul** were made **short**? In that case, the day that is considered the fourteenth of Tishrei in the Diaspora would actually be the fifteenth of Tishrei, and therefore it should also be observed as *Sukkot*.

BACKGROUND

The date line – קוֹ הַתְּאָרִיךְ: The question with regard to which longitudinal line is considered the beginning of the day according to *halakha* is quite complex. This became a practical question in the year 1942, due to the arrival of European Jews in Japan, who brought this question before their rabbis, but there was not consensus regarding how to answer it.

There are two main opinions: According to the first opinion, there is in fact a halakhic international date line, and there are a number of ways to calculate the date line itself. According to the Ḥazon Ish, in accordance with his understanding of the *Kuzari* and of Rabbi Zerahya HaLevi, the date line is 90° east of Jerusalem. Since this line crosses through land, which could create a situation in which Shabbat should be observed on two different days within one house, the Ḥazon Ish reached the conclusion that all connected land extending to the east beyond the date line is included within the west of the world. Any land that is beyond 90° east of Jerusalem and not connected to the land west of the date line is considered east of the world. Japan, a primary area of dispute, is then a day ahead of Eretz Yisrael. Shabbat there should therefore be observed on what is Sunday for the rest of the world. In the image, areas colored red are either west of the date line or geographically connected to land west of the halakhic date line.

According to the second opinion, there is no halakhic date line. The day on which one must observe Shabbat in any new uninhabited country is determined by the first Jews who arrive there and keep Shabbat, according to their calculation, based on their country of origin. Once there is a community of Jews that observes Shabbat on a certain day, their determination becomes binding on anyone else who comes to that place. Therefore, since there was a well-established Jewish community in Japan that observed Shabbat on Saturday, that should remain the practice. This opinion was expressed by Rabbi Menahem Mendel Kasher in his book *Kav HaTa'arikh*.



Halakhic date line according to the Hazon Ish