

## Maseches Eruvin - Additional notes

1. **Daf 6A** - outline 2):(b)  
Tosfos - a Lechi does not permit an opening wider than 10 Amos - Reshus ha'Rabim is at least 16 wide, so the Lechi must be at least six wide. Ga'on Yakov asks, also a Korah does not permit an opening more than 10, and Tosfos' answer does not apply! If Tosfos holds that a Lechi \*and\* Korah are required [unlike Rif's text, which requires a Lechi \*or\* Korah], this is not difficult.
2. **Daf 8A** - outline 1):(g):2:i  
Our text here permits \*throwing\* [from the side] - we are not concerned lest the wasteheap be diminished to less than 10, and the object would pass through Reshus ha'Rabim (i.e. within 10 of the ground) before reaching its destination. The text in the Mishnah (99B) discuss \*pouring\* [straight down] from a window above - according to this, the only concern mid'Oraisa would be if the heap became less than three Tefachim tall (if it is less than four by four wide it is Makom Patur; if it is four by four and at least three [until 10], it is a Karmelis. However, Rashi there says 'we are not concerned lest it become less than \*10\*' - perhaps we would be stringent if there was a concern that the dropped item will pass through Reshus ha'Rabim, even if in a way that is not forbidden mid'Oraisa.
3. **Daf 9A** - outline 1):(e)  
Our diagram is unlike the one printed with Rashi (Rashi does not allude to it; there is no source to say that the pegs are diagonal, and Rashi and Tosfos say that the pegs would count towards the Korah if they were thick enough, suggesting that they are partially horizontal).
4. **Daf 12A** - outline 1):(d)  
Rashba - The Talmid already had a Korah - he originally thought that R. Eliezer holds that Lechayayim permit, and all the more so a Lechi and a Korah. Tosfos ha'Rosh - he did not have a Korah - R. Eliezer told him that he needs Lechayayim, obviously he adds to the [first Tana's] opinion of Beis Shamai.
5. **Daf 13B** - outline 4):(d):2  
Sha'ar ha'Tziyon 372:18 - Chachamim rely on approximations that are not exact, e.g. the circumference is three times the diameter (also see the comment to 14A 2:e), and a square's diagonal is seven fifths of its side) because it is tedious to be precise - perhaps there is a tradition from Sinai to do so. One may rely on them even regarding mid'Oraisa laws. Tana'im argue (23B) about whether or not we rely on an approximation regarding Beis Sa'atayim - but all could agree that we rely on the above approximations [especially if there was a tradition for them].
6. **Daf 14A** - outline 1):(e):2

There are traditions for extending Mechitzos (Gud Asik and Gud Achis) or ignoring gaps in Mechitzos (Lavud); sometimes we do not apply these, because the potential for goats to stick their heads through shows that it is not a useful Mechitzah. Me'iri - the opinion that considers Korah to be a Mechitzah is not concerned for this, for we say Pi Tikra Yored v'Sosem, since it was not intended to be a proper Mechitzah; Ran - we view the Pi Tikra as if it seals the opening, and goats cannot go through.

7. **Daf 14A** - outline 2):(e)

The exact ratio of the circumference to the diameter is  $\pi$  (Pi) - 3.1415926...; the ratio of the Gematriyos (including one for the word itself) of "v'Chamesh" (355) and "v'Kav" (113) is 3.1415929..., within one part in a million of the exact value of  $\pi$  (Pi) - there is no better approximation for  $\pi$  that is the ratio of Gematriyos [of two words], or of any other whole numbers less than 10,000. There is a superfluous 'Hei' in v'Kav - perhaps this alludes to taking the ratio of this word and v'Chamesh. Alternatively, the ratio of the Gematriyos of v'Kav with and without the Hei is  $118/113 = 1.046...$ , extremely close to the correction factor (the circumference is really  $\pi/3 = 1.047...$  times as big as the verse says it is. (The basis for this note was heard in the name of the Vilna Gaon.)

8. **Daf 14B** - outline 2):(t):1

The Godesh cannot always be a third of the volume, since it depends only on the length and width [on top - we discuss circles and squares, these are the same], not on the height. Rashi - it is a third when the height of the Keli is half the width. Ritva asks, this was true for the Yam Shel Shlomo, its top was round and its bottom was square - had it been all round [or square], the Godesh would have been the same, but the volume would have been less [or more]! He suggests correction factors, i.e. if it is all round (a cylinder) the height should be 60% of its width (diameter), if it is all square (a rectangular box) the height should be 45% of its width. He assumes that the Godesh for a square is the same as for the circle inside - this is true if one pours down [e.g. flour] from above the center (it will form a cone) until it is ready to overflow on the middle of the sides. However, this does not allow for any Godesh outside the circle. If one piles up Godesh on the entire square [by continuing to pour even while it overflows on the middle of the sides, or by placing Godesh there and shaping it into a pyramid], then also for a square the height should be 60% of its width (for both a pyramid and cone, the volume is a third of the height multiplied by the area of the base; it follows that the height of the pyramid and cone is 90% of its side.

According to Sha'ar ha'Tziyon cited above (comment to 13B 4:e), we could say that Chachamim fixed that the Godesh is a third of the volume, even though this is not exact (but we must say that the height is half the width [or close to this], or else the error is too big).

Perhaps the Gemara discuss a Godesh of grain - apparently, the Godesh varies greatly, depending on what is put in the Keli - one cannot make a heap of salt even half as tall as the width of the Keli.

9. **Daf 17B** - outline 5):(d)  
Rashi - all the more so if the distance between them is less they permit. R. Yehonason - if it is less, [during the week] teams of oxen will knock them over! He seems to say that this is the minimum Shi'ur - but this is very difficult. It is clear that the distance cannot be more than the width of two teams - it is unreasonable to say that the distance between planks must be \*exactly\* the width of two teams. Also, the Gemara (19B) says that they argue about a pit between eight Amos and [close to] 12, i.e. R. Yehudah is Machshir even though the distance between Pasim is less than two teams. We must say that R. Yehonason merely explains why Chachamim allowed this width, i.e. if they had to be less the Pasim would not last.
10. **Daf 18B** - outline 3):(b):1  
Rashi – it is disgraceful to walk behind a woman, even one's wife. Maharsha – he is more important; Einayim l'Mishpat - perhaps people do not know that it is his wife. Radvaz – it is forbidden for it arouses lust - this is only if he is close enough to notice her movements; Be'er Heitev – others permit walking more than four Amos behind a woman.
11. **Daf 18B** - outline 3):(c)  
This is brought in Maseches Kalah; it is supported by a Drashah that looking at a woman's finger for pleasure is like looking at her Ervah.
12. **Daf 18B** - outline 3):(e)  
Tosfos (Berachos) deletes the 'verse' regarding Elkanah from the text, for there is no such verse. Maharshal – regarding Pilegesh b'Giv'ah it says “Va'Yakam Ishah va'Yelech Achareha” (Shoftim 19:3) – the Gemara intentionally misquotes the verse to teach that it refers to Elkanah. Maharsha – the Gemara refers to “Va'Yelech Elkanah ha'Ramasah Al Beiso” (Shmuel 1:2:11), which implies that he walked behind his wife.
13. **Daf 21A`** - outline 2):(b):5  
Berachos b'Cheshbon [on the Hagadah] - another meaning of "Etzba Elokim Hi" is that Mitzrayim, which is 400 by 400 Parsa'os, corresponds to Hashem's finger, since the whole world (6000 by 6000 Parsa'os) corresponds to His Zeres, which is 15 fingers.
14. **Daf 23B** - outline 2):(n)  
It seems that the limit of Beis Sa'atayim is mid'Oraisa, since a verse teaches about how to measure it; Tosfos proves from the Gemara on 58A that this Drashah is mid'Oraisa, not a mere Asmachta! However, mid'Oraisa, there is no limit to the size of Reshus ha'Yachid, even if it was not Hukaf l'Dirah (Shulchan Aruch 385:1, Mishnah Berurah

358:5)! Perhaps it is mid'Oraisa regarding the 70 Amos given to cities before measuring the Techum - R. Akiva [who learns from this verse to ignore the remainder] holds that Techumim is mid'Oraisa.

15. **Daf 43B** - outline 3):(b)

Our explanation is based on [and greatly adds to] a Gaon cited in Me'iri. R. Gamliel had tested [on perfectly flat land] at which angle to hold the reed in order to see exactly 2000 Amos; he had an iron stand to hold it steady at the proper angle.

Alternatively, one could calculate the angle at which it should be held. If the reed is at height 'A' and at an angle 'Y' below horizontal, the distance one sees is A times cotangent Y; when Y is very small and measured in radians (180 degrees equals  $\pi$  radians), this is almost exactly A/Y. If his eye is four Amos above the ground, Y is about 1/500 radians.

Two extra considerations apply at sea. Firstly, the ship is perfectly horizontal only if the weight is perfectly balanced - if a person walks to the front or back, this tilts the ship (according to the ratio of his weight to the total weight of the ship)! Presumably, R. Gamliel aligned the reed to be perfectly horizontal (i.e. so he can see endlessly in both directions), then lowered it the proper angle in order to see exactly 2000 Amos. (We must assume that there was little movement on the ship and the water was still.) Secondly, we must consider the height of the reed above sea level - e.g. if it is eight Amos (twice the height when he measured the angle to see 2000 Amos on land), he will see 4000 Amos (twice as far) at sea. He must adjust the angle accordingly, e.g. instead of holding it at angle Y below horizontal, he holds it at angle Y/2.

To measure the depth of a canyon, we assume that the incline is the same on both sides of it, and that the elevation of the level ground on both sides is the same. He stands on one edge and points the reed to the other edge; he turns around [away from the canyon, preserving the angle of the reed] and measures how far he sees on level land - this equals the gap across the canyon, call it 2B (B is the horizontal distance to the middle of the canyon). He points the reed to the middle of the canyon, this is the angle of the incline, call it Z. He faces away [preserving the angle] and measures the distance on level land, call it C. Since the ratios of corresponding sides of similar triangles are equal, if A is the height of eye level (like above), and the vertical depth of the canyon is D, then  $D/A = B/C$ , or  $D=AB/C$  (= B tan Z).

16. **Daf 52A** - outline 2):(g)

(Rabah): All agree that Amirah is required (Rashi (first explanation) - someone else must tell him to stop - if he returns by himself, this shows that he retracted and decided to keep the Techum of his city; R. Tam - Shimon must give a reason to stop, then we say that

Reuven will go once it passes (e.g. the weather changes) - but if he gave no reason, this shows that Reuven reconsidered and decided not to go). They argue about whether or not he needs to have started walking (R. Tam - R. Yosi does not require it; Rashi - R. Yehudah does not require it - he merely discusses the typical case, usually one does not return on his own; we must delete from the Beraisa 'a bigger Chidush - even', for R. Yosi is more stringent than R. Yehudah);

(Rav Yosef): All agree that he needs to have started walking - they argue about Amirah (R. Yosi does not require it). Rashi - Ula and R. Noson are like Rav Yosef's explanation of R. Yosi b'Rebbi Yehudah (we require Amirah and that he started walking; the rejection on Amud B, that it is even like Rabah's explanation of R. Yehudah, applies to both of them). R. Tam - presumably, the dissuasion is on account of the weather. Ula said 'even though he returned', implying that he acquires Shevisah \*despite\* the dissuasion - this is only like Rav Yosef's explanation of R. Yosi.

17. **Daf 53A** - outline 3):(b)

Rebbi: Maharsha says that it was a miracle for six Talmidim to sit in one Amah. Normally, we allow one Amah [or in any case, at least two thirds of an Amah] for a person's width (Sukah 8A; in Hilchos Tzitzis, the opinions of the width of a garment that a 13-year old would not be embarrassed to go out range from half an Amah to an Amah). A similar miracle, 'being crowded when standing and having space when bowing' was experienced even in recent times, in the Beis Medrash of R. Noson Adler (Mishnas R. Aharon Bein ha'Metzarim, p.52, citing the Chasam Sofer). However, we could explain naturally, if Talmidim sat [or stood] on top of each other, or if they were very young children, in particular if a square Amah is discussed.

18. **Daf 54A** - outline 1):(e)

Me'iri - eating and drinking is a metaphor for learning; Sefas Emes - do not be particular about your food, for this wastes time; Ben Yehoyada - one who understands deep secrets can Metaken sparks of Kedushah through eating more than through fasting; Matzpas Eisan - perhaps he suggested that Rav Yehudah adopt Hillel's approach, to build Emunah by eating well during the week and relying on Hashem to bring him nicer food for Shabbos. PF - perhaps he refers to the chance to bless Shehecheyanu (Be'er Heitev 225:13 - one will be held accountable for squandering the opportunity to eat nice food); alternatively, perhaps Shmuel felt that Rav Yehudah starved himself too much [like Abaye, Shabbos 33A].

19. **Daf 54B** - outline 4):(o)

Anaf Yosef (citing the Ari Z"l) asks how R. Freida merited that his entire generation get the world to come, something even Moshe

Rabbeinu did not merit! He answers that 'his generation' refers to the root of his Neshamah and all its branches - normally, not all of them merit the world to come. R. Margoliyus asks, if R. Freida lived 400 years, into the period of the Ga'onim, why are there are no Teshuvos from, or mention of R. Freida among the Ga'onim? He suggests that the text originally said 'Tish'im' (90), which was abbreviated 'Tov' with an apostrophe, and was mistakenly understood (and written) as 400.

20. **Daf 55B** - outline 3):(n):1

Even R. Akiva [who says that Techumim are mid'Oraisa] only forbids leaving the Techum of 12 Mil! Perhaps the Gemara hold like the Taz (Orach Chayim 588:5), that Chachamim would not decree to forbid something [such as circumcision on Shabbos] that the Torah explicitly permits - if the Torah requires leaving the Machaneh to eliminate, it implicitly allows leaving the Techum. People could have been careful to eat only Man on Shabbos and a day or two before Shabbos to avoid the need to eliminate on Shabbos - perhaps we ask from the Slav (it says that people would eat for 30 straight days), or after the Man ceased (surely, even if most men were away fighting and two and a half Shevatim were in Ever ha'Yarden, the size of Machaneh Yisrael was at least a third of its former size. Alternatively, perhaps we ask how the Torah could expect people to be so precise to distance themselves exactly 12 Mil (sometimes one must go further, e.g. to avoid eliminating in front of other people).

21. **Daf 56A** - outline 2):(e):1

(Beraisa #1 did not say that the sun rises due northeast and sets due northwest - perhaps Rav Mesharshiya infers this from the Seifa, for he understands that each direction traversed has the same length. He does not say why he favors Beraisa #2 over Beraisa #1. Perhaps he himself verified Beraisa #2 by observation; alternatively, he merely teaches that even though Beraisa #1 \*seems to\* imply that each direction traversed has the same length, and hence the sun sometimes rises due northeast, this cannot be.

22. **Daf 56b** - outline 2):(f)

Shmuel was an expert astronomer; he taught this calculation even though he knew that it is not exact (an average year is about  $365.24$  days - this is why the Gregorian (secular) calendar has only 24 leap years in most centuries, i.e. every fourth year but not every 100th). He was concerned for Yisraelim exiled to places without Chachamim, so he instituted a simple calculation that everyone could remember - it determines when we start praying for rain in Chutz la'Aretz (60 days after Tekufas Tishrei). - requesting [or failing to request] rain when one should not [or should] can invalidate the Shemoneh Esre. Shmuel knew that Moshi'ach will come before the year 6000; the total error from the approximation will be less than 20 days - Chasam Sofer.

23. **Daf 68A** - outline 1):(b):1

Abaye was a Ba'al Chesed, this caused him to live much longer than others from Beis Eli (Yevamos 105A) - presumably, he would not share his bread because he used to starve himself (Shabbos 33A), and could not survive on less than he prepared for himself.

Ga'on Yakov - Rabah was not Mezakeh because he thought that there was Shituf (R. Yehonason - he had no time, he was constantly surrounded by Talmidim); Abaye knew that there was no Shituf, but he was too poor to Mezakeh from his own.

24. **Daf 68A** - outline 1):(d)

Rashi - One may not use an Otzar for Shituf, because Ein Breirah - if one does not specify which food is the Eiruv and consumes some of it, it is possible that he ate the Eiruv - no one will know, people will carry b'Isur! We decree to forbid even if he will not eat before Shabbos (Tosfos R. Peretz). R. Menachem - it is invalid because the food was not placed l'Shem Eiruv; R. Yehonason - there is no Heker; Me'iri - he wants to store the food; even if he says that people may eat it, he is insincere).

25. **Daf 68A** - outline 1):(f):5

Beis Hillel say, this is even if he intended after the person died. (Rashi - Yesh Breirah, it is as if he intended for this opening from the beginning; R. Menachem - Beis Hillel agree that Ein Breirah - however, the intent helps to Metaher from now and onwards - likewise, intent now to use food in an Otzar for an Eiruv helps, no action is needed [but one must designate the Eiruv in the end - R. Yehonason]. Me'iri - we are not concerned lest he is insincere about taking the Mes out of this opening [and similarly, we do not doubt the sincerity of one who says that people may eat from his Otzar].

The Gemara does not answer for Abaye [who prohibited using an Otzar, unlike Beis Hillel!] Tosfos - Abaye argues with R. Oshaya; according to Rashi, Abaye holds that all agree that Ein Breirah [therefore an Otzar may not be used] - they argue about whether or not the intent helps to Metaher from now and onwards; according to R. Menachem, Abaye holds that we do not learn Eiruv from Tum'ah [regarding whether or not intent suffices]. Mordechai - really, Abaye agrees that Beis Hillel permit to use an Otzar - in any case, he could have been Mezakeh vinegar in a Kli [and not use it]! Rather, Abaye holds that there is no Mitzvah to Me'arev, he merely sought to dispel Rabah bar Rav Chanin, who says that there is a Mitzvah. Rashba - perhaps Abaye never heard Beraisa #2.

26. **Daf 68A** - outline 2):(a)

Behag permits telling a Nochri to do Melachah for Milah - he must explain that [they had to ask the mother because] it was already three days after the Bris, the baby was no longer in danger. Alternatively, it was before the Bris, within seven full [24 hour] days after the birth (e.g. the baby was born Shabbos afternoon), a Yisrael

would heat the water (some texts do not say 'Nochri'). However, a Yisrael may not heat extra water for the baby! R. Yehonason - we ask if she wants to \*bathe\* in hot water - the baby can bathe with her.

27. **Daf 76B** - outline 2):(q)  
Tosfos - judges of Kisari refer to areas - if an [outer] square has area four, the circle inside has area three, and the square inside it has area two, half of the outer square (i.e. two thirds of the circle). R. Yochanan mistakenly thought that they refer to perimeter - he deduced that if a window is four by four, its perimeter (16) is two thirds of the perimeter of the circle around it (24). Gra - he did not err, he discusses the perimeter of the square around the circle (the side of the square equals the diameter of the circle - the side is almost six, so the perimeter is almost 24. Ga'on Yakov - they are stringent to require a circle whose diameter is [eight,] twice the size of the square required, lest people rely on a beam that is too small.
28. **Daf 81A** - outline 1):(j)  
If one removed from a loaf the [minimal] Shi'ur for Chalah or Dimu'a, it may be used. Rashi - this refers to standard Dimu'a, i.e. Terumah that became mixed with at least 100 times as much Chulin; one must remove the amount of the Terumah from the mixture. Rashba - it refers to Tevel [which is sometimes called Dimu'a]; an average person takes one part in 50 for Terumah, about the same Shi'ur as Chalah for bakers. Rashba permits no matter why Kedei Chalah or Dimu'a was removed; Rashi permits only if it was removed to permit a dough. Ga'on Yakov - Rashi allows Kedei Chalah \*and\* Dimu'a together; Sefas Emes - he allows only one of them.
29. **Daf 93A** - outline 1):(a):1  
Rashi explains that the walls are on opposite sides; Rava holds like Rav Yehudah (Sukah 7A), who says that even in such a case a beam one Tefach wide can comprise the third wall. Tosfos - the two walls must be adjacent for Abaye to apply Pi Tikra Yored v'Sosem. Our diagram shows a beam right in the corner (like Rav (ibid)) - the Halachah requires it to be within three Tefachim of the wall, so that with Lavud it is four Tefachim.
30. **Daf 95A** - outline 1):(c):1  
Above (93A) Rashi explained that the Achsadra has two walls and pillars in two corners; here, he explains that the walls consist of pillars within three Tefachim of each other on the sides - perhaps he teaches that Abaye is Machshir even without the pillars, for Pi Tikra Yored v'Sosem makes four walls - see diagram in graphics section.
31. **Daf 95B** - outline 5):(l)  
The Rishonim understand that there is room for two Tefilin, one in back of the other. Ritva - the minimum Shi'ur for Tefilin is two fingers, one should not make them more than four fingers (these are the

Shi'urim currently used for small and big Tefilin).

Since Tefilin must be square, there is room for four small Tefilin (two rows of two across) in place of one big Tefilin! Perhaps we learn from "Bein Einecha" that head Tefilin must be centered, therefore they cannot be side by side. According to the opinion that permits arm Tefilin on both halves of the upper half arm (even closer to the shoulder than the elbow), surely there is room for at least three Tefilin! Perhaps since one cannot wear more than two head Tefilin, it is not normal to wear more than two arm Tefilin at a time, therefore one may do so in order to save. It is difficult why the Gemara asked why one \*may\* save two, the answer was Mechadesh that there is room for two Tefilin! Perhaps the questioner assumed that at least part of the Tefilin must be "Al Levavecha", and the answer is that it need not be.

32. **Daf 99B** - outline 4):(c):1

Me'iri asks, as long as the Chulyah is above three Tefachim it should be permitted [just like a Sefer that became unraveled (97B)], for the bucket does not rest in Reshus ha'Rabim and it is held by a rope! He answers, our Gemara is stringent to be concerned for the opinion that Kelutah k'Mi she'Hunchah (something in the air is considered to be at rest) - according to the Halachah, Kelutah Lav k'Mi she'Hunchah, it suffices for the Chulyah to be three, or even less than three according to Rava [who requires Akirah to be from an important place, even within three of the ground].

The concern when the Chulyah is below 10 is that once it is lifted above the Chulyah, it immediately swings outside of the airspace of the pit [towards the wall under the window], within 10 Tefachim above Reshus ha'Rabim. But even if the Chulyah is 10 tall [or slightly more], unless the bucket is pulled up quickly, it will swing towards the wall and drop within 10! Perhaps we consider this last concern to be Davar she'Eino Miskaven (he does not want it to swing down, lest the bucket hit the ground or wall and spill or break), whereas the former concern is intended (he wants the bucket to come towards the window).

33. **Daf 101A** - outline 2):(c)

R. Yehonason - R. Yosi does not argue with the previous Tana. Tiferes Yisrael - the previous Tana permits regarding a butchers' market, for which there can be a need on Shabbos (also cooked meat is sold there - Kelim 5:6); Rabbi Yosi permits a wool market, even though there is no need for it on Shabbos.

34. **Daf 103B** - outline 4):(e)

Rashi says that the back of the finger is not used for Avodah - but it is difficult to imagine how a reed will stay on if it is not tied around the front [unless it is very sticky]. Alternatively, we could say that it is on a finger not needed for a particular Avodah.