

## OVERVIEW of the Daf

### 1) MISHNAH: (cont.)

#### The fifty amah rope

The source for measuring the techum with a fifty-amah rope is identified.

A Baraisa explains why the rope may not be more or less than fifty amos.

R' Assi identifies the type of rope that should be used.

A Baraisa explains why ropes are used rather than chains.

R' Yosef disagrees with R' Assi concerning the type of rope that should be used.

### 2) Measuring by spanning and piercing

A careful reading of the language of the Mishnah indicates that if one cannot span a valley directly opposite the city, one should move to a place where spanning is possible. This procedure is echoed in a Baraisa.

A contradiction between the cited Baraisa and the Mishnah is noted concerning the procedure to measure when there is a wall that obstructs the measurement.

The contradiction is resolved.

R' Yehudah in the name of Shmuel rules: If one could drop a plumb line straight down into a valley it should not be measured by piercing.

R' Yosef, according to one version, ruled that a valley may be spanned only when it is not deeper than two-thousand amos. According to the second version, he ruled it may be even deeper than two-thousand amos.

Avimi ruled that as long as the plumb line does not deviate more than four amos it is considered vertical and may not be measured by piercing.

Two contradictory versions of Rava's ruling concerning the acceptable angle of a sloped mountain that may be spanned are presented.

### 3) Clarifying the Mishnah

The Gemara explains why it is forbidden to leave the techum in order to span.

The procedure for piercing is explained.

R' Nachman in the name of Rabbah bar Avuha limits the use of measuring by piercing.

**4) MISHNAH:** The techum must be measured by an expert. Any time there is an uncertainty regarding the measurement, we accept the more lenient measurement. ■

## Gemara GEM

### The credibility of a solitary witness

ואפילו עבד אפילו שפחה נאמנין לומר עד כאן תחום שבת שלא אמרו חכמים את הדבר להחמיר אלא להקל:

תוספות עירובין (נט/א) ד"ה ותחומין דרבנן -

משמע אי הוה דאורייתא לא מהימני ואע"ג דמעשה בכל יום שמאמינין לנשים בשחיטה וניקור ולתרום חלה היינו משום דהוי בידה קודם שנעשית השחיטה הוי בידה לשחוט אבל לתחומין לא הוי כלל בידה

The Mishnah tells us that even slaves are believed to testify as to the extent of the techum Shabbos of a locality.

The Gemara (below, 59a) tells that the reason why we are lenient to such an extent is that the 2000 amos of techum Shabbos are a rabbinic enactment. The obvious inference is that if the 2000-amah limit had been Torah law, we would not be allowed to accept the testimony of the slaves.

For that matter, Tosafos assumes (ad loc., d.h. U'techumin) we would not be allowed to accept the testimony of any person whose testimony is not acceptable in a court of law. Thus, we would not be allowed to accept the testimony of a woman. Yet, ask the Tosafos, we regularly believe women concerning more severe areas of Torah law – e.g., kashrus and niddah, etc. – why not in connection with techum Shabbos?

Tosafos responds that we only accept the testimony of women and other witnesses who cannot testify in a court of law when they testify concerning a matter that is, or at least was, under her control (בידה) at some point. For example, at some point in the past a woman could have exercised her control on this piece of meat (while it was still a part of a live cow) and slaughtered it properly. Or, at some point, either in the past or the present, a woman who was a niddah could have exercised her control of her actions and immersed in a mikveh. The extent of the techum Shabbos, on the other hand, is an objective matter of measurement, not subject to her control, and therefore a matter in which we cannot credit her testimony.

The Beis HaLevi (Teshuvos 2:37.4) derives from this discussion a fundamental stringency regarding the credibility of any soli-

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## REVIEW and Remember

1. What two halachos are derived from the phrase חמישים בחמישים?
2. When is a wall spanned and when is its width estimated?
3. Under what circumstances would R' Yosef permit spanning a valley more than two-thousand amos deep?
4. Why do we accept the lenient measurement when there are conflicting results?

# HALACHAH Highlight

## Preferred measuring instruments

Flax is used for measuring

**R'** Yehoshua ben Chananya contends that there is no object that would measure more precisely than a metal chain; however, the Torah relates that when measuring distances one must use a flax rope. This statement is codified in Shulchan Aruch<sup>1</sup> as well. The difficulty with this is that there are many instances in which distance is measured in different manners. For example the Gemara above (43b) related that R' Gamliel measured 2000 amos with a viewing tube that would allow him to see a distance of 2000 amos. The Gemara also advised a person who does not know where the techum ends to walk 2000 steps and should consider that to be the end of the techum. Interestingly, this ruling is also codified in Shulchan Aruch<sup>2</sup>.

Nesivos Shabbos<sup>3</sup> suggests that there is a difference between an individual who measures a distance for himself and measuring a distance for the public. The requirement to use a flax rope is limited to one measuring for the public, but an individual who measures for himself may use any method that he chooses. Sefer Machanah Yisroel<sup>4</sup> answers that the requirement to use a flax rope specifically is limited to one who will use a rope or chain for measuring distance. When it comes to ropes and chains, a flax rope will generate the most accurate measurement. However, if one measures distance using a different manner, e.g. a tube, the only requirement is that it should be reliable and accurate. Therefore, nowadays there is no issue to use surveyor's

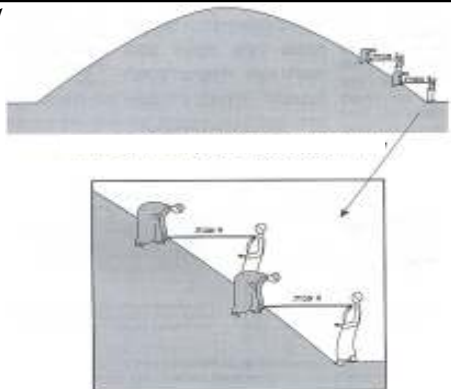
של פשתן למדידה

# Daf DIAGRAM

## Spanning the Hills and Mountains

**I**f a mountain or hill is wider than 50 amos, and the rope cannot span across it, we use the process called מקדרין—piercing.

A rope of 4 amos is used. It is held by the person at the lower level at his chest, while the person higher up holds it at his feet. Thus, the measurement of each 4 amos is made with the rope being held horizontally, and the accrued length is used to determine the linear distance across the hill. ■



instruments to measure a techum. His cautionary remark is that when measuring distance on mountains and valleys there are times, depending upon the angle of the slope, that it is measured as though the ground is flat without the added distance that results from the slope and other times the added distance of the slope is included in the measurement. ■

1. שו"ע או"ח סי' שצ"ט סעי' א'.

2. שו"ע או"ח סי' שצ"ז סעי' ב'.

3. נתיבות שבת פמ"ג סק"ד.

4. מחנה ישראל תחום העיר סי' ט' פ"א אות ג'.

# Distinctive INSIGHT

## Does the techum have to be measured by an expert?

אין מודדין אלא מן המומחה

The measurement may not be done by anyone but an expert.

**R**ashi explains that the Mishnah is teaching that only an expert surveyor is allowed to measure the distance of the techum. Rambam, in his Commentary to the Mishnah, echoes the same idea when he writes that the surveyor must be an expert in mathematics to measure the distance of the techum. Normally, if two people measure the techum, and their measurements do not match, we can follow the more lenient of the two, for the laws of erubin are rabbinic. However, the Yerushalmi writes that if an amateur would measure the distance, and his marking would result in a longer distance, we would not be allowed to rely upon his lenient results, for he is ineligible to do the job. Rosh (סי' ז') notes that this comment of the Yerushalmi sup-

ports this opinion of Rashi, and that only an expert is qualified to do the calculation of the techum.

Rosh also points out that according to Rashi, we must change the Mishnah to read: "אין מודדין אלא מומחה" (without the word "מן"), since this wording is more consistent with his understanding of the Mishnah.

R' Chananel, however, maintains the wording of the Mishnah as it appears (with the word "מן") and explains that the word מומחה is related to the word ומחה, meaning "direct area" as in the pasuk (Bemidbar 34:11): "ומחה - And it shall reach the edge of the Kinneret Sea." In other words, as explained by the Rosh, the techum must be measured directly opposite the city even if that involves piercing or spanning, rather than off to the side where there are no impediments.

Tosafos Chadashim, a commentary to the Mishnah, writes that the proof for Rashi suggested by the Rosh from the Yerushalmi is not a definitive proof. It is possible that the Yerushalmi's comment was not made in reference to the first part of the Mishnah as the

Rosh understood. Rather the comment was made in reference to the later halachah, namely, "If the measurement was long in one place and short in another we follow the longer measurement." This is only true, explains Tosafos Chadashim, if the measurement was performed by an expert. Furthermore, the language of the Mishnah is inconsistent according to Rashi. The Mishnah should have read אין מודדין אלא מומחין, rather than מן המומחה, to maintain consistent plural language rather than switching from plural to singular. ■

(Gem...continued from page 1)

tary witness — even a male, since the testimony of a solitary man is also not accepted in a court of law. To wit, a solitary witness of any gender or background is never credited unless the matter of his or her testimony is one that was at one time subject to his or her control. From our case we see that this principle applies even to a case in which there is no a priori assumption of a prohibition (חזקת איסור), as there is no a priori assumption that a specific place near a city is beyond its techum Shabbos. ■