## Tzurot Hapetach – A Report from the Field - Part One

A surge of interest in community Eruvin has emerged from Daf Yomi's recent study of Masechet Eruvin. Thus, now is an excellent time to share with Kol Torah readers some of my more than twenty years of experience in advising dozens communities how to construct, expand and maintain their Eruvin. We shall focus on the construction of Tzurat HaPetach (symbolic doorframes) which most often constitutes the bulk of a community Eruv.

Constructing a tzurat hapetach seems to be a simple and straightforward process. The Talmud (Eruvin 11b) states that a tzurat hapetach consists of two vertical poles with a horizontal pole directly on top of them (kaneh mikan vekaneh mikan vekaneh al gabeihen). However, the laws of tzurot hapetach are actually quite complex, particularly when constructing a community eruv. Community eruvin commonly use preexisting structures, which can significantly stabilize the Eruv and also reduce the costs of building and maintaining an eruv. These structures, such as utility poles, were not built for use in eruvin and often introduce halachic complexities.

Must the Vertical Poles Extend All the Way to the Horizontal One?

The Talmud (Eruvin 11b) records a dispute between Rav Nachman and Rav Sheishet about whether the vertical poles (Lechis) of a tzurat hapetach must extend all the way to the horizontal pole. The Halachah follows the opinion of Rav Nachman, that if the vertical poles are ten tefachim (approximately forty inches) high and are positioned precisely beneath the horizontal pole, the tzurat hapetach is acceptable. The horizontal pole need not touch the vertical poles and may be well above them (Shulchan Aruch, O.C. 362:11). The Mishnah Berurah (362:62) explains that the basis for this ruling is the principle of gud asik (literally, "stretch up"), which states that the Halachah views the vertical poles as extending upward to the horizontal pole.

The dispute between Rav Nachman and Rav Sheishet might depend upon a fundamental issue – when constructing Tzurot Hapetach, must one replicate an actual doorframe, in which case the Lechis must extend all the way to the horizontal wire, or does Halacha require one to construct only "Mei'ein Tzurot HaPetach" (see Rashi to Eruvin 11a s.v. Umatach), in which case ten Tefachim high Lechis suffice. Alternatively, even Rav Nachman agrees that a Tzurat Hapetach must thoroughly imitate an actual doorframe. The point of contention between Rav Nachman and Rav Sheishet is whether the principle of Gud Asik allows us to view a Lechi that does not extend all the way to the horizontal wire as a replication of an actual Tzurat Hapetach.

Gud Asik: Eyesight or Plumb Line?

Although Halacha follows the opinion of Rav Nachman that the vertical poles of a tzurat hapetach need not touch the horizontal pole (or wire), they must be positioned directly underneath it. The poles cannot even be off by the slightest amount (see Mishnah Berurah 362:63). Halachic authorities debate how to determine the proper

positioning. Rav Yosef Dov Soloveitchik (as reported by Rav Yosef Adler) and Rav Moshe Feinstein (reported by Rav Elazar Meyer Teitz, from his uncle, Rav Pesach Rayman) both felt that it is sufficient to estimate the poles' positioning with one's eyes. Rav Zalman Nechemia Goldberg (personal communication) also permits using eyesight, although he requires building very wide vertical beams to allow for a wide margin of error in their positioning. Rav Gedalia Schwartz (personal communication) adopts this approach as well.

However, Rav Yitzchak Liebes, (and Yibadeil Lchayim Aruchim) Rav J. David Bleich, Rav Feivel Cohen, Rav Moshe Heinemann, Rav Hershel Schachter, and Rav Mordechai Willig (all through personal communication) rule that a plumb line (or other device for measuring verticality) is necessary to ensure that everything lines up appropriately. The Gemara (Eruvin 94b) requires constructing "halachic walls" (and presumably tzurot hapetach as well) in the same manner that people usually build walls (kede'avdei inshei). Builders and carpenters have used plumb lines for thousands of years; they appear in Amos (7:7-8) and the Mishnah (for example, Kil'ayim 6:9 and Keilim 29:3). Accordingly, a plumb line must be used in constructing a tzurat hapetach.

On the other hand, Rav Moshe and Rav Soloveitchik as well as Rav Goldberg and Rav Schwartz could argue that since Halacha does not require the Lechi to extend all the way to the horizontal wire, Halacha does not require a Tzurat Hapetach to replicate an actual doorframe. In which case, an estimate made by eyesight suffices to create a Mei'ein Tzurat Hapetach. Thus, this dispute regarding how to assess "Gud Asik" from the Lechi to the horizontal wire hinges upon the two approaches delineated above as to whether Rav Nachman requires a Tzurat Hapetach to match an actual doorframe.

Rav Shlomo Zalman Auerbach told this author that, while it is best to use a plumb line, one may rely on eyesight alone if it is "impossible" to construct the eruv otherwise. When I reported this ruling to Rav Hershel Schachter, his response was that it is always possible to measure "Gud Asik" by a plumbline or equivalent such as a combination of a laser pointer and level. One could respond that a community cannot always readily access someone who is proficient in using a tool that assesses plumbline verticality and that laser pointers are easy to use only at dusk or before sunrise. Thus, while Rav Schachter's insight rightfully limits the scope of Rav Shlomo Zalman's ruling, there are unusual circumstances where it could be relevant, especially when correcting a problem with the Eruv near to the start of Shabbat.

#### A New Machloket?

The issue as to how to assess Gud Asik emerged in the late 1970s and 1980s when Eruvin began to be built in North America. I discovered this Machloket when I began my involvement in Eruvin in 1989. I wondered whether the same Machloket had already existed elsewhere. I asked the older Rabbanim who had served communities in pre-war Eastern Europe, how the Eruvin were built in their communities. Rav David Lifshitz (Rav of Suwalk immediately before World War II) told this author that a plumb line was used when constructing tzurot hapetach in Suwalk. Rav Ephraim Oshry (Rav of the

Kovno Ghetto) told this author that in Kovno they relied on eyesight alone. Rav Yosef Singer (Rav of Pilzno prior to World War II) also reported that he believes the rabbis he knew in Europe relied on eyesight alone.

Thus, the debate that emerged in the 1970s and 1980s had already raged at least 40 years beforehand. In addition, Rav Meir Goldwicht informed this author that Israeli communities today also have divergent practices regarding this issue. In order to avoid this problem, many communities erect vertical poles that reach the horizontal wire or pole. This method avoids the need to estimate from afar if the pole is directly under the wire.

It is not unusual to discover an issue that began to be debated in one generation had already been debated in earlier generations. For example, Rashi and Rabbeinu Tam dispute the order in which the last two parshiyot should be placed in tefillin. Rashi (Menachot 34b s.v. V'hakorei) believes that "Shema" should come before "V'haya im shamo'a," while Rabbeinu Tam (cited in Tosafot ibid. s.v. V'hakorei) believes that "V'haya im shamo'a" should precede "Shema." Piskei Tosafot (Menachot 92), in turn, records that "In Nahardea and Jerusalem, two pairs [of tefillin] were found, one in accordance with Rashi and the other in accordance with Rabbeinu Tam." Thus, the celebrated Rashi-Rabbeinu Tam debate about Tefillin already raged in earlier generations. Similarly, in twentieth-century archaeological excavations of the Dead Sea area, both types of *tefillin* have been discovered (Encyclopedia Judaica 15:904). Furthermore, the Gemara frequently records disputes between the Amoraim about issues that the Tannaim had debated in earlier generations.

## A Sub-Machloket Concerning the "Eyesight Approach"

One could argue that a sub-Machloket exists even within the approach that eyesight suffices to assess Gud Asik. An eyesight assessment involves an estimate of Gud Asik instead of a precise measurement by plumbline. The question is how to make the estimate. Does this approach nonetheless require an "informed estimate" or does even a gross estimate suffice? An informed estimate involves first noticing whether the pole is tilting to the right or left and then estimating Gud Asik from both very near and a longer distance from the site of the proposed Lechi installation.

The question behind this sub-dispute is what suffices to create the "Meiein Tzurat HaPetach" – does a gross estimate suffice or is a more thought out estimate required. In other words, since only an approximation of doorframe is required, how much difference between a real doorframe and a Tzurat Hapetach is tolerated. In addition, one could argue that all would agree that a more informed estimate should be made, according to all opinions, when measuring very long distances (such as fifty or even sixty feet) between a Lechi and a very high horizontal wire.

**Current Practice** 

Today (2013) in North America most community Eruvin extend their Lechis to the horizontal wires, even though the Eruvin in the 1970s and 1980s commonly utilized only ten tefachim high Lechis. The change happened to a great extent due to a report by Rav Moshe Heinemann (a leading Halachic authority who is adept with tools, technology and machinery). He reported that he installed ten tefachim high Lechis on utility poles and measured Gud Asik with a plumbline equivalent. However, when he reinspected the Eruvin a year later he discovered that the Lechis were no longer aligned with the horizontal wire! Rav Heinemann investigated and reported that utility poles shift over time (it is reported that the freezing of the ground over winter causes this shift).

After this discovery Rav Heinemann ordered Lechis to be extended to the horizontal wire, since proper alignment cannot be maintained on a utility pole. Thus, Rav Sheishet's opinion has enjoyed a revival when making Tzurat Hapetachs on utility poles. An alternative remedy to this problem could be to attach multiple ten Tefachim Lechis on utility poles to create a greater margin of error and to account for the shifting of the pole and wire (such as I saw in Memphis in 1992, in an Eruv constructed by Rav Nata Greenblatt) . In addition, some Rabbanim have expressed skepticism whether concern for pole shifting applies in all areas and especially in more temperate climates.

#### Conclusion

Next week we continue with a discussion of some of the hotly debated issues regarding community Eruvs such as Tachuv and zigzagging wires.

## Tzurot Hapetach – A Report from the Field - Part Two

Last week we noted (in an essay available at <a href="www.koltorah.org">www.koltorah.org</a>) that constructing a tzurat hapetach (symbolic doorways, which constitute the bulk of most community Eruvin) seems to be a simple and straightforward process. The Talmud (Eruvin 11b) states that a tzurat hapetach consists of two vertical poles (Lechis) with a horizontal pole directly on top of them (kaneh mikan vekaneh mikan vekaneh al gabeihen). However, the laws of tzurot hapetach are actually quite complex, particularly when constructing a community eruv. Community eruvin commonly use preexisting structures, which can significantly stabilize the Eruv and also reduce the costs of building and maintaining an eruv. These structures, such as utility poles, were not built for use in eruvin and often introduce halachic complexities.

#### Tachuv

Last week we discussed the issue as to whether the Lechis must extend all the way to the horizontal wire. This week we address yet another major area of debate in constructing tzurot hapetach - the status of "tachuv," when the horizontal wire does not rest atop the vertical poles, but is drilled through them instead. Cases of tachuv frequently arise today, as many wires on utility poles, especially those used for cable television, are attached to bolts that pass into holes in the poles (utility line workers commonly refer to Tachuv as "bolt through"). The issue of tachuv arises dozens or even hundreds of times in most community eruvs. If Tachuv is acceptable, many preexisting poles and wires already satisfy the Halachic requirements for a Tzurat Hapetach without requiring the additional installation of a Lechi to the utility pole.

The Gemara relates that, in a valid tzurat hapetach, the horizontal pole is placed atop the vertical poles. Furthermore, if the vertical poles are not under the horizontal one, but to its side (tzurat hapetach min hatzad), the tzurat hapetach is unacceptable (Eruvin 11b). The Talmud does not specifically address a situation in which the horizontal pole passes through the vertical poles.

The Acharonim debate the acceptability of such a tzurat hapetach. The Mishnah Berurah (362:64) notes that the Pri Megadim was uncertain regarding this issue and therefore was inclined to rule strictly. On the other hand, Rav Shlomo Kluger (Ha'elef Lecha Shlomo, Orach Chaim 164), the Aruch Hashulchan (O.C. 362:32), the Chazon Ish (O.C. 71:9), and Rav Tzvi Pesach Frank (Teshuvot Har Tzvi, O.C. 2:18:3) rule that such tzurot hapetach may be used. They argue that, as long as the horizontal pole passes through the vertical poles at a point higher than ten tefachim off the ground, the portion of the vertical pole that is above the horizontal pole is ignored (Dal Mei'hacha, see Sukkah 2a for an example of this Halachic construct). The Chazon Ish notes that if a horizontal pole was placed on top of a vertical pole and then another vertical pole was placed on top of the first one, the original tzurat hapetach remains acceptable. Similarly, a horizontal wire that passes through a hole in a vertical pole should be acceptable.

On the other hand, one could argue that a Tzurat Hapetach must replicate an actual doorway (as we discussed last week). Accordingly, since people do not create doorways using Tachuv, a Tzurat Hapetach that is built using Tachuv does not constitute a proper Tzurat Hapetach. Nonetheless, just as we mentioned last week that the Halachic construct of Gud Asik can legitimately create a Tzurat Hapetach that resembles a doorway, so too can the rabbinic tool of Dal Mei'hacha create an acceptable Tzurat Hapetach that fully resembles an actual doorway.

This issue has not been resolved; some rabbis rely on the lenient opinion, while others follow the strict one. Rav Dovid Feinstein has told this author that the leniency of tachuv should not be employed in community eruvin (Rav Yitzchok Frankel told me that this was the position of Rav Moshe Feinstein). Rav Shlomo Zalman Auerbach (Teshuvot Minchat Shlomo 2:35:25) writes that tachuv is undoubtedly acceptable. Rav Yehuda Amital told this author that the practice in Israel is to be lenient on this issue.

In North America, Eruvin made by Rav Shimon Eider and (Yibadeil L'Chaim) Rav Moshe Heinemann do not rely on Tachuv while Rav Hershel Schachter and Rav Mordechai Willig agree that Tachuv may be relied upon. The Teaneck Eruv relies upon Tachuv as do many Eruvin in North America built by Rav Schachter and Rav Willig's Talmidim. Rav Michael Taubes, the administrator of the Teaneck Eruv, once told me that it is difficult to imagine how a very large Eruv (such as the Teaneck Eruv, which has a perimeter of approximately twelve miles) could be properly maintained if Tachuv is not accepted. I wholeheartedly agree with this assessment, based on my experience administering the Englewood Eruv and advising many other communities regarding their Eruvin. Relying on Tachuv avoids the need to install dozens (and sometimes hundreds) of Lechis and allows the community to pay proper heed and attention to the existing essential Lechis.

# Flimsy Wires

The Shulchan Aruch (Orach Chaim 362:11) codifies the Gemara's (Eruvin 11b) requirement that the vertical poles be sufficiently strong that they could theoretically support a door made of straw. The Shulchan Aruch adds that the horizontal wire connecting the vertical poles does not have to be as strong and can even be made from a very light material, such as reed-grass (gemi).

Nonetheless, some suggest that the string may not be so flimsy that it sways in the wind. The Mishnah Berurah (362:66) presents two opinions regarding this issue. One focus of the argument is whether the horizontal wire has to be sufficiently sturdy that it can withstand "conventional" winds (omeid beruach metzuyah). He quotes the well-known rule that for a halachic wall (mechitzah) to be valid, it must be sturdy enough to withstand ordinary winds. This rule undoubtedly applies to the vertical poles of a tzurat hapetach, but one opinion claims that it does not apply to the horizontal strings (or poles). Another objection to flimsy wires is that normal doorframes are not constructed in such a manner (see Eruvin 94b). The Aruch Hashulchan (362:37) rules leniently regarding this concern, while the Chazon Ish (Orach Chaim 71:10) rules strictly. This issue, similar to

the Tachuv debate, hinges on the issue of to what degree must a Tzurat Hapetach replicate an actual doorframe.

# Zigzagging Wires

In a true doorframe, the horizontal beam goes straight from one vertical beam to the other. When constructing a tzurat hapetach, it happens sometimes that the wire will wrap around things, such as trees or poles, which it does not pass over. Consequently, the wire, which should parallel the top beam of a doorway, will zigzag between the vertical poles rather than going straight from one of them to the other. This issue always arises with telephone wires as the poles are very often not aligned in a straight line, thereby causing the horizontal wire to run in less than a straight line. Does Halacha tolerate the Eruv's horizontal line not running in a straight line?

Many argue that the status of such a wire depends upon the same dispute as the status of a wire which is blown from side to side in the wind, for both wires move horizontally from being directly between the vertical poles. Eruvin created by Rav Shimon Eider and (Yibadeil L'Chayim) Rav Moshe Heinemann require that the Eruv wire be exactly straight. They argue that only a completely straight horizontal replicates an actual Tzurat Hapetach.

In defense of the lenient position, Rav Mordechai Willig (Am Mordechai, Shabbat) claims that a minor zigzag is permissible, because the Gemara (Eruvin 11a) describes eruvin made of grapevines, which are not completely straight. He adds that the Shulchan Aruch's mentioning the use of Gemi (reed grass) as the horizontal wire also bolsters this approach, since reed grass will not necessarily be completely straight. The grapevine and reed grass examples seem to demonstrate that Halacha does not require the complete replication of an actual Tzurat Hapetach. As we noted last week, Rashi (Eruvin 11a s.v. Umatach) notes that Rashi states that a Tzurat Hapetach is Mei'ein Tzurat Hapetach (resembles an actual Tzurat Hapetach) which might imply that the Halachic Tzurat Hapetach is not completely resemble a true doorframe.

There is a sub-dispute among Poskim who adopt the lenient approach that the horizontal need not need be perfectly straight. Rav Yosef Adler reports that Rav Dov Soloveitchik ruled (for the Teaneck rabbis who consulted him in the early 1980's for guidance regarding the creation of the Teaneck Eruv) that Halacha tolerates a curve up to twenty-two degrees. Rav Willig, however, advocates accepting a much smaller change of direction. The dispute hinges upon how much of a deviation from a true doorframe may a Tzurat Hapetach be if it is to be regarded even as Mei'ein Tzurat Hapetach.

Rav Meir Arik (Teshuvot Imrei Yosher 2:133) offers a compromise that the wire is valid only if it does not sway or veer more than three tefachim in any direction. Rav Yitzchok Frankel told me that he believes that this was the opinion of Rav Moshe Feinstein as well. This approach fundamentally agrees that the tzurat hapetach must completely mimic an actual doorframe. However, the Imrei Yosher and Rav Moshe believe that the Halachic concept of Lavud renders the wire as if it were straight, just as

the concept of Gud Asik could render the ten Tefach Lechi (aligned under the horizontal wire) as if it extended all the way to the horizontal wire.

This issue is not a matter of only theoretical interest. The less the tolerance of change of direction of the horizontal wire, the greater the amount of Lechis must be installed into the utility poles. This does not only involve increase cost (as only a professional should install Lechis all the way to the wire) but also adds to the difficulty of keeping track of the Kashrut of the Lechis. Experience teaches that for some communities that have very large Eruvin, maintaining a very large numbers of Lechis makes the Eruv unwieldy and unmanageable if just one or two people inspect the Eruv on a weekly basis.

In practice, many communities are strict and tolerate no change of direction in the horizontal wire while many others tolerate a modest change in direction in keeping with either Rav Moshe or Rav Willig's standards. Some communities might rely on Rav Solovetichik's standard in case of great need, such as the discovery of a problem with the Eruv shortly before Shabbat begins.

#### Conclusion

We hope the discussion of the past two weeks have enlightened those who studied Masechet Eruvin with this introduction to a few of the many issues involved in the creation of community Eruvin. Even if those who have not yet had the privilege to do so can appreciate the seriousness in which Rabbanim and lay leaders of all generations take the practical application of the holy words of the Gemara and Shulchan Aruch to the realities of life.