

Three Keys to Unlocking Talmudic Mysteries: Philosophy, Science, and Baseball Trivia

June 20, 2021

July 11, 2021

July 18, 2021

Maybe more

Overview of June 20 class

Review

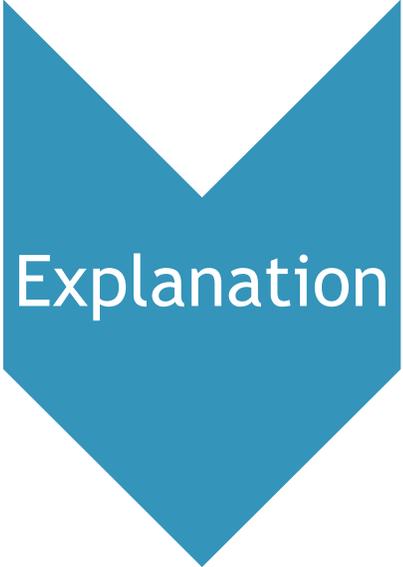
Onward!

Two models of philosophy



Proof

- There is only one right answer. The rest are wrong.
- Arguments prove one side is right or the other is wrong.
- The goal: discover the right answer.



Explanation

- Usually, there are many acceptable answers. Some may be better than others.
- Explanation shows how an answer could be true, despite a point that initially appears to conflict with the answer.
- The goal: understand the full set of acceptable answers. This includes knowing each answer's strongest possible form and its strengths and weaknesses.

Three keys

Key #1: 20th- Century philosophy

Explain how View P can be true in view of X

Flesh out the best possible version of View P, identifying its strengths and weaknesses

Do the same with Views Q, R, S, etc., to understand the set of minimally acceptable views

Key #2: Empirical science

All questions are interesting, and relevance is irrelevant

Theories must be adjusted to fit the data, which include Biblical and rabbinic statements

Experiments (including thought experiments) are always specific and often weird

Key #3: Baseball Trivia

Insiders speak tersely. They understand each other without spelling everything out.

Outsiders often can't make sense of insiders' terse speech. A lot of explanation is required.

מאימתי

Cross-references to other texts

The Mishnah

Rashi

The Gemara

Tosafot

Rabbeinu Hannanel often on the margins

Main body of text containing Mishnah, Rashi, Gemara, and Tosafot commentary.

In sukkot shall you reside seven days; all that are homeborn in Israel shall reside in sukkot. So that your future generations will know that I caused the children of Israel to reside in sukkot when I took them out of the land of Egypt: I am the Lord your God.

(Leviticus 23:42-43)



מתני' סוכה שהיא גבוהה למעלה מעשרים
אמה – פסולה, ורבי יהודה מכשיר.

ושאינה גבוהה עשרה טפחים, וש אין לה
(שלשה) דפנות, ושחמתה מרובה מצלתה –
פסולה.

MISHNA A *sukka*,^N i.e., its roofing, which is the main and most crucial element of the mitzva, that is more than twenty cubits^B high^{HN} is unfit. Rabbi Yehuda deems it fit.

Similarly, a *sukka* that is not even ten handbreadths high,^H and one that does not have three walls,^H and one whose sunlight that passes through its roofing is greater than its shade^H are unfit.

גמ' תנן התם: מבוי שהוא גבוה מעשרים
אמה – ימעט, רבי יהודה אומר: אינו צריך.

GEMARA

Over there in tractate Eruvin, the Mishna says, “When an alley has a beam that is more than 20 cubits high, it is lowered. Rabbi Yehuda says that’s not necessary.”



A view from tradition:

- On Shabbat, one may not carry objects between a private domain (like a house) and a public domain (like the street).
- When many houses share an alley, the Torah views the alley as a shared private space, even if one side opens onto the street.
- To prevent people from mistakenly carrying something between a private alley and the public street, the rabbis of the Mishna required a beam to be placed at the end of the alley, reminding people that they were leaving a private space and moving into a public one.

מֵאִי שָׁנָא גִבֵּי סוּכָּה דְּתַנִּי פְּסוּלָהּ, וּמֵאִי שָׁנָא
גִּבֵּי מְבוּי דְּתַנִּי תִּקְנָתָא?

Given the seeming similarity between the two cases, that of the *sukka* and that of the alleyway, the Gemara asks: **What is different with regard to a *sukka* where the mishna teaches that it is unfit, and what is different with regard to an alleyway where the mishna teaches the method of rectification, that one must diminish the height of the cross beam? Why was a solution not suggested in the case of a *sukka*?**



Hypothesis #1: Torah law vs. rabbinic enactment

סוכה דאורייתא - תני "פסולה", מבוי דרבנן -
תני תקנתא.

The obligation of a Sukka comes from the Torah, so the Mishna says, "Unfit."

The obligation of an alley comes from the rabbis, so that Mishna says to fix it.

Transition

וְאִי־בַעִית אֵימָא: The Gemara suggests an alternative explanation: **And if you wish, say**

Hypothesis #2: Numerosity

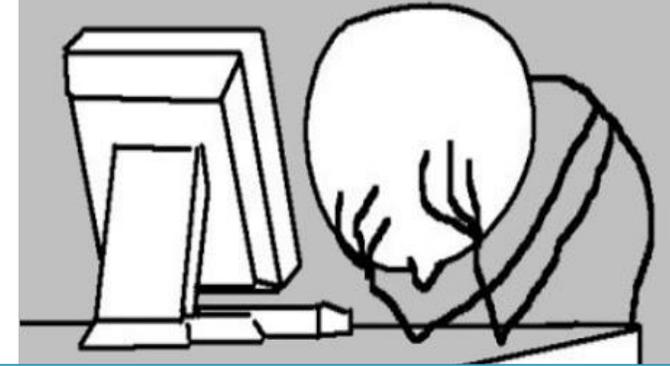
בְּדֹאוּרֵייתָא נִמְי תַנִּי תְקַנְתָּא.

that with an obligation that comes from the Torah, you can also say to fix it.

מִיָּהוּ, סוּכָה (דְּנִפְיֵשׁ מִלְתָּה) –
פְּסִיק וְתַנִּי "פְּסוּלָה", מְבוּי דְלָא נִפְיֵשׁ
מִלְיָה – תַנִּי תְקַנְתָּא.

However, the Sukka obligation has many things, so it definitely says, "unfit." An alley doesn't have many things, so it says to fix it.

HOW IS THIS RELEVANT?!



Back to Hypothesis #1: Torah law vs. rabbinic enactment

Gemara

The obligation of a **Sukka** comes from the Torah, so the Mishna says, “Unfit.”

The obligation of an **alley** comes from the rabbis, so that Mishna says to fix it.

Rashi

From the Torah. Before the Mishna was taught, the measure [of a kosher sukka] was from Mt. Sinai.

The Mishna says, “Unfit.” The term “unfit” pertains to this teaching. It says, in effect, “This wasn’t made according to the Torah and the Halacha.”

Alley. Everything involving the alley comes from the rabbis. According to the Torah, it’s enough to have three walls. You don’t need a wooden beam, except for the rabbis.

The Mishna says to fix it. The term “unfit” does not pertain to this teaching. Who made [the alley] invalid before this was taught in the Mishna? Look, this was the first time it was shown and commanded.

Now let's hear from the grandkids: A tripartite Tosafot

Of the clean animals, of the animals that are not clean, of the birds, and of everything that creeps on the ground, two of each, male and female, came to Noah into the ark, as God had commanded Noah.

ment of Rabbi Yehoshua ben Levi. As Rabbi Yehoshua ben Levi said: A person should never express a crude matter, as the formulation of a verse was distorted by the addition of eight letters rather than have it express a crude matter, as it is stated: “From the pure animals and from the animals that are not pure [*asher einena tehora*]”^N (Genesis 7:8). To avoid using the Hebrew term for impure [*teme’a*], which is four letters: *Tet, mem, alef, heh*, the verse replaced the term with the euphemism meaning “that are not pure,” which is spelled with twelve letters: *Alef, shin, reish; alef, yod, nun, nun, heh; tet, heh, reish, heh*.





Part 1: When in doubt, euphemize!

Don't say, "invalid"

Instead, say "it can be fixed"

Part 2: Language of before and after

לכתחילה

- “At first” or “ideally”
- It’s better to send a handwritten note accepting a party invitation

ודיעבד

- “As it happens” or “after the fact”
- If you didn’t send a handwritten note, it’s OK to send an email message

Part 3: What Tosafot says

Gemara

The obligation of a Sukka comes from the Torah, so the Mishna says, “Unfit.”

The obligation of an alley comes from the rabbis, so that Mishna says to fix it.

Tosafot

From the Torah. If the Mishnah had said, “it is lowered,” we would worry. A person could make a mistake of thinking that lowering it is **לכתחילה**

-- ideally, what one should do, but that **ודיעבד**
-- or after the fact -- it’s kosher [as is, unlowered]. That’s why the Mishna is precise in its wording, because maybe someone could be led to violate a prohibition of the Torah! So it uses the word, “invalid,” even though it’s not a euphemism like, “it is lowered.”

However, with an alley, which is from the rabbis, the Mishna doesn’t worry. It says, “it is lowered,” which is a euphemism...

Rashi didn’t explain it this way.



Overview of June 20 class

Review

Onward!

Back to Hypothesis #2: Numerosity

Gemara

If you wish, say that with an obligation that comes from the Torah, you can also say to fix it.

However, the Sukka obligation has many things, so it definitely says, “unfit.” An alley doesn’t have many things, so it says to fix it.

Rashi

If you wish, say that from the Torah... It’s fitting to say, “fix it.”

The Sukka has many things The remedy for one thing isn’t the same as the remedy for another. You’d have to change the words you use for each individual correction. For example, if it’s too tall, you’d say, “Lower it.” If it’s too short, you’d say, “Raise it.” If it doesn’t have three walls, you’d say, “Make another wall.” If there’s more sun than shade, you’d say, “Add schak [vegetation on the Sukka’s roof].” Accordingly the Mishnah definitively uses the word, “Invalid,” since all of those things are included in that term.

An alley doesn’t have many things. In that particular Mishna.

Similarly, a *sukka* that is not even ten handbreadths high,^H and one that does not have three walls,^H and one whose sunlight that passes through its roofing is greater than its shade^H are unfit. Mishnah Sukka 1:1

In an alley, a crossbeam above 20 cubits high is made smaller. Rabbi Yehuda says that’s not required. If the entrance into the alley from the street alley is wider than 10 cubits, it is made smaller. But if it has the form of a doorway, it’s not required to make it smaller. Mishnah Eruvin 1:1

Summary: Why does the Mishna say, “It is invalid,” with a Sukka, but say, “it is lowered” with a board in an alley?

Theory #1: Torah obligation vs. Rabbinic obligation

Rashi: when the Mishna talked about a too-high Sukka, it was already invalid, through previous Torah law. But the Mishna’s ruling about an excessively high alley board was brand new. The board wasn’t yet invalid, so the Mishna could only say, “Lower it.”

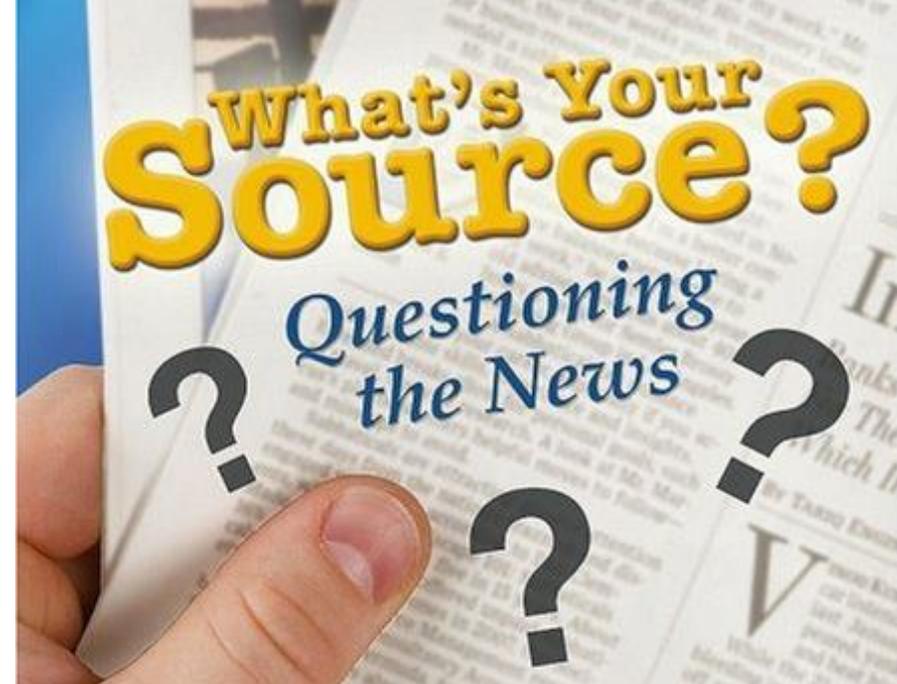
Tosafot: It’s better to use a euphemism like, “it is lowered,” than a crude word like “invalid.” However, someone could be misled by the phrase, “it is lowered,” to think that, while ideally the Sukka roof should be lowered, it’s OK to leave it as is. That would violate a Torah law! So there’s no choice but to use the crude word, “invalid.”

With an alley, the obligation is only Rabbinic, so it’s not so terrible if someone mistakenly thinks it’s OK to leave the board as is. In such a case, it makes sense, on balance, to use the euphemism, “it is lowered.”

Theory #2: Numerosity

Rashi: For a Sukka, the Mishna requires many things. It’s more parsimonious to use one word, “invalid,” than many (“lower a sukka that’s too big, raise one that’s too small, add a wall if there are <3,” etc.). With an alley, the Mishnah requires just a few things: height and width that are not excessive. That Mishnah can therefore say, “make it smaller.”

A new question,
with three possible answers



מִנָּא הָנִי מִיֵּלֵי?

§ After clarifying its formulation, the Gemara addresses the *halakha* in the mishna and asks: **From where are these matters**, i.e., the *halakha* that a *sukka* may not exceed a height of twenty cubits, derived?

Answer #1, from Rabba

- וְהָאָדָם יָדַע אֶת-חַוָּה אִשְׁתּוֹ וַתְּהַר וַתֵּלֶד אֶת-קַיִן וַתֹּאמֶר קָנִיתִי אִישׁ אֶת-יְהוָה:

Now the man knew his wife Eve, and she conceived and bore Cain, saying, "I have gained a male child with the help of the LORD."

Gen. 4:1

אָמַר רַבָּה, דְּאָמַר קָרָא: "לְמַעַן יִדְעוּ דוֹרוֹתֵיכֶם כִּי בַסּוּכּוֹת הוֹשַׁבְתִּי אֶת בְּנֵי יִשְׂרָאֵל", עַד עֲשָׂרִים אַמָּה - אָדָם יוֹדֵעַ שֶׁהוּא דָר בַּסּוּכָה, לְמַעַלָּה מֵעֲשָׂרִים אַמָּה - אֵין אָדָם יוֹדֵעַ שֶׁדָר בַּסּוּכָה, מִשּׁוּם דְּלֹא שָׁלְטָא בָּהּ עֵינָא.

Rabba said that it is derived as the verse states: "So that your future generations will know that I caused the children of Israel to reside in *sukkot* when I took them out of the land of Egypt" (Leviticus 23:43). In a *sukka* up to twenty cubits high, even without a concerted effort, a person is aware that he is residing in a *sukka*. His eye catches sight of the roofing, evoking the *sukka* and its associated mitzvot. However, in a *sukka* that is more than twenty cubits high, a person is not aware that he is residing in a *sukka* because his eye does not involuntarily catch sight of the roof, as at that height, without a concerted effort one would not notice the roofing.

Rashi's comments

Gemara

Rabba said that it is derived from the verse, “So that your future generations will know that I caused the children of Israel to dwell in sukkot when I took them out of the land of Egypt.”

In a sukka up to 20 cubits high, a person is aware that they are sitting in a sukka. However, in a sukka that is more than 20 cubits high, a person is not aware that they are sitting in a sukka, because their eye does not involuntarily catch sight of the roof.

Rashi

In order that they will know... Make a sukka so you recognize that you're sitting in it, as it says, “They will know that I made them sit in sukkot.” I commanded them to sit like this.

Their eye does not catch sight. The person doesn't see the schack (vegetation on the sukka's roof), and a Sukka is essentially the schack, as you can tell from the name.

Answer #2, from Rabbi Zeira

- וּבְרָא יְהוָה עַל כָּל־מִכּוֹן הַר־צִיּוֹן וְעַל־מִקְרָאָהּ עָנָן וַיּוֹמֵם וְעָשָׂן וַנִּגְהַ אֵשׁ לְהִבֶּה לַיְלָה כִּי עַל־כָּל־כְּבוֹד חִפָּה: 5

the LORD will create over the whole shrine and meeting place of Mount Zion cloud by day and smoke with a glow of flaming fire by night. Indeed, over all the glory shall hang a canopy,

- וְסִכָּה תִהְיֶה לְצִל־יוֹמָם מִחֶרֶב וּלְמַחֶסֶה וּלְמִזְרוֹם וּמִמְטָר: {פ} 6

which shall serve as a pavilion for shade from heat by day and as a shelter for protection against drenching rain.

Isaiah 4:5-6

רַבִּי זֵירָא אָמַר, מִהֶכָּא: "וְסִכָּה תִהְיֶה לְצִל יוֹמָם מִחֶרֶב, עַד עֲשָׂרִים אַמָּה - אָדָם יוֹשֵׁב בְּצִל סִכָּה, לְמַעַל מֵעֲשָׂרִים אַמָּה - אֵין אָדָם יוֹשֵׁב בְּצִל סִכָּה, אֶלָּא בְּצִל דְּפָנוֹת.

Rabbi Zeira said that it is derived from here: The verse states: "And there shall be a *sukka* for shade^N in the daytime from the heat, and for refuge and cover from storm and from rain" (Isaiah 4:6). In a *sukka* up to twenty cubits high, a person is sitting in the shade of the *sukka*, i.e., the shade of the roofing; in a *sukka* that is more than twenty cubits high, a person is not sitting in the shade of the roofing of the *sukka* but rather in the shade of the walls of the *sukka*, as their considerable height provides constant shade, rendering the shade of the roofing irrelevant.

Rashi's comments

Gemara

Rabbi Zeira said it comes from here: “And the sukka will be for shade in the daytime from the heat” (Isaiah 4:6). In a sukka up to twenty cubits high, a person is sitting in the shade of the sukka; in a sukka that is more than twenty cubits high, a person is not sitting in the shade of the sukka but rather in the shade of the walls

Rashi

And the sukka will be for shade... This implies it's not schack unless it makes shade.

But rather in the shade of the walls. The shadows reach from one to the other because of the walls' height, and there's no need for the schack.

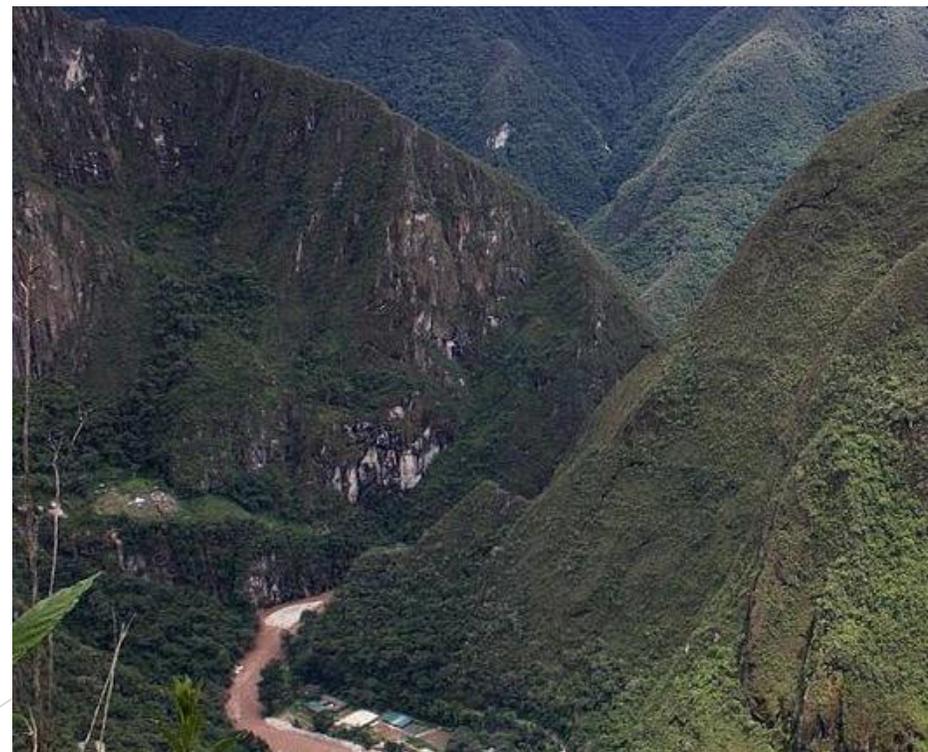
Abaye objects, and Rabbi Zeira replies

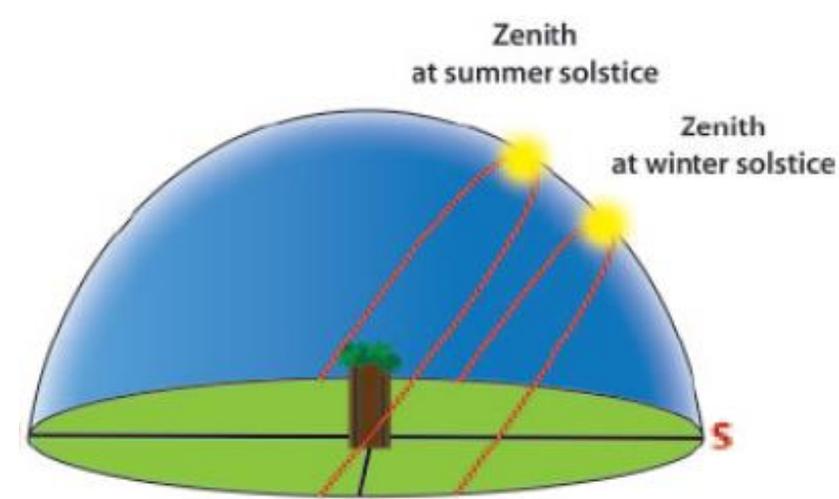
אָמַר לִיה אַבַּי: אֵלֶּא מַעַתָּה, הָעוֹשֶׂה
סוּכָּתוֹ בְּעִשְׁתְּרוֹת קַרְנַיִם, הֲכִי נִמְי דְּלֵא
הוּי סוּכָּה?!

Abaye said to him: But if it is so that one is required to sit in the shade of the roofing of the *sukka*, then in the case of one who makes his *sukka* in Ashterot Karnayim,^B which is located between two mountains that prevent sunlight from reaching there, so too, it is not a fit *sukka*, since he is not sitting in the shade of the roofing.

אָמַר לִיה הֲתָם, דְּל עִשְׁתְּרוֹת קַרְנַיִם -
אִיפָּא צִל סוּכָּה, הֲכָא דְּל דְּפָנוּת - לִיפָּא
צִל סוּכָּה.

He [Rabbi Zeira] said to him [Abaye], in that case, if you remove the mountains of Ashtarot Karnayim, there is Sukkah shade. In this case, if you remove the walls, there is no Sukkah shade.





Rabbeinu Hannanel's paraphrase and explanation

Rabbi Zeira says, a sukkah is unfit if it's more than 20 cubits high because you're sitting in the shade of the walls, not the shade of the sukkah.

Abaye objects, saying that implies that in a place where the sun never shines, such as as Ashtarnot Karnayim, if you make a sukkah there, it's not a sukkah, because there's no shade from the sun.

However, that's a different case. If you remove the mountains of Astharnot Karnahyim, which restrain the sunshine, you'll find the shade of the sukkah. In this case, if you take away the walls, you'll find the shade of the schack in a different place, far from the spot underneath the schack.

Answer #3, from Rava

וְרַבָּא אָמַר, מִהֶכָּא: "בַּסּוּכּוֹת תֵּשְׁבוּ
שִׁבְעַת יָמִים". אָמְרָה תּוֹרָה: כָּל שִׁבְעַת
הַיָּמִים צֵא מִדִּירַת קִבְעָה וְשֵׁב בְּדִירַת
עֲרָאִי. עַד עֶשְׂרִים אַמָּה – אָדָם עוֹשֶׂה
דִּירַתוֹ דִּירַת עֲרָאִי, לְמַעַלָּה מֵעֶשְׂרִים
אַמָּה – אֵין אָדָם עוֹשֶׂה דִירַתוֹ דִּירַת
עֲרָאִי, אֶלָּא דִירַת קִבְעָה.

Rava said that the *halakha* is derived from here: “In *sukkot* shall you reside seven days” (Leviticus 23:42).^N The Torah said: For the entire seven days, emerge from the permanent residence in which you reside year round and reside in a temporary residence, the *sukka*. In constructing a *sukka* up to twenty cubits high, a person can render his residence a temporary residence, as up to that height one can construct a structure that is not sturdy; however, in constructing a *sukka* above twenty cubits high, one cannot render his residence a temporary residence; rather, he must construct a sturdy permanent residence, which is unfit for use as a *sukka*.

Rashi

Seven days... A *sukka* of seven days, and no more. In other words, it's temporary. Light walls are enough.

Above 20 cubits. Its foundations and walls need to be fixed קִבְעָה so they don't fall.

Abaye objects, and Rava replies

אָמַר לִיה אַבַּי: אֲלֵא מֵעַתָּה, עֲשֵׂה
מְחִיצוֹת שֶׁל בְּרוֹזל וְסִיבֵךְ עַל גַּבֵּן – הֲכִי
נִמְי דְּלֵא הוּי סוּפָה?!

אָמַר לִיה, הֲכִי קְאָמִינָא לָךְ: עַד עֲשָׂרִים
אַמָּה, דְּאָדָם עוֹשֶׂה דִּירְתוֹ דִּירְת עֲרָאִי,
כִּי עֲבִיד לִיה דִּירְת קַבֵּעַ – נִמְי נְפִיק.
לְמַעְלָה מֵעֲשָׂרִים אַמָּה, דְּאָדָם עוֹשֶׂה
דִּירְתוֹ דִּירְת קַבֵּעַ, כִּי עֲבִיד לִיה דִּירְת
עֲרָאִי – נִמְי לֹא נְפִיק.

Gemara

Abaye said to him: But that implies that if it's made with walls of iron and schack is on top - this too isn't a sukka!

Rava said to him in response that this is what I am saying to you: In a case where one constructs a *sukka* up to twenty cubits high, a height that a person typically constructs a temporary residence, when he constructs a structure of that height that is sturdy like a permanent residence, he also fulfills his obligation. However, in a case where one constructs a *sukka* more than twenty cubits high, a height that a person typically constructs a permanent residence, even when he constructs it in a less sturdy fashion like a temporary residence, he does not fulfill his obligation.

Rashi

Up to 20 cubits, a person makes, etc. It must be that the Torah doesn't insist on the [sukka being] temporary, except for the sake of measurement. [It] gives you a measure of height [namely,] that it has to be able to stand with temporary poles.

The dialectic of Talmudic argument



R. Zeira: **Shade!** >20 cubits, shade of wall, not shade of schack



Abaye: You're invalidating a sukka that's always shaded because it's in a valley between mountains!

R. Zeira: >20 cubits, if you imagined the walls gone, the schack would not provide shade



Rava: **Temporary!** >20 cubits, its permanent, not temporary

Abaye: You're invalidating a small sukka made with metal walls and schack on top!

Rava: Impermanence matters only as a measure of height, based on customary building patterns

Our three explanations for the 20 cubit height limit

Rava

- **Knowledge.** You should know you're in a sukkah, under the schack

R. Zeira

- **Shade.** You should sit in shade cast by the schack

Rabba

- **Impermanence.** You should sit in a sukka small enough to be a temporary dwelling