

Rabbi Daniel Nevins Torah and Technology: Circuits, Cells, and the Sacred Path Izzun Books, 2024 / 5784

Study Guide for Chapter 4 The Us of Electricity and Electronics on Shabbat

In the tempestuous ocean of time and toil there are islands of stillness where man may enter a harbor and reclaim his dignity. The island is the seventh day, the Sabbath, a day of detachment from things, instruments and practical affairs, as well as of attachment to the spirit.

--Abraham Joshua Heschel, The Sabbath

1. Melakhah—The Prohibition of Transformative Labor.

The primary halakhic vocabulary used to regulate Shabbat is that of *melakhah* (המלאכה) transformative labor). The Torah emphatically prohibits all *melakhah* on pain of death (Exodus 31:14), but it is vague about the definition of such activity. What is this *melakhah*? In the Torah God commands Israel not to burn fire in all of its habitations (Ex. 35:3), to stone to death a man who gathers firewood (Numbers 15:32-35), and not to plow or harvest in the field (Ex. 34:21). Jeremiah adds a ban on carrying from one domain to another (17:21-22), and Nehemiah admonishes the men of Judah for treading on winepresses and loading wares on Shabbat (13:15-18). A ban on cooking is implicit in the Exodus manna narrative.

The Rabbis came up with a list of 39 categories of labor, which they claimed to be connected to the tabernacle project:

אבות מלאכות ארבעים חסר אחת הזורע והחורש והקוצר והמעמר הדש והזורה הבורר הטוחן והמרקד והלש והאופה הגוזז את הצמר המלבנו והמנפצו והצובעו והטווה והמיסך והעושה שתי בתי נירין והאורג שני חוטין והפוצע ב' חוטין הקושר והמתיר והתופר שתי תפירות הקורע ע"מ לתפור שתי תפירות הצד צבי השוחטו והמפשיטו המולחו והמעבד את עורו והמוחקו והמחתכו הכותב שתי אותיות והמוחק על מנת לכתוב שתי אותיות הבונה והסותר המכבה והמבעיר המכה בפטיש המוציא מרשות לרשות הרי אלו אבות מלאכות ארבעים חסר אחת:

Principal occupations there are forty less one: to sow, to plough, to mow, to gather into sheaves, to thrash, to winnow, to sift [grain], to grind, to sieve, to knead, to bake, to shear wool, to wash wool, to card, to dye, to spin, to warp, to shoot two threads, to weave two threads, to cut and tie two threads, to tie, to untie, to sew two stitches, to tear thread with intent to sew two stitches, to catch a stag

[game], to slaughter it, to skin, to salt [cure] a hide, to singe a hide, to tan, to cut up a skin, to write two letters, to erase with intent to write two letters, to build, to demolish, to extinguish fire, to kindle fire, to hammer, to carry [or convey] from one reshuth [domain] into another. Thus these principal occupations are forty less one.

This list may be broken into five functions. #1-11: the production of bread; #12-24: the production of clothing; #25-33: hunting and preparing hides as parchment for writing; #34-38: the construction of tools and shelter; and #39: the transportation of goods. We may summarize the list by stating that the rabbinic understanding of *melakhah* regards the transformation of *material reality* to serve the needs of civilized people for food, clothing, writing, shelter and tools. Labors which leave no durable impact on the material environment are not considered to be forbidden as *melakhah*. As Mishnah Shabbat 12:1 declares, ומלאכה ומלאכה מלאכה מלאכה בשבת חייב "this is the rule: anyone who performs work and his work is stable (or endures) on the Sabbath is culpable."

2. Intention. There are four categories of intention significant to *hilkhot Shabbat*:

A) דבר שאינו מתכוון Unintended and unanticipated melakhah. If a person performs a permitted act on Shabbat knowing that it is possible but not inevitable that a melakhah might result from his/her activity, such action is permitted despite the unintended consequence. The classic examples are dragging a chair on a dirt floor, which could cause a rut, but is not considered to be "plowing," and walking across a lawn, which could uproot some grass, but is not considered "harvesting."

B) פסיק רישיה ולא ימות Unavoidable melakhah. If a person likewise performs an action on Shabbat for a permitted purpose but knows that it is *inevitable* that a beneficial *melakhah* will result from the activity, such action is deemed by the rabbis to be forbidden by biblical law as an unavoidable and beneficial consequence. This category's name comes from its classic example—a man wants to give a child a chicken head to play with on Shabbat; he cuts off the head, not intending to kill the chicken per se, but, איל ימות "if you cut off its head, will it not die?"

C) פסיק רישיה ולא ניחא ליה Unavoidable and undesirable melakhah. Similarly, if a person intends to perform a permitted act on Shabbat knowing that it is *inevitable* that a *melakhah* will result from the activity, except that he will receive no benefit from this result (and may suffer a loss), many authorities permit the action, though some Ashkenazi *poskim* rule stringently.

D) מלאכה שאינה צריכה לגופה Intentional act, but for a purpose different from the melakhah. Finally, if a person intentionally performs a melakhah on Shabbat, but for a permitted purpose unrelated to its forbidden result, this is the subject of debate. In the

Talmud, Rabbi Shimon considers such an act to be permitted, whereas Rabbi Yehudah forbids it.

The question of intention is significant when considering the *melakhot* possibly involved in using electricity. For example, some electrical switches may create an arc of flame when flipped. It is forbidden to light a fire ($\alpha = 0$), but in this case, the creation of sparks is not *inevitable* and is not the actor's *intention* and is generally not even *observed*. Causing such sparks would therefore be considered only a *possible* consequence of the act, and certainly not one which benefits the actor. Thus, we would deem their creation to be permitted as unintended and unanticipated.

Also significant—original and derivative labors—Avot and Toledot.

3. Nominations for a Ban on Electricity/Electronics on Shabbat

a. Boneh—building, and Makeh p'fatish—completing construction; and Soteir—destroying to rebuild.

b. Bishul—cooking.

c. Maavir—burning.

d. Koteiv—writing, and Moheik—erasing to rewrite.

Summary—no overall prohibition, but specific concerns related to changing the state of a substance.

4. Shvut—The Obligation to Rest

a. Exodus 23:12.

ששת ימים תעשה מעשיך וביום השביעי תשבת למען ינוח שורך וחמרך וינפש בן אמתך והגר: Six days you shall do your labor, and on the seventh day you shall rest; so that your ox and donkey will rest, and your servant's child and the stranger will relax.

b. Midrash Mekbilta D' Rabbi Yishmael.

ושמרתם את היום הזה לדורותיכם למה נאמר והלא כבר נאמר כל מלאכה לא יעשה בהם. אין לי אלא דברים שהם משום מלאכה דברים שהם משום שבות מנין ת"ל ושמרתם את היום הזה להביא דברים שהן משום שבות.

Therefore shall ye observe this day. Why is this said? Has it not already been said: "no manner of work shall be done in them" (v.16)? From this I would know only about work that can be regarded as labor [melakhah]. How about activities which can be regarded only as detracting from the restfulness of the day [shvut]? Scripture therefore says: "Therefore, shall you observe this day," thus prohibiting even such work as only detracts from the restfulness of the day.

c. Ramban, Torah Commentary to Leviticus 23:24.

ונראה לי שהמדרש הזה לומר שנצטוינו מן התורה להיות לנו מנוחה בי"ט אפילו מדברים שאינן מלאכה, לא שיטרח כל היום למדוד התבואות ולשקול הפירות והמתנות ולמלא החביות יין, ולפנות הכלים וגם האבנים מבית לבית וממקום למקום, ואם היתה עיר מוקפת חומה ודלתות נעולות בלילה יהיו עומסים על החמורים ואף יין וענבים ותאנים וכל משא יביאו בי"ט ויהיה השוק מלא לכל מקח וממכר, ותהיה החנות פתוחה והחנוני מקיף והשלחנים על שלחנם והזהובים לפניהם, ויהיו הפועלים משכימין למלאכתן ומשכירין עצמם כחול לדברים אלו וכיוצא בהן, והותרו הימים הטובים האלו ואפילו השבת עצמה שבכל זה אין בהם משום

מלאכה, לכך אמרה תורה "שבתון" שיהיה יום שביתה ומנוחה לא יום טורח. וזהו פירוש טוב ויפה: It seems to me that this Midrash is saying that we have been commanded from the Torah to have rest on the festival even from activities which are not *melakhah*: a person should not labor all day measuring grains, weighing fruits and merchandise, filling casks of wine, emptying vessels and transporting stones from house to house and place to place. And should the city be walled and locked by night, they could be loading the donkeys, and delivering wine, grapes, figs and all goods on the festival so that the market would be full of all forms of buying and selling, with the shops open and the merchants attending and the vendors with all their wares displayed with their coins before them, and the workers would be rising early to hire themselves out for these and similar tasks as if it were a weekday—and all this is permitted on the festivals and even on Shabbat itself, for there is no *melakhah* in all of this! For this reason, the Torah said "Shabbaton"-that it be a day of rest and relaxation, not a day of effort. And this is a good and accurate explanation.

5. Conflicting Values.

המכבה את הנר מפני שהוא מתירא מפני עובדי כוכבים מפני לסטים מפני רוח רעה ואם בשביל (ונ"א מפני) החולה שיישן פטור כחס על הנר כחס על השמן כחס על הפתילה חייב ורבי יוסי פוטר בכולן חוץ מן הפתילה מפני שהוא עושה פחם:

One who extinguishes a lamp out of fear of idolaters, thieves or evil spirits, or in order to help an ill person sleep is exempt. If [he extinguished the lamp] from concern for the lamp, or the oil or the wick, he is liable. Rabbi Yossi exempts him from all of these except for the wick, since it makes charcoal.

- a. Pikuah Nefesh—saving a life
- b. Holeh she'ain bo sakkanah—non-emergency care
- c. Kvod habriot—human dignity
- d. Tzorekh mitzvah/oneg Shabbat—Needed to perform or enhance a mitzvah.
- e. Ba'al tashhit—Not destroying or wasting resources.