

HALOCHOSCOPE

This week's question:

Is there any issue with using a hand-warmer on *Shabbos*? These come in various forms. We are not discussing battery-operated or charcoal hand-warmers. We are discussing chemical hand-warmers, most of which are used once, until the reaction has spent itself. The chemicals in the small pouch are activated, usually, by exposure to the air. In the process of their becoming oxidized, they warm up just enough to keep the hands warm. This is not enough heat to cook anything. However, there could be issues with both activating the pouch and with using it. Note: our discussion is only relevant inside an *eruv*-bound area, or a private domain. The pouch would be considered carried, albeit inside a glove. [Much of our discussion is taken from Halochoscope X:27, regarding glow-sticks.]

The issues:

- A) *Hav'arah*, the *melacha* of igniting
- B) *Bishul*, cooking in its various *melacha* and non-*melacha* forms; *Molai'ach*, salting
- C) *Makeh bapatish*, final blows to form utensils; *Tikun kli*, fixing a utensil
- D) *Nolad* and *Molid*, bringing into existence something new
- E) *Hatmanah*, the Rabbinical restrictions on insulating

A) *Hav'arah*

Kindling a fire is Scripturally forbidden on *shabbos*. Is the prohibition against the consumption of the fuel or against the production of the fire or light, or heat through burning? For example, if it were possible to kindle a fire that would not consume the fuel, would it be considered the *melacha*? Concerning the 'burning bush' the fire is called a fire, and the term for 'burning' is used in the way it is used to describe the *melacha*, yet the bush is not consumed. This could be the reason the matter was considered extraordinary. [See Avnei Nezer O.C. 238. Sfas Emes Psachim 75a. Tzitz Eliezer I:20.]

The chemicals in a hand-warmer are indeed consumed, in the sense that they break down. Does decomposition qualify as burning, since no heat or fire is used to produce it? [See references to Halochoscope I:4 7 11, II:10 36, III:7 10 23, etc.]

Assuming that producing light or heat without *hav'arah* is not Scripturally a *melacha*, could it be forbidden Rabbinically? Activities that do not produce a lasting effect are not forbidden Scripturally, but some are forbidden Rabbinically.

B) *Bishul*; *Molai'ach*

The *melachos* forbidden on *shabbos* were all in some way performed in the construction of the *mishkan*, tabernacle in the wilderness. *Bishul*, cooking, was involved in preparing the *samemanim*, ingredients in the dyes used for the cloth.

Scriptural *bishul* is limited to a process using heat to harden soft material or to soften hard material and thus make it fit for a new use. Many poskim include melting metal, wax, butter or tar, and hardening earthen vessels by heating them in this category. Plac-

ing a fresh piece of wood in an oven where it will dry out is also included.

Bishul is only forbidden Scripturally *derech bishul*, when done in the normal way. This excludes using the heat of the sun, because it is not reliable or controllable. Cooking in direct sunlight is permitted, while using heat collected from sunlight is forbidden Rabbinically. It could get confused with indirect man-made heat. Could a case be made to Rabbinically forbid activating a chemical reaction to produce heat due to the confusion with heating with combustible fuel? Or could we say that just as direct sunlight is not confused, and permitted, chemical reactions would also be permitted?

Pickling food is Rabbinically forbidden as a related process to *bishul*. It qualifies as cooking in other *halachic* situations. It also prepares raw food for eating instead of cooking it. Salting qualifies as roasting for some *halachic* situations. It is also related to the *melacha molai'ach*. *Me'abed*, tanning raw hides with chemicals, or *molai'ach*, salting using regular salt, processes the hide as leather or parchment. Salting foods is forbidden Rabbinically. Making saltwater is also forbidden. This looks like salting, or is part of the preparatory process of salting foods. This is *uvda dechol*, mundane activity usually done during the week that reduces the sanctity of *Shabbos*. Making a minor amount is allowed. It is clear that it is not done to salt foods, but to add as a flavor. Adding wine to vinegar, making the new wine into vinegar, is also forbidden. Some consider it like pickling, while others say it is *uvda dechol*. Is mixing non-foods to change them through chemical reaction included in these Rabbinical extensions of the prohibitions? It might seem like *uvda dechol*, but since it was not decreed on, may we add it to the prohibition ourselves? [See *Shabbos* e.g., 38b-42b, 108a, *Poskim Tur*, *Sh. Ar. O.C* 318 321:2-6, commentaries.]

C) Makeh Bapatish; Tikun Kli

Forming a utensil is forbidden on *shabbos*. The *melachos* associated with this are *boneh*, building, and *makeh bapatish*. *Boneh* applies primarily to structures built on the ground. Very large utensils made to remain stationary are often included in this. Activities involved in fashioning regular utensils are not usually *boneh*, and dismantling them is not *sosair*, demolishing. Obviously making a *kli* involves *melacha*. Along the way, melting, cutting, gluing etc., are considered separate *melachos*. Completing a *kli* is considered *boneh* by some *poskim*. The finishing touches in the manufacture of an item constitute a separate *melacha*. A pot formed of metal is smoothed with a hammer, *makeh bapatish*. *Tikun kli*, repairing, is forbidden, sometimes Scripturally, and sometimes Rabbinically. [See *Shabbos* 31b 41b 47a-48b 74b 102b-103a 122b 146a-b, *Eruvin* 35b- 36a, *Beitza* 10a 11b 22a 33b, *Poskim. Tur*, *B.Y. Sh. Ar. O.C.* 314, 317, commentaries.]

For example, one may not fill an unfilled pillow or thread a shoe-lace that was not threaded before *Shabbos*. A handle may not be attached to a tool. In our case, the pouch is practically useless until activated. While activating it might not be true *sosair al menas livnos*, demolishing in order to build, this is definitely an activity that brings the utensil to its intended use. It is, at the very least, the final touch. The Talmud discusses a type of *boneh* that involves making an opening. There is a specific issue with making an opening in order to allow air to enter through it. While our pouch does not require an opening to be made in the traditional sense, the way it is used clearly requires an act to allow exposure to the air. In the Talmudic example, the exposure to air is not forbidden *per se*. It

makes the act of making the opening meaningful. Thus, it would appear that this aspect of the activity is not problematic. What is problematic is the action that activates the utensil, making it function. There are other chemicals in the hand-warmer, that distribute the heat or perform other functions. These are also activated when the pouch is exposed.

D) *Nolad*; *Molid*

Anything not intended for use on *shabbos* when *shabbos* began, for a variety of reasons, can be *muktzeh*. *Nolad* is essentially a type of *muktzeh*. It was 'born' on *shabbos* or *yomtov*. Nobody could have it in mind before *shabbos* since it did not exist. Therefore, it is *muktzeh*. Cases of *nolad* include newly born animals, freshly laid eggs, milk milked on *shabbos* and ashes from a fire that was kindled on *shabbos*.

A further type generally considered *nolad* is a drastic change made to an existing item. Examples include cloth sewn (by a gentile) into a garment, or a glass bottle broken such that it can no longer be used for its original purpose. Water evaporates into clouds, then condenses as rain. The Talmud entertains the possibility that this is *nolad*, but concludes otherwise. However, the Talmud forbids crushing snow and ice to produce water. Some explain it as a look-alike to *makeh bapatish*. Others consider it a Rabbinical form of *sechitah*, squeezing fruit. A third view considers the water *nolad*. The activity of making something *nolad* is similar to *melacha*. Thus, though it can not be categorized as any *melacha*, it is forbidden Rabbinically as a collective *molid*.

Based on this, melting other solids, like hardened fat, or using solid or thick soap is forbidden. In our case, there is no doubt that the item in question has been altered to a new level. The actual process is a chemical reaction, but it is done intentionally to create the new chemical to produce the heat. It would appear to involve *molid*. If it was activated on *Shabbos*, it might be considered *nolad*. [See refs. Halochoscope I:27 46, VIII:16.]

E) *Hatmanah*

Insulating food on *Shabbos* is not forbidden Scripturally. No *hav'arah* or *bishul* is involved. The most likely and natural insulating material is hot ash. This is very likely to have live embers mixed in with the ash. These are actually what keep the ash so hot for so long. Since there is an interest in keeping the food hot for as long as possible, one is likely to fan these embers. If one forgets that it is *Shabbos* and fans the embers, he will have been in violation of *hav'arah*. Stoking the ash is another way to allow fresh air (oxygen) into the pile. Basically, one is burning the oxygen, a Scriptural *melacha*.

This concern led to a Rabbinical decree against insulating food in hot ash before *Shabbos*. One might fan or stoke the ash after *Shabbos* begins. Along with the decree against using ash as an insulator, any other material that increases heat, or provides its own heat, was banned for use as an insulator. This is known as *hatmanah bedavar hamosif hevel*. There is another decree, forbidding *hatmanah* on *Shabbos* itself, even in material that does not provide its own heat, such as a blanket. This is known as *hatmanah bedavar sheaino mosif hevel*. This type of insulation is permitted before *Shabbos* begins or even during twilight, but is forbidden after nightfall. The reason for this decree is different. There is concern that one might heat the food before insulating it. This involves *hav'arah* and possibly *bishul*, if the food was not fully cooked.

The chemical hand-warmer is a kind of *davar hamosif hevel*. It is not used for food

at all. The decrees of *hatmanah* apply to food. What about keeping a body warm? We are obviously permitted to use blankets and wrap ourselves in warm clothing on *Shabbos* itself. These are not *mosif hevel*. The Talmud also permits warming a towel to place on the stomach. There is no concern that while warming the towel, one might do *hav'arah*. Using warm water for this is forbidden. If it spills, one might end up washing himself with it. [If the water is too hot, there is a separate issue of danger to health. Most contemporary poskim permit using a sealed hot water bottle.] This, in turn, is forbidden as a separate decree, *gezairas merchatzaos*, forbidding warm baths. This was indeed enacted due to concern about *bishul* and *hav'arah* in the bath-house. Thus, indirectly, there is a decree against some types of warming. Would there be a similar extension to forbid using *davar hamosif hevel* as a body or hand-warmer? In fact, there exists a charcoal hand-warmer, that is basically using 'hot ashes with embers'. It would definitely be forbidden, without the need for a special decree, for obvious reasons. Would any other *mosif hevel* be forbidden to use for the same purpose, just like *hatmanah* on food? *Hatmanah* is forbidden before *Shabbos*, while this would be applied on *Shabbos*. Or could this be an extension of *gezairas merchatzaos*.

It would appear that unless the Rabbis decreed against this, we may not invent our own decree. They might have had numerous reasons not to make a decree. Moreover, the poskim discuss using an electric blanket on *Shabbos*. Other issues are dealt with, including use of electricity and *muktzeh*, but this issue is never raised. An electric blanket is even more like *davar hamosif hevel* than a chemical hand-warmer. The only difference is that there does not seem to be a charcoal ember equivalent of the electric blanket. In terms of heat, there is a distinct source that sustains its level indefinitely. It can also be adjusted, which could involve *melacha* of some sort. Many poskim permit it. In fact, when permitting it, the poskim say that the control must be covered to prevent adjusting it on *Shabbos*. Some interpret this as a partial concern for the aforementioned decree. However, in the final analysis, this decree *per se* does not seem to factor in the considerations. Wrapping food in an electric blanket to keep it warm would seem to be forbidden even on *Erev Shabbos*. [See *Shabbos* 34a-b 40a-b 47b-49a 51a-b, Poskim. Tur Sh Ar OC 257 326:6 328:40, commentaries (Nishmas Avraham I). Igros Moshe OCIII:50. Chelkas Yaakov OC 117-118. Yechave Daas V:28. Tiferes Tzvi II:58.]

In conclusion, there are concerns with activating the hand-warmer on *Shabbos*. If it was activated before *Shabbos*, it may be used.

On the parsha *veyamesh choshech, and darkness will be removed .. [10:21] The usual darkness of the night will be removed [Targum Onkelos] a thicker type of darkness will envelop [Ibn Ezra]. The dark of night is the absence of light, and may be lit up by a flame. This was air that could not tolerate a flame [Sforno].* Perhaps the air was polluted with chemicals that could extinguish a flame, or with chemicals that could prevent a flame from being kindled. Perhaps, furthermore, the pollution could even prevent a chemical substitute for actual fire. There was no solution for the Egyptians. Even chemical hand-warmers would have been useless!

Sponsored by 'your name here'

© Rabbi Shimon Silver, January 2013.

Subscriptions and Sponsorships available. (412) 421-0508. halochoscope@hotmail.com