

Electrically Produced Fire or Light in Positive Commandments

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Introduction

Advances in technology require halacha* to apply previously developed principles to new settings. Frequently, in the process of drawing distinctions based on advances in technology, it is necessary to distinguish between terms that the classical texts did not explicitly separate. For example, the Talmud contains no words that clearly distinguish between light or heat generated by combustion or without combustion. When the Talmud states that a candle, fire, or light be used, it frequently is not clear which particular aspect is desired. Until the late 1800's this absence of clear definition was of little halachic significance for obvious technological

* *In the absence of any specific reference to a multi-section work, all references are to Orach Chaim.*

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reasons: there was no mechanism to generate light without heat or heat without light. However, within this century, technology has developed many devices that can generate light without heat or heat without light, and can do both without combustion. This development has occasionally produced some disagreement among the authorities as to what are the basic characteristics according to halacha of "fire" and "light."¹

Five significant applications are discussed in this article, each of which shares the common factor that a "candle" or "fire" is required for the action. According to most authorities, in two instances "light" is what is essentially needed, in another "fire" is what is required, in the third a particular type of "fire" with "light" is needed, while in one case all that is needed is heat.

Part I of this article discusses the use of electrically produced light for Sabbath candles; part II considers their use as *havdala* candles, and part III examines the use of electric Chanuka menorahs. Parts IV and V discuss the use of electrically produced light and heat when searching for *chametz* or broiling meat. The conclusion to this article touches on some of the broader issue of the relationship between tradition, technology, and change within halacha.

I. Shabbat Candles²

1. These authors have already addressed those issues related to the production of light and heat in the context of prohibited work on Shabbat and Yom Tov; see Broyde and Jachter "The Use of Electricity on Shabbat and Yom Tov," *Journal of Halacha and Contemporary Society* 21:4 (1990).

2. There is no difference vis-a-vis the use of electricity between Yom Tov candles and Shabbat candles.

The Sages of the Mishnah record that on Shabbat and Yom Tov there is an obligation upon every household to have a light burning³ so that people spend Shabbat in comfort and pleasantness.⁴ Rambam states the obligation as follows:

The lighting of a candle on Shabbat is not merely permissive – i.e., one may light or not light as one wishes; so, too, it is not a good deed (mitzvah) – i.e., one does not have to run after it to insure it is done, like *eruv chatzerot* – rather, it is an obligation. All people, men and women, must have a lit candle in their house on Shabbat. . . One must recite a blessing over the candle prior to lighting it.⁵

This ruling is codified in the *Shulchan Aruch* without disagreement.⁶

There are two essential issues relating to the use of incandescent lights for Shabbat candles. The first is whether a fire is needed and whether these incandescent lights are considered fire (שק) according to halacha. As explained

3. For a discussion of whether the obligation is best fulfilled in the dining room or in other rooms, and what the particular rationale for the obligation is, see *Aruch Hashulchan* 263:2 and *Shemirat Shabbat Kehilchata* 43:n.6.

4. This obligation supersedes even the obligation of kiddush. Thus, one who does not have enough money to purchase both wine for kiddush and Shabbat candles should purchase only candles; *Shulchan Aruch, Orach Chaim* 263:3.

5. Rambam, *Shabbat* 5:1. The blessing is not, in fact mentioned in the Talmud, and some authorities (see *Tur, Orach Chaim* 263) maintain that no blessing is required.

6. *Shulchan Aruch* 263:5.

elsewhere,⁷ the overwhelming consensus of rabbinic opinion maintains that a glowing hot filament is a form of "fire" according to Jewish law and that one who starts such a fire violates the biblical prohibition of starting a fire on Shabbat. This rule is accepted by nearly all modern decisors.⁸

While a few authorities do not share this view and believe that an incandescent bulb may not be used as Shabbat candles,⁹ their opinion on this matter is not generally accepted. Since most authorities reject this view, the minority view alone would not constitute grounds to discourage the use of incandescent lights as Shabbat candles.¹⁰ However,

7. Broyde and Jachter "The Use of Electricity on Shabbat and Yom Tov," pp. 21:4, 6-10.

8. See sources cited in notes 10 and 14.

9. Rabbi Tzvi Pesach Frank in his responsa, *Har Tzvi, Orach Chaim* 2:114:2, in the context of discussing Chanuka candles, states that a glowing filament

is not fire. Rather, it appears to the eyes as if it gives off light and appears similar to a brilliant gem that gives off light in the dark, which has no similarity to a lit candle. Therefore, it is impossible to say that one can use [an incandescent light] to fulfill any mitzvah which requires the lighting of a candle since no light is lit; rather, it is merely metal which glows when it is heated considerably.

Rabbi Frank also discusses this issue in *Har Tzvi, Orach Chaim* I:143; *Mikra'ei Kodesh* I:47; *HaMa'ayan*, Tevet 5732, and *Moriah*, Cheshvan-Kislev 5732. For a similar suggestion, see also *Maharshag* 2:107.

10. Rabbi Ovadia Yosef, *Yechave Daat* 5:24. It is worth noting that even Rabbi Yosef, who has a very strong inclination to avoid situations where there is just a possibility of one's uttering blessings in vain (see e.g. *Yabia Omer* 1:29,11; 4:42-43; *Yechave Daat* 1:66, 2:32, 4:4, and 4:41) permits one to use incandescent lights for Shabbat candles and recite the blessing. The possibility of one's

there are other factors to be considered as well.

It has been argued that even though incandescent lights clearly are "fire" for the purposes of halacha, they cannot be used for Shabbat candles since they lack a "kindling process," which is required for Shabbat candles.¹¹ This argument reasons that turning on incandescent lights generally may only be a form of indirect action (*gerama*) and Shabbat candles – like all mitzvot – must be directly lit.¹²

This approach is not accepted by most authorities for either of two reasons. A number of authorities have asserted that Shabbat candles do not require an act of kindling. *Magen Avraham* rules that one who delays candle lighting until after sunset may ask a Gentile to light the candles and then the Jew should recite the blessing.¹³ It would appear in

uttering a blessing in vain motivates Rabbi Yosef to reach a contrary result when discussing the use of incandescent lights for *Havdala* candles; see text accompanying notes 37 and 39. This ruling is consistent with *Yabia Omer* 1:19 where Rabbi Yosef rules that incandescent lights are undoubtedly fire, and cites *Dovev Mesharim* 1:87 who denies that the contrary opinion can even be used as a consideration in halacha.

11. The blessing one recites states "to kindle Shabbat candles."

12. See *e.g.*, Rabbi Tzvi Pesach Frank, *Har Tzvi, Orach Chaim* I, 143, discussed in Broyde and Jachter, *supra* note, 1 at 25-26. See also *Pekudat Elazar* 22 and *Yabia Omer* 2:17.

Other authorities rule that Shabbat candles must be kindled in the classic sense that a candle is lit, which incandescent lights are not; see *Devar Halacha* 36; *Kochvav Yitzchak* 1-2 (possibility); *Levushai Mordechai Orach Chaim* 2:59; see *Mishpetai Uziel, Orach Chaim* 1:7 for a full explanation of this approach and *Yabia Omer* 2:17 for a reply.

13. *Magen Avraham, Orach Chaim* 263:11. This issue derives to a great extent from a dispute recorded in Tosafot, *Shabbat* 25b (s.v. "*chova*"). There, Tosafot quote differing opinions as to whether

explaining this ruling that according to this view no particular act of kindling is required. All that is needed is that the candle be illuminating on (and for) Shabbat. This argument is accepted by Rabbi Eliezer Waldenburg.¹⁴ However, many authorities clearly argue with this approach and disagree with the ruling of the *Magen Avraham* on this topic.¹⁵

Rabbi Ovadia Yosef states, however, that even according to those who rule that an act of kindling is required, the turning on of incandescent lights is considered by the overwhelming consensus of authorities to be an act of kindling.¹⁶ Thus, according to most authorities, whether or not an act of kindling is required need not be relevant to this discussion, since even an incandescent light is "kindled."

one must make a blessing over Shabbat candles, and if they are already lit, whether one needs to extinguish them and relight them for Shabbat. Rabbenu Tam rules that a blessing must be recited. Even if a candle is already lit on Friday, one may not recite the blessing over it but rather must extinguish the candle and relight it for the sake of Shabbat; see also note 25. This dispute is explained in great length in Rabbenu Tam's *Sefer Hayashar*, #44-47, which contains the exchange of letters between Rabbenu Tam and Rabbenu Meshulam concerning whether Shabbat candles need a fire or an act of kindling; *Tur* quotes an opinion that states that one can fulfill the obligation of Shabbat candles on an already lit candle, even if it was not lit for the sake of Shabbat; *Tur, Orach Chaim* 263. This opinion must maintain that no act of kindling is required.

14. *Tzitz Eliezer* 1:20:11; see also *Har Tzvi* 2:114:2; but see *Yabia Omer* 2:17(11).

15. See e.g. Comments of Rabbi Akiva Eiger on *Magen Avraham* 263:11; *Mishnah Berurah* 263:21.

16. *Yabia Omer* 2:17; *Yechave Daat* 5:24; *Beit Yitzchak Yoreh Deah* 1:120; *Achiezer* 3:60; *Melamed Lehoil, Orach Chaim* 49; *Tzitz Eliezer* 3:17; *Meorai Aish* chapter 3 and many other authorities cited in Broyde and Jachter, *supra* note 1 at 25-26.

Rabbi Shlomo Zalman Auerbach is quoted as stating that Shabbat lights must contain an independent fuel supply. Thus, while in theory he allows electric Shabbat candles, he insists that this is only permissible when the power source come from a battery. Standard electric lights may not be used, he is quoted as saying, because "one is considered to be lighting without fuel since ... at every moment new electric current is being generated at the power station."¹⁷ This argument, though, seems difficult since, as Rabbi Ovadia Yosef notes

17. *Shemirat Shabbat Kehilchata* 43:n.22. A similar argument may be found in *Levushai Mordechai* 3:59. Rabbi Neuwirth explains that a flashlight may be used for Shabbat candles since "current is already stored within the battery." This statement appears to be factually incorrect, since a battery does not "store" electric current, but rather is a self-contained cell which converts potential chemical energy into electric current.

Rabbi Dovid Cohen, of *Gvul Yavetz*, has communicated to these authors an alternative understanding of Rabbi Auerbach's ruling. He states that since the electric current is not under the control of the one doing the mitzvah, one should not recite a blessing. This rationale appears to be based on a pronouncement of Rashba (*Teshuva* 18) and Ravad (commenting on Rambam, *Ishut* 3:23) that one may not recite a blessing over a mitzvah when performance of the mitzvah is dependent on the future actions of others. Since the ongoing production of electrical current is dependent on those people working in the power station, one may not recite a blessing over a light powered by such current. (Such an argument is also cited by Rabbi Yosef, *Yabia Omer* 2:17(10). If this rationale is accepted as normative, one could use electricity produced not only by a battery but also by a generator under one's own control. Moreover, since power plants in the United States operate automatically (without the active participation of workers in the production of electricity except to repair equipment that ceases to function), it is not unreasonable to argue that the ongoing production of electric current is not contingent on the actions of others (but merely can be curtailed through the action of others).

(*Yabia Omer, Orach Chaim* 2:17), there is no talmudic source which indicates that a fuel supply is necessary for Shabbat candles. In fact, Rabbi Waldenburg demonstrates that no fuel supply is necessary. (Rabbi Waldenburg's argument is written in regard to Chanuka candles, but applies equally to Shabbat candles.)¹⁸ The purpose of Shabbat candles is to promote *shelom bayit* – domestic tranquility – (*Shabbat* 23b) by helping family members avoid stumbling over furniture. Accordingly, since ample lighting is provided, the fact that when one lights an electric bulb no fuel supply is present should be irrelevant. It is possible, however, to limit the requirement of a battery – powered flashlight to those areas of the world where electric power is only supplied sporadically and is curtailed without notice; in that circumstance it is reasonable that only battery – powered lights should be permitted.¹⁹

Rabbi Waldenburg²⁰ raises another possible objection to the use of an incandescent bulb for Shabbat candles, based

18. *Tzitz Eliezer* 1:20:12:2; see however *Meorai Aish* p. 95.

19. *Yabia Omer, Orach Chaim* 2:17(10) and *Tzitz Eliezer* 1:20:11:8.

Rabbi Moshe Stern (*Baer Moshe* 6:58:5) advances another rationale for excluding electric Shabbat candles and Chanuka candles. He states that "with an electric light one has nothing substantial in front of him – on what can one bless? In addition, the flow of electricity through the wires of an electric bulb is something spiritual which has no substance. It is one of the miracles of the Creator that He put the power in nature that is impossible to understand. Even though it is in front of us, after it is lit, it is just a dream without an interpretation." One could argue with the relevance of this analysis.

20. *Tzitz Eliezer* 1:20:11:10. *Mishpetai Uziel, Orach Chaim* 2:34:2, makes a similar argument.

on Ramo's ruling²¹ that Shabbat candles may not be arranged in a circle. Rabbi Waldenburg suggests that since most filaments are "arc-shaped" they may be disqualified from use as Shabbat candles. Based on a comment by *Mishnah Berurah*, Rabbi Ovadia Yosef (*Yabia Omer* 2:17(13)) rejects this suggestion of Rabbi Waldenburg. *Mishnah Berurah*²² limits Ramo's ruling to a situation where one places the Shabbat candles so close to each other that they cause each other to melt. This, of course, does not apply to an electric bulb. Additionally, it could be argued that this ruling is inapplicable to a single circular filament, and should be limited to a collection of candles or lights.²³

The status of fluorescent or neon lights as Shabbat candles appears to be subject to some dispute. Some have stated that they may not be used for Shabbat candles since they do not constitute a fire according to halacha and no biblical violation occurs when one lights them on Shabbat.²⁴ One could perhaps disagree with this line of reasoning. Unlike other instances when the term "fire" (שֵׁר) is used, here only the term "candle" (נֵר) is used in the blessing. It is possible to argue that any light – emitting item (that can be kindled, according to those authorities who require kindling) suffices. One could argue that for the purpose of Shabbat candles – whose goal is to

21. *Orach Chaim* 671:4.

22. *Mishnah Berurah*, *Biur Halacha* 671:4 s.v. *afilu*.

23. As incandescent lights are comparable to circular wicks, rather than to candles arranged in a circle, which all permit.

24. Rabbi Shmuel Yudlovitz, *Chashmal Leor Hahalacha* 3:6. For a further discussion of why fluorescent lights do not violate the biblical prohibition of lighting a fire, see Broyde and Jachter, *supra* note 1 at pages 6-9 and *Encyclopedia Talmudit* "Electricity" 18:182.

illuminate so as to increase Shabbat enjoyment – any form of illumination suffices.²⁵ In fact, two recent codifications of the halacha in this area make no distinction between incandescent and fluorescent lights when it comes to Shabbat candles.²⁶

Thus, an examination of the responsa literature leads one to believe that most authorities allow the use of incandescent lights for Shabbat candles and that position is persuasive. Rabbi Yehoshua Neuwirth, in *Shmirat Shabbat Kehilchata*, states the rule as follows:

One who uses electrically produced light for Shabbat or Yom Tov candles, has halachic support for his practice, and may recite a blessing on this lighting.²⁷

This ruling is supported by the view of most authorities, including Rabbi Chaim Ozer Grodzinsky, Rabbi Yosef Henkin, Rabbi David Tzvi Hoffman, Rabbi Aharon Kotler,

25. Such a position is found explicitly in the commentary of *Moshav Zekainim* on Leviticus 24:2 in the name of Rabbenu Meshulam, where he asserts that one who has a reflecting and illuminating gem does not need to light Shabbat candles (even though there is no fire present). This position seems to be quoted by the *Tur* in *Orach Chaim* 263; see *Encyclopedia Talmudit* 18:182 (n.308) which cites the *Moshav Zekainim* to indicate that fluorescent lights might be permissible.

26. See *Shemirat Shabbat Kehilchata* 43:4 and *Yalkut Yosef* 263:5. This is even more significant since both these works explicitly discuss the difference between incandescent and fluorescent lights in the context of *havdala* candles; see *Shemirat Shabbat Kehilchata* 61:32 and *Yalkut Yosef* 298:5.

The distinction drawn by these authors can also be found in *Piskei Teshuva* 298:3(n.11); but see *Har Tzvi* 2:114:2 which appears to identify the term *ner* with the term *aisht*.

27. *Shmirat Shabbat Kehilchata* 43:4 (notes omitted).

Rabbi Yitzchak Schmelkes, Rabbi Moshe Shternbach, Rabbi Binyamin Silber, Rabbi Joseph B. Soloveitchik, and Rabbi Ovadia Yosef.²⁸

However, it is important to note that all regulations and restrictions which apply to wax or oil Shabbat candles apply equally to incandescent lights. Thus, one should light them intending that they be Shabbat lights; one should not bless already lit candles or lights.²⁹ So, too, it is preferred that it be clear to the observer that these lights or candles are lit specifically in honor of Shabbat.³⁰

Some authorities argue that it is best to turn off the incandescent lights in the area when one is lighting Shabbat candles so as to make it clear over which "light" one is

28. *Achiezer* 4:6; *Luach Hayovel* 81:20; *Melamed Lehoil* 47; Rabbi Aharon Kotler, cited in *Kochvay Yitzchak* p.20; *Beit Yitzchak Yoreh Deah* 120; *Teshuvot Vehanhagot* 2:157; *Oz Nidberu* 3:1; Rabbi Joseph B. Soloveitchik, quoted by Rabbi Hershel Schachter; *Yabia Omer* 2:17.

Rabbi Simcha Bunin Cohen quotes Rabbi Moshe Feinstein as ruling that one should not recite a blessing on incandescent lights when they are used as Shabbat candles; this appears to be at tension with Rabbi Feinstein's statement that a glowing filament is fire according to halacha (*Iggerot Moshe Y.D.* 2:75), but perhaps in harmony with his suggestion (*Iggerot Moshe* 3:350) to the contrary.

Rabbi Ovadia Yosef states that one should not bless incandescent lights when they will be powered by electricity produced by a Jew in violation of Shabbat. Although he does not provide a source for this ruling, it is presumably based on *Sanhedrin* 6b where the Talmud writes that one who steals wheat and processes it and recites a blessing over it has "insulted" (so to speak) God. This issue requires further analysis and is beyond the scope of this article; see also *Shulchan Aruch* 298:5.

29. *Ramo, Shulchan Aruch* 263:4.

30. *Shulchan Aruch* 263:4.

making the blessing.³¹ Others have argued that this practice is not necessary,³² and this does not seem to be the common practice among observant Jews in the United States.

One could, in fact, argue just the opposite. One could claim that a person should turn *on* all the lights he expects to use on Shabbat, prior to lighting Shabbat candles, and then light the candles with a blessing and have in mind that the blessing should be on all the lights turned on for the sake of Shabbat. Such an approach presupposes that these lights can be (at least possibly) used for Shabbat candles.³³

II. Havdala Lights

According to Jewish law, *havdala* lights must be a fire. The text of the blessing explicitly mentions fire and it seems clear that a fire is actually needed. At first glance it would appear that an incandescent bulb could be used for *havdala* lights since the consensus of authorities regard incandescent lights as fire,³⁴ and many of the possible problems associated

31. Implication from *Zichronut Eliyahu* 50:6 quoted in *Yabia Omer* 2:16(14); *Tephila LeMoshe* 1:1; and *Shemirat Shabbat Kehilchata* 43:34.

32. *Yabia Omer* 2:16(14) and *Yalkut Yosef* 263:8(n.15). Rabbi Auerbach also is quoted as indicating that perhaps such a practice is not needed; see *Shemirat Shabbat Kehilchata* 43:n.171.

33. *Oz Nidberu* 1:79. This is recorded to have been the practice of Rabbi Moshe Feinstein also; see *Teshuvot Vehanhagot* 2:157 and Rabbi Simcha Bunim Cohen, *The Radiance of Shabbos* page 20 (n.3). *Shemirat Shabbat Kehilchata* 43:34 records variations of this custom.

34. See text accompanying notes 1 to 10 and the sources cited therein. Rabbi Frank rules that incandescent lights may not be used for *havdala*, since they are not a fire; see note 9.

with the use of Shabbat candles are not relevant to *havdala* candles. *Havdala* candles do not require an act of kindling, no prominent authority believes that a fuel supply is necessary, and the *havdala* candles may be arranged in a circle. However, two objections have been raised regarding the use of incandescent bulbs for *havdala* lights.

The *Shulchan Aruch* (*Orach Chaim* 298:15), based on a statement in the Jerusalem Talmud (*Berachot* 8:6), states that it is prohibited to recite the *havdala* blessing over a fire that one sees through an *aspaklaria* (a mirror or glass)³⁵ or in any situation in which one sees only diffuse light but not a fire. Based on this ruling, there are authorities who rule that a *havdala* light may not be covered even by see-through glass since it constitutes a *hefsek* (blockage) from the light.³⁶

From this insight, Rabbi Ovadia Yosef rules that one should not use an incandescent bulb for *havdala* since the blessing recited over the incandescent light would be in vain, as it is covered by a glass case.³⁷ Most authorities disagree with Rabbi Yosef for two different reasons. First, Rabbi Uziel,

35. *Mishnah Berurah* translates *aspaklaria* as "clear glass;" *Biur Halacha* 298:15 *oh betoch aspaklaria*; *Aruch Hashulchan* translates it as a mirror; *Aruch Hashulchan* 298:18.

36. *Mishnah Berurah*, *Biur Halacha* 298:15 *s.v. oh betoch aspaklaria*.

37. *Yabia Omer* 1:17-18; see also note 10. *Mikra'ei Kodesh*, *Chanuka*, 20 (page 47); *Toldot Shemuel* 3:4(#7) (in doubt). Even these authorities admit that if the bulb were not covered by a glass case, it would be permissible to recite the blessing over it. Thus, for example, the element in an electric stove could, even according to these authorities, be used for *havdala* if it were specifically turned on for the ceremony; see, however, *Shemirat Shabbat Kehilchata* 61:27,87.

Rabbi Waldenburg,³⁸ as well as many other authorities,³⁹ rule in accordance with the authorities who permit using a light covered by glass, provided the glass is transparent. Second, Rabbi Waldenburg cogently argues that even according to those who rule to the contrary and prohibit blessing a fire covered in glass, the outer case of an incandescent bulb does not constitute a blockage since it is an integral component of the bulb and cannot be removed.⁴⁰

Rabbi Auerbach⁴¹ adds that even if one were to accept this analysis that the glass covering is not a blockage, it would

38. *Mishpatai Uziel, Orach Chaim* 9 and *Tzitz Eliezer* 1:20:13.

39. See also *Aruch HaShulchan* 298:18; *Ketzot Hashulchan* 99:4; *Mishnah Berurah* (*bede'aved* permissible); *Shermirat Sabbat Kehilchata* 61:31 (same); *Shoneh Halacha* 298:17 (same); but see *Meorai Aish*, 5:1 who questions whether a lamp cover need ever be removed.

Rabbi Ovadia Yosef criticizes Rabbi Uziel for dismissing the opinions of those authorities who are strict on this matter, especially since according to these rabbis a blessing over a glass covered light would be uttered in vain. Rabbi Yosef's criticism is surprising, since halacha allows for an eminent scholar to decide which position among differing opinions one should follow (see e.g., *Ramo, Choshen Mishpat* 25:2; *Shach, Yoreh Deah* 242, *Kitzur Behanhagat Horaot*, no. 4; and *Aruch Hashulchan, Yoreh Deah* 242:64). It is possible that this reflects Rabbi Yosef's strong inclination to avoid even possibly uttering a blessing in vain; see also note 10.

40. See e.g. *Yevamot* 78a-b, which clearly indicates that any impediment which is an intrinsic part of an item (or person) is not considered a blockage (*hefsek*).

41. *Meorai Aish* 5:1. Rabbi Auerbach additionally suggests a novel interpretation of the Jerusalem Talmud to exclude a light which requires a glass to function properly. Only an independently functioning fire can be used for *havdala*. Thus, he argues that an incandescent light may not be used for *havdala*, since it needs a glass case to function.

only permit use of an electric bulb through which one can see the filament glowing. The *Shulchan Aruch* (*Orach Chaim* 298:15) states explicitly that in any situation where one only sees the light (but not the fire), one may not recite the blessing. *This limitation is critical; frosted light bulbs may not, under any circumstances be used for havdala candles.* Even according to those authorities who permit the use of incandescent lights, they must be of the transparent variety that one can clearly see the filament glowing.⁴²

42. Rabbi Moshe Stern (*Baer Moshe* 6:61(15)) speculates that incandescent lights may not be used for *havdala* candles since they are similar to the dying coals which the Talmud (*Berachot* 53b) states should not be used for *havdala* candle. The Talmud's criterion for how "bright" dying coals must be in order to be used for *havdala* candles is if "one places a splinter on them, the splinter ignites independently." Rabbi Stern believes that the term "independently" is synonymous with "immediately" in this case. Thus he suggests since a splinter placed on a glowing filament does not immediately ignite, incandescent bulbs should be disqualified for use as *havdala* candles. Rabbi Stern's argument seems incorrect for three reasons: First, it is contra-factual, as splinters do ignite immediately when they touch a glowing filament; second, he provides no proof that the term "independently" means immediately; third, the Talmud's criterion is not intended to provide a broad definition of what "fire" is sufficient for *havdala*, but only to provide a test for when coals are considered to be "dying." Neither the contemporary nor the classical decisors have cited this Talmudic text as a general test of what constitutes fire according to halacha. A similar critique of Rabbi Stern's arguments appears in Rabbi Feitel Levin "The Electric Menorah" 1 *Or Hadarom* 12, 21 (1984). In his conclusion, Rabbi Stern, however, defers to the rulings of the many authorities cited in note 45 and permits the use of incandescent lights as *havdala* candles in case of need.

Rabbi Shlomo Zalman Auerbach⁴³ himself, however, argues that one may not use even an incandescent light for *havdala*. He cites the Talmud (*Pesachim* 54a) which relates that on the Saturday night following Creation, God provided Adam with the knowledge to make fire by rubbing two stones together; the Sages decreed that it is proper to light a fire at the *havdala* ceremony to commemorate Adam's discovery. Rabbi Auerbach asserts that the fire used for *havdala* must be halachically identical to the fire that Adam discovered. Accordingly, he states that even an incandescent light may not be used for *havdala* because of both its physical and halachic dissimilarity to the fire discovered by Adam.⁴⁴

43. *Meorei Aish* 5:1; *Kochavia Yitzchak* 11. It is reported that Rabbi Moshe Feinstein also prohibited the use of incandescent lights for *havdala* candles; see Rabbi Bunim Cohen, *The Radiance of Shabbos* p.137.

44. Among the physical dissimilarities is that an electric bulb requires a glass covering to function, unlike the fire that Adam produced. The halachic difference is more complex. While both incandescent lights and a fire are biblically prohibited, halacha considers an incandescent light to be violative of a *tolada* (derivative biblical prohibition) and not of the *av melacha* (primary biblical prohibition), since no combustion takes place. This is why the Rambam (*Hilchot Shabbat* 12:1) classifies heating a metal until it glows as only a derivative biblical prohibition. Rabbi Auerbach states that the critical difference is whether combustion of fuel is present. Only in circumstances where fuel combustion is present is there a primary biblical prohibition (*av melacha*); in all other circumstances there is only a derivative biblical prohibition.

Rabbi Stern (*Baer Moshe* 6:65(29)) appears to argue factually with Rabbi Auerbach and assert that there would have been actual combustion in the lights were there not a vacuum seal around the filament. These authors are at a loss to explain his understanding of how incandescent lights works. In addition, even if he were factually correct, Rabbi Auerbach could reply that it

Many rabbinic authorities disagree with Rabbis Auerbach and Yosef and accept that an incandescent light may be used for *havdala* candles.⁴⁵ In fact, there was a practice in Europe, dating back to the invention of incandescent lights, to deliberately use these bulbs for *havdala* candles so as to demonstrate that one may not use them on Shabbat.⁴⁶ This

is the presence of actual combustion that is needed, and not merely the possibility of combustion; see also, Levin, *supra* note 42, at 12, 21.

It is, however, possible to disagree with Rabbi Auerbach's halachic analysis by noting that nowhere in the talmudic or post-talmudic literature is there ever stated a requirement that the fire used for *havdala* must be violative of the primary biblical prohibition, and not a derivative biblical prohibition. In fact this assertion seems contrary to Rambam's rule (*Hilchot Shabbat* 7:7) that there is only one distinction between a secondary and primary biblical violation and that difference relates to sacrifice issues. Rabbi Dovid Cohen, of Congregation Gvul Yavetz, has commented to these authors, that that statement can be limited to issues relating to prohibited work, and not positive commandments.

45. *Mishpetai Uziel*, *Orach Chaim* 1:8, 2:38; *Tzitz Eliezer* 1:20:13; *Shaarim Metzuyanim Behalacha* 96:6; *Machaze Avraham*, *Orach Chaim* 41; *Luach Hayovel* (R. Henkin) 18:20 (some permit); *Yesodai Yeshurun* 5:494; *HaChashmal Leor Halacha* 3:8; *Zichron Yaakov* 14:2; *Beit Yisrael*, *Orach Chaim* 21. Rabbi Aharon Lichenstein recounts that Rabbi Joseph B. Soloveitchik ruled that one fulfills (at least minimally) the obligation of *havdala* candles with incandescent lights. Nearly all authorities do not consider as normative the position of the Ravad, commenting on Rambam, *Shabbat* 12:1, that a glowing red-hot metal is not a fire; see note 10 and *Minchat Shlomo* 105-7, but see *Meorai Aish* 5:1.

46. Halacha requires that the fire used for the candle must be a prohibited form of fire; see *Shulchan Aruch*, *Orach Chaim* 298:5. For this reason, fluorescent lights may not be used for *havdala*; for a further discussion of why fluorescent lights are not "fire" according to halacha, see Broyde and Jachter, *supra* note 1 at 10-11.

practice has been attributed to many of the eminent rabbinic authorities of the previous generations of Europe, including Rabbi Chaim Ozer Grodzinsky, Rabbi Yosef Rozen (the Rogachover) and Rabbi Chaim Soloveitchik of Brisk.⁴⁷

However, even those authorities who permit the use of an incandescent light for *havdala* lights concede that they are not the most preferable form of fire. The *Shulchan Aruch* (*Orach Chaim* 298:2) states that it is preferable that a candle of more than one wick be used for *havdala*. An incandescent bulb consists of one filament and, therefore, does not constitute the optimal way of reciting *havdala* according to all opinions. It is possible, however, that a series of electric bulbs placed together (such as a chandelier) may be comparable to a candle with more than one wick.⁴⁸

47. For a historical recounting of the various rabbinic figures who used to recite the *havdala* blessing over incandescent lights, see *Zichron Yaakov* 14:2; *Chashmal Leor Hahalacha* 3:8; *Nachalat Simon* 16; *Shaarim Metzuyanim Behalacha* 96:6; *Aishel Avraham, Chullin, Kuntres Peirot Ginosar* no. 21. Indeed Rabbi Joseph B. Soloveitchik recounted a number of times that he witnessed Rabbi Grodzinsky recite *havdala* on an incandescent light.

48. *Kochavai Yitzchak* #11 notes that many of the traditions of the *havdala* ceremony are contingent on there being a flame present. Thus the *Shulchan Aruch* (298:4) states it is best to have a multi-wick candle; to extinguish it in the wine (*Ramo* 296:1); and to have a designated candle used only for *havdala* (*Kaf HaChaim* 298:12). All of these additional customs are dependent on the presence of a candle. The latter objection can be overcome through the use of a designated electric *havdala* light; see *Tzitz Eliezer* 1:20(13), based on *Shulchan Aruch* 298:2 and *Aruch HaShulchan* 298:6. In addition, *Magen Avraham* 298:3, *Aruch Hashulchan* 298:5 and *Mishnah Berurah* 298:5 note that a wax candle should be used for *havdala*, and common practice reflects this custom.

Kaf Hachaim (*Orach Chaim* 673:19), however, indicates that even a single incandescent light has the status of multiple fires.

Shemirat Shabbat Kehilchata summarizes these rules as follows:

It is prohibited to use a fluorescent light for *havdala*, since there is no fire present;⁴⁹ so too, one may not use a regular incandescent bulb whose filament is not visible. Concerning those bulbs whose filament is visible, there is a dispute; some authorities prohibit and some authorities permit.⁵⁰

In situations where a candle is unavailable (or impractical) and the choice is between reciting *havdala* without a candle⁵¹

49. It is interesting to note that he does not exclude fluorescent lights for Shabbat candle lighting, but only for *havdala*; see also text accompanying notes 24 to 26 for a discussion of why this might be so.

Rabbi Moshe Stern (*Baer Moshe* 6:63:22) states "One may recite *havdala* over an electric light since one can see the actual fire through the glass. However, one may not recite the blessing over fluorescent lights since the glass is opaque." Nearly all other authorities who address this issue rule that fluorescent lights may not be used since they are not fire according to halacha, rather than because the bulb is opaque; see *Chashmal Leor Hahalacha* 3:8; *Yabia Omer* 1:17-18; *Shemirat Shabbat Kehilchata* 61:32.

50. *Shemirat Shabbat Kehilchata*, 61:32 (notes omitted). "According to those authorities who rule permissibly, one may recite the blessing over an incandescent light turned on via a timer;" *id.*

Many agree, however, that incandescent lights may not be used for *havdala* after Yom Kippur. The light used for *havdala* after Yom Kippur must be lit the entire fast (*Shulchan Aruch, Orach Chaim* 624:5). It is possible that an incandescent light, even if it has been on the entire fast, is not considered to be lit the entire fast since at every moment the electricity used by the light is being newly generated; see *Tzitz Eliezer* 1:20:13 and *Yabia Omer* 1:18; see, however, *Mishpetai Uziel, Orach Chaim* 8.

51. While the use of a candle is a mitzvah (*Mishnah Berurah* 298:3, *Chazon Ish, Orach Chaim* 35:7) one who cannot find one

or using an incandescent light, most authorities rule that an incandescent light should be used and a blessing recited; since an incandescent bulb has the halachic status of a "fire", at least minimally, it fulfills the obligation.⁵²

III. Chanuka Lights⁵³

Unlike Shabbat candles or *havdala* lights, Chanuka lights unquestionably require an act of kindling,⁵⁴ and nearly all rabbinic authorities assert that a "fire" of some sort is needed.⁵⁵ If either of these two elements are lacking one cannot fulfill the commandment. A clear majority of rabbinic decisors who have addressed the question of whether one

need not delay *havdala* in order to find a candle; *Shulchan Aruch* 298:1.

52. As explained above, numerous rabbinic authorities of the last fifty years – including Rabbis Grodzinsky, Henkin, Soloveitchik, Uziel, Waldenburg and others – have affirmed the practice that permitted or even encouraged reciting the *havdala* blessing over an incandescent light. The two significant rationales for prohibiting such a blessing are analytically debatable. Rabbi Ovadia Yosef's reasoning, that the glass covering is a blockage – which he himself labels only a possibility – has not been accepted by most authorities (see notes 38 and 39) for a broad variety of reasons; Rabbi Auerbach's novel insight, which distinguishes between primary and secondary prohibited fire, can be questioned (see note 44) and creates a distinction between types of fire unsupported by authorities, past or present.

53. For an excellent analysis of the many issues summarized in this section, see Rabbi Feitel Levin "The Electric Menorah" *Or Hadarom* 1:12-67 (1984). This essay has been translated into Hebrew also; see *Idem*, *Techumin* 9:317-340.

54. *Shulchan Aruch*, *Orach Chaim* 675:1.

55. Since Chanuka lights commemorate the miracle related to the fire-burning candelabrum in the Temple, it is intuitive that fire is needed in the commemoration.

can fulfil the commandment to light Chanuka candles with an electric menorah conclude that one cannot. The reasoning employed by these many decisors is varied, and no single rationale attracts the approval of a majority of the decisors.⁵⁶ A minority of decisors⁵⁷ have ruled that one does minimally fulfil the obligation of lighting a Chanuka menorah with an incandescent electric menorah.⁵⁸ It clearly is the tradition in observant homes not to use electric menorahs to fulfill the commandment of lighting a menorah (except perhaps under exceptional circumstances).⁵⁹

Three minority opinions that are raised to object to the use of electric menorahs are ones that have been raised elsewhere in the context of incandescent lights. Thus, Rabbi

56. *Yabia Omer* 3:35; *Yam HaGadol*, *Orach Chaim* 32; *Devar Eliyahu* 63; *Mishpetai Uziel* 1:7; *Levushai Mordechai* 3:59 *Maharshag* 2:107; *Yaskil Avdi* 2:9; *Har Tzvi* 2:114; *Meorai Aish* 5:2; *Kaf Hachaim* 673:19; *Luach Hayovel* (R. Henkin) page 81 (and many others).

57. See note 79 for such a list.

58. *I.e.*, a specially designed menorah that operated on electrical current.

Beit Yitzchak, *Y.D.* 120, claims that one does not fulfill the obligation with a regular hanging incandescent light since it is not clear to the observer that this relates to Chanuka; the publicizing of the miracle (*parsumai nesa*) is intrinsic in the obligation.

59. Rabbi Levin, *supra* note 53, page 12 and page 16(n.19). There is, of course, nothing wrong with publicly turning on an incandescent menorah as a way of publicizing the holiday of Chanuka so long as this "lighting" is followed or preceded by a lighting of a proper menorah. For reasons explained in the final portion of this section, it is appropriate to have in mind that one is not fulfilling one's obligation to light Chanukah candles when one lights an incandescent menorah prior to lighting an oil or candle one; see *Mishpetai Uziel* 1:7.

Tzvi Pesach Frank states that one may not use an incandescent menorah to fulfill the obligation because turning on an incandescent light may not be an act of kindling and an incandescent bulb is not a form of fire.⁶⁰ As explained above, both of these positions are rejected by the consensus of halachic authorities.⁶¹ So too, continuing his analysis discussed above, Rabbi Waldenburg raises the possibility that an incandescent bulb is unsuitable for use as Chanuka lights since the light filament is shaped like an arc and all agree that Chanuka lights may not be arranged in a round shape.⁶² As we have noted above, this contention is not beyond dispute. Rabbi Yitzchak Schmelkes⁶³ states that one may not use incandescent lights since they are so common and lighting them would not publicize the miracle of Chanuka. This argument is not applicable, as Rabbi Ovadia Yosef notes, to an electric Chanuka menorah which is lit, built, and designed specifically to publicize the miracle of Chanuka.⁶⁴

The argument, though, which has attracted the greatest number of adherents, albeit with variation, is the contention that electric lights differ – even though they are halachically "kindled fire" – so significantly from the menorah which

60. *Har Tzvi, Orach Chaim* 2:114:2; see *supra* note 9.

61. See *supra*, text accompanying notes 1 - 10.

62. See *Shulchan Aruch* 671:4; *Tzitz Eliezer* 1:20:12.

63. *Beit Yitzchak, Yoreh Deah* 1:120.

64. *Yechave Daat* 4:38. In addition, as Rabbi Yosef argues, one can minimally fulfill the mitzvah in a way that does not publicize the mitzvah; see *Shulchan Aruch* 671:7; in times of old when people used wax candles for both illumination and for Chanuka purposes, halachic authority generally did not prohibit such candles lest it not publicize the miracle; rather they insisted that such candles be lit in a special place indicating their unique function; but see note 58.

was lit in the Temple that they cannot be used to fulfill the rabbinic commandment of commemorating the miracle with the menorah that occurred in the Temple. Chanuka lights commemorate the lights in the Temple, and one cannot fulfill this mitzvah by lighting something which differs so greatly from the Temple menorah, even if it is halachically defined as fire. Among the prominent differences are that electric lights do not have a flame, no fuel is consumed, no fuel supply is present at the time of lighting, and that electric bulbs contain a glowing filament which is not a conventional fire. Among the secondary differences between a conventional menorah and an electric one are the absence of a wick and oil and the dependency on not-yet produced fuel.⁶⁵ While each of these differences alone might not be significant according to most authorities, the sum-total of these differences motivates most authorities to prohibit the use of an electric menorah.⁶⁶

Rabbi Shlomo Zalman Auerbach focuses on the absence of a flame in an incandescent light and the fact that it is an unconventional "fire".⁶⁷ He states that even though heat

65. Rabbi Levin in his article, *supra* note 53, lists 17 factors which are not present in a electric menorah according to various authorities. Some argue that a fuel supply is always required in the definition of a candle, independent of any issue relating to the Temple Menorah; see *Meorai Aish* 5:2.

66. It is important to note that, with the exception of *Mayim Chaim* 1:279, all the authorities who permit the use of an incandescent menorah admit that it is far short of the ideal, since certainly it is no better than a menorah which does not use oil or an oil based fuel, which *Shulchan Aruch* 673:1 explicitly classifies as non-ideal.

67. *Ma'amarim Be'inyanei Chashmal* p.87-88; *Meorai Aish* 5:2. In fact, Rabbi Auerbach here states that metal heated until it glows

and light production without the presence of a flame or combustion suffices to violate the Shabbat rules, it does not necessarily follow that it suffices to fulfill a positive commandment. He notes that Rambam classifies flame-less and combustion-less light and heat as only a derivative form of fire.⁶⁸ Furthermore, Rabbi Auerbach notes that a strong case can be made that even if these lights were a full "fire" for the purposes of Shabbat rules, the menorah is designed for a completely different purpose – to commemorate and publicize the miracle – and to commemorate the miracle, it would seem clear that one needs a flame and fuel consumption.⁶⁹

The same argument can be advanced for the absence of combustion. As Rabbi Feitel Levin explains, "fire without combustion may be adequate to incur liability for fire-lighting on Shabbat, but not adequate for the performance of a mitzvah."⁷⁰ Two counter arguments have been advanced. Rabbi Yitzchak Sternall replies that it is clear that the Chanuka menorah does not have to resemble the menorah in the Temple; our Chanuka menorah differs in many other forms. There is no talmudic support for the proposition that combustion is required.⁷¹ In addition it has been argued that it would seem appropriate to commemorate the miracle

hot is not a *ner*; but see text accompanying note 17.

68. See note 44 for a further explanation.

69. *Meorai Aish*, p. 190; Rabbi Eliyahu Klatzkin advances this argument in a slightly different form. He states that the Chanuka menorah must resemble the Temple menorah (*Devar Eliyahu* 63), while Rabbi Auerbach thinks it has to resemble the Chanuka miracle; see generally, Rabbi Levin, *supra* note 53, at page 23.

70. Rabbi Levin, *supra* note 53 at 24 and *Meorai Aish* 5:2.

71. *Kochavai Yitzchok* 7-8.

– there was light and heat emitting from the menorah in the Temple without any fuel consumption – precisely through a menorah that consumes no fuel.⁷²

So, too, it has been argued that the halachic requirement that a fuel supply present in the menorah to last the requisite time it needs to burn cannot be fulfilled, since the menorah is powered by continuously produced electricity, none of which exists at the time of "lighting."⁷³ Some have replied that in our modern era when power disruptions are so infrequent, the inevitability of the power production suffices.⁷⁴ Others have sought to solve this problem with a battery-operated menorah, since its fuel supply is present at the time of lighting.⁷⁵

Various secondary objections have also been raised. Among the secondary objections raised are that a menorah must have a wick.⁷⁶ A number of halachic authorities clearly disagree with this rule, however, including both Rabbi

72. *Mayim Chaim, Orach Chaim* 279; Rabbi Yakov Holtzberg, "Electric Chanuka Candles," *Hameasef* 9:2 (391) Nissan 5664.

73. *Devar Halacha* 63. This argument is advanced in a different form by *Har Tzvi* 2:114:2 who implies that fuel need not be present at the time of lighting, but must be provided by the lighter of the menorah.

74. Rabbi Shlomo Levin, *Hapardes* 24:5:27

75. See, e.g., comments of Rabbi Chayim David Halevi, *Aseh Lecha Rav* 6:57. It is clear scientifically that "current" is no more present in a battery than in the fuel supply stored in the power station. Rather, the virtue of a battery is that the fuel supply is under the control of the one making the blessing, which is not true of electricity produced at a generating station; see footnote 17. According to this analysis, a generator under the control of the one making the blessing is halachically identical to a battery.

76. Rav Henkin, *Luach Hayovel* page 81.

Auerbach and Rabbi Shmelkes,⁷⁷ both of whom approve of wick-less menorahs. So, too, some later authorities, based on a discussion in the Maharal, note that it is important for a menorah to have a container that holds the fuel, although this requirement is not accepted by all rabbinic decisors. Rabbi Feitel Levin has noted that an electric menorah might not have a fuel base according to halacha and thus be unacceptable to those authorities who require one.⁷⁸

In summary, while the reasons advanced differ, it is the opinion of most rabbinic authorities that have addressed this issue that one may not fulfill the commandment of lighting Chanuka candles with an incandescent menorah.

A minority of authorities have, on the other hand, permitted the use of incandescent lights for Chanuka candles.⁷⁹ Their argument is that while there are many

77. *Beit Yitzchak* Y.D. 1:120 and *Meorai Aish* 5:2. Rabbi Schmelkes' rationale for permitting wickless menorahs is that the obligation to resemble the Temple menorah is only a *lechatchela* (ideal) obligation. Rabbi Auerbach is uncertain if Rabbi Schmelkes' approach would apply even for an absence of a fuel supply, since the focus of the miracle was with the fuel supply. In addition, Rabbi Levin suggests that maybe the filament should be considered the wick; Rabbi Levin, *supra* note 53, at n.140.

78. Levin, *supra* note 42 at 40-42. See *Avnei Nezer, Orach Chaim* 500, for a discussion of this issue citing the various opinions relating to the requirement of a fuel base; see also *Ba'er Hataiv* 673:1 who in passing, citing *Shevot Yakov* 137, permits one to light candles without any base holding the candles. Rabbi Joseph B. Soloveitchik agrees with *Baer Hataiv's* ruling and permits this practice.

79. *Achiezer* 4:6 (clear implication); *Kochavai Yitzchok* 5; *Mayim Chaim* 1:279; *Tzitz Eliezer* 1:20(12) (possibility); *Ohr Chadash* p. 36; such a position can also be inferred from *Beit Yitzchak Yoreh Deah* 1:120(5) & 2:31. For a list of articles found in rabbinic

differences between incandescent lights in a menorah and a classical oil-burning menorah, all of these differences only have the status of preventing one from ideally fulfilling the obligation. These authorities would generally assert that any single "fire" for which one would be biblically liable for lighting on Shabbat suffices to minimally fulfil the obligation to light Chanuka candles. As Rabbi Chaim Ozer Grodzinsky states:

On the matter of whether it is permissible to turn on or off electric lights on Shabbat and Yom Tov, it is obvious that one who does so violates the biblical prohibition of lighting or extinguishing a fire . . . It is permissible to recite the blessing over electric Shabbat candles; on the issue of electric menorah lights, olive oil is the preferred form. This is particularly so in light of Ramo's rule that one should light on a place that makes it clear that one is lighting for Chanuka.⁸⁰

According to this approach, it clearly appears that one would fulfill the minimal obligation to have Chanuka candles lit with a specially designated electric menorah. This position, although it has not attracted a great deal of support among decisors of our generation, cannot be dismissed. Since there is nearly no discussion in the Talmud or *rishonim* of what aspects of a menorah are vital to minimally fulfill the obligation, it is very difficult to prove (wrong or right) the assertion of those authorities that any menorah which

journals that support this position, see Encyclopedia Talmudit "Electricity" 18:187 (n.384) and Levin, *supra* note 53, table 4.

80. *Achiezer* 4:6. All of the responsa found in volume four of *Acheizer* were not published until many years after Rabbi Grodzensky's death, and were unavailable to all but the most recent discussion of this topic.

produces a form of light which violates the biblical commandment of burning on Shabbat,⁸¹ suffices for Chanuka menorahs.

Rabbi Chayim David Halevi discusses the situation of one who is on an airplane⁸² on Chanuka and thus unable to light a conventional Chanuka candle. He recommends lighting a battery-powered electric menorah without a blessing.⁸³ From his responsa it is clear that Rabbi Halevi does not believe that one has fulfilled the mitzvah of lighting Chanuka lights with a battery-powered light, since he rules that if one has the opportunity to light with candles before dawn, one should do so and *recite the blessing*. The reason he urges one to use the battery-powered light is simply to publicize the miracle of Chanuka and not to fulfill the mitzvah of lighting.⁸⁴

81. It is however, clear that a fluorescent LCD or LED menorah would not fulfill the commandment, since such lights are not considered fire according to halacha; See Rabbi Levin, *supra* note 53, at 18 and Broyde and Jachter, *supra* note 1, at pages 10-11.

82. For an excellent discussion of whether one is obligated to light a menorah on an airplane and other possible solutions to this problem, see Rabbi J. David Bleich, *Contemporary Halakhic Problems* III:54-58 ("Chanuka Lights for Travelers").

83. The advantage of a battery-operated light over a light which draws its power from a generator is that the former has a fuel supply present at the time of candle lighting. Thus, one obstacle to permitting the use of electric lights is eliminated by the using a battery-operated light.

84. *Aseh Lecha Rav* 6:57 and *Yechave Daat* 4:38; see also *Yalkut Yosef* 5:p.215 for a similar analysis. Rabbi Uziel rules that one may recite the blessing of *she'asa nissim*, deleting God's name, on an electric menorah even though one does not fulfill the obligation of lighting Chanuka candles therewith; see *Mishpetai Uziel* 1:7(3). Most disagree with this rule; see *Yalkut Yosef* 5:205(n.50).

The final portion of Rabbi Halevi's ruling can be considered debatable. A number of premier authorities, including Rabbis Grodzinsky, Massas, and perhaps Waldenburg⁸⁵ and Schmelkes,⁸⁶ accept that one can fulfill the commandment with an incandescent menorah. According to these authorities, reciting a blessing the second time one lights candles (if that opportunity arises) would be prohibited. It would seem more proper to avoid this problem and light a second time without a blessing.⁸⁷

85. Rabbi Waldenberg (*Tzitz Eliezer* 1:20(12)) leaves the matter in doubt, as he thinks it is possible that most incandescent lights are torches, and cannot be used as Chanuka lights. However, an incandescent menorah could be designed to use a straight single filament bulb, which Rabbi Waldenberg would rule acceptable.

86. Rabbi Schmelkes' ruling is unclear. He states that incandescent lights may not be used as Chanuka candles, since they do not publicize the miracle. Rabbi Yosef, *Yabia Omer* 3:35, understands Rabbi Schmelkes as prohibiting incandescent menorahs in all circumstances. Rabbi Grodzinsky, *Achiezer* 4:6, indicates that he understands Rabbi Schmelkes as stating only that incandescent lights do not ideally fulfill the commandment, and such an understanding of Rabbi Schmelkes is also found in Levin, *supra* note 53, at 33 ("Rabbi Schmelkes, who essentially permits the use of electric lighting for *Ner Chanukah...*"). *Encyclopedia Talmudit* indicates that from Rabbi Schmelkes' work one can derive that incandescent lights might be permissible; see *Encyclopedia Talmudit* "Electricity" 18:187 (n.384 & 396).

87. This assumes that it is not proper to recite the Chanuka blessing in circumstances where no one certainly fulfills the commandment of lighting Chanuka candles (except in a synagogue during services). Such a position is accepted by most authorities; see *Moadei Yeshurun* page 18 and n.273 (in the name of Rabbi Feinstein); *Miztvot Ner Ish u'Baito* 2:9; *Minchat Yitzchak* 6:65; Rabbi Joseph B. Soloveitchik, *Mesorah* 4:12-3; but see *Noam* 19:290,

IV. Searching for Chametz

The first mishnah of *Pesachim* states that "on the evening of the fourteenth of Nissan one must search for *chametz* by candlelight."⁸⁸ The Sages felt that since this search should be a particularly thorough one, it was necessary to be done by candlelight.⁸⁹ While a light source must be used during the search, certain types of light sources are deemed unacceptable. Thus, *Shulchan Aruch* recounts that a torch (a multi-wick candle) is unacceptable.⁹⁰ The Talmud⁹¹ gives four reasons prohibiting the use of a torch:

- 1] A torch is so large that one will not closely examine the corners of the house since the torch is too large to go there.
- 2] A torch [because of the way it is carried] illuminates

where it has been argued that one may recite the blessing any time a proper menorah is lit.

88. *Pesachim* 2a. In addition, one recites a blessing which concludes with "that one commanded us to destroy *chametz*;" *Pesachim* 7b; *Shulchan Aruch* 432:1. Rabbi Yosef notes that from the fact that the blessing recited does not make mention of the candle (unlike Shabbat, Chanuka and *havdala* blessings), one can derive that any light source is sufficient; *Yabia Omer* 1:40. It has been argued that the Talmud (*Pesachim* 7b), when discussing the biblical allusion for the need for a candle, seems to require specifically a "candle" in this ritual, although, as noted in text accompanying note 97, this requirement is not reflected in the various halachic codes and this talmudic passage could be interpreted as merely requiring a light source and not specifically a candle..

89. *Pesachim* 2a.

90. *Shulchan Aruch*, 433:2. One who searches with a torch must search again according to most authorities; *Aruch HaShulchan* 433:2; *Mishnah Berurah* 433:10; but see *Turei Zahav* 433:3.

91. *Pesachim* 8a.

behind a person, whereas a candle illuminates in front.

3] A torch emits so much heat that one will not search closely, lest the flame from the torch set the house on fire.

4] A torch, unlike a candle, provides an unsteady flame that jumps and flickers, which is poor to search with.⁹²

None of the reasons advanced to prohibit a torch are applicable to a battery-powered flashlight, and in fact nearly all⁹³ authorities permit the use of a flashlight for *chametz* searching.⁹⁴ Thus, in this case, even though the term "candle"

92. So, too, one should not use an oil lamp or a candle made from animal fat, since one might not search closely lest the oil or animal fat drip on utensils and render them non-kosher; *Shulchan Aruch* 433:2.

93. The authors are aware of only one work that rules to the contrary; *Hillel Omer, Orach Chaim* 231 prohibits the use of electric lights for the search. He states, writing more than 50 years ago, that electric lights are dangerous, come on too short a cord and are so valuable, that people who search with them will not search closely, just like the torch in the time of the Talmud. His reasons certainly are not applicable today, as has been noted by Rabbi Felder, *Yesodai Yeshurun* 6:339, and Rabbi Yosef, *Yabia Omer* 1:40.

94. Rabbi Ovadia Yosef *Yabia Omer* 1:40; Rabbi Gedalia Felder *Yesodei Yeshurun* 6:338-339; Rabbi Salomon Braun, *Shearim Mitzuyananim Behalacha* 111:4; Rabbis Moshe Feinstein and Aharon Kotler cited by Rabbi Shimon Eider *Halachos of Pesach* I:86 n.81; Rabbi Abraham Isaiah Karelitz (*Chazon Ish*) cited in *Yechave Daat* 1:40; Rabbi Shmuel Halevi Wosner, *Shevet Halevi, Orach Chaim* 136, and many others.

Rabbi Yosef is the only prominent authority who is hesitant to permit this conduct on technical halachic grounds. *Shulchan Aruch* 433:1 cites the talmudic rule permitting one to search an area illuminated by sunlight without a candle; Magen Avraham 433:4

(ג) is used, the overwhelming majority of decisors rule that only the "light" aspect of the candle is required.

In fact, Rabbi Moshe Feinstein is cited as maintaining that it is *preferable* to use a flashlight rather than a candle.⁹⁵ It seems to these authors that since the consensus opinion acknowledges that a heated filament is the equivalent of a fire, a flashlight fulfills the rabbinic requirement to check for *chametz* "by the light of a candle." Furthermore, the essential requirement of the light that should be used while checking for *chametz* is that it be effective, particularly in enabling the search for *chametz* in various nooks and crannies.⁹⁶ Flashlights or incandescent bulbs on long extension cords are considerably more effective and safer than a candle in allowing one to search.

It is unclear if in fact a "fire" is actually even required according to halacha in this case. *Shulchan Aruch* (codifying the statement of the Talmud, *Pesachim* 8a) states that a porch

adds, however, that one may not search a room illuminated through a window that has a glass pane on it. Rabbi Yosef, asserting that the glass covering the flashlight is like the window pane, states that it is best to avoid this situation; see also notes 10, 37 and 39.

Rabbi Yisrael Weltz (*Chok Liyisrael* p. 16), however, rules in accordance with Maharsham's statement (*Da'at Torah* 11:3) that the *Magen Avraham's* rule is limited to those situations where the glass is cloudy and thus does not allow sufficient light to pass. He cogently argues that since the glass covering the bulb of the flashlight is transparent, use of a flashlight for searching for *chametz* should be permitted. This also appears to be the opinion of *Aruch Hashulchan* 433:2, especially as interpreted by Rabbi Yosef, *Yabia Omer* 4:40(4).

95. *Halachos of Pesach* I:86 n.81. The reasons advanced are our own and not Rabbi Feinstein's.

96. See *Shulchan Aruch, Orach Chaim* 433:1-2.

may be inspected without a candle so long as sun-light is available; the rationale for this is that natural light provides enough illumination. This rule is accepted by all authorities.⁹⁷ It would seem from this rule that any form of illumination, whether it is definitionally a "fire" or not according to halacha, suffices for the search for *chametz*. Thus, one could use a fluorescent flashlight for the search, since it too illuminates.

The most significant objection to the use of a flashlight for *bedikat chametz* is that it is a deviation from the custom of earlier generations. For example, Rabbi Braun, writing in *Shearim Metzuyanim Behalacha* 111:4, ends his discussion of this topic by stating:

Thus, there is no reason or rationale to prohibit the use of electric lights for *bedikat chametz*. Nonetheless, the Jews are holy, and a mitzvah that comes only once a year, it is best to do in the tradition of our parents, with a wax candle. Rabbi Aharon Kotler *zt"l* when he saw this statement in the first edition [of this work] stated that this is correct and the halacha is like it.⁹⁸

V. Broiling Meat

Halacha requires that meat either be salted or broiled prior to consumption,⁹⁹ and that livers always be broiled

97. *Shulchan Aruch* 433:1 and commentaries *ad locum*.

98. Similar sentiments can be found in *Yechave Daat* 1:4. This issue will be discussed in more detail in the Conclusion of this article.

99. *Shulchan Aruch, Yoreh Deah* 73:1. For an overview of this issue, see *Aruch Hashulchan, Yoreh Deah* 73:1-14.

prior to consumption. This regulation is designed to remove blood from within the meat.

There has been considerable discussion of the permissibility of broiling meat in an electric broiler. (This discussion involves only meat which *has not been salted* and is being broiled in order to fulfill the halachic requirement to remove the blood). Nearly all authorities permit the use of an electric broiler, since the hot filament is the halachic equivalent to a fire.¹⁰⁰ In this context, almost all halachic authorities agree that the requirement is that the meat be roasted with an external cooking source that radiates heat; in this case, even though the phrase fire (*עש*) is used, the critical factor is the generation of heat capable of broiling.¹⁰¹ Thus, it is the accepted practice that meat roasted over an electric oven has the same status as meat roasted over a wood or charcoal fire.¹⁰² It would therefore seem that

100. See, e.g., See *Da'at Sofer* Y.D. 13; *Yeshuot Yaakov* Y.D. 1:47; *Mishneh Halachot* 6:132 (quoting many authorities); *Hamaor* 21:6 p.19 (5729) (*Teshuva* of Rabbi Dov Ber Weinfeld permitting electric broilers); *Hapardes* 25:4 (#33) (*Teshuva* from Rabbi Henkin permitting electric broilers); *Hapardes* 26:2 (#13) (*Teshuva* from Rabbi Menachem Mendel Kasher permitting electric broilers). *Tzitz Eliezer* 11:53; *Chelkat Yakov* 2:141; *Hakashrut Kehilchata* 26:33. But see *Mishnat Avraham* 2:5 and *Shearim Metzuyanim Behalacha* 36:8 (opinion of Rabbi Yonatan Scheiff prohibiting electric broiling).

101. *Darkei Teshuva* 73:3. *Aruch HaShulchan* (Y.D. 76:11) and *Darkei Teshuva* (in the name of nearly all authorities), for example, state, that one can roast meat over a very hot piece of metal that is made hot through a fire source that is no longer present; but see *Tzlach, Pesachim* 74a. This is permissible according to many authorities, only if the gravy produced flows away from the roasting meat; see *Tzitz Eliezer* 11:53.

102. There is, however, a dispute as to whether the fire or element must be below the meat, or can even be above it; *Shearim*

liver cooked in a microwave oven would not have the status of "roasted meat", since a microwave oven does not have an external heat source, which is what is needed to "roast" meat according to halacha.¹⁰³ This ruling does not necessarily mean, however, that livers cooked in a microwave oven may not be eaten.¹⁰⁴

Metzuyanim Behalacha 36:7-8. A majority of authorities rule that even if the element is above the meat, it is permissible; see *Kashrut Kehilchata* 26:32 (n.9). This issue involves factors beyond the scope of this article.

103. "The external heat source draws the blood from the meat," *Shulchan Aruch Yoreh Deah* 69:21. A microwave oven has no external heat source, but rather generates heat by producing microwaves that increase the speed of vibration of the water molecules within food and thus heat the food internally. Unlike a conventional oven, the walls of a microwave oven get hot only through heat radiating from the food in the oven.

104. *Shulchan Aruch (Yoreh Deah 73:2)* notes that one may pickle livers in vinegar if the livers are properly de-veined; however, the *Geonim* decreed that one may not cook these livers again in a pot, but rather one must eat them "uncooked" (only pickled). It is possible to argue that livers "cooked" in a microwave oven (in a way that the blood drips away from the livers) are halachically analogous to pickled livers, and may not be recooked over a flame, but may be eaten "as is." In fact, such a ruling has been reported in the name of Rabbi Ben-Tzion Aba Shaul; see *Kashrut Kehilchata* 26:39 (one may "cook" liver in a microwave oven providing one does not recook the liver again).

It is possible that the appropriateness of Rabbi Ben Tzion Aba Shaul's rationale is related to how one resolves the dispute between Rabbi Feinstein and Rabbi Auerbach as to whether heating something in a microwave oven has the status of "cooking" (*bishul*) according to halacha. If one accepts Rabbi Auerbach's ruling that heating food in a microwave oven is not considered halachically as cooking, it would seem plausible that the livers would be permissible, similar to "uncooked" or pickled livers and may be eaten after they are washed, but may not be reheated over a

Conclusion

Merely because something is permissible according to halacha does not mean that it ought to be immediately implemented and adopted in observant homes. On the other hand, when an advance in technology allows one to upgrade one's ability to fulfill a commandment, one should not freely turn away that opportunity simply because such opportunity was not available to previous generations. There is a balance. Halacha prefers ritual observance performed in a manner similar to that done in previous generations and in other observant homes. On the other hand, technical improvements in ritual can and do occur¹⁰⁵ and many of

flame; if one accepts Rabbi Feinstein's ruling that heating food in a microwave oven is halachically considered cooking, livers cooked in such a manner would be prohibited. It is possible to argue that even Rabbi Feinstein would permit the eating of livers cooked in a microwave oven if the blood drips away, since the blood would not have an opportunity to be reabsorbed into the liver, as it does in the conventional cooking process; for a similar argument see Rabbi Henkin, *Hapardes* 25:4. For a detailed discussion of the dispute between Rabbis Feinstein and Auerbach, see Rabbi J. David Bleich, "Microwave Ovens on Shabbat," 25:2 *Tradition* 68 (1990).

105. This, of course, assumes that a determination has been made that a particular change is, in fact, halachically permissible. For a discussion of this issue in a different context, see Rabbi Chaim Twersky, "The Use of Modern Inks for Sifrei Torah," *Journal of Halacha & Contemporary Society* 15:68,76 (1988) where it is noted that "the use of a modern binding agent [for inks] ought not be proscribed by the halacha, and should be sought to improve the longevity of *sifrei torah*, *t'fillin* and *mezuzot*." Advances in technology have allowed the reformulation of the ink used by scribes to increase the number of years the letters in a Torah scroll will last. See also Rabbi Uri Dasberg, "Identification of a Sefer Torah," *Techumin* 1:491 (1979) where the author discusses the permissibility of marking a Torah with an invisible code so

them are driven by advances of technology. If in fact, a flashlight provides better light, it is not inappropriate to encourage people to use a flashlight instead of a candle when searching for *chametz* or when lighting Shabbat candles that will be left unattended; this is even more true in light of the safety problems associated with lit candles and small children.¹⁰⁶

Rabbi Yechezkel Landau (*Nodah BiYehuda, Orach Chaim* 2:18) provides a paradigmatic example of how halacha resolves this balance. Rabbi Landau was asked if one may construct a synagogue in a shape other than a rectangle, which had been the way synagogues were designed for many years. He replied that even though halacha has no particular requirement regarding the shape of a synagogue, "it is best not to deviate from the venerated practices [of the Jewish people]." However, he adds "if the reason [a deviation is desired] is that the proposed plan will allow for more available seating area, there is no reason why this plan should not be implemented." The question of using a flashlight to search for *chametz* is analogous to changing the shape of the synagogue for a valid reason. Unnecessary deviation from

as to prevent its theft. Indeed, Rabbi Feinstein uses a very similar type of argument – a change in technology leading to a change in ritual observance – to strongly discourage funerals on the second day of Yom Tov; see *Iggerot Moshe, Orach Chaim* 3:76.

106. Nor is this concern merely theoretical. See, e.g., "Mother and Two Sons Hurt in Fire Started by Candle" *New York Times* April 18, 1992, Page 23 col.5. ("As [a man] and his family performed the symbolic search for the leaven, a final preparation for Passover, a candle ignited a fire that swept their Brooklyn home late Thursday night ... [The fire] left his wife ... and their two youngest boys critically injured and their home destroyed.") This type of event should incline one to encourage the use of flashlights instead of candles.

custom is frowned upon; however, if the reason for the deviation is legitimate – and safety reasons certainly fit into this category – and there are no other halachic objections, then there is no objection to the change.¹⁰⁷

107. There is a fundamental difference between a custom involving a mitzvah, and other traditions. For example, having established that it is halachically permissible to broil meat in an electric oven (see section V), there is no mention among the decisors that it is best to broil meat in a manner similar to that done in previous generations. The sense that traditions of ritual observance ought to be kept and not changed (all else equivalent), is limited to those situations where there is a mitzvah involved, like searching for *chametz*, or lighting Shabbat candles. (Broiling meat is not a mitzvah, but only a procedure one follows to avoid a prohibition). To apply it in other contexts is uncalled for, and not found among the decisors.