

Survey of Recent Halakhic Periodical Literature

KOHANIM AND FLIGHTS LEAVING ISRAEL

I. THE PROBLEM

As recorded in Leviticus 21:1-4, other than in conjunction with the burial of a close relative, *kohanim*, the descendants of Aaron, are forbidden to defile themselves through contact with a corpse. Late in the summer of 2001 Rabbi David Morgenstern of Jerusalem was approached by a newly-observant Israeli pilot who relayed a question raised by a colleague: How is it that *kohanim* are permitted to embark on flights leaving Lod that pass over a cemetery in Holon? Upon investigation it was discovered that the situation has been in existence since some time in 1984 when flight patterns were altered to minimize flights over densely populated areas north of Ben Gurion airport and to avoid overflying a military area south of the airport. Although the details are not clear, it seems that some night flights departing to the United States use an alternate route but that all flights to European cities fly over Holon. It is reported that government officials have given assurance that flight plans would be altered in order to obviate the problem but that, in actuality, such changes have not been implemented.

Although there have been previous discussions of the permissibility of *kohanim* flying over cemeteries,¹ the reports of regular and ongoing cemetery overflight affecting vast numbers of travellers embarking from Ben Gurion airport have spawned a number of highly erudite halakhic treatments of this topic. Upon discovery of the problematic flight plans, a number of scholars formed a group styled as *Kanfei Yonah* for the purpose of investigating the various halakhic considerations with regard to possible priestly defilement in the course of such overflights. The findings of that group were published by Rabbis Mattisyahu ha-Kohen Halberstadt and Abraham Judah Goldmintz of Yeshivat Mir in Jerusalem in a pamphlet bearing the title "*Kanfei Yonah: Tisah me-al Kevarim.*"

An article discussing the same issues authored by R. Naphtali Baruch Spitzer appears in *Kol ha-Torah*, no. 52 (Nisan 5762), published by Agudath Israel of Great Britain. A responsum by R. Yosef Shalom Eliashiv and an accompanying article devoted to this topic authored by Rabbis David ha-Kohen Munk and Yohanan Alexander Lombard were published in *Yeshurun*, vol. X (Nisan 5762).² An article by R. Jacob Epstein presenting a number of leniencies that would render such flights permissible to *kohanim* as well as a rebuttal by Rabbis Halberstadt and Goldmintz of the *Kanfei Yonah* group are included in *Tehumin*, vol. XXII (5762). A further survey of a number of leniencies offered by R. Yirmiyahu Menachem Cohen appears in a journal published by the Conference of European Rabbis, *Sridim*, no. 21 (Nisan, 5763). Much of that material was earlier published by Rabbi Cohen in his *Teshuvot ve-Herim ha-Kohen* (Jerusalem, 5741), no. 61.

II. TUM'AT OHEL DEFILEMENT THROUGH OVERHANGING

A corpse defiles by means of tactile contact and also, as stated in Numbers 19:14, defiles persons, vessels and artifacts present within the same tent. Moreover, as recorded by Rambam, *Hilkhot Tum'at Met* 1:10, persons and implements directly above or below a corpse also become defiled. Such defilement occurs regardless of the distance between the person or object and the corpse because a corpse defiles *ad coelum et ad infernos* unless there is an interposition (*hazizah*) consisting of an object not subject to defilement.^{2a} The Gemara, *Hullin* 125b, records a controversy with regard to whether defilement occurring in such fashion is in the category of tactile defilement or whether the basis of that defilement lies in the fact that the person or the object, regardless of its size, has in effect formed itself into a "tent" over the corpse.³ Rabbenu Tam, *Sefer ha-Yashar*, no. 275, explains that the rule providing that a tent serves as an interposition preventing defilement from ascending *ad coelum* is based upon the verse "every one that comes into the tent and every thing that is in the tent shall be unclean seven days" (Numbers 19:14). The import of the text is twofold in nature: a) a tent serves to impart defilement to everything under its roof; and b) it serves to prevent defilement from extending beyond its confines.

An artifact that does not touch the corpse but is spread above it not

only becomes defiled but, if it is of the requisite size, has the status of a “tent” with the effect that persons, artifacts and foodstuffs under that object become defiled even though there is no contiguous contact with the corpse. At the same time, however, an item spread above the corpse in this manner, since it has the status of a “tent,” has the effect of limiting defilement and causing defilement to be contained within the area beneath it with the result that anything above that person or object remains in a state of ritual purity.⁴ Applying that principle to an airplane, the lower surface of the plane could itself serve as an interposition⁵ preventing defilement from entering and affecting anyone or anything within the plane.

However, the Mishnah, *Oholot* 8:5, posits a number of exceptions to that rule. Included among those exceptions are a person, animal or artifact “leaping” from place to place, a flying bird, a flapping cloak and a ship moving on the water. Persons, animals or objects encompassed in that category do not constitute a “tent” that serves to prevent ascension of defilement *ad coelum* or to convey defilement to all objects beneath. Rambam, in his *Commentary to the Mishnah, Oholot* 8:11, and in *Hilkhhot Tum’at Met* 13:5, explains that this provision is rooted in the consideration that members of this class do not have the status of a “durable tent” (*ohel ha-mitkayyem*). R. Ezekiel Landau, *Teshuvot Noda bi-Yehudah, Mahadura Tinyana, Orach Hayyim*, no. 30, amplifies that characterization by noting that a cloak billowing through the air is not grounded in any way but is suspended in the air by the wind and hence provides no shelter to that which is below; a moving ship and a flying bird do not remain in a fixed position and cannot be described as forming a protective “tent” over anything underneath.

Tiferet Yisra’el, Bo’az, Oholot 8:6, declares that although members of this class do not have the status of a “tent” even for purposes of constituting an interposition, nevertheless, they themselves do become defiled. That is indeed the position of a host of early-day authorities.⁶ An airplane flying through the sky is certainly comparable to a ship sailing in the sea and a bird flying in the air. Accordingly, since an airplane is not a “tent” but does itself become defiled, it cannot serve as an interposition preserving persons within the plane from defilement. That fundamental point was noted in the early days of airplane travel by R. Aaron Epstein, *Teshuvot Kappei Aharon* (Muncasz, 5693), nos. 25 and 50, and repeatedly confirmed in the intervening decades by a host of authorities.⁷

III. *OHEL ZARUK* A "THROWN TENT"

Despite the unopposed statement of the Mishnah, *Oholot* 8:5, declaring that a person or object leaping from place to place, a flying bird, a flapping garment and a boat moving upon water are not interpositions for purposes of defilement, the Gemara, *Eruvin* 30b, *Haggigah* 25a, *Gittin* 8b and *Nazir* 55a, cites a controversy recorded in a *beraita* regarding a similar but substantively different situation, "If one enters the land of the gentiles in a box, chest or cupboard, Rabbi [Judah the Prince rules that] he is defiled and R. Jose the son of R. Judah [rules that] he [remains] pure. The Gemara analyzes that dispute as a controversy with regard to whether or not an *ohel zaruk*, i.e., a "cast tent" or a "thrown tent", enjoys the halakhic status of a tent.⁸ The question is equally applicable to a person who is transported over a grave in a box or other container. If a "thrown tent" is not a tent, the "box, chest or cupboard" cannot function as an interposition and the person transported in that manner is subject to the rabbinically legislated defilement attendant upon one who exits the Land of Israel and enters the "land of the gentiles" or to the biblically ordained defilement occasioned by traversing a corpse or a grave.⁹ However, if such objects are indeed "tents" they serve as an interposition¹⁰ and hence, since the person transported in that manner has not physically set foot on defiled ground nor been in a tent resting thereon, he remains in a state of ritual impurity even though he is no longer within the confines of the Land of Israel. Similarly, if such an object is itself a "tent," a person enclosed within such an object does not himself become a "tent" over a corpse or a grave. Rambam, *Hilkhot Tum'at Met* 11:5, followed by virtually all early-day authorities,¹¹ rules that a "thrown tent" does not have the halakhic status of a tent.¹²

How does a "thrown tent" differ from, for example, a flapping garment with the result that there is controversy with regard to the former's status as a tent but the latter is not regarded as a tent by any of the *Tana'im* of the Mishnah?¹³ And, more significantly, how does the distinction impact upon the propriety of *kohanim* overflying cemeteries in an airplane? *Tosafot*, *Eruvin* 31a, *Haggigah* 25a, and *Nazir* 25a, as well as Rabbenu Hananel and Rashba, in their respective commentaries on the discussion in *Eruvin* 30b, explain that since the flapping cloak and the flying bird are "tents" actually flying through the air or moving over water, there is universality of opinion that, while actually in movement, a flying object does not have the characteristics of a "tent." The

controversy with regard to an *ohel zaruk*, those authorities assert, is a disagreement with regard to the status of a "tent" that by virtue of its nature does fly through the air, but the disagreement is confined to the status of such an object when it is at rest.¹⁴ R. Jose the son of R. Judah ascribes the status of a tent to such an object during the periods in which it is stationary while R. Judah maintains that the object's inherent potential for movement through the air or over water removes it from the category of a "tent."

Tosafot, in their comments on the discussions in *Eruvin*, *Haggigah* and *Nazir*, formulate a somewhat different distinction. According to *Tosafot*, the distinction is between a "tent" cast through the air or water and a tent transported by humans or beasts of burden. According to *Tosafot*, the controversy is limited to a "tent" that itself remains stationary but is nevertheless in motion because it moves in tandem with, and secondarily to, the propelling motion of a person or an animal. Again, the controversy is whether or not an object in the process of being moved in such a fashion possesses the defining attributes of a "tent"; all agree, however, that an independently propelled object lacks the characteristics of a "tent."¹⁵ *Tosafot's* distinction is also reflected, *inter alia*, in the comments of Rashi, *Gittin* 8b, *Tosafot Yeshanim*, *Shabbat* 17a, *Tosafot Rabbenu Perez* and Ritva, *Eruvin* 30b, as well as those of Rosh, Me'ri, and *Tosafot Rabbenu Tordos*, *Nazir* 55a. The distinction is amplified by Rabbenu Tam in his *Sefer ha-Yashar*, no. 275, with the explanation that the connotation of "tent" is of an object that is stationary; a bird in flight, a garment blown through the air by the wind and a floating boat are in constant (and essentially uncontrolled) motion and hence do not "rest" upon the corpse or provide it with shelter as is the nature of a tent. The controversy regarding an *ohel zaruk*, according to Rabbenu Tam, arises from the fact that the motion of the object can be controlled at any moment simply by stopping the person or animal carrying the object.¹⁶ Thus, according to both Rabbenu Hananel and *Tosafot*, there is no question that an *ohel zaruk* does not have the status of a "tent" while it is flying through the air.¹⁷ Moreover, *Shulhan Arukh*, *Orah Hayyim* 409:1, rules definitively that a *kohen* may not enter a cemetery even in an *ohel zaruk*. It is for that reason that a number of authorities, including R. Moshe Feinstein, *Iggerot Mosheh*, *Yoreh De'ah*, II, no. 164, and Rabbi Eliashiv, in the letter published in *Yeshurun*, rule unequivocally that a *kohen* may not fly over a cemetery.^{17a}

Parenthetically, R. Shalom Mordecai Schwadron, *Da'at Torah*, *Orah Hayyim* 626:3, reports that he was asked whether it is permissible to eat

or sleep in a *sukkah* while a dirigible hovers above the *sukkah*. The general rule, as formulated by the Gemara, *Sukkah* 21b, is that a *sukkah* within a “tent,” i.e., a *sukkah* over which a “tent” is suspended, is disqualified from use as a *sukkah*. The issue, then, is whether a dirigible has the status of a “tent.” *Da’at Torah* compares the dirigible to a floating boat that does not have the status of a tent even while standing immobile in the water or a billowing garment that does not have the status of a tent even when it is temporarily suspended in a stationary position. The boat regains the status of a tent only when it is immobilized by being tied to the ground and the garment similarly becomes a tent only if it is secured to the ground by means of a stone or a weight. Nevertheless, *Da’at Torah* notes that the dirigible is controlled by the pilot who determines whether it will move through the sky or remain stationary. Hence, according to *Tosafot*’s distinction between the phenomena enumerated in *Oholot* 8:5 and an *ohel zaruk*, the dirigible, since its potential motion is controlled by a human being, is not comparable to the objects enumerated in *Oholot* 8:5 but is in the category of an *ohel zaruk* and, accordingly, does constitute a “tent” when “at rest” in a stationary position.¹⁸ For that reason *Da’at Torah* advises that the *sukkah* not be used until the dirigible moves on. Rabbi Spitzer, *Kol ha-Torah*, p. 178, observes that *Da’at Torah*’s comments are, obviously, limited in their application to a dirigible, and presumably to a hovering helicopter as well, but do not apply to an airplane that cannot remain suspended at a fixed point in the sky.

It should also be pointed out that, according to *Tosafot*, a piloted dirigible, even if not comparable to a flapping garment or a flying bird, when in motion, would minimally have the status of an *ohel zaruk* which, as noted earlier, for purposes of normative Halakhah, does not have the status of a “tent” and hence would not prevent defilement of the *kohen*. However, as noted earlier, although an *ohel zaruk* is not a “tent” for purposes of interposition, it nevertheless has the status of a “tent” for purposes of extending defilement to everything under its cover. It may well be the case that an *ohel zaruk* also has the status of a “tent” for the purpose of disqualifying anything underneath from use as a *sukkah*. That would certainly seem to be the case according to the earlier-cited analysis of R. Chaim ha-Levi Soloveitchik, *Hiddushei Rabbeinu Hayyim ha-Levi al ha-Rambam, Hilkhhot Tum’at Met* 11:5. R. Chaim explains that the objects enumerated in *Oholot* 8:5 are not at all encompassed within the halakhic category of a “tent” because they lack the essential quality of a tent whereas an *ohel zaruk* is indeed a “tent” but,

unlike other tents, an *ohel zaruk* does not function as an interposition simply because its motion renders its position transitory and, in effect, an interposition that is inherently transitory is not an interposition.

Rabbi Epstein cites an opinion of Ritva, *Eruvin* 30b, in dismissing the contention that an airplane does not serve as an interposition by virtue of being an *ohel zaruk*. Ritva maintains that the rule that an *ohel zaruk* does not serve as an interposition is limited to an *ohel zaruk* that is itself subject to defilement as a vessel or utensil but that, for example, a wooden *ohel zaruk* that cannot become defiled because it is not a utensil, i.e., a flat board, does serve as an interposition. Much earlier, *Teshuvot Erez Zevi*, no. 73, s.v. *hetter gammel*, citing Ritva's position, suggests that a thin layer of wood placed over the floor of the airplane would serve as a interposition. Rabbi Epstein notes that the travelers flying in the passenger cabin sit atop another compartment used for stowing luggage and freight. The passenger cabin is separated from the lower compartment by a floor made of a variety of substances, the major portion of which, he asserts, cannot become defiled. Accordingly, he maintains that the floor of the passenger cabin constitutes an interposition serving to prevent defilement of the passengers.¹⁹ Nevertheless, as demonstrated by R. Zevi Pesach Frank, *Teshuvot Har Zevi, Yoreh De'ah*, addenda, no. 280, the majority of early-day authorities reject Ritva's position with regard to this matter. In addition, the question of whether or not items containing at least some quantity of metal are subject to defilement will be discussed subsequently.

R. Aryeh Zevi Fromer, *Teshuvot Erez Zevi*, no. 93, points out that even if the floor of the passenger cabin is composed of materials that cannot be defiled and hence would serve as an interposition preventing defilement from ascending to the cabin above, nevertheless, the roof of the passenger cabin, which is made of metal, protrudes over the edges of the floor.²⁰ Hence, the roof of the passenger compartment serves as a tent that causes defilement to ascend through the margins of the plane to the entire passenger cabin causing the passengers to become defiled. *Teshuvot Erez Zevi* dismisses that consideration with the argument that the defilement must first rise and enter the passenger compartment and only subsequently can it diffuse throughout the entire compartment. But since the plane travels at such high speed, argues *Erez Zevi*, there is no time for the defilement to diffuse.

Teshuvot Erez Zevi's argument is problematic, to say the least. He apparently treats defilement as if it is reified in a manner comparable to a physical vapor or the like.²¹ In actuality, defilement is a metaphysical

concept and while, at times, the language of physics is employed to describe metaphysical phenomena, there is no reason to assume that a metaphysical phenomenon such as diffusion of defilement does not occur instantaneously. Moreover, if the analogy of defilement to a diffusing vapor or the like is to be taken literally, there is no reason to assume that the defilement is left behind by the speeding plane. Smoke released within the passenger cabin, for example, would remain trapped in the compartment and would travel *in situ* at the same speed as the plane. If it is assumed that sources of defilement are governed by laws analogous to those of physics, defilement should similarly be trapped and hence continue to diffuse within the speeding passenger cabin.

Rabbi Epstein also cites an opinion advanced separately by *Sefat Emet*, *Sukkah* 21a, and *Tiferet Yisra'el*, *Oholot* 8:10, to the effect that an *ohel zaruk* is not a "tent" only in the sense that it does not prevent the "air" of the "land of the gentiles" from penetrating and mixing with the "air" of the container but that an *ohel zaruk* does serve as an interposition preventing the defilement of a corpse from penetrating the "tent."²² He further cites the opinion of R. Joseph Saul Nathanson, *Sho'el u-Meshiv*, *Mahadura Telita'a*, II, nos. 42 and 43, who asserts that objects that are designed for use in a mobile state, e.g., railroad cars, are regarded as "stationary" even while they are in motion.²³ If so, it follows that an airplane does not constitute an *ohel zaruk*.²⁴ Rabbi Yirmiyahu Menachem Cohen, *Teshuvot Ve-Herim ha-Kohen*, no. 61, cites Rashi's comment, *Nazir* 55a, explaining that an *ohel zaruk* does not have the status of a tent because "since it has been thrown, it has been removed from the status of a tent and acquires the status of a vessel." *Ve-Herim ha-Kohen* suggests that, although a moving "box, chest or cupboard" may neither have the characteristics of a tent nor perform the functions of a tent, an airplane, even in flight, fulfills all the functions of a tent and hence should not be regarded as having the status of an *ohel zaruk*. It should however be noted that those considerations do not affect the status of the plane as an object akin to a floating ship or the like that, as explained earlier, are not classified as "tents" for reasons quite distinct from those governing classification as an *ohel zaruk*.²⁵

IV. GARGANTUAN VESSELS (*KELI HA-BA BE-MIDDAH*)

Vessels and utensils are subject to defilement whereas structures or objects attached to the ground are not subject to defilement. The dis-

tion lies in the fact that vessels and utensils are movable and can be transported from place to place whereas objects attached to the ground are immobile. Inordinately large objects may be immovable even if they are not attached to the ground. For purposes of the regulations governing defilement, objects are classified as vessels or utensils only if they are comparable to the "sack" described in Leviticus 11:32. According to rabbinic exegesis, the term "sack" serves as the paradigm for all vessels subject to defilement. The nature of a sack is that it can be transported "[when] full as well as [when] empty." Accordingly, only utensils that are not too heavy to be transported even when full are susceptible to defilement; gargantuan vessels that are not movable when full are treated as though they are rooted to the ground even when they are empty and hence cannot become defiled. The Mishnah, *Oholot* 8:3, declares that any utensil that holds forty *sa'ah* is, by definition, too large to become defiled. The Mishnah further declares that since such utensils cannot become defiled they can also serve as an interposition preventing defilement from ascending *ad coelum*. Such an oversized utensil is termed a *keli ha-ba be-middah*. The dimensions of an airplane certainly seem to place it within that category.

Nevertheless, an airplane does not qualify as a *keli ha-ba be-middah* for a number of reasons. In effect, an airplane is encompassed within the ambit of each of a number of exceptions to the rule of *keli ha-ba be-middah*:

1. A round or oval vessel is subject to defilement regardless of its size since there is nothing to prevent it from moving to and fro.²⁶ Although the airplane itself, despite its oval shape, does not roll from place to place, it rests on wheels which render it movable. Rabbis Munk and Lombard, *Yeshurun*, X, 560, suggest that the presence of wheels may negate the plane's status as a *keli ha-ba be-middah*.

2. As noted by *Tosafot*, *Shabbat* 84a, s.v. *u-le-Hananyah*, the Mishnah, *Kelim* 15:1, declares that, regardless of size, utensils that are generally moved from place to place in conjunction with their designed use do not fall within the category of a *keli ha-ba be-middah*. *Hazon Ish*, *Yoreh De'ah* 211:8, however, inclines to the view that this provision is limited to utensils comparable to a "sack" in that such artifacts are designed to be transported by humans or animals but does not extend to objects such as automobiles or trains that cannot be "carried" from place to place.²⁷

3. *Tosafot*, *Shabbat* 44b, s.v. *mukhani*, and *Menahot* 31a, s.v. *sheidah*, demonstrate that the category of *keli ha-ba be-middah* does not apply to a utensil designed to be used for sitting or reclining (*medras*).²⁸

Thus, an airplane designed to transport passengers may be regarded as a utensil designed primarily for seating²⁹ and hence cannot serve as an interposition.³⁰

4. Most significantly, the rule regarding *keli ha-ba be-middah* applies only to implements made of wood or leather and to articles of clothing that are enumerated together with the "sack" in Leviticus 11:32 as subject to defilement. However, metal utensils that are not mentioned in that verse are susceptible to defilement regardless of size.³¹ The definition of "metal" for this purpose will be addressed in a subsequent section.

V. SPACE OF A *TEFAH* WITHIN THE GRAVE

Unlike the practice in most other countries in which the corpse is buried in a coffin and earth is shoveled directly upon the coffin, in Israel the body is laid to rest directly upon the earth. Layers of bricks or cinder blocks are placed in a rectangular shape around the body and are used to support a row of cement blocks or boards that is placed over the corpse. The result is that the earth shoveled into the grave does not rest directly upon the corpse; instead, an empty space is created between the corpse and the ceiling of the grave in which it reposes.

There is a significant controversy with regard to whether a corpse defiles *ad coelum* insofar as biblical law is concerned in situations in which there is an open space of a cubic *tefah* or, more precisely, the space of at least a *tefah* in length, width and height, between the corpse and the roof of the coffin or tomb in which it is found.³² There are various opinions regarding the measurement of a *tefah* ranging from 7.6 to 10 centimeters.³³ The most significant of those opinions are the views of R. Abraham Chaim Noe who asserts that a *tefah* is eight centimeters in length³⁴ and of *Hazon Ish* who maintains that a *tefah* equals either 9.67 or ten centimeters.³⁵

The Gemara, *Berakhot* 19b, reports that R. Eleazar the son of Zadok, who was a *kohen*, and his companions were wont to jump over coffins in order to enter the presence of monarchs. It was permissible for them to do so because, in the majority of cases, the corpse reposing in the coffin was surrounded by a *poteah tefah*, i.e., an "opening of a *tefah*." Although rabbinic legislation decrees defilement even with regard to a coffin having a *poteah tefah*, that decree is suspended for purposes of fulfilling a *mizvah* or in order to pay honor to a monarch.

Rashi, *Hullin* 71a and *Nazir* 53b, as well as Ra'avad, *Hilkhot Tum'at Met* 7:4, maintain that this is the case with regard to every coffin in which there is a *poteah tefah*, viz., in terms of biblical law such a coffin defiles only by means of tactile contact but does not defile *ad coelum*. However, Rambam, *Hilkhot Tum'at Met* 7:4; *Tosafot*, *Berakhot* 19b, *Shabbat* 146b and *Bava Batra* 100b; *Teshuvot ha-Rosh*, *klal* 20, no. 1, and Ramban in his *Torat ha-Adam*³⁶ as well as in his commentary to *Bava Batra* 101a, assert that this is the case only with regard to a coffin open on one side or in the case of a body within an open crypt but that a completely sealed coffin defiles *ad coelum* by virtue of biblical law.

Although *Tur Shulhan Arukh* and *Bet Yosef*, *Yoreh De'ah* 372, as well as *Taz*, *Yoreh De'ah* 372:1, follow the position of early-day authorities who maintain that the rule regarding an open space of a *tefah* applies only in the case of a body within a coffin open on one side or in the case of a body within an open crypt but is of no avail in preventing defilement in the case of a sealed tomb,³⁷ *Arukh ha-Shulhan*, *Yoreh De'ah* 372:3, cites the view of the authorities who maintain that an "opening of a *tefah*" (*poteah tefah*) serves to prevent defilement even above a sealed grave.³⁸ Thus, it would appear that, according to this view, if it can be established that the space between the corpse and the cinder blocks placed above the corpse is of the requisite size, a *kohen* might traverse the grave without becoming defiled according to the provisions of biblical law. In actuality, however, that consideration will not serve to dispel the problem because of a number of factors:

1. *Tur Shulhan Arukh* and *Bet Yosef*, *Yoreh De'ah* 372, rule unequivocally in accordance with the opinion that the consideration of *poteah tefah* does not pertain to a sealed grave. That is also the position recorded by *Arukh ha-Shulhan he-Atid*, *Hilkhot Tum'at Met* 7:31.³⁹

2. As spelled out by *Tur Shulhan Arukh*, *Yoreh De'ah* 372, even Rashi, *Sukkah* 21a, and Ra'avad, *Hilkhot Tum'at Met* 7:4, who aver that the rule of *poteah tefah* applies to a sealed grave as well, nevertheless concede that in such cases defilement exists by virtue of rabbinic decree. According to those authorities, the rabbinic decree is suspended only for purposes of fulfilling a *mizvah* that could not otherwise be fulfilled.

3. Citing *Kesef Mishneh*, *Hilkhot Tum'at Met* 12:6, *Kappei Aharon* asserts that, even according to Rambam, who maintains that *poteah tefah* applies only in the case of a coffin open on one side, the presence of a *poteah tefah* prevents the ascent of defilement only in the case of an unburied coffin "lying on the face of the field" but is of no avail with regard to a corpse already interred.

4. Rabbis Munk and Lombard, *Yeshurun*, X, 563, note 33, suggest that, although presence of the requisite empty space may negate defilement engendered by the corpse, nevertheless, the bricks or cinder blocks are themselves a source of defilement and, as is quite evident, there is no empty space above the bricks or concrete blocks to prevent such defilement from affecting an object or person above the grave. Both the verse "And whosoever in the open field touches one that is slain by a sword or a bone of a man or a grave shall be unclean seven days" (Numbers 19:16) and the verse "and a clean person . . . shall sprinkle it upon the tent . . . and upon him that touched the bone or the slain or the dead or the grave" (Numbers 19:18) posit defilement for contact with a grave no less so than for contact with a corpse. In their recently published monograph dealing with the laws of priestly defilement, *Tohorat ha-Kohanim* (Jerusalem, 5762), pp. 91f., Rabbis Munk and Lombard, citing the comments of *Sifri*, show that the "grave" specified in Numbers 19:16 and 19:18 is not the earth in which the corpse is buried but a man-made tomb or structure in which the body is placed within the ground. Accordingly, the cinder blocks or bricks themselves constitute a tomb or "grave" which, in turn, causes defilement independently from the corpse.

Nevertheless, the same authors, *Tohorat ha-Kohanim*, pp. 92f., question whether the defilement engendered by a tomb is indeed an independent source of defilement, and hence serves to defile *ad coelum* unless there is a *poteah tefah* above the tomb itself, or whether a tomb or "grave" defiles only by virtue of the corpse contained within the tomb, with the result that the presence of a *poteah tefah* between the corpse and the "grave" serves also to obviate defilement caused by the grave.

5. Some communities, including some sectors of the Yemenite community, customarily fill the space between the body and the cinder blocks with sand thereby effectively eliminating any possibility that there may be an empty space of a *poteah tefah* within the grave. Thus, it is highly likely that there are indeed graves within the confines of the Holon cemetery in which there is no *poteah tefah*.

6. Examination of graves that have been opened for one reason or another reveals that the cinder blocks customarily utilized for placement around and above the body are not very durable and tend to crumble with the passage of time with the inevitable result that the intervening space rapidly becomes filled with earth. When that occurs there is no longer a *poteah tefah* within the grave.

7. The Mishnah, *Oholot* 2:4, declares that a "*gollel*" and its sup-

porting structure known as a "*dofek*" cause defilement in the same manner as a corpse. Among early-day authorities there are three views with regard to the definition of a "*gollel*." 1) The *Arukh*, *erekh gollel*, maintains that a *gollel* is a stone used to seal an open grave. 2) Rashi, *Shabbat* 152b, *Ketubot* 4b and *Hullin* 72a, maintains that the cover of a coffin is also deemed to be a *gollel*. Ramban, in his *Torah ha-Adam*, qualifies Rashi's view with the assertion that the cover of a coffin acquires the status of a *gollel* only upon being secured to the coffin with nails or pegs. 3) Rabbenu Tam, cited by *Tosafot*, *Berakhot* 19b, *Shabbat* 152b, *Ketubot* 4b and *Sanhedrin* 47b, defines a *gollel* as a tombstone placed over the grave. *Taz*, *Yoreh De'ah* 369:2, rules that, in consideration of the opinion of Rabbenu Tam, a *kohen* must regard a tombstone as a source of defilement.⁴⁰

It appears that, according to Rabbenu Tam, the presence of a tombstone covering a grave would be sufficient to cause the defilement of a *kohen* flying over the cemetery even if it might be established that each of the graves contain an empty space possessing the dimensions of a *poteah tefah*. Nevertheless, Rabbis Munk and Lombard, *Yeshurun*, X, 563, note 29, suggest that, even according to Rabbenu Tam, only a tombstone erected at the time of interment is a source of defilement. Indeed, the *gollel*, and hence its definitions, is significant not only with regard to the issue of defilement but also because mourning does not begin until the time of "sealing of the *gollel*," (or better, "sealing by means of the *gollel*"), i.e., for Rabbenu Tam, the placing of a tombstone upon the grave. It is counterintuitive to assume that commencement of mourning is to be delayed until erection of a tombstone months after interment. Rather, the Sages must have referred to an act that signifies completion of the burial ritual. Accordingly, argue Rabbis Munk and Lombard, tombstones erected long after burial, as is the custom in our day, do not fall within the connotation of the term "*gollel*" either for purposes of the "sealing of the *gollel*" signaling the advent of the mourning period or, as employed by the Mishnah, *Oholot* 2:4, in conjunction with the laws of defilement.

It should also be noted that Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 176, cites *Tosafot*, *Sukkah* 23a, as apparently maintaining that a *gollel* cannot serve as a source of defilement unless the grave that it covers is also a source of defilement. Thus, if the grave does not generate defilement because of the presence of a *poteah tefah*, its stone covering, according to the understanding of *Tosafot*, could not be an independent source of defilement.

However, according to Rashi, who maintains that the *gollel* is to be defined as the cover of the coffin, it would seem that the concrete blocks or wooden boards placed over the body would also have that status, and hence, as Rabbi Epstein, *Tehumin*, XXII, 396, appears to indicate, according to Rashi, that covering would serve as a source of defilement even if beneath the cover there is an empty space of a *poteah tefah*.

There is indeed a minority view that does not regard the presence of a *gollel* as constituting a problem for a *kohen*. Not every form of defilement is forbidden to a *kohen*. Thus, a *kohen* is permitted to defile himself by coming into contact with an implement, including a metal sword, that has been defiled by a corpse. However, the general consensus is that a *kohen* may not defile himself by coming into contact with a *gollel*. Nevertheless, in seeking permissive views that would justify the airplane journeys that are the subject of this discussion, Rabbi Epstein cites a variant opinion recorded by *Tur Shulhan Arukh* 369 that maintains that a *kohen* is not prohibited from defiling himself by means of a *gollel* just as he is not forbidden to defile himself by contact with utensils that have become defiled by a corpse.

R. Judah Gershuni, *Kol Zofayikh* (Jerusalem, 5740), pp. 428-430, cites the explanation of R. Gershon Henach of Radzin, *Sidrei Taharah*, pp. 77b-78a, of the statement of the Mishnah, *Shabbat* 83b, declaring that a ship cannot become defiled. Citing *Tosafot Rid*, *Sidrei Taharah* asserts that the rationale underlying that rule is that a ship is not considered to be a "vessel" because its walls are designed primarily to keep the water at bay rather than to provide a container for that which is within; hence, a ship lacks the essential property of a utensil, i.e., it is not a container.

Sidrei Taharah expresses some doubt with regard to the applicability of that consideration to a boat made of metal since a metal object is susceptible to defilement even though it is not a container. Rabbi Gershuni applies the same considerations to airplanes in arguing that airplanes are similarly designed to keep out air but, since they are constructed from metal, their status according to *Sidrei Taharah* remains unclear. However, assuming that *Sidrei Taharah's* analysis of the status of a ship is correct, it is hardly cogent with regard to airplanes. The walls of a plane are not designed to keep air out; they are clearly designed to keep passengers inside, to protect them from the elements and to prevent them from falling to their deaths.

R. Moshe Feinstein, *Iggerot Mosheh*, *Yoreh De'ah*, II, no. 164, expresses doubt with regard to whether an airplane is subject to defile-

ment despite the fact that it is made of metal. *Iggerot Mosheh* suggests that “perhaps” only the six metals specified in Numbers 31:23, viz., gold, silver, copper, iron, tin and lead, have the halakhic status of metal. Those materials, together with mercury which is actually a liquid, constitute the seven metals of antiquity. Arsenic was discovered in the 13th century by Albertus Magnus and a number of other metals, including zinc, were discovered subsequently. However, most other metals were unknown until relatively modern times. *Iggerot Mosheh* suggests that only the enumerated metals are susceptible to defilement and that it is for that reason that they are named individually in Numbers 31:23 rather than collectively identified as metals. *Iggerot Mosheh* points out that, biblically, glass is not susceptible to defilement despite the fact that it is comparable to metal in the sense that it is melted, rather than destroyed, by fire. Accordingly, *Iggerot Mosheh* suggests that since airplanes are composed primarily of metals discovered during subsequent periods of history, i.e., aluminum and titanium, a plane cannot become defiled and hence the airplane itself may serve as an interposition preventing defilement from entering the passenger section. Although the material used in the construction of airplanes for that purpose is a mixture of one of the metals of antiquity and subsequently discovered metals, the halakhic identity of the entire mixture, asserts *Iggerot Mosheh*, is that of its major component. The halakhic status of modern metals will be more fully discussed in a subsequent section.

VI. ZAMID PATIL

A. THE UTENSIL

With regard to the defilement engendered by a corpse, Numbers 19:14 specifies that “. . . every [person] who comes into the tent shall be unclean seven days.” The immediately following verse, Numbers 19:15, spells out the circumstances in which vessels and utensils are defiled: “And every open vessel which has no covering close-bound upon it is unclean.” The clear inference is that the converse, i.e., a closed vessel that is tightly sealed, does not become defiled. The Mishnah, *Kelim* 10:1, declares that not only is such a utensil not subject to defilement but the utensil also preserves anything that may be contained within its walls from becoming defiled. Rabbinic tradition teaches that biblical law limits the capacity of a sealed utensil to preserve its contents from defilement to vessels such as pottery and earthenware that are not subject to defilement by tactile contact with the exterior of the vessel.

However, rabbinic edicts did legislate defilement in many situations in which there is no biblically mandated defilement. The concern was to prevent confusion as well as to assure avoidance of objects that cause defilement. Accordingly, rabbinic legislation decreed defilement of vessels or utensils enclosed within such sealed containers. Nevertheless, rabbinic law did not interfere with the protection such vessels offer to food and beverages because, once defiled, foodstuffs cannot be purified. Concern for the resultant economic burden caused the Sages to refrain from decreeing defilement of foodstuffs contained within a sealed vessel. For an entirely different reason no defilement was decreed for a human being who might be sealed within such a utensil. Rambam, *Hilkhot Tum'at Met* 23:2, explains that the exclusion of human beings from the decree is based upon the consideration that the phenomenon of a person sealed within a closed vessel is highly unusual and rabbinic edicts are generally not promulgated with regard to regulation of events that occur only rarely.

In order to "rescue" its contents from defilement, a utensil must satisfy three conditions: 1) The object must have the halakhic status of a utensil (*keli*)⁴¹ designed for use as a container;⁴² 2) the utensil must be made of a material that cannot be defiled by contact of the exterior of the utensil with a defiled object, e.g., earthenware or pottery;⁴³ and 3) the utensil must be covered and sealed.

Thus, if an airplane has the status of a closed and sealed vessel (*zamid patil*) a *kohen* might fly in the passenger cabin without fear of defilement. The first issue that presents itself is whether an airplane has the status of a utensil. As is evident from the statement of the Mishnah, *Kelim*, 2:4, a utensil that incorporates openings in its structure but is nevertheless designed for use in that fashion has the status of a utensil. According to the interpretation of Rabbenu Shimshon, the Mishnah, *Kelim* 2:5, makes specific reference to a utensil constructed with openings in its base. Nevertheless, large holes or openings serve to nullify the status of a utensil as a *keli*. As recorded in numerous instances in *Kelim*, the minimum size of an opening that serves to nullify the status of a utensil as a *keli* varies in a manner commensurate with the designated use of the utensil. Airplanes contain numerous doors and apertures of rather large proportions. As a result an airplane may not have the status of a *keli*. Nevertheless, as Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 22, cogently observe, since such doors in airplanes are entirely consistent with the intended use of the airplane, it is quite possible that the airplane retains the status of a *keli*.

1. THE SIX METALS

An even more crucial issue is whether the airplane is constructed of material that is susceptible to defilement. According to reports in the rabbinic literature, the composition of the material of which airplanes are constructed is 75% aluminum, some titanium, and approximately 15 to 25% steel and copper. *Tiferet Yisra'el*, in his introduction to *Seder Tohorot*, *Yevakesh Da'at*, sec. 44, cites a statement of R. Elijah of Vilna, commonly known as the Gra, in the latter's *Eliyahu Rabbah*, in which he declares that there are six species of metal: gold, silver, copper, iron, tin and lead, i.e., the species enumerated in Numbers 31:22. Those metals, together with mercury, which at room temperature is actually a liquid, constitute the seven metals known in antiquity.⁴⁴ *Tiferet Yisra'el*, however, takes note of the fact that in the modern period metallurgists have succeeded in identifying and refining additional metals. Accordingly, he asserts that newly discovered metals must either be regarded as subspecies of the metals enumerated in Scripture⁴⁵ or that the list is not intended to be exhaustive.⁴⁶

Since each of the modern metals is a unique element in the element table and possesses an idiosyncratic molecular structure it is difficult to accept the contention that those metals can be identified as variants of one of the metals of antiquity. It is indeed the case that the Gemara, *Yoma* 44b, describes no less than seven types of gold. However, the diversity of the multiple forms of gold known in antiquity reflects only the degree of purity of the gold and the various alloys with which it is found in its natural state. Modern metals contain no admixture of any of the metals of antiquity.

Tiferet Yisra'el's alternative suggestion, viz., that the list presented in Numbers 31:22 is paradigmatic rather than exhaustive, is more plausible but gives rise to the further problems of determining the halakhic definition of "metal." *Tiferet Yisra'el* himself defines metal as any substance that can be hammered into thin sheets, i.e., the halakhic category of "metal" includes all malleable and ductile substances. However, that definition seems to be contradicted by Rashi, *Rosh Hashanah* 19b, s.v. *ve-hakhamin*, who explains that, biblically, glass is not subject to defilement in the manner of metal utensils because "the only metal utensils subject to biblical defilement are those enumerated in the [biblical] section [dealing with the utensils seized from the Midianites]." Since glass is certainly not ductile, according to *Tiferet Yisra'el*, no further explanation for why it is not subject to defilement as a metal should be neces-

sary and hence Rashi's comment would be rendered superfluous. Moreover, Rashi seems to imply that the list of metals enumerated in Numbers 31:22 is exhaustive. It is difficult to read Rashi's comment, (as Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 23, apparently do) as designed simply to explain that glass is not comparable to the materials named in Scripture but that Rashi leaves it to the reader to discern that glass is not comparable because it is not malleable.

In his earlier-cited responsum, *Iggerot Mosheh, Yoreh De'ah*, II, no. 164, seems to define the halakhic concept of metal as encompassing any substance that melts but is not destroyed when exposed to heat. Indeed the Hebrew term for metal, viz., "*matekhet*," is derived from the verb meaning "to melt."⁴⁷ If so, glass similarly possesses the characteristics of a metal and, presumably, Rashi found it necessary to explain why glass is not subject to defilement as a metal. If that is the case, Rashi must be understood as stating that only those materials explicitly enumerated by Scripture are subject to defilement as metals.

Iggerot Mosheh further argues that one of the hermeneutic principles of biblical exegesis is that a single example is designed to establish a paradigm but two or more examples (*shnei ketuvim ha-ba'im ke-ehad*) of an identical principle serve to negate the drawing of a paradigm. The logic underlying that principle is that, if a paradigm were intended, the second example would be redundant, whereas if no paradigm is intended each instantiation must be presented individually. Thus, suggests *Iggerot Mosheh*, enumeration of six separate metals would have been superfluous if the rule was intended to apply to all metals. Hence, he concludes, the list must be regarded as exhaustive and designed to exclude any modern metal that "it was the will of the Holy One, blessed be He, that it be revealed in these latter generations." Moreover, asserts *Iggerot Mosheh*, the laws of defilement cannot be applied, *mutatis mutandis*, to a novel species "for all the laws of defilement are a decree of Scripture," i.e., the regulations pertaining to defilement are arational in the sense that they are not predicated upon a discernible logical principle. Nevertheless, *Iggerot Mosheh* concludes that the matter requires further reflection. In a responsum appended to *Tevilat Kelim*, pp. 243f., and later published in his *Emet le-Ya'akov, Shulhan Arukh, Yoreh De'ah* 120:1, R. Jacob Kaminetsky cites *Tiferet Yisra'el's* position with regard to modern metals and, advancing arguments identical to those of *Iggerot Mosheh*, strongly disagrees with *Tiferet Yisra'el's* position.

As has been noted, the major components of the material from which airplanes are constructed are modern metals, primarily aluminum,

which was first produced by Hans Christian Østed in 1825, and titanium that was first isolated by M.H. Klaproth in 1797. Although both steel and copper are present as alloys in the material from which airplanes are manufactured, *Iggerot Mosheh* cites *Kelim* 11:4 in asserting that the halakhic status of the plane is dependent upon the identity of the metal that represents the major portion of the compound from which the plane is constructed. It thus follows that, according to *Iggerot Mosheh*'s tentative conclusion,⁴⁸ an airplane is not susceptible to defilement as a metal and hence, if the other requisite conditions are satisfied,⁴⁹ an airplane can shield passengers from defilement.⁵⁰ That conclusion stands in sharp contradiction to the conclusion that must be reached on the basis of the position of *Tiferet Yisra'el*. If, as *Tiferet Yisra'el* maintains, modern metals also have a halakhic status identical to that of the biblically enumerated metals, it follows that an airplane is subject to defilement and accordingly, cannot protect passengers from defilement.

2. NATAR

There is indeed support for the position of *Tiferet Yisra'el* in a comment of *Tosafot*, *Avodah Zarah* 33b, as that comment is understood by Maharsha, *ad locum*. The Gemara speaks of utensils made of an earthen substance known as "*natar*" and states simply that utensils made of that material cannot be *kashered* because, as is the case with pottery, earthenware is porous and hence non-kosher food absorbed within the walls of the utensil cannot be purged in the usual manner. *Natar* is described as an earth-like substance and, quite understandably, utensils fashioned from that material have the status of earthenware and cannot be *kashered*. However, *Tosafot*, as understood by Maharsha, assert that utensils fashioned from *natar* are subject to defilement in the manner of utensils manufactured from metal. Since *natar* is not one of the six biblically enumerated metals, it is thus readily apparent that *Tosafot* did not regard the list of metals as exhaustive and, in effect, *Tosafot* subscribe to the view later explicitly formulated by *Tiferet Yisra'el*, viz., that all metals, including those discovered in the modern period, are subject to defilement.⁵¹ Thus, the controversy between *Tiferet Yisra'el* and later authorities, and hence the status of aluminum utensils, is the subject of an earlier dispute between Rashi and *Tosafot*.

However, an additional consideration emerges from Rabbi Feinstein's further analysis of the nature of aluminum in *Iggerot Mosheh*, *Yoreh De'ah*, III, no. 32. Although *Iggerot Mosheh* does not deem aluminum to be one of the biblically defined metals and finds no evidence of a rab-

binic decree providing for defilement of aluminum implements as rabbinically defined metal utensils, he points to the fact that glass utensils, although they are not made of metal, are nevertheless subject to the mode of defilement associated with pottery. Glass is similar to *heres*, or pottery, in that it, too, is fashioned from sand and fired in a kiln; hence it is rabbinically subject to the same type of defilement that is biblically attendant upon pottery. Accordingly, argues *Iggerot Mosheh*, aluminum, which is also produced from an earth-like substance, is subject to the same type of rabbinic defilement that is attendant upon glass utensils. To be sure, glass, and hence aluminum, have the status of *heres* and, accordingly, are not subject to defilement from any object that comes into contact with the exterior of the vessel. But such utensils are nevertheless subject to defilement if a defiled object enters the internal air space of the vessel. Once that has occurred (as Rabbi Spitzer, *Kol ha-Torah* no. 52, p. 184, notes), the vessel, even if covered by a *zamid patil*, can no longer preserve any object within the vessel from defilement. Only a tightly sealed vessel that has not been defiled can preserve its contents from defilement; once the vessel has become defiled, the fact that it is sealed by a *zamid patil* is of no relevance. The practical effect of that observation is that if the plane has harbored a dead body at any time it can no longer preserve passengers from defilement even if the plane has the characteristics of a *zamid patil*.

3. IMMERSION OF ALUMINUM VESSELS ACQUIRED FROM A NON-JEW

It is noteworthy that the biblical locus of the controversy regarding the status of modern metals is not a passage containing a provision directly pertaining to defilement associated with contact with a dead person but a verse that occurs in the context of booty acquired in the course of the war against the people of Midian. The talmudic interpretation of Numbers 31:23, "and all that can not go through the fire you shall cause to go through the water," is that the verse establishes a requirement for immersing utensils acquired from a non-Jew in a *mikveh*. That requirement is limited to implements made of materials to which reference is made, i.e., all utensils susceptible to defilement. Thus the question of the status of modern metals such as aluminum is a matter of concern not only for *kohanim* contemplating plane trips but is of significance for any Jew who purchases aluminum eating or cooking utensils from a non-Jewish purveyor. It is therefore not surprising that most of the contemporary rabbinic discussions of the status of modern-day metals occur in that context.

Indeed, in a discussion paralleling his analysis of the status of airplanes, *Iggerot Mosheh*, *Yoreh De'ah*, III, no. 22, vigorously argues that, according to biblical law, aluminum utensils acquired from a non-Jew do not require immersion in a *mikveh* because aluminum is not one of the metals enumerated in Scripture but nevertheless suggests that immersion is required by virtue of rabbinic decree for the same reason that rabbinic law requires immersion of glass utensils, *viz.*, because glass utensils can be melted down and refashioned in a manner similar to metal.⁵² A British authority, R. Chanoch Padwa, *Heshev ha-Ephod*, III, no. 70, reports that it had been his intention to rule that aluminum utensils are exempt from immersion but that the *Tchebiner Rav*, R. Dov Berish Weidenfeld, refused to agree⁵³ and he therefore abandoned the issue. R. Zevi Cohen, *Tevilat Kelim* (Jerusalem, 5738), chap. 11, note 113, reports that R. Samuel Wosznar also ruled that aluminum utensils require immersion. Similarly, R. Ya'akov Yitzchak Weisz, *Teshuvot Minhat Yizhak*, V, no. 9, analyzes the status of disposable aluminum utensils but fails even to suggest that aluminum may not have the halakhic status of a "metal."⁵⁴

Although, as cited earlier, Rabbi Jacob Kaminetsky asserts that aluminum is not susceptible to defilement, he nevertheless asserts that aluminum utensils acquired from a non-Jew require immersion. Rabbi Kaminetsky points to a tentative statement by the Gemara, *Avodah Zarah* 75b, that would have required immersion of certain earthen vessels even though such vessels are clearly not subject to defilement. Rabbi Kaminetsky suggests that the immersion of utensils acquired from a non-Jew is not at all associated with concepts of defilement but rather is comparable to the immersion of the High Priest on *Yom Kippur* each time he changed vestments. He also notes that glass utensils acquired from a non-Jew are subject to immersion by virtue of rabbinic decree even though they have the status of pottery which, when defiled, cannot be purified by immersion. However, rabbinic legislation requiring immersion of a utensil that is not subject to purification in that manner insofar as biblical law is concerned strongly suggests that such immersion is designed for a purpose other than the purging of defilement.

Advancing an argument similar to that of *Iggerot Mosheh*, Rabbi Kaminetsky further suggests, albeit tentatively, that even if the rabbinic requirement of immersion of glass utensils is indicative of a rabbinic decree legislating a unique form of rabbinic defilement that is subject to purification by immersion, aluminum utensils purchased from a non-Jew may require immersion for the same reason. The Sages decreed that

glass utensils require immersion because they are comparable to, and hence readily confused with, metal utensils in that, like metal, glass becomes molten when subjected to high temperature. Hence, like metal, when a glass utensil is broken it can be melted and refashioned. The Sages feared that allowing use of unimmersed glass utensils would lead to the erroneous assumption that metal utensils, because of their similarity to glass, also do not require immersion. However, Rabbi Kaminetsky expresses doubt with regard to whether or not the same rabbinic decree encompasses aluminum utensils as well. Aluminum can certainly be melted down and hence is even more likely than glass to be confused with other metals. On the other hand, the rabbinic decree may be limited to utensils such as glass which, since it is made from sand and is comparable to pottery, is susceptible to certain forms of defilement by virtue of rabbinic decree, but the decree may not include modern metals which, in Rabbi Kaminetsky's opinion, cannot become defiled under any circumstances.⁵⁵

A similar point was made much earlier by R. David Zevi Hoffmann, *Melammed le-Ho'il, Yoreh De'ah*, no. 49, with regard to utensils made of bone. In his day a process was developed that made it possible to melt bone so that it might be fashioned into implements. In addressing the question of whether such implements have the halakhic status of glass utensils, *Melamed le-Ho'il* comments, "since glass utensils [require immersion only by virtue of] rabbinic decree, perhaps the [Sages] legislated only with regard to glass utensils but not with regard to other utensils even though they can be melted down." More recently, citing *Magen Avraham* and *Mahazit ha-Shekel, Orach Hayyim* 301:10, R. Jacob Breisch, *Teshuvot Helkat Ya'akov*, II, no. 163, and R. Ovadiah Yosef, *Yabi'a Omer*, IV, *Yoreh De'ah*, no. 8, both assert that rabbinic decrees encompass only matters that were known to the Sages at the time of their decree. The basic notion reflected in the assertions of *Helkat Ya'akov* and *Yabi'a Omer*, i.e., that rabbinic legislation is subject to interpretation in accordance with a doctrine of "strict construction," recurs frequently in halakhic literature. Hence, even if the rationale underlying the rabbinic decree is relevant to novel phenomena or materials of our age, we lack the power or the mechanism to extend such decrees. It is for this reason that those authorities maintain that plastic utensils do not require immersion.⁵⁶

R. Chaim Greineman, *Hiddushim u-Bi'urim, Kelim* 2:3, similarly rules that plastic utensils do not require immersion for the reason cited but adds an additional consideration as well. Rabbi Greineman argues

that the rabbinic decree regarding immersion of glass vessels was based not simply on the fact that they are similar to metal utensils in that they can be repaired by means of melting and refashioning but also upon the consideration that glass utensils are objects of value, as is the case with regard to metal utensils. Plastic utensils, he argues, do not have the same intrinsic value as utensils made of glass and hence are not included within the parameters of the rabbinic decree. That consideration may perhaps apply to disposable aluminum utensils as well. There are, however, some few authorities who regard the status of plastic utensils to be a matter of unresolved doubt and therefore require immersion of such vessels, albeit without a blessing.⁵⁷

B. THE SEAL

A vessel made of *heres* becomes defiled only from its interior. Hence, defilement by virtue of occupying the same "tent" as a corpse can occur only if the vessel has an opening. Accordingly, the vessel does not become defiled—and hence "rescues" its contents from defilement—only if its opening is both covered and tightly sealed with a sealant. The Mishnah, *Kelim* 10:2, lists materials that serve as sealants as well as a number of materials that are explicitly excluded. The doors of an airplane are indeed tightly closed but are not sealed with a sealant; hence the airplane does not appear to qualify as a *zamid patil*.

However, Maharam of Rothenberg, in his commentary on *Oholot* 9:1, cited by *Tosafot Yom Tov*, *Kelim* 10:3,⁵⁸ asserts that a sealant is required only if closure is effected by means of a "hard" material inserted to fill the opening. Since a hard material can never be tailored completely and perfectly to plug an opening in another hard material, a sealant is necessary to fill the remaining gaps. However, maintains Maharam of Rothenberg, if a soft, pliable material is molded into a tight plug, an additional sealant is unnecessary.

Closed airplane doors are certainly airtight. That is assured by means of strips of rubber or synthetic material attached to the door in the form of a lip or gasket in a manner such that, when closed, the gasket overlaps the door and the adjacent wall. Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 26, are prepared to categorize the materials used in such a manner as "soft." Although that categorization is probably inaccurate, in practice, the gasket certainly does create a perfect seal and is the functional equivalent of a "soft" material. Nevertheless, they point out that the gasket does not actually fill the opening; rather,

the gasket totally impedes the flow of air by virtue of its location behind the opening. They cogently question whether this satisfies the requirement of *zamid patil*. Moreover, Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 184, argues that, absent the hinges and bolt securing the door, the door would not stay in place. Since the door itself is not secure in the aperture, argues Rabbi Spitzer, such an arrangement does not serve as a *zamid patil*.

The authors of *Kanfei Yonah* also point out that the bolts and hinges securing the door are made of metal. Since they are designed to support the door, they may constitute a *ma'amid*, i.e., a supporting or stabilizing entity which lends its halakhic status to the supported or stabilized object. As a result the door itself would have the status of a metal implement that is susceptible to defilement.⁵⁹ Items that are themselves subject to defilement cannot serve as a plug to generate a *zamid patil*.

Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 183, observes that the purpose of the seal is not simply to prevent air from flowing into the interior of the utensil but to “nullify” or destroy the entranceway into the utensil and thereby create a halakhically seamless, impenetrable vessel. That is accomplished only if the seal that is in place must be broken in order to gain entrance to the vessel. R. Samuel Strashun, *Reshash, Kelim* 10:3, declares that a cork does not serve as a *zamid patil*. His rationale is that, since a bottle is customarily corked and uncorked, the cork cannot be regarded as “nullifying” the opening. That principle is also reflected in the ruling of Ra'avad, *Hilkhos Tum'at Met* 22:9, to the effect that a tight fitting “cap” does not serve as a *zamid patil*. Rabbi Spitzer understands the comment of Maharam of Rothenberg regarding a soft plug as limited to a plug that is not designed to be removed, i.e., a soft material used to plug a hole, but not to a stopper or the like designed to temporarily block the entranceway to the interior of the vessel.

This observation is significant for another reason as well. Rabbis Halbertstadt and Goldmintz, *Kanfei Yonah*, p. 26, note 142 and *Tehumin*, XXII, 508, observe that, above a certain height, some airplane doors would be held in place and firmly sealed by virtue of air pressure alone. However, if it is acknowledged that a sealant is necessary not simply to render the vessel airtight but to nullify the opening that factor is not at all germane.

VII. MA'AMID

Quite apart from the questionable status of an airplane as a metal utensil because it is made of aluminum, a further complication arises from the fact that the material from which the plane is made is an alloy containing 15-25% steel. Despite the general rule that, as noted by *Iggerot Mosheh*, the halakhic identity of a substance is determined by its major component, that may not be the case with regard to a material containing an alloy designed to make the material hard enough to be fashioned into a durable utensil. Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 25, and *Tehumin*, XXII, 505, suggest that when a substance designed to strengthen a utensil or to prevent it from disintegrating is present, the identity of the utensil is determined by the identity of that substance. A substance performing such functions is known as a *ma'amid*.⁶⁰ The same point is made by Rabbis Munk and Lombard, *Yeshurun*, X, 560, note 22.

Moreover, airplanes are constructed and held together by means of nuts, bolts, screws, rivets, beams, braces and the like that are fashioned from unalloyed steel. Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 25, and Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 182, suggest that those components serve to endow the entire airplane with their status as objects subject to defilement. They suggest that since those objects, which are made of pure metal, serve to hold the plane together their status is that of a *ma'amid* described by the Gemara, *Shabbat* 60a. The Sages rule that the material out of which the portion of a utensil that holds the utensil together, e.g., the sides of a ladder into which rungs are inserted or the base of a ring into which a signet is affixed, determines the halakhic status of the entire utensil.⁶¹ Applying that principle, they contend that the entire airplane is subject to defilement because of the presence of essential metal components.

Although not cited by those scholars, a quite similar issue is discussed by *Taz*, *Yoreh De'ah* 371:3. *Taz* reports an incident involving a corpse lying in a building or room annexed to a synagogue with a connection in the form of an open window in the women's gallery. An unnamed rabbinic authority ruled that the curtain attached to the window be drawn in order to close the opening so that entry of *kohanim* might be permitted. *Taz* takes strong exception to that ruling for a number of reasons, in particular, because the curtain was attached to the wall with iron rings. *Taz* cites Rambam, *Hilkhot Tum'at Met* 18:3, who rules that a door held in place by a metal support without which

the door would fall does not serve as an interposition preventing the spread of defilement. R. Samuel Aboab, *Teshuvot Dvar Shmu'el*, no. 223, disputes *Taz'* understanding of Rambam. According to *Dvar Shmu'el*'s interpretation of Rambam, the presence of metal to support the door does not compromise the door's ability to serve as an interposition. Rather, taking notice of Rambam's phraseology "he supports it with a key" (*ve-sumkho be-mafteah*, i.e., a metal object), *Dvar Shmu'el* understands Rambam as speaking of a situation in which it is the pressure of a human being, rather than the weight of the metal, that keeps the door from collapse. Thus, concludes *Dvar Shmu'el*, although a metal support would not itself effect the status of the door and impart to it the status of a metal utensil that could not serve as an interposition, nevertheless, a door that cannot remain in an upright position other than with human support cannot serve as an interposition preventing the spread of defilement.

Another consideration advanced by the authors of *Kanfei Yonah*, p. 28, is that the passenger seats are attached to the floor of the passenger compartment by screws that they regard as having the status of a *ma'amid*. As a result, the seats, and hence the entire plane to which the seats are affixed, are subject to an entirely different category of defilement, namely, *tum'at medras*,⁶² i.e., the category of defilement associated with an item designed to be seated or reclined upon.⁶³ A person sitting or reclining upon an object subject to defilement by virtue of *tum'at medras* becomes defiled if there is a corpse underneath that object. This form of defilement is entirely independent of defilement by virtue of tactile contact or by virtue of defilement associated with a "tent."

VIII. CONCOMITANT PERMISSIBLE DEFILEMENT (*HEREV HAREI HU KE-HALAL*)

One expedient which, if viable, would permit not only an airplane traveler but any *kohen* to come into contact with a corpse has not been mentioned by any of the scholars who have addressed this issue. Many years ago, R. Shlomoh Goren suggested that a *kohen* might avoid transgressing the prohibition against defilement by wearing a watch or by otherwise being in tactile contact⁶⁴ with a piece of metal previously defiled through contact with a corpse. That suggestion was posthumously published in Rabbi Goren's *Torat ha-Refu'ah* (Jerusalem, 5761) and is reprinted in *Assia*, vol. X, no. 1-2 (Nisan 5762).

Despite the contrary view of Rabbenu Tam cited by *Tosafot*, *Nazir* 54b, the accepted view is that a *kohen* incurs no transgression in coming into contact with metal defiled by a corpse. As quoted in the comments of *Tosafot*, that position was formulated by Rabbenu Chaim Kohen who responded to Rabbenu Tam with a pithy comment based upon the verse "What house will you build for Me?" (Isaiah 66:1). The import of Rabbenu Chaim Kohen's retort is that, particularly in medieval times, there was no house that did not sooner or later become defiled through the presence of a corpse and hence no building that, following Rabbenu Tam's position, a *kohen* may enter. Rabbi Chaim Kohen's position is espoused by Rambam, *Hilkhhot Avel* 3:2, and Rema, *Yoreh De'ah* 369:1.

Although Rambam, *Hilkhhot Avel* 3:7, rules that a *kohen* who has become defiled is nevertheless forbidden to come into any further contact with a corpse, in *Hilkhhot Nezirut* 5:17 Rambam rules that, while yet in contact with the first corpse, a Nazarite (who is also forbidden to defile himself through contact with a corpse) incurs no additional penalty in touching a second corpse "since he is ongoingly profaned" (*mehullal ve-omed*). In effect, Rambam states that defilement is one and the same whether the source is a single corpse or multiple corpses; contact with multiple corpses does not generate a greater degree of defilement. Rabbi Goren argues that the same line of reasoning can be applied to the situation of a *kohen* who is in contact with defiled metal, i.e., further simultaneous contact with a corpse does not generate additional defilement. Moreover, argues Rabbi Goren, since a *kohen* may touch defiled metal with impunity, he may also therefore simultaneously come into contact with a corpse with impunity.

In a contribution to *Torah she-he-al Peh*, XIII (5742), republished in *Be-Netivot ha-Halakhah*, III (New York, 5711), 202-206, this author has endeavored to demonstrate that such a conclusion is incorrect. Although other early-day authorities disagree, Rambam's own position, *Hilkhhot Avel* 2:15, is that a *kohen* who is permitted to defile himself through contact with the corpse of a close relative is nevertheless forbidden to come into contact with another corpse at the same time. Rambam must be understood as distinguishing between the *penalty* for defilement and the *prohibition* against a priest or a Nazarite defiling himself, viz., although there is no incremental defilement in the second contact and hence no additional punishment, the act of touching the second corpse is nevertheless prohibited because it is intrinsically an act that generates defilement and all such acts are prohibited.⁶⁵

Moreover, as is evident from the discussion of the Gemara, *Nazir*

42b, and Rambam's own terminology in *Hilkhot Nezirut* 5:19, any leniency with regard to simultaneous contact with a second corpse is predicated upon the consideration that a *kohen* is prohibited from coming into contact with a corpse because of the admonition "He shall not defile himself . . . to profane himself" (Leviticus 21:4) which is regarded as excluding from the prohibition an instance of a *kohen* who confronts no additional profanation in the act of contact. To be sure, a *kohen* defiled through contact with metal suffers no additional defilement but, since his contact with metal does not constitute an act of profanation of his priestly status, he remains bound by the prohibition against coming into contact with a corpse since that act represents not merely an act of defilement but also an act of profanation.

The same issue of *Assia* contains two critiques of Rabbi Goren's article, one by R. Levi Yitzchak Halperin, previously published in Rabbi Halperin's *Teshuvot Ma'aseh Hoshev*, IV (Jerusalem, 5757), no. 27, and a second by Rabbi Baruch Berkowitz. Although his article does not address the many complexities of airplane travel by a *kohen*, Rabbi Berkowitz, in his final paragraph, suggests that a *kohen* who relies upon a lenient view with regard to such travel should endeavor to maximize considerations of permissibility by also wearing a metal ring on his finger. Presumably, none of the rabbinic writers who directly address the issue of plane travel by a *kohen* deem Rabbi Goren's opinion regarding simultaneous contact with metal to be a factor meriting consideration. The fact that his view was ignored is not surprising. The suggestion advanced by Rabbi Goren is hardly novel; it was advanced much earlier and rejected by *Teshuvot Helkat Yo'av*, II, no. 9, *anaf* 5 and was also considered and rejected by *Sha'ar Zekenim* cited by *Iggerot Mosheh*, *Yoreh De'ah*, I, no. 230, *anaf* 6.

IX. PLASTIC BODY BAGS

The London *Jewish Chronicle* reported that the head of the London *Bet Din*, Dayan Chanoch Ehentreu, who is a *kohen*, insisted upon enclosing himself in a plastic body suit for the few minutes of flying time required to clear the Holon cemetery. El Al refused to accommodate him on the grounds of safety concerns but British Air did so.⁶⁶

It is the consensus of halakhic opinion that the substances from which plastic is manufactured have the halakhic status of water or of unfired earthenware and hence cannot be defiled.⁶⁷ Therefore, a plastic container, when covered and sealed,⁶⁸ would have the status of *zamid*

patil and would assure any object or person confined within the container of freedom from defilement. The authors of *Kanfei Yonah*, p. 28, assume that closing the bag with tape serves as a seal but also argue that, in addition, the usual form of closure is necessary in order to establish a status of *zamid patil*. Hence they assert that the cardboard or metal tie customarily used to close plastic bags is also required. It appears to this writer that the sufficiency of tape or a tie to seal the plastic bag is open to question on the basis of the earlier-cited concern expressed by *Kanfei Yonah* regarding the status of rubber or plastic used to seal airplane doors. If, as the authors of *Kanfei Yonah* suggest, *zamid patil* requires a seal inserted within the aperture, squeezing the opening shut from the outside with tape and a tie should not be sufficient.

Another impediment to invocation of the principle of *zamid patil* in this context is that only a container that has the status of a *keli*, or vessel, can preserve its contents from defilement when covered by a *zamid patil*. The authors of *Kanfei Yonah*, p. 28, assert that a disposable plastic bag designed for a single use does not have the status of a *keli*.⁶⁹ However, Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 184, cites *Iggerot Mosheh*, *Orah Hayyim*, III, no. 39, who rules that a disposable plastic cup may be used for *kiddush* and the like as well as *Iggerot Mosheh*, *Yoreh De'ah*, III, no. 23, in which Rabbi Feinstein rules that such a container may also be used for washing one's hands before eating bread.⁷⁰ Rambam, *Hilkhhot Kelim* 5:7, does indeed rule that a utensil designed for a single use is not subject to defilement. However, the reason for that ruling is not that a disposable utensil lacks a necessary attribute of a utensil but that, for purposes of defilement, an object must not only be a utensil but must be an item of significance (*hashuv*) as well. A disposable item, by its nature, is arguably not an item of significance. However, a utensil not subject to defilement because it is lacking significance may nevertheless serve as a *zamid patil* as is evident from Rambam's ruling in *Hilkhhot Tum'at Met* 21:1.

Rabbi Spitzer also points out that, although there is no indication of such a requirement in Tractate *Kelim*, *Shulhan Arukh*, *Orah Hayyim* 159:4, rules that a leather flask cannot be used as a vessel for washing one's hands unless it has a base upon which it can stand in an upright position. *Taz*, *Orah Hayyim* 159:6, notes that other objects have the status of a *keli* even though they tip over readily and explains that the requirement for stability is limited to leather flasks and the like that collapse upon themselves and hence become containers or receptacles only when filled. Such an item becomes a *keli* or a container, explains *Taz*,

only if it has a base that turns it into a receptacle. It may be noted that Rabbenu Shimshon, *Kelim* 10:4, seems to indicate that for the purpose of serving as a *zamid patil* a utensil must have a *tokh*, i.e., it must have the capacity to be a receptacle. Thus, in order for a passenger to enclose himself in a utensil having the status of a *zamid patil*, a durable plastic container having sufficient body to stand upright even when empty would be required.

X. A PRACTICAL SUGGESTION

Obviously, the optimal solution to this problem is, as El Al has repeatedly promised, a change of flight plans to avoid the Holon cemetery. In the alternative, it has been suggested to this writer by a member of his congregation that an entire section of an airplane might be enclosed in a silicone container and sealed from within for the requisite amount of time with silicone putty or with some other acceptable sealant. In addition to being able to utilize a hard substance such as silicone, the advantage of constructing an entire compartment is that it would be large enough to contain sufficient oxygen so that there would be no danger of suffocation during the brief period during which that compartment must remain sealed. If deemed prudent, a canister of oxygen might be placed in the compartment during that brief period for use in case of emergency. Perhaps El Al might even find it advantageous to advertise such accommodations as "*Kohanim Klass!*"

NOTES

1. The issue was earlier addressed briefly by *Hazon Ish*, *Yoreh De'ah* 211:9; R. Aaron Epstein, *Teshuvot Kappei Aharon*, no. 25; R. Leib Friedman, *Teshuvot ha-Rivad*, *Yoreh De'ah*, no. 70; R. Israel Freund, *Yerushat Pleitah* (Budapest, 5707), no. 34, reprinted in *She'erit Yisra'el*, pp. 23-26, appended to R. David Judah Freund's *Alufei Yehudah al ha-Torah* (Jerusalem, 5749); R. Zevi Pesach Frank, *Teshuvot Har Zevi*, *Yoreh De'ah*, no. 280; R. Yirmiyahu Menachem Cohen, *Teshuvot ve-Herim ha-Kohen*, no. 61; and R. Levi Yitzchak Halperin, *Teshuvot Ma'aseh Hoshev*, IV (Jerusalem, 5757), no. 29.

The question of whether a *kohen* may fly in an airplane when it is not known that the plane will fly over graves but that there is a possibility that it might do so is discussed by *Teshuvot Kappei Aharon*, no. 25, sec. 1; R. Aryeh Zevi Frommer, *Teshuvot Erez Zevi*, no. 93; *Teshuvot ha-Rivad*, *Yoreh*

De'ah, no. 70; R. Jacob Zevi Katz, *Or Torah*, ed. R. Pinchas Zelig Schwartz, no. 49, (reprinted Brooklyn, 5751); R. Menachem Pollack, *Teshuvot Helek Levy*, no. 128; R. Jacob Breisch, *Teshuvot Helkat Ya'akov*, I, no. 12, and II, nos. 179-181; R. Menasheh Klein, *Mishneh Halakhot*, IX, no. 224; R. Shlomoh Zalman Braun, *She'arim ha-Mezuyanim be-Halakhah* 202:8; R. Betzael Stern, *Be-Zel be-Hokhmah*, II, no. 82; R. Moshe Stern, *Teshuvot Be'er Mosheh*, VII, *Kuntres Elektrik*, no. 88; R. Moshe Sternbuch, *Teshuvot ve-Hanhagot*, III, no. 347; R. David Munk and R. Yohanan Alexander Lombard, *Tohorat ha-Kohanim* (Jerusalem, 5762) 11:3; and in the posthumously published restrictive responsum of R. Mordecai Gifter, *Yeshurun*, X (Nisan 5762), 568-570. Cf., R. Shlomoh Yitzchak Levine, *Ha-Pardes*, Sivan 5705, p. 44 and R. Judah Yekuti'el Greenwald, *Kol Bo at Avelut* (New York, 5716), p. 78, note 30. *Teshuvot Kappei Aharon*, no. 50, raises a similar question with regard to travel by sea since the ship may sail over the corpse of a drowned person. See also *Kol Bo al Avelut*, p. 79 and *ibid.*, note 31.

The issue of *kohanim* flying as passengers in an airplane transporting a body in its baggage compartment is discussed by R. Moshe Feinstein, *Iggerot Mosheh*, *Yoreh De'ah*, II, no. 164; *Teshuvot ve-Hanhagot*, III, no. 347; *Teshuvot Helkat Ya'akov*, III, nos. 109-111; *She'arim ha-Mezuyanim be-Halakhah* 202:8; *Teshuvot Be'er Mosheh*, VII, *Kuntres Elektrik*, no. 87; *Teshuvot ve-Hanhagot*, I, no. 678; R. Samuel Wosznier, *Teshuvot Shevet ha-Levi*, IX, no. 251; *Teshuvot ve-Herim ha-Kohen*, no. 61; *Teshuvot Ma'aseh Hoshev*, IV, no. 29; R. Judah Gershuni, *Kol Zofayikh* (Jerusalem, 5740), pp. 425-432; *Tohorat ha-Kohanim* 11:6; and, more recently, by R. Yirmiyahu Menachem Cohen, author of *Teshuvot ve-Herim ha-Kohen*, in a contribution to *Sridim*, no. 21 (Nisan, 5763).

Teshuvot Har Zevi, *Yoreh De'ah*, no. 280 and R. Eliezer Waldenberg, *Ziz Eli'ezer*, XII, no. 62, address the question of *kohanim* traveling in motor vehicles on roads built in close proximity to graves. Cf. R. Shlomoh Zalman Auerbach, *Minhat Shlomoh*, I, no. 72, sec. 3, s.v. *agav*. R. Zevi Hirsh Orenstein, *Birkhat Rezeh*, no. 12; R. Joseph Saul Nathanson, *Sho'el u-Meshiv*, *Mahadura Telita'a*, II, no. 43; *Rav Pe'alim*, III, index, no. 23; and R. Jacob Zevi Katz, *Or Torah*, no. 49; and R. Moshe Schick, *Teshuvot Maharim Shik*, *Yoreh De'ah*, no. 353, discuss the analogous situation of a railroad passing through a cemetery. An interesting question regarding whether it is permissible for a *kohen* to travel as a passenger on a train in which a body is transported in a freight car is discussed by R. Isaiah Zilberstein, *Tel Talpiyot*, ed. David Zevi Katzberg, vol. IX (Waitzen, 5661), no. 23, p. 287 and cited by *Mezudat David* in his comments on *Kizur Shulhan Arukh* 202 as well as by R. David Zevi Hoffmann, *Melammed le-Ho'il*, II, no. 133. That issue is also addressed by R. Saul Brach, *Sha'ul Sha'al* (Murcacz, 5671) *Yoreh De'ah*, no. 25, as well as by *Tohorat ha-Kohanim* 11:7. The problem in such situations arises from the fact that the train passes through tunnels and, in some railway stations, under an overhanging roof. The rabbinic journal *Yagdil Torah*, ed. R. Moshe Benjamin Tomashoff, VIII, no. 2, reports that it was the practice in New York City for coaches transporting bodies to cross the river on a ferry. The permissi-

- bility of *kohanim* to travel on the same ferry is addressed in that issue and also in the following issue, VIII, no. 3.
2. Rabbis Munk and Lombard are also the authors of a valuable compendium dealing with the laws of defilement as applicable to *kohanim*, the previously cited *Tohorat ha-Kohanim* (Jerusalem, 5762). That work is arranged in the form of a commentary on the relevant sections of *Yoreh De'ah* and contains a second section presenting detailed discussions of particular issues. A second monograph by R. Moshe ha-Kohen Gross, *Tohorat ha-Kohanim ke-Hilkhatat* (Bet Shemesh, 5762), appeared shortly thereafter. The latter work is presented in the form of a digest of the basic principles and rules of defilement and for that reason may be highly useful to a student lacking a background in this somewhat arcane area. A second section contains detailed discussions of considerations affecting modern-day problems in this area.
 - 2a. For sources of the position that even an object or substance subject to defilement may serve as an interposition when actually shaped as a tent, see Rambam, *Hilkhot Tum'at Met* 13:4; Rash (Rabbenu Shimshon), Rosh and R. Ovadiah Bartenura, *Oholot* 8:1; as well as *Mishnah Aharonah*, *Oholot* 8:1 and *Oholot* 7:2. See also *Hazon Ish*, *Oholot* 9:13. Cf., *Pnei Yehoshu'a*, *Shabbat* 19b.
 3. As will be noted subsequently, there is yet a further ramification of the defilement occasioned by a tent: If the object overhanging the corpse is at least a square *tefah* in area and there is a space of a cubic *tefah* between the object and the corpse the object acquires the status of a "tent" with the result that persons and implements beneath any part of the overhanging object become defiled.
 4. A "tent" serves as an interposition blocking the ascent of defilement even if the tent is itself constructed of a material that is subject to defilement. See Rash (Rabbenu Shimshon) and Rosh, *Oholot* 8:1 and Rambam, *Hilkhot Tum'at Met* 13:4. Cf., however, R. Menachem Mendel Kargau, *Giddulei Tahahah*, *Teshuvot*, no. 19, who demonstrates that *Tosafot*, *Shabbat* 27b, s.v. *ve-ein*, and Ra'avah, *Hilkhot Tum'at Met* 5:12, disagree with the view of Rash and Rosh. Cf., *Pnei Yehoshu'a*, *Berakhot* 19a, s.v. *de-amar Rava*, who adopts the curious position that the principle that an object subject to defilement cannot serve as an interposition blocking defilement is rabbinic in nature but that it applies to a defiled tent as well. See also *Ziz Eli'ezer*, XII, no. 62, sec. 4.
 5. The terminology employed by Rash and Rosh, *Oholot* 8:1, is that a mat "pitched on a tent" serves as an interposition. *Teshuvot Har Zevi*, *Yoreh De'ah*, addenda, no. 280, asserts that even the underside or floor of a tent susceptible to defilement serves as an interposition. See also *Ziz Eli'ezer*, XII, no. 62, sec. 4.
 6. See sources cited by Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 8 and *idem*, *Tehumin*, XXII (5762), 507, note 8. However, one early-day authority, Rabbenu Shimshon (Rash), *Tohorot* 4:3, maintains that members of this class neither constitute a "tent" nor do they themselves become defiled. In effect, Rash maintains that a flying object is not susceptible to defilement as a "tent" or overhanging object. Thus, the passenger in the

airplane, who is also in motion, cannot become defiled. That is also the position of Rash, *loc cit*; however, Rosh contradicts that view in his comments on *Nazir* 55a, s.v. *ve-ha-tanya*, and in his *Tosefot ha-Rosh*, *Berakhot* 19a, s.v. *rov*. The theory underlying Rash's position is difficult to fathom. He presumably maintains that defilement extends *ad coelum* only in the presence of an overhanging tent. Hence, since a flying object does not constitute an overhanging "tent," even that object cannot become defiled. Cf., R. Chaim ha-Levi Soloveitchik, *Hiddushei Rabbenu Hayyim ha-Levi al ha-Rambam Hilkhhot Tum'at Met* 11:5. See Rabbi Halberstadt, *Kanfei Yonah*, p. 9, note 4. Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 179, cites numerous early-day authorities who contradict the view of Rash. *Teshuvot Kappei Aharon*, no. 25, sec. 14 and no. 50; *Hazon Ish*, *Tohorot* 4:13 and *Yoreh De'ah* 211:9; and R. Yosef Shalom Eliashiv, *Yeshurun*, X (Nisan 5762), 566f., all rule contrary to the position of Rash. R. David Samuel Pardo, in his commentary on the Tosefta, *Hasdei David*, *Tohorot* 3:14, also expresses astonishment with regard to Rash's position.

Citing the comments of Rash and Rosh, *Oholot* 8:5, regarding a "house on a boat," *Kappei Aharon*, no. 50, asserts that, even according to Rash, a "flying" object is immune to defilement only if there is no "roof" over that object; if, however, the flying object is covered by its own roof, even if the roof itself is moving, it does become defiled by the corpse below the flying object. Thus, a *kohen* in an airplane that overflies a cemetery, asserts *Kappei Aharon*, becomes defiled because the plane is enclosed on top.

R. Eleazer Moshe ha-Levi Horowitz of Pinsk, *Teshuvot Ohel Mosheh*, II, no. 122, develops the novel view that even according to Rash, since there is no interposition between himself and the corpse, a *kohen* who leaps over a corpse transgresses the prohibition against "entering" the tent containing a corpse even though he does not transgress the prohibition against becoming defiled. The prohibition against actual defilement is formulated in Leviticus 21:1; the verse "upon a dead body he shall not come" (Numbers 6:6) is understood by the Gemara as referring to entering into a tent in which a corpse is present and, according to *Ohel Mosheh*, *Nazir* 42a, constitutes a transgression even if such entry does not lead to defilement. That thesis is also tentatively advanced by R. Elchanan Wasserman, *Kovez Shemu'ot*, *Hullin*, sec. 31, and is reflected in the comments of R. Chaim Ozer Grodzinski, *Teshuvot Ahi'ezer*, III, no. 65, secs. 5-7.

7. See *Hazon Ish*, *Yoreh De'ah* 211:9, *Even ha-Ezer* 144:9 and *Oholot*, addenda; *Teshuvot Har Zevi*, *Yoreh De'ah*, no. 280; *Teshuvot Helkat Ya'akov*, III, no. 209; *Yerushat Pleitah*, no. 34; *Teshuvot ve-Hanhagot*, III, no. 347; and R. Yosef Shalom Eliashiv, *Yeshurun*, X (Nisan 5762), 566-567.
8. See R. Jacob Reischer, *Teshuvot Shevut Ya'akov*, I, *Yoreh De'ah*, no. 85 and II, *Yoreh De'ah*, no. 88 as well as *Pnei Yehoshu'a*, *Sukkah* 21a, who maintain that all agree that in terms of biblical law a "thrown tent" has the status of a tent but that R. Judah maintains that a "thrown tent" does not constitute an interposition for purposes of defilement by virtue of rabbinic decree. See also *infra*, note 10.
9. Cf., *Tiferet Yisra'el*, *Oholot*, *Yakhin* 8:10, and *Sefat Emet*, *Sukkah* 21a, who

- assert that all agree that even an *ohel zaruk* serves as an interposition with regard to an underlying corpse or grave. The controversy, they contend, is limited to whether an *ohel zaruk* constitutes an interposition with regard to defilement associated with the "land of the gentiles" because rabbinic decree pronounced the air itself to be defiled. That position is rejected by all other authorities and appears to be contradicted by the discussion of the Gemara, *Eruvin* 30b. Moreover, even those authorities concede that a "flying" tent, as described in *Oholot* 8:5, does not serve as an interposition for any type of defilement.
10. A tent serves as an interposition only if the substance of which the tent is fashioned itself has not become defiled. Thus, if a "thrown tent" qualifies as a tent, the "box, chest or cupboard" that serves as an interposition does so only if it is of a size that renders it immune to defilement. See *Encyclopedia Talmudit*, I, 238. Discussion of the application of the principle of *ohel zaruk* to an airplane is germane only if it is determined that the airplane itself is not subject to defilement. See Rabbis Halberstadt and Goldmintz, *Tehumin*, X, 505.
 11. Cf., however, Rashba, *Eruvin* 31a, who rules that an *ohel zaruk* does have the status of a tent.
 12. Rambam's view with regard to the status of an *ohel zaruk* or a "tent" has been the subject of differing interpretations. Rambam, *Hilkhhot Tum'at Met* 11:5, rules that a person entering the "land of the gentiles" in a "chest, a box or a cupboard" becomes defiled "for an *ohel zaruk* is not a tent." However, in *Hilkhhot Nezirut* 5:18, Rambam rules that a person who is placed inside a closed box and brought into a tent containing a corpse becomes defiled only if the covering of the box is opened. Thus, Rambam clearly indicates that so long as the container is closed the person is not defiled. A similar ruling is recorded by Rambam in *Hilkhhot Avel* 3:6. The latter ruling seemingly reflects the notion that an *ohel zaruk* is indeed a tent.

Mishneh le-Melekh, *Hilkhhot Tum'at Met* 11:1, resolves the contradiction by positing the thesis that an *ohel zaruk* lacks the status of a "tent" only in the sense that an *ohel zaruk* does not qualify as a "tent" that prevents defilement when overhanging a corpse; if, however, an *ohel zaruk* is brought into a tent already sheltering a corpse but does not itself overhang the corpse, it does indeed serve as an interposition preventing defilement of anything within the *ohel zaruk*. The reason, explains *Mishneh le-Melekh*, is that everything within the tent is defiled because the Torah prescribes that the tent is to be regarded as totally filled with defilement and for that reason any interposition, including an interposition even of an object that is itself not a "tent," is sufficient to preserve anything contained within such an object from defilement so long as it prevents the defiled "air" of the tent from entering.

However, *Mishneh le-Melekh's* distinction is insufficient to resolve an additional contradiction posed by a ruling recorded by Rambam in *Hilkhhot Parah Adumah* 2:7. In reporting the extraordinary precautions taken to assure that the *kohen* who burned the *parah adumah* was cleansed of any possible defilement, Rambam records the statement of the Gemara reporting that those who purified that *kohen* prior to his performance of that rit-

ual were transported to the requisite site upon boards placed upon the backs of oxen. Those planks were designed to serve as an interposition preventing defilement that might have resulted had the person being transported passed over an unknown grave. In that ruling Rambam apparently accepts the principle that an *ohel zaruk* does indeed constitute a "tent" for purposes of interposition over a corpse or grave. A number of authorities, including *Teshuvot Erez Zevi*, no. 93, *Melammed le-Ho'il*, no. 133, and *Yerushat Peleitat*, no. 34 (the latter two citing *Sho'el u-Meshiv*, *Mahadura Tinyana*, II, no. 43), suggest that it is only with regard to a corpse that an *ohel zaruk* does not serve as an interposition but that an *ohel zaruk* does serve as an interposition with regard to a grave. See also Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 18, note 96. Cf. also the comments of *Tosafot Eruvin* 30b, s.v. *le-mar*, and the analysis of R. Ezekiel Landau, *Noda bi-Yehudah*, *Orah Hayyim*, *Mahadura Tinyana*, no. 30. Ritva, *Eruvin* 31a, advances the position that only a *keli*, i.e., a vessel or utensil, does not serve as an interposition when it is an *ohel zaruk* but wood that has not been fashioned into a *keli*, since it is not subject to defilement under any circumstances, does serve as an interposition even when it constitutes an *ohel zaruk*. *Sidrei Tohorot*, *Oholot* 2:3, s.v. *ma'i* (p. 58b) and *ibid.* 6:1, s.v. *o* (p. 98b), dispels the contradiction in Rambam's rulings by suggesting that Rambam is in agreement with Ritva. *Mishneh le-Melekh* himself observes that many stringencies were introduced in preparation of the *parah adumah* that were halakhically unnecessary. Use of planks even though they constitute an *ohel zaruk* and could not serve as an interposition, he contends, was designed simply to reinforce the lesson that extreme care had to be taken lest the officiants become defiled.

Mishneh le-Melekh further observes that an *ohel zaruk* is not a "tent" only so long as it rests upon the back of an animal or is carried by a person but that upon coming into contact with the ground it does acquire the status of a tent even while being dragged upon the ground. Cf., however, *Tosafot*, *Nazir* 55a. s.v., *ve-ha-tanya*, who appear to adopt a position at variance from that of *Mishneh le-Melekh*. *Mishneh le-Melekh* suggests, perhaps somewhat improbably, that since in *Hilkhot Nezirut* Rambam omits any reference to the container being suspended in the air, his ruling to the effect that the container constitute a "tent" should be understood as referring solely to a "chest, a box or a cupboard" placed on the ground. Cf., *Tiferet Yisra'el*, *Oholot*, *Yakhin* 8:10, who rejects that distinction. *Teshuvot Birkat Rezeh*, no. 12, endeavors to demonstrate that, even according to *Mishnah le-Melekh*, this is so only if the container in its entirety rests on the ground but not, for example, with regard to a railway car suspended on wheels. That distinction is, however, disputed by *Ziz Eli'ezer*, XII, no. 62, sec. 2 and was clearly not even entertained by *Teshuvot Maharam Shik*, *Yoreh De'ah*, no. 353. *Birkat Rezeh* himself adopts a diametrically opposed position in asserting that the controversy is limited to a "tent" transported by a person or animal but that all concede that a "tent" that is itself in motion does not have the status of a tent, even if it is in direct contact with the ground. *Mishneh le-Melekh's* position is accepted by *Teshuvot Zikharon Yosef*, no. 23 and *Mezudat David* in his commentary on *Kizur Shulhan*

Arukh 202 and also by R. David Zevi Katzberg, *Tel Talpiyot*, 1X, 287, as well as by *Ziz Eli'ezer*, XII, no. 22, sec. 2 and apparently also by *Sho'el u-Meshiv*, *Mahadura Telita'a*, II, no. 43. However, *Teshuvot Maharam Shik*, *Yoreh De'ah*, no. 353, regards that position to be a matter of dispute among early-day authorities.

However, *Teshuvot Shevut Ya'akov*, I, no. 85, offers an entirely different resolution of the contradiction between Rambam's rulings. As noted earlier, *Shevut Ya'akov* asserts that it is only by virtue of rabbinic decree that an *ohel zaruk* does not constitute an interposition but that in terms of biblical law it is indeed a tent. Rambam's statements in *Hilkhot Nezirut* and *Hilkhot Avel* declaring that defilement takes place only upon opening the container is made in conjunction with a statement concerning punishment incurred by virtue of biblical culpability whereas the statement in *Hilkhot Tum'at Met* occurs in the form of a ruling regarding the status of a person who enters the "land of the gentiles." According to *Shevut Ya'akov*, Rambam's declaration that such a person becomes ritually defiled refers only to defilement by virtue of rabbinic decree and indeed all defilement associated with presence in the "land of the gentiles" is by virtue of rabbinic decree. See also the gloss of *Gilyon Maharsha* to *Shakh*, *Yoreh De'ah* 372:2 and *Pnei Yehoshu'a*, *Sukkah* 21a, s.v. *Be-Tosafot*, as well as the resolution offered by *Sefat Emet*, *Sukkah* 21a. Cf. also, *Teshuvot Erez Zevi*, no. 93.

Each of these analyses of Rambam's ostensibly conflicting rulings would yield the conclusion that, even for Rambam, a *kohen* may not enter a cemetery in an *ohel zaruk*. However, *Tiferet Yisra'el*, *Oholot*, *Yakhin* 8:10, explains that an *ohel zaruk* is indeed an interposition insofar as defilement is concerned but, nevertheless, one who enters the "land of the gentiles" in an *ohel zaruk* becomes defiled because the "air" of the "land of the gentiles" permeates the *ohel zaruk*.

The view of *Tiferet Yisra'el* may have been accepted by *Teshuvot ha-Rivad*, no. 70. In a short, cryptic responsum that author permits a *kohen* to fly over a cemetery because "that airplane is no worse than a box, chest or cupboard which interpose in the face of defilement as is spelled out in Rambam, *Hilkhot Avel* and [*Hilkhot*] *Nezirut*." *Teshuvot ha-Rivad* appears to be oblivious to the seemingly contradictory nature of those two rulings. R. Israel Freund, *Yerushat Pleitah*, no. 34, suggests that *Rivad* follows *Tiferet Yisra'el* in understanding Rambam as ruling that an *ohel zaruk* does indeed constitute an interposition and that his ruling with respect to a *kohen* who enters the "land of the gentiles" in an *ohel zaruk* is based upon the notion that it is the "air" itself that constitutes the source of defilement in "the land of the gentiles." Hence, since air penetrates an *ohel zaruk*, the *ohel zaruk* cannot serve as an interposition preventing defilement associated with entrance into the "land of the gentiles."

13. Moreover, commenting on *Oholot* 16:1, as cited by the Gemara, *Shabbat* 17a, *Tosafot Yeshanim*, *ad locum*, demonstrate that, in contradistinction to the phenomena described in *Oholot* 8:5, an *ohel zaruk*, although not a "tent" for purposes of interposition, is nevertheless a "tent" for purposes of extending defilement to all persons and objects under its "roof." For an elucidation of the rationale underlying that distinction see *Hiddushei*

- Rabbenu Hayyim ha-Levi al ha-Rambam, Hilkhhot Tum'at Met* 11:5.
14. As cited *supra*, note 12, *Mishneh le-Melekh, Hilkhhot Tum'at Met* 11:1, further limits the controversy to a "tent" resting on an animal or carried by a person. According to *Mishneh le-Melekh*, when the object is actually on the ground, all concede that it has the halakhic status of a "tent." Thus, for *Mishneh le-Melekh*, the controversy is whether an object reposing upon on an animal or a person, who although stationary is nevertheless capable of locomotion, is regarded as tantamount to having been placed upon the ground.
 15. Citing *Tosafot, Sukkah* 21a, s.v., *she-ein, Sho'el u-Meshiv, Mahadura Tinyana*, II, no. 43, argues that an object specifically designed to be propelled, e.g., a train, does have the status of a tent. However, Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 16, note 88, assert that *Sho'el u-Meshiv's* view is limited to train cars and the like that are designed to move on tracks permanently affixed to the ground but not to airplanes that fly through the air. Cf., *Ziz Eli'ezer*, XII, no. 62, sec. 7, who understands *Sho'el u-Meshiv's* categorization to include any vehicle, including an automobile, designed to move on the ground. They point to the fact that birds and ships are not even in the category of an *ohel zaruk* despite the fact that boats are designed to sail in rivers and oceans and birds naturally fly through the air.
 16. *Teshuvot Erez Zevi*, I, no. 93, seems to suggest that since it is within the capacity of the pilot to stop the plane it therefore follows that, for *Sefer ha-Yashar*, an airplane should have the status of an *ohel zaruk*. However, it must be noted, unlike an object carried by a person or by an animal, it is impossible to cause a plane to come to a halt *in situ*. Cf., Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 16, note 86. Even a helicopter that can be made to hover over a particular spot would nevertheless constitute an *ohel zaruk*. Cf., however, R. Shalom Mordecai Shwadron, *Da'at Torah, Orah Hayyim* 626:3, cited in the text, who maintains that a dirigible whose motion or lack of motion is controlled by the pilot is not an *ohel zaruk* when in a stationary position. See also *infra*, note 18.
 17. See, however, *Teshuvot Shevut Ya'akov*, I, no. 85; cf., *Teshuvot Birkat Rezeh*, no. 12; and *Sedei Hemed*, I, *ma'arekhet ha-alef*, sec. 228.
 - 17a. R. Yirmiyahu Menachem Cohen, *Teshuvot ve-Herim ha-Kohen*, no. 61 and *Sridim*, no. 21, suggests that a "thrown tent" loses its status as a "tent" only when thrown by an external force. However, an airplane propelled by its own force, he suggests, is not deemed to be a "thrown tent." He similarly argues that a self-propelled object does not have the status of a "flapping cloak" and hence retains its status as a "tent." However, as noted by Rabbi Cohen in his contribution to *Sridim*, that notion, developed in a somewhat different context, is rejected by R. Shlomoh Zalman Auerbach, *Minhat Shlomoh*, I, no. 72, addendum, sec. 1.
 18. Cf., however, R. Gershon Chanoch Leiner, *Sidrei Tohorot, Oholot* 8:8 (p.134b), s.v. *she-ha-of*, who presents a somewhat different analysis of why a billing garment, a flying bird or a ship are not even in the category of an *ohel zaruk*. *Sidrei Tohorot* maintains that as indicated by the Mishnah, *Oholot* 8:5, a ship even while stationary and floating in the water acquires

the status of a tent until it is tethered in a manner that anchors it firmly in place. He explains that the unanchored ship, as well as the flying bird, will of necessity move from one place to another, in contradistinction, a person or animal standing on *terra firma* must exercise a considered act of will in order to move and already retains the option of remaining *in situ*. It would seem to this writer that, according to *Sidrei Tohorot's* analysis, a dirigible is comparable to a floating ship, *viz.*, it cannot remain in one place indefinitely. When its fuel is expended the dirigible will be effected by the wind and by gravity quite as a ship will sooner or later be carried by flowing water. The pilot can no more decide to remain perpetually motionless than can a bird determine that it will remain in a fixed position in the air.

19. See also *Teshuvot Har Zevi, Yoreh De'ah*, no. 280 and *Ziz Eli'ezer*, XII, no. 62, secs. 8-9. Cf., *infra*, note 20.
20. *Iggerot Moshav, Yoreh De'ah*, II, no. 164, somewhat ambiguously remarks that although the plane is not made of metal, nevertheless, the plane "in its entirety is a single vessel."
21. Cf., the bracketed comments of *Teshuvot Birkat Rezek*, no. 12, s.v. *amnam*, who in a different context employs somewhat similar language but has no occasion to discuss the question of simultaneity.
22. *Tiferet Yisra'el's* view is also accepted by *Teshuvot Zikhron Yosef*, no. 23; *Teshuvot Melammed le-Ho'il, Yoreh De'ah*, no. 133; *Mezudat David* in his commentary on *Kizur Shulhan Arukh* 202; R. Israel Freund, *Yerushat Peleitat*, no. 34; and *Ziz Eli'ezer*, XII, no. 62, sec. 3.
23. See also *Ziz Eli'ezer*, XII, no. 62, sec. 7.
24. See also *Tosafot, Sukkah* 21b, s.v. *she-ein lah keva* and *Kol Zofayikh*, p. 426.
25. Cf., however, the comments of *Sho'el u-Meshiv, Mahadura Telita'a*, II, no. 43.
26. Interestingly, Rabbis Munk and Lombard, *Yeshurun*, X, 560, note 21, suggest that, for purposes of *Shabbat* regulations, fashioning a utensil that is so heavy that it can never be moved may be considered as actually attaching the vessel to the ground and, accordingly, would constitute an act of construction comparable to the building of a "house." If so, an airplane would have the status of a structure attached to the ground and by virtue of that consideration constitutes an interposition for purposes of defilement. Nevertheless they concede that, despite its weight, this cannot be the case with regard to a vehicle that is designed for transportation.
27. See also *Ziz Eli'ezer*, XII, no. 62, sec. 5. Cf., however, *Sha'ul Sha'al*, no. 225, who asserts that any object that moves from place to place as a result of human intervention falls within this exception. *Hazon Ish, Yoreh De'ah* 211:8, also entertains that possibility with regard to automobiles. R. Chaim Meshullam Kaufman, *Petah ha-Ohel* (Jerusalem, 5709), no. 5, asserts that the exception includes even wagons powered by steam and apparently assumes that no human involvement is necessary. Cf., *Hazon Ish, Yoreh De'ah* 211:8, who remarks that a train driven by a steam engine is not to be regarded as a utensil moved by "human power." See also R. Shlomoh Zalman Auerbach, *Minhat Shlomoh*, I, no. 72, sec. 4, s.v. *be-zemano*, who observes that, even heavy, fuel-powered vehicles such as trains are to be regarded differently from utensils transported by people or

- animals but, be that as it may, automobiles are certainly to be regarded as utensils that may be carried from place to place. *Minhat Shlomoh* argues that, unlike a train, an automobile is no different from a coach of earlier times in that, were gasoline not available, the "horseless carriage" might simply be hitched to a horse in the manner of a coach of days of yore.
28. Although Rashi, *Shabbat* 44b, seems to disagree, *Tosafot*, *Menahot* 31a, explain Rashi's comment in a manner that is compatible with their thesis. Cf., however, *Tosefet Yom Tov*, *Kelim* 24:4, who suggests that Rambam may disagree with *Tosafot*.
 29. Cf., however, *Minhat Shlomoh*, I, no. 72, sec. 4 s.v. *akh*, who suggests precisely the opposite: seats attached to the plane may become part of the plane and lose their status as *medras*.
 30. This point is made by *Giddulei Taharah*, Responsa, no. 19, with regard to a *kohen* riding in a large carriage while being transported over a corpse. See also *Birkat Rezeh*, no. 12 and *Hazon Ish*, *Yoreh De'ah* 211:8. See, however, the consideration raised and sources cited *infra*, notes and 62 and 63.
 31. See *Kelim* 15:1 and *Oholot* 8:1.
 32. For a discussion of whether the dimensions of the object that defiles are included in the *poteah tefah* and of various sources regarding that question see *Teshuvot Ohel Mosheh*, II, no. 122.
 33. See R. Chaim Benish, *Middot u-Shi'urei Torah* (Bnei Brak, 5747), p. 612. See also R. Jacob Gershon Weiss, *Middot u-Mishkalot shel Torah* (Jerusalem, 5745), p. 382.
 34. R. Abraham Chaim Noe, *Shi'urei Torah* (Jerusalem, 5707) 3:25.
 35. See R. Ya'akov Kanievsky, *Shi'urin shel Torah* (Bnei Brak, 5729), p. 64.
 36. See "Torat ha-Adam," *Kitvei Ramban*, ed. R. Bernard Chavel (Jerusalem, 5724), II, 139.
 37. According to these authorities, absent a *poteah tefah*, a sealed tomb defiles only directly above the corpse; if the sealed tomb contains a *poteah tefah* it defiles persons and items that come into contact with any one of its sides as well.
 38. See R. Moshe Sofer, *Teshuvot Hatam Sofer*, *Yoreh De'ah*, no. 340, sec. 2.
 39. R. Abraham I. Kook, *Da'at Kohen*, nos. 214 and 215, asserts that the permissive view is limited to a body within a sealed but uninterred coffin. According to *Da'at Kohen*, all authorities agree that *poteah tefah* is of no avail in instances of a body already in a grave.
 40. *Arukh ha-Shulhan*, *Yoreh De'ah* 269:11, understands these authorities as referring to a stone slab or bed placed horizontally over the grave but not to the vertical tombstone that in many locales is more prevalent in our day.
 41. See *Yadayim* 1:2; Tosefta, *Kelim*, *Bava Kamma* 7:7; as well as *Mizpeh Shmu'el*, *ad locum*, s.v. *or ha-dag*.
 42. See Tosefta, *Kelim*, *Bava Kamma*, *loc. cit.*
 43. See *Kelim* 10:1
 44. The statement that only seven metals (including mercury) were known in antiquity may not be entirely accurate. The Gemara, *Avodah Zarah* 33b, speaks of utensils made of *natar*, a material identified by the Gemara as being derived from the "digging" or excavation from which *zerif* is extracted. The status of this material is discussed more fully in the following sub-

section. Rashi defines *zerif* as alum. In context, the Gemara declares that utensils made of *natar* in which non-kosher food has been cooked cannot be *kashered* by conventional methods. That statement is readily understandable: since the utensil is made of earth its status is that of *heres* which cannot be *kashered*. Rabbenu Shimshon, *Kelim* 2:1, states explicitly that utensils made of *natar* have a status identical to that of *heres* and hence, if such utensils become defiled, they cannot be purified by immersion in a *mikveh*. Maharsha, however, explains a comment of *Tosafot*, *ad locum*, as reflecting the notion that, although implements made of *natar* are highly absorbent and hence cannot be *kashered*, just as *heres* cannot be *kashered* for that reason, nevertheless, for purposes of laws of ritual purity, the status of the vessel is that of a metal utensil. Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 182, astutely comments that, according to Maharsha's understanding of *Tosafot*, the material must have been extracted from earth in which it was found in a natural state but, since refining methods known at the time were imperfect, the extracted metal retained a high concentration of earth or sand. Those particles of sand remained highly absorbent and hence the utensil could not be *kashered*. Nevertheless, the utensil itself, even though it was composed of an incompletely refined substance, according to Maharsha's understanding of *Tosafot*, had the status of a metal utensil. Putting aside the question of the correct interpretation of *Tosafot*, Maharsha, in agreement with *Tiferet Yisra'el*, certainly accepted as an antecedent premise the notion that the six enumerated metals do not constitute an exhaustive list.

45. See *infra*, note 53. R. Yirmiyahu Deutsch, *Tohorat ha-Kohanim*, pp. 197f., cites by way of comparison the seven species of kosher animals enumerated in Scripture and the three species identified as non-kosher because they chew the cud but do not have split hooves. Other kosher species are regarded as subspecies of the deer and the sheep; the alpaca and the llama are regarded as subspecies of the non-kosher camel even though zoologists do not recognize them as members of the same genus. Accordingly, Rabbi Deutsch argues that there is no way to determine with certainty that modern metals are not subspecies of those enumerated by Scripture. That argument is not compelling for the simple reason that the Torah spells out the criteria of both kosher and non-kosher species and animals not specifically mentioned do manifest the specified criteria. However, the Torah does not spell out the criteria of a metal; moreover, modern metals do not in any way share the chemical profile of the enumerated metals. Hence there is no reason to suspect that they may be subspecies of the six biblically enumerated species.
46. Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 181, draws attention to Rambam's formulation regarding the defilement of metal implements. Rambam, *Hilkhot Kelim* 1:1, states simply that metal implements are subject to defilement but fails to enumerate the six metals. That omission might suggest that the rule extends to all metals rather than only to the six specifically enumerated in Scripture. That inference is, however, less than compelling. Since modern metals were as yet unknown in his day, Rambam had no reason to exclude them by specifying the metals to which the rule

- applies. Scripture, on the other hand, must perforce have been concerned with providing a full and accurate rule for posterity.
47. Rabbi Jacob Kaminetsky, in a responsum appended to R. Zevi Cohen's *Hekhsher Kelim* (Jerusalem, 5738), p. 243 and reprinted in Rabbi Kaminetsky's *Emet le-Ya'akov, Shulhan Arukh, Yoreh De'ah* 120:1, cites Targum Onkolos in tracing the etymology of "*matakhet*" and identifies the word from which it is derived as an Aramaic verb meaning "to pour."
 48. R. Yirmiyahu Kahana, in a responsum appended to *Tohorat ha-Kohanim*, p. 195, reports that R. David Feinstein informed him that his father wrote this responsum "merely in the form of *pilpul*" but, in practice, did not rely upon his argument. That *Iggerot Mosheh* refused to issue a definitive ruling is stated quite explicitly in this responsum; by the same token, it is clear that the suggestion, although not definitive, was both serious in nature and reflected a considered judgement. Moreover, in *Iggerot Mosheh, Yoreh De'ah*, III, no. 22, in the context of a discussion of whether there is a biblical obligation with regard to the immersion of aluminum utensils acquired from a non-Jew, Rabbi Feinstein declares without reservation that aluminum is not a "metal." See *infra*, note 52 and accompanying text.
 49. See however, Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 182, who argues that, even according to *Iggerot Mosheh*, in practice an airplane cannot shield passengers from defilement. *Iggerot Mosheh, Yoreh De'ah*, III, no. 22, suggests that, by virtue of rabbinic decree, aluminum may be susceptible to defilement in the manner of an earthen utensil. Since a utensil may serve as an interposition in the form of a *zamid patil* preventing defilement of the contents or occupants only if it itself has not become defiled. If, however, the utensil has become defiled from within, it can no longer serve as a shield preventing penetration of defilement.
 50. See, however *infra*, note 61 and accompanying text for a discussion of the capacity of even a small quantity of metal to determine the halakhic status of a utensil by virtue of the principle of *ma' amid*.
 51. Rabbi Spitzer, *Kol ha-Torah*, no. 52, p. 182, states that Rashi defines *natar* as alum and proceeds to confuse alum with aluminum in assuming that the Gemara is referring to utensils made of aluminum that were only partially refined because the technology for properly refining aluminum was as yet unknown. Curiously, without citing a source, Rabbi Spitzer comments, "It is known that there are presently extant utensils from the days of the Romans who termed them alum and they are [made] from a type of earth from which, after additional refinement (the manner of which was discovered more than one hundred and fifty years ago), aluminum is made. It is called alum after partial refining but while still mixed with other alloys and not refined sufficiently to be a metal as other species of metal." In actuality, aluminum is an element whereas alum is a totally unrelated crystalline compound and may be any one of a series of isomorphous double salts. Alum also occurs in nature as the mineral kalunite. Aluminum was used in antiquity as a mordant to fix certain dyes and in tanning. Some types of alum are presently used in baking powder, in fireproofing textiles, in vegetable glues and porcelain cements, in photographic fixing baths to harden gelatin films and plates and in water purification.

Moreover, a careful reading of Rashi indicates that he does not identify “*natar*” as alum; rather he defines “*zerif*” as alum. The Gemara describes *natar* as derived from “the digging of *zerif*” rather than as *zerif* itself. Thus the statement should be understood as indicating that *natar* is excavated together with *zerif*, i.e., in nature *natar* and *zerif* are found together, but they are different substances. The identity of *natar* remains unknown to us but, contrary to Rabbi Spitzer’s understanding, it is not alum and indeed alum—which is unrelated to aluminum—is not a material from which utensils can be manufactured.

52. Cf., *supra*, note 48 and accompanying text.
53. Rabbi Weidenfeld is quoted by *Heshev ha-Efod* as explaining his demurrer with the comment, “Who knows? Perhaps [aluminum] is a species of iron.” See *supra*, note 45.
54. See also *Teshuvot ve-Hanhagot*, III, no. 347.
55. A similar doubt is expressed by R. Elimelech Bluth, *Le-Torah ve-Hora’ah*, no. 2 (Summer, 5733), p. 40.
56. That is also the view of R. Yosef Eliyahu Henkin, *Ha-Darom*, no. 20 (Tishri 5725), p. 51; *Ziz Eli’ezer*, VII, no. 33; *Iggerot Mosheh*, *Le-Torah ve-Hora’ah*, no. 1 (Chanukah, 5733), p. 11 and no. 2 (Summer, 5733), p. 20 (see also *ibid.*, p. 42) and is reported to be the position of *Hazon Ish* as well. See R. Zevi Cohen, *Tevilat Kelim*, (Jerusalem, 5738), chap. 11, note 115.
57. See *Minhat Yizhak*, III, nos. 76-78. See also R. Solomon Braun, *She’arim ha-Mezuyanim be-Halakhah*, chap. 37, note 4; R. Moshe Sternbuch, *Halakhah be-Mishpahah ha-Shalem* (Jerusalem, 5748) 30:3; and *Tevilat Kelim*, chap. 11, note 115.
58. See also *Hazon Ish*, *Kelim* 13:1 and 13:4.
59. Rabbis Halberstadt and Goldmintz, *Kanfei Yonah*, p. 27, observe that, if the airplane is not subject to defilement, the door is also not subject to defilement even if the door is made of metal. Under such circumstances as recorded in the Mishnah, *Kelim*, 13:6, the metal door merely “serves” the non-metal utensil and is not subject to defilement. However, those authors note that the metal handle may have an independent function, i.e., members of the crew may use the handle as a hook from which to hang bags or articles of clothing. If so, the door would be subject to defilement and hence could not serve as a *zamid patil*.
60. See *Shabbat* 15b. As explained by *Tosafot*, *ad locum*, s.v. *me-Rabbi*, the principle of *ma’amid* applied in this context is distinct from the principle of *ma’amid* discussed in *Shabbat* 10a in describing matters such as the material holding the rungs of a ladder in place or a ring to which a signet is attached.
61. Sources cited in support of that view include *Tosafot*, *Shabbat* 15b, s.v. *ve-Rabbi* and *Avodah Zarah* 75b, s.v. *ve-hilkhata*; *Kesef Mishnah*, *Hilkhot Kelim* 4:8; *Dvar Shmu’el*, no. 223; *Teshuvot Hatam Sofer*, *Yoreh De’ah*, nos. 199, 206 and 214; *Pithei Teshuvah*, *Yoreh De’ah* 210:32; *Hazon Ish*, *Kelim* 17:19 and *Yoreh De’ah* 211:9; and *Sidrei Tohorot*, *Kelim* 13:6, (p. 134a).
62. However, *Petah ha-Ohel*, *klal* 5, no. 5, declares that, although the seats of a train constitute a *medras*, the rest of the compartment or car to which they are attached does not acquire the status of *medras*. Nevertheless, a *kohen*

- would become defiled if there is a grave directly beneath his seat.
63. *Kanfei Yonah* concedes that *Hazon Ish*, *Yoreh De'ah* 211:8, maintains that the seat of a motor vehicle is designed for transportation from place to place rather than for repose and accordingly, unless it is portable, is not subject to defilement as a *medras*. Cf., *Teshuvot Erez Zevi*, no. 83, s.v. *ve-hakham ehad*, who notes two contradictory views with regard to this issue expressed by *Tosafot*, *Menahot* 44b, s.v. *sheidah*, in their discussion of the status of seats of a boat. See also *Petah ha-Ohel*, *klal* 5, no. 5; *Teshuvot Erez Zevi*, no. 83; *Birkhat Rezeh*, no. 12; and *Ziz Eli'ezer*, XII, no. 62, sec. 5. See also *supra*, note 30. Rabbis Halberstadt and Goldmintz, *Kanfei Yonah* and *Tehumin*, XXII, 508, note 11, nevertheless agree that crew members and those leisure travelers who travel for pleasure do use the seat for the purpose of rest. A similar point is made by *Hazon Ish*, *Yoreh De'ah* 211:8 and somewhat more tentatively by *Minhat Shlomoh*, I, no. 72, sec. 4, s.v. *gam*.
 64. However, the presence of a piece of metal in the same tent as the corpse but not in contact with the body of the *kohen* is insufficient since, although some early authorities disagree, Rambam, *Hilkhot Tum'at Met* 5:13, rules that metal, although it became defiled in the tent of a corpse, does not itself defile persons or utensils other than by tactile contact. See *Teshuvot ha-Rashba*, I, no. 476.
 65. Cf., *Teshuvot Ohel Mosheh*, II, no. 122, note 4, who in a similar manner asserts that the act of entry into the tent of a corpse is intrinsically forbidden and constitutes a transgression that is independent of any defilement entailed thereby.
 66. See *Jewish Chronicle*, November 2, 2001, p.1. See also *ibid.*, November 9, p. 1 and November 16, 2001, p. 1.
 67. As noted earlier, it is for that reason that most rabbinic decisors rule that plastic utensils purchased from a non-Jew do not require immersion.
 68. As opposed to an ordinary sheet of plastic which, even if wrapped around an object or person and sealed, does not have the status of a *keli* and hence cannot serve as a *zamid patil*.
 69. A similar issue arises with regard to the immersion of disposable cooking or eating utensils. For a review of halakhic literature addressing that question see this writer's *Contemporary Halakhic Problems*, II (New York, 1983), 43-45.
 70. The basis for *Kanfei Yonah*'s assertion, p. 28, note 154, that, unlike a plastic bag, a disposable plastic cup has the status of a *keli* because "it has the appearance of a *keli*" is unknown to this writer.