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Survey of Recent Halakhic Periodical Literature

COCHLEAR IMPLANTS

A number of halakhic requirements can be satisfied only by hearing a human voice. To take but two examples, fulfillment of the obligation to hear the reading of the *Megillah* on Purim or fulfillment of the obligation of *kiddush* by listening to another person's recitation require hearing a human voice. A similar requirement exists with regard to hearing the blasts of the *shofar* on *Rosh ha-Shanah*. As stated by the Mishnah, *Rosh ha-Shanah* 27b, one cannot fulfill the obligation of listening to the sound of the *shofar* by hearing an echo of that sound.[1] An echo is caused because the rebounding sound waves do not coalesce with the first set of sound waves and hence they produce a separate and distinct sound with the result that the sound actually perceived is not at all contemporaneous with the sound that is replicated. *A fortiori*, such requirements cannot be fulfilled by listening to a tape-recording or a radio broadcast.

The question of whether the obligations of *shofar*, *kiddush*, *Megillah* and the like are discharged when a microphone is employed for amplification is a matter of controversy among twentieth-century authorities. Some recognize that the sound emitted by the microphone is artificial in nature and hence rule in the negative.[2] Others, in effect, find the microphone to be analogous to an ear trumpet or a megaphone. A megaphone amplifies sound by causing natural sound waves to rebound upon themselves—thereby producing a higher volume of sound. *Pri Hadash*, *Even ha-Ezer* 121:6, regards the ability to hear by means of an ear trumpet to be akin to natural hearing. Both an ear trumpet and a megaphone enhance sound without producing a secondary sound akin to an echo. Still others regard the status of sound produced by a microphone to be a matter of doubt. A comprehensive list of sources discussing this issue is presented by R. Levi Yitzchak Halperin, *Ha-Hashmal be-Halakhah*, I (Jerusalem, 5738), 161-182.[3]

The authorities who rule that an obligation contingent upon "hearing" cannot be fulfilled by means of listening to sounds amplified by a microphone base their position upon one salient factor: Sound is created by waves moving through a medium. The sound of a human voice is

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produced by waves generated by the motion of the organs of speech. Sound produced through the intermediacy of a microphone is different in one crucial respect. Unlike hearing dependent upon an ear trumpet or megaphone—in which no sound but that of a human voice is heard—in the case of a microphone, the waves that produce sound are generated by a vibrating membrane within the microphone. Sound waves entering the apparatus produce electrical pulses that, in turn, cause a thin synthetic membrane to vibrate. To be sure, those vibrations are produced by electrical signals generated by waves set into motion by the organs of speech; nevertheless, it is not sound waves generated directly by a human being that are perceived, but waves set in motion by a latex membrane that stimulate the auditory receptors.

Hearing aids are essentially highly sophisticated microphones. Although a latex membrane is not employed, the microphone converts sound waves to electrical signals. Those signals are then amplified—causing the eardrum to vibrate. Vibrations of the eardrum set the ossicles in motion, which then causes the endolymph, i.e., the fluid in the inner ear, to move. It is the movement of the fluid in the inner ear, both in natural hearing and in hearing-aid assisted auditory perception, that stimulates the fibers of the eighth cranial nerve commonly known as the auditory nerve but now termed the "vestibulocochlear nerve." Auditory perception is a neural phenomenon that occurs upon stimulation of the eighth cranial nerve.

The microphone that is a component of a hearing aid used by the hearing impaired differs from conventional microphones used for amplification of sound designed to make sound audible at a distance. In the case of a conventional microphone, the proximate cause of the acoustic perception is the electronically stimulated vibration of a latex membrane; in the hearing aid it is the electrical signals generated by the hearing-aid microphone. Nevertheless, most, if not all, halakhic discussions conflate the two. Although precise elucidation is absent in those discussions, those authorities apparently regard sound produced through the intermediacy of electrical impulses stimulating the eardrum to be artificial in nature, i.e., as sounds attributable to something other than the direct causal effect of a human voice.

The sounds emitted by a microphone are not simply an enhancement or amplification of the original sound waves, as is the case with a megaphone, but an entirely new sound. Thus, in amplifying human speech, although the process is set into motion by a human voice, according to the authorities who maintain that a *mizvah* requiring listening to a human

voice cannot be fulfilled in such a manner, the sound produced— despite its remarkable similarity to a human voice—is not at all a human voice, but an electronically generated sound.

Hearing aids can only amplify sound for persons having at least some auditory capacity. Although they are invaluable even to persons suffering profound loss of hearing, hearing aids provide no benefit to someone who is totally deaf. Thus, assuming that an electronically amplified sound is halakhically regarded as artificial, a hearing-impaired individual who enjoys at least some residual auditory perception may well be advised to remove the hearing aid when listening to the *shofar* or to stand in close proximity to the person reading the *Megillah*. If the hard-of-hearing person's residual auditory capacity is sufficient to enable him or her to hear the sound of the *shofar* or of the *Megillah*, even faintly, he or she will have fulfilled the *mizvah*; if not, the physical incapacity serves to exempt such an individual from the obligation.

In recent years, technological advances have led to the remarkable development of a novel and highly effective method of alleviating deafness. Cochlear implants facilitate hearing in an entirely different manner from that employed by hearing aids.

Natural auditory perception occurs as sound waves are funneled down the ear canal to the eardrum located in the middle ear. Those waves strike the eardrum—causing it to vibrate. Three small bones, known as the ossicles, are attached to the eardrum. The ossicles vibrate in tandem with the vibration of the ear drum. The smallest of those bones is the stapes, which is attached to the cochlea, a snail-shaped structure located in the inner ear. The cochlea is lined with thousands of sensory receptors called hair cells. The vibration of the stapes causes fluid inside the cochlea to move. Movement of the cochlear fluid stimulates the hair cells. As the hair cells are stimulated, they produce electrical impulses that are transmitted along nerve fibers to the brain. The brain interprets those pulses as sounds.

A major cause of deafness and impaired hearing is damage to the hair cells lining the cochlea. For that reason, the fluid within the cochlea cannot stimulate the hair cells, with the result that the hair cells fail to generate electrical impulses to be conducted to the brain. Since hearing aids employ electrical stimuli to effect movement of fluid inside the cochlea in order to stimulate the hair cells lining the cochlea, they are of no avail in remedying that situation. Causing fluid to stimulate the hair cells will not result in sound because auditory sensation cannot be produced by absent or damaged hair cells. For such persons, a cochlear implant makes hearing

possible because it bypasses intermediate structures and allows electronic stimuli to operate upon neural receptors directly.

A cochlear implant system consists of an external speech processor and an internal, surgically-implanted array of electrodes. The operation of cochlear implants is described in the relevant literature in two different ways. Typically, although hair cells may be absent or damaged, some residual nerve filters remain. Some popular descriptions of cochlear implants describe the implant as an electronic device that stimulates residual nerve fibers within the cochlea. Unlike the operation of a hearing aid, the electrical stimuli generated by a cochlear implant do not cause vibration of the eardrum or of the ossicles and hence the implant does not cause resultant movement of the fluid within the cochlea. Instead, the electrical stimuli operate upon the hair cells directly. Other descriptions of cochlear implants assert that the hair cells are entirely bypassed so that the eighth nerve dendrites are directly stimulated by the electrical signals.

The crucial halakhic difference between a hearing aid and a cochlear implant is that the latter does not transform electrical current into amplified sound waves. Rather, it enhances auditory perception by producing electronic impulses capable of stimulating either residual nerve receptors in the cochlea or in the eighth cranial nerve directly. It is certainly arguable that, since no intermediate waves are created, the resulting sounds perceived by the brain are to be classified as having been generated by a human voice. An argument to that effect is presented by Dr. Israel Brema in a contribution to *Tehumin*, XXIV (5764). If that argument is correct, the recipient of a cochlear implant is at no disadvantage with regard to fulfilling *mizvot* requiring auditory perception.

The argument can be illuminated by examining a hypothetical example. Ordinarily, sounds are perceived through the intermediacy of oscillation of several structures including the ossicles and the cochlear fluid. Let us assume a situation in which the ossicles become diseased, are removed, and replaced by a synthetic structure designed to perform in a similar manner. It is highly improbable that any halakhic authority would argue that the sound perceived by the brain in such circumstances is other than natural. A cochlear implant functions in much the same manner: it does not produce its own sound waves; rather, it serves as an intermediary device, akin to the structures of the inner ear, allowing for natural sound waves to become converted into stimuli affecting the neural receptors in the hair cells lining the cochlea. The auditory result is produced in a manner entirely analogous to the manner in which sound is naturally

produced without benefit of a prosthesis.[4] In both cases there is no extraneous force that causes the fluid in the inner ear to vibrate. Both with regard to the hypothetical artificial ossicles and the cochlear implant the original sound waves, and only the original sound waves, stimulate a structure which acts upon the neural receptors that produce the sensation of sound. Accordingly, the auditory perception of a recipient of a cochlear implant may be regarded as identical to natural hearing for all halakhic purposes.

This analysis assigns no weight to the fact that the electrical impulses that actually stimulate the hair cells are produced synthetically by the implanted apparatus; it is the implanted device that generates the electronic stimuli, not the human voice. Accordingly, it might be contended that the electronic stimuli are non-natural in origin and hence any resultant sound does not qualify as a human voice. In response it may well be argued that the role of electricity in this process is of no import. It might be contended that artificially generated electrical stimuli are ephemeral and devoid of ontological status[5] and hence do not constitute an interloping entity for purposes of Halakhah. That argument is not without cogency but, if accepted, would also lead to a similar conclusion with regard to amplification by means of a hearing aid and to a ready distinction between a hearing aid and a conventional microphone. In the case of a microphone, the intermediate source of acoustic perception is a vibrating membrane, an entity of which Halakhah certainly takes cognizance. In the case of a hearing aid, the only intervening source is the electrical stimulus. The electrical impulses produced by a hearing aid are no different from those produced by a cochlear implant; it is certainly arguable that, if the latter are to be discounted, so should the former.

If a distinction is to be drawn between hearing aids and cochlear implants it must hinge upon the fact that the electrical stimuli produced by a hearing aid effect vibration of the eardrum which, in turn, gives rise to further physical effects caused by those vibrations, whereas no vibrations or waves are caused by a cochlear implant. In both cases, the neural acoustic phenomenon is the effect of an "artificial" electrical stimulus. To accept hearing assisted by a cochlear transplant as natural while categorizing hearing aid assisted perceptions as not proximately attributable to their original source requires an assertion that interloping waves or vibrations—and only interloping waves or vibrations—sever the requisite causal nexus. Phrased somewhat differently, such a position would entail the assertion that Halakhah takes no cognizance of electricity itself but does recognize the artificial nature of waves or vibrations produced by electricity.[6] If such

a distinction is to be drawn, it must lie in the fact that electrical stimuli are ephemeral whereas resultant waves or vibrations of such electrical stimuli are perceivable phenomena of which Halakhah takes cognizance. That issue has heretofore not been identified but, in this writer's opinion, merits serious deliberation.

DOUBLE RECOVERY FOR MEDICAL EXPENSES

The issue of double compensation for a single loss was examined in this column some years ago.[7] The issue arises in situations in which an accident victim is compensated for his losses by his own insurance company. If the victim is made whole by his insurance carrier he suffers no actual loss. In such circumstances, is the tortfeasor relieved of liability for the damage he has caused? Or may the victim enjoy a windfall by recovering damages from the tortfeasor as well as compensation from his own insurance company? As was shown in that discussion, although the matter is the subject of some controversy, the more authoritative view is that the tortfeasor remains liable for damages resulting from his action. Indeed, the victim's insurance company does act as surety for the tortfeasor; however, the insurance company's liability, although triggered by the tort, is not liability in tort but arises from a contractual obligation between the carrier and the insured. To be sure, that liability is contingent upon the occurrence of an event causing financial loss, but that event is merely a condition subsequent serving to consummate liability arising from a contract. Of course, when, as is usually the case, the insurance contract provides for subrogation of the insured's claim against the tortfeasor, it is the insurance company that will recover and thereby preclude the victim from receiving double compensation. However, in situations in which, for any reason, the insurance carrier cannot, or does not, seek recovery, the victim will be the beneficiary of a windfall profit.

Also addressed was the question of whether the same principle applies to compensation for medical expenses as well. According to those who maintain that double compensation is justified, the liability incurred in committing a tort is not an obligation to assure that the victim is rendered whole by being restored to his *status quo ante* but is simply a financial obligation arising as a direct result of the tortfeasor's action and is not extinguished other than by his payment to the victim. However, the nature of the halakhic obligation with regard to compensation for medical expenses is not as clear. The obligation to make compensation for

personal injury is based upon the verse "and he shall surely heal" (Exodus 21:19). Is that verse to be understood in a literal manner—as expressing an obligation to assure that the victim is restored to health, but limited in the sense that it becomes extinguished if, for any reason, such treatment is no longer necessary? Or is the verse to be understood as expressing a financial obligation in instances of personal injury similar to the obligation with regard to compensation for capital damages? As a simple financial obligation such an obligation would be novel in nature in the sense that similar obligations are not incurred in instances of property damage, i.e., compensation for property damage is limited to actual diminution in value of the damaged property with no recovery allowed for consequential damages, whereas consequential damages in the form of medical expenses are recoverable in instances of harm to the person.

The question is aptly framed by R. Elchanan Wasserman, *Kovez Shi'urim*, *Ketubot*, sec. 218. R. Elchanan cites the statement of the Gemara, *Gittin* 12b, declaring that in the case of a battery committed against a slave, medical expenses are payable to the slave and not to the master. R. Elchanan poses the following question: Title to any property acquired by a slave is immediately vested in his master. If so, why are medical costs not paid to the master? Based on that difficulty, R. Elchanan develops the thesis that a battery victim has no pecuniary interest in a claim for medical costs; rather, the victim's claim is to be healed and restored to health. Battery generates an obligation *in personam* on the part of the tortfeasor to make the victim whole physically. The tortfeasor must either heal the victim himself (although, as spelled out in *Bava Kamma* 85a, the victim has the right to refuse the ministrations of the tortfeasor and insist upon treatment by another practitioner) or, if he is not proficient in the medical arts, he must hire a physician to do so on his behalf. R. Elchanan further asserts that a husband's obligation *vis-à-vis* the medical treatment of his wife is entirely similar, i.e., he must restore her to health and, if he is unable to do so, he must hire a physician to do so on his behalf. Payment of medical expenses to the husband by the tortfearsor is not a satisfaction of a monetary claim of the husband but simply an expedient designed to assure medical treatment of the wife for which, in cases of battery, the tortfeasor has primary responsibility. It follows from this theory, declares R. Elchanan, that, if the victim dies of other causes before receiving medical treatment, the heirs have no claim for recovery of the costs that would have been incurred for medical treatment.

If so, it would seem to this writer, that, according to R. Elchanan's thesis, were a physician willing to treat the patient without a fee and were

the patient willing to accept *pro bono* treatment at the hands of an unpaid physician,[8] the victim would have no claim whatsoever upon the tortfeasor for medical expenses since that claim is not in the nature of a pecuniary claim for damages but constitutes a claim *in personam* to be healed. Similarly, if payment is made by a third party, e.g., an insurance company (or even a relative who defrays the costs *ex gratia* rather than in the form of a loan), the tortfeasor has no liabilility.

R. Elchanan's thesis, however, requires further elucidation. In formulating the extent of recovery for personal injury, the Gemara, *Bava Kamma* 91a, states:

> An estimation is made and payment is made immediately. Healing and loss of wages are estimated [for the entire period] until [the vicitim] recovers. If estimation is made and he continues to deteriorate, he is compensated only in accordance with the estimation. If an estimation is made and he recovers [more rapidly], he is paid the entire sum [originally] estimated.

Although, generally, a husband is responsible for his wife's medical expenses, in the case of battery the assailant is fully liable. Since medical expenses are estimated and paid in advance, a question arises in instances in which the woman recovers more quickly than anticipated and hence the assessed medical costs prove to be in excess of actual expenses. Is the balance payable to the husband or to the wife who suffered the injury? Rosh, *Ketubot* 6:1, rules that "If she was estimated for five days but sharp medicaments were employed and she was healed in three days"[9] the balance must be treated as compensation for pain and suffering which, as may be inferred from the discussions of the Gemara, *Bava Kamma* 42b and 49a, are payable to the wife rather than to the husband. Rosh adds that his position is in contradiction to that of Rambam, *Hilkhot Hovel u-Mazik* 4:15,[10] who rules that medical expenses are payable solely to the husband.

As pointed out in this writer's earlier discussion, Rambam's position as reported by Rosh, and later by *Bah, Even ha-Ezer* 83:4, is an apparent contradiction to R. Elchanan's thesis. According to R. Elchanan, who asserts that the husband himself has no pecuniary interest in his wife's claim for medical expenses but is merely a custodian of the funds or a conduit to assure her treatment, any balance should logically accrue to the wife. Thus, if R. Elchanan's thesis is accepted, an accident victim cannot be allowed double recovery for medical expenses. If, on the other hand, the view attributed to Rambam is accepted, if follows that medical expenses

must be treated in the same manner as other tort damages with regard to the possibility of double recovery.

However, it is possible to reconcile the ruling attributed to Rambam by Rosh and *Bah* with R. Elchanan's thesis regarding responsibility for medical expenses by analyzing the basis of the rule requiring payment of estimated expenses in advance. *Shulhan Arukh*, *Hoshen Mishpat* 420:18, formulates the rule as follows:

> How are medical expenses assessed? We estimate how many days [the victim] will live with this malady and how much he requires [for medical care] and [the assailant] pays him immediately. We do not require [the assailant] to pay each day's [expenses] on a daily basis. This provision is an enactment for the benefit of the tortfeasor.

As explained by *Sema*, *Hoshen Mishpat* 420:21, the rabbinic enactment requiring advance payment was predicated upon a concern that, if he were to be reimbursed on a daily basis, the victim might seek to aggrieve his assailant by neglecting his own care in order to incur additional expenses. The enactment benefits the assailant since he will not be charged with additional expenses incurred through prolongation of treatment.[11]

That rationale serves to explain why the assailant is not held responsible for expenses in excess of those originally assessed. However, the rabbinic enactment provides for no return of funds advanced but not actually expended for medical purposes. That aspect of the ordinance is certainly not for the benefit of the assailant and its rationale is not immediately apparent. *Sema* recognized this differently and concluded his comment with the statement that "It is unusual that [the victim] will be healed before the time that has been estimated. That is not so with regard to prolongation of his illness with regard to which there is reason for concern as has been stated earlier and, in addition, there exist causes and means to prolong his illness." *Sema*, in effect, assumes that the rule disregarding the contingency of speedy recovery was made univocal for purposes of simplicity and expedience and that the Sages could afford to do so because speedier than anticipated recovery is a relatively rare phenomenon.

Sema, however, fails to explain why, according to Rambam, any remaining funds are retained by the husband rather than by the wife. It might well be argued that, since the husband remains liable for any additional expenses incurred in the process of a long recovery, the Sages ordained that, in fairness, as a reciprocal benefit, he be entitled to pocket any remaining funds that are not actually used to defray medical expenses.[12] The Sages ordained a quite similar reciprocity with regard to

inheritance. In return for an obligation to pay burial expenses that may well exceed the value of his wife's estate, the husband was granted the right of inheritance to the entire estate even when the estate proves to be far in excess of burial costs. The problem with that explanation is that, unlike the husband's financial obligations and prerogatives *vis-à-vis* his wife in which the relevant reciprocities are carefully spelled out, there is no hint in any talmudic source of such a legislative trade-off with regard to medical compensation in excess of actual expenditures.

It seems to this writer that the matter can be explained in an entirely different way. The tortfeasor's obligation to pay for medical expenses is fundamentally an obligation to restore the patient to good health, as explained by R. Elchanan. That obligation is generally discharged by employing the services of a physician and defraying the costs of his services. The Sages, however, sought to prevent the victim from taking spiteful advantage of the assailant. They did so, not by promulgating a narrow *ad hoc* ordinance limiting recovery situations of longer than anticipated illness, but by conceptually redefining the nature of liability for medical expenses: They converted the biblical obligation to heal the patient to a pecuniary obligation in the form of estimated costs and thereby made liability for effecting a cure no different from liability for causing permanent physical harm, i.e., a simple financial obligation. Consequently, the estimated expenses are then paid to the husband just as payment for permanent physical harm is made to the husband. Unexpended funds, according to Rambam, remain the husband's property without need for any further enactment.

This thesis, however, does not in itself serve to permit double recovery. The rabbinic enactment involving conversion of an obligation actually to heal into a purely financial obligation was designed for the protection of the assailant. As is the case with all rabbinic enactments of such nature, the beneficiary of the enactment may renounce any prerogative conferred upon him thereby. Accordingly, the assailant may insist upon paying ongoing medical expenses on a daily basis, even though his liability would then be open-ended, rather than paying the estimated costs in advance. If the assailant avails himself of that option, his liability reverts to the biblically ordained obligation to effect healing of the victim.

Hence, if the victim is treated without charge—or if his expenses are paid by a third party such as an insurance company—the assailant might be well advised to renounce the benefits of the rabbinic enactment by refusing to pay estimated expenses in advance and then announce that since the victim has, in fact, been restored to good health he has incurred no financial obligation.

It should, however, be remembered that the victim is under no obligation whatsoever to submit a claim to his insurance carrier or to accept the ministrations of a public health clinic. Effectively, the victim would have the choice of accepting payment either from his assailant or from his insurance company—but not from both. By accepting payment from his insurance company, the victim forfeits his claim against the assailant. But, since he has no obligation to submit such a claim to his insurance carrier, he may legitimately demand a fee from the assailant as an inducement to submit such a claim.[13] The net result would be a situation in which medical costs are borne by the insurance company and the victim agrees to accept reduced compensation from the assailant.

In a contribution to *Tehumin*, XXIII (5763), R. Meir Freeman advances a further argument demonstrating that the assailant's primary obligation is to heal the victim rather than to satisfy a pecuniary claim. That argument is based on a statement of the Gemara, *Bava Kamma* 85a, that serves to establish that the assailant may insist upon making payment directly to the medical practitioner rather than to the victim:

> If [the victim] says "Give me [the money] and I will cure myself" [the assailant] may retort, "You may be negligent and then take from me more [than would otherwise be necessary]." And if [the victim] says, "Establish a fixed sum" [the assailant] may respond, "All the more reason that you may neglect yourself and I will be called 'a goring ox.'"[14]

Certainly, the Gemara does state that, unlike compensation for destruction of property, the victim cannot demand that compensation be paid directly to him rather than to the practitioner rendering medical care.[15] The Gemara reflects the position that the assailant may demand that the funds actually be expended to effect a cure and may refuse to allow the victim to pocket the money and forego treatment.

However, the argument that this text demonstrates that the assailant's duty is not in the nature of financial liability, but rather only to restore the victim to good health, is not compelling. The Gemara may well have regarded medical expenses as essentially a monetary claim vested in the victim. If so, the victim's demand to be paid directly would, on its merits, be entirely cogent. Nevertheless, the Gemara refutes that claim on the grounds that acquiescing to such a demand might prove to be unjustifiably detrimental to the assailant. Of course, if the obligation is entirely pecuniary in nature, the victim would be entitled to claim the sum and use it any way he pleases as is his prerogative with regard to payment for property damage. If so, the response, "I will be called a goring ox," would

appear to be inapt. However, that argument is advanced by the Gemara only to rebut the victim's claim to assess medical costs in advance. That claim, in turn, is a rebuttal of the assailant's demand to compensate the victim directly, rather than to pay the physician. Medical expenses are essentially consequential in nature and hence need not be paid until the need for treatment triggering such expenses becomes actualized. In that sense, liability for medical expenses is unlike damages for destruction of property or permanent untreatable physical injury with regard to which the financial obligation is immediate.[16]

Similarly, the Gemara's suggestion that, but for countervailing considerations, if the assailant is a physician, he should be allowed to treat the victim himself, or that he might demand that a physician willing to treat the victim without compensation be permitted to do so, does not demonstrate that the obligation is primarily to restore the victim to health rather than to pay damages. Even with regard to property damage, if an object can be replaced without cost or for a reduced price, the tortfeasor cannot be held liable for a greater sum. An offer to provide medical care at no cost to anyone—but for the countervailing considerations advanced by the Gemara—is tantamount to contending that there can be no liability in situations in which no financial expenditure is needed in order to render the victim whole. It does seem to be the case that in a society in which medical care is freely available from all physicians without a fee there can be no tort claim for medical care.

R. Meir Freeman (*Tehumin*, p. 273) makes one salient point: Even if the issue framed by R. Elchanan is left unresolved, if the victim accepts treatment paid for by an insurance company, the argument in support of the view that the assailant is relieved of liability serves to create at least an element of doubt. If so, the assailant, as the defendant, may plead that the burden of proof of halakhic liability is on the plaintiff and that such burden has not been satisfied.

In an addendum to R. Freeman's article, one of the editors of *Tehumin*, Dr. Itamar Warhaftig, finds reason to distinguish between a victim whose medical expenses are covered by private insurance and one whose expenses are covered by public funds. Such is the case in the State of Israel where medical care is funded by *Kuppat Holim*. In the United States there is a parallel in coverage funded by Medicare and Medicaid. In both countries, the funds are derived from public taxes or levies paid by all citizens. Dr. Warhaftig argues that all would agree that, in such circumstances, there can be no double recovery. He further asserts that the same rule would apply, for example, in jurisdictions in which compensation for

vehicular damage to property is paid by a similar public fund. In support of that position Dr. Warhaftig advances two separate arguments:

1) The tortfeasor has already made compensation in the form of his own tax contribution and he cannot be required to pay twice. Dr. Warhaftig regards the fact that the tortfeasor's cumulative tax payments may represent only a fraction of the victim's recovery to be irrelevant on the grounds that the risk has been spread among all taxpayers. He apparently reasons that all citizens are, in effect, partners in the compensation fund and that each shoulders a proportionate liability for claims against any single partner. If correct, that argument should also prevail in cases in which both the assailant and the victim are insured by a single cooperative carrier.

In this writer's opinion, that line of reasoning is faulty in that it fails to distinguish between insurance indemnifying the person found liable and insurance designed to compensate the victim. No one has argued that an insured tortfeasor should be held liable for damages already paid by his liability insurance for the simple and cogent reason that such payments are made by the insurance carrier on behalf of the tortfeasor. Insurance designed to compensate the victim, including *Kuppat Holim*, Medicaid and Medicare, is not at all payment on behalf of the tortfeasor. The fact that the tortfeasor has contributed to payment of the victim's "premiums" with his tax shekels or tax dollars is entirely irrelevant. A principal of Lloyd's of London who contributes to compensation of a medical claim of a person insured by Lloyd's arising from an assault by that principal is certainly not absolved from personal liability on the grounds that he has already participated—together with other principals of the firm—in payment of those expenses. Those payments serve to satisfy the claims of the victim, not to discharge the responsibility of the assailant.

2) Dr. Warhaftig further argues that the fact that the assailant's tax contributions represent only a small fraction of the money expended on behalf of the victim does not mitigate the assailant's claim that he has already paid for the victim's medical expenses because that is simply the nature of social welfare legislation. It is entirely within the power of the State, he argues, to promulgate legislation designed to advance the needs of society as a whole.

That argument is a *non sequitur*. Such an argument might well be cogent if the legislation in question were in the nature of no-fault compensation coupled with a provision cancelling any further private liability. But that is simply not the case. Neither in Israel nor in the United States have legislative authorities found it wise or prudent to eliminate personal

liability as an integral component of social legislation designed to provide medical care for all citizens.

NOTES

1. R. Eliezer Waldenberg, *Ziz Eli'ezer*, VIII, no. 11, regards even an echo as tantamount to the original sound for all halakhic purposes other than the *mizvah* of hearing the sounding of the *shofar*. *Ziz Eli'ezer* regards disqualification of an echo as a singular rule limited to the *mizvah* of *shofar*. The same distinction was made earlier by R. Abraham I. Kook, *Orah Mishpat*, *Hilkhot Berakhot*, no. 43, with regard to sounds heard over a telephone.
2. See the particularly forceful comments of R. Shlomoh Zalman Auerbach, *Minhat Shlomoh*, I, no. 9. *Inter alia*, Rabbi Auerbach comments that he totally fails to comprehend the opposing opinion of *Hazon Ish*. Cf., the remarks of R. Moshe Feinstein, *Iggerot Mosheh*, *Orah Hayyim*, II, no. 108, in expressing a view comparable to that of *Hazon Ish*.
3. See also the subsequently published discussion of R. Ovadiah Yosef, *Yehavah Da'at*, II, no. 68 and R. Aaron Buaron's work devoted to issues of electronic amplification, *Birkat Aharon*, I (Jerusalem, n.d.).
4. This analysis may appear to be contradicted by the comments of *Iggerot Mosheh*, *Even ha-Ezer*, III, no. 33. *Iggerot Mosheh* asserts that a person capable of hearing *only* with the assistance of a hearing aid must be regarded as deaf for purposes of Halakhah. For an opposing view, see R. Ben Zion Uziel, *Mishpetei Uzi'el*, *Even ha-Ezer*, I, no. 89, sec. 2.

   Implicit in *Iggerot Mosheh*'s argument is the novel thesis that a *heresh* is defined in terms of capacity for *unassisted* hearing rather than simply in terms of capacity for perception of speech. *Iggerot Mosheh* regards sounds perceived only with the assistance of a hearing aid as analogous to subclinical phenomena such as microorganisms or gaps in a letter of *tefillin* or *mezuzot* that can be perceived only by means of artificial magnification. *Iggerot Mosheh* makes a broad assertion to the effect that Halakhah takes cognizance only of naturally perceived phenomena. Consequently, he distinguishes between a hearing-impaired person who can hear even only extremely loud voices (as is the case with regard to most wearers of hearing aids) and a person suffering from a profound loss rendering him incapable of perceiving even a loud voice without benefit of a hearing aid. *Iggerot Mosheh* regards the residual hearing of a person suffering extreme hearing loss to be below the threshold level of "hearing" if such an individual cannot discern sounds without benefit of a hearing aid. The same should be the case with regard to a person utilizing a cochlear implant. [Contrary to the earlier-cited ruling of *Pri Hadash*, *Even ha-Ezer*, 121:6, it should follow from *Iggerot Mosheh*'s position that a person who can hear only with the assistance of an ear trumpet should also be regarded as deaf.]

   Iggerot Mosheh states that sound perceived through the intermediacy of an electronic apparatus is "auditory perception of a created power (*devar*

mehudash) and [therefore the individual] cannot be deemed to be a person who can hear since essentially he does not hear at all." However, the analogy between magnification of microscopic organisms and the definition of a *heresh* is somewhat inapt. The assertion that microscopic organisms are not prohibited is based on the postulate that the Torah speaks only of organisms that can be seen with the naked eye. Similarly, a gap in a letter is defined only as a gap that can be naturally perceived. A microscopic organism is, by definition, not a *sherez* (the biblical term for a creeping creature) and a microscopic gap is not deemed to be a gap. The minimum size of a *sherez*, or of a gap in a letter, is objectively defined; perception by means of normal vision is simply a criterion of the presence of an objective *shi'ur*. Sound, however, is an entirely subjective phenomenon. A sound that is not heard is not a sound that can serve to fulfill any halakhic requirement. Conversely, any sound that is perceived *is* a sound. Accordingly, sound that is perceived as the result of amplification of existing hearing capacity by means of a hearing aid, although distinguishable from a human voice on other grounds, as earlier explained, also constitutes a true sound. Comparison to the definition of a *sherez* is misleading because a *sherez* is defined in terms of a minimum size whereas, on this analysis, a person who experiences any unassisted hearing is not a *heresh*. Thus, there appears to be no rule preventing a person with extraordinary auditory perception from discharging a halakhic obligation by listening to the sound of a voice that would not be audible to a person endowed with only normal hearing. In contradistinction, *Iggerot Mosheh*'s definition of a *heresh* focuses upon the concept of unassisted hearing rather than upon establishment of a minimum volume of the sound perceived. *Iggerot Moshe*'s thesis is also incongruent with the notion that hearing, and hence speech, are generally necessary for developing capacity for rational thought and hence are criteria, but not the *sine qua non*, of reason. See J. David Bleich, *Contemporary Halakhic Problems*, II (New York, 1983), 368-375.

Nevertheless, Rabbi Feinstein himself, *Iggerot Mosheh*, *Orah Hayyim*, II, no. 108, rules, albeit somewhat tentatively, that the obligation to hear the reading of the *Megillah* can be discharged by hearing the *Megillah* read over a microphone. Rabbi Feinstein clearly maintains that a sound amplified by a microphone retains the status of the original sound but that the status of *heresh* is defined by the absence of a capacity for normal, unassisted hearing.

In any event, *Iggerot Mosheh*'s comments regarding the status of a person relying entirely upon a hearing aid as that of a *heresh* have no bearing upon the status of sounds perceived through the amplification of either a hearing aid or a cochlear implant or upon a possible distinction between the two modes of amplification.

5. That position seems to be incompatible with the view of those authorities who prohibit causing a flow of electric current on *Shabbat* because they consider such an act to be *molid*, i.e., generation of a new entity. See *Encylopedia Talmudit*, XVIII (Jerusalem, 5746), 163-165.
6. For an unrelated but, arguably, analogous exception to the principle that Halakhah does not take cognizance of sub-clinical phenomena see R. Shlomoh Zalman Auerbach, *Minhat Shlomoh*, *Tinyana* (Jerusalem,

5760), no. 100, sec. 7 and this writer's *Bioethical Dilemmas*, II (Southfield, 2006), 213-215.

7. That material has also been included in this writer's *Contemporary Halakhic Problems*, V (Southfield, Michigan, 2005), pp. 285-300.
8. See *Bava Kamma* 85a.
9. See *Gittin* 12b.
10. Actually, Rambam states only that "medical expenses [are paid] to the husband and [compensation] for pain is hers" but makes no specific reference to payment of any surplus that remains from the original assessment. *Korban Netanel*, in his commentary on Rosh, *Ketubot* 6:1, sec. 2, as well as *Helkat Mehokek*, *Even ha-Ezer* 83:2, and *Bet Shmu'el*, *Even ha-Ezer*, 83:2, assert that any such balance represents compensation for pain and suffering payable to the wife and hence Rambam's ruling is not in contradiction to that of Rosh. Rosh apparently was puzzled by Rambam's juxtaposition of a statement requiring that medical expenses be paid to the husband with a statement declaring that compensation for pain belongs to the wife. Since these funds are turned over to the physician, the husband derives no benefit from such payment. Hence, Rosh understood the phrase to mean that the assessment is paid to the husband and the husband retains an interest in any balance. *Maggid Mishnah*, however, comments that the import of Rambam's statement is that funds are delivered to the husband to be used for treatment of his wife. *Bah*, *Even ha-Ezer* 83:4, agrees with Rosh's understanding of Rambam's view, i.e., that Rambam rules that the husband may retain the balance. Rambam is also understood in that manner by *Hafla'ah*, *Ketubot, Kuntres Aharon* 83:3. R. Betzalel Stern, *Teshuvot be-Zel ha-Hokhmah*, III, no. 9, also asserts that there is no conflict between Rambam and Rosh but explains that each of those authorities is addressing a different situation. Rosh refers explicitly to a woman who is cured more rapidly than anticipated because of administration of "sharp medicaments," i.e., therapy that itself entails additional pain. However, when only conventional therapy is employed and the recovery occurs more quickly than anticipated, Rosh would not assert that the balance of the assessment is retained by the wife. Rambam, in ruling that the balance belongs to the husband, makes no mention of "sharp medicaments." Accordingly, asserts *Be-Zel ha-Hokhmah*, Rambam's ruling should be understood as limited to rapid recovery resulting from standard therapy; however, when "sharp medicaments" are employed, Rambam would acquiesce in Rosh's ruling that the balance is retained by the wife.
11. Maharshal, *Yam shel Shlomoh*, *Bava Kamma* 8:40, adopts an opposing view in declaring that the ordinance was for the benefit of the victim and was designed to make it unnecessary for him to seek relief in *bet din* on a daily basis and was also designed as an expedient to spare the *bet din* the burden of ongoing proceedings. Therefore according to Maharshal, the assailant may be compelled to pay the assessment in advance.
12. The matter seems to have been understood in this manner by *Hafla'ah*, *Ketubot*, *Kuntres Aharon* 83:3.
13. For a somewhat similar type of negotiation see *Bava Kamma* 8a: "If you remain silent and accept what is offered you will receive according to your

entitlement; but, if not, I will return the deed to inferior lands to their original owner and you will recover everything from inferior lands."

14. *Tosafot*, *ad locum*, carefully note that the discussion is limited to situations in which there was no initial assessment of medical expenses. But then why does the victim not simply demand that such an assessment be made? It seems to this writer that *Bi'ur ha-Gra*, *Hoshen Mishpat* 420:28, resolves that question in observing that the assailant enjoys the prerogative of refusing assessment of medical expenses.
    Bi'ur ha-Gra cites that discussion of the Gemara as the source of the ruling that the assailant enjoys such a prerogative. The bare statement of the Gemara provides no such source; it is only upon posing *Tosafot*'s question and elucidating the answer that the source becomes evident. Cf., Rabbi Freeman, *Tehumin,* XXXII, 271, as well as the exchange between the editor and Rabbi Freeman, p. 272, note 1. Their analysis of *Bi'ur ha-Gra* eludes this writer.
15. See *Hazon Ish*, *Bava Kamma* 6:3.
16. Cf., Rabbi Freeman, *Tehumin,* p. 272 and editor's note 2. Both writers fail to make this point.