



Of Mice and Pens – Writing Medical Records on Shabbos

The *Melacha* of *Koseiv* – writing (*Mishna Shabbos* 7:2) is derived from the *Melechtes haMishkan* (the acts used in constructing the *Mishkan*) where letters were inscribed upon the *Mishkan's* beams to ensure that they were placed in the correct positions. By Torah law, one is only liable if one writes two letters, but writing fewer than two letters is still forbidden due to "*Chatzi Shiur*"¹.

In hospitals, the accuracy of the medical record is critical in patient treatment and safety. For example, all medication administrations must be recorded precisely to ensure that the patient is receiving the correct treatment, medications are given at the proper time, and to have an accurate record of what medications were given in case of reactions or complications. This, however, presents a challenge on Shabbos when writing is forbidden. Since many of the patients are not dangerously ill and the records may not be urgent, writing in the regular fashion may not be permitted. In the following paragraphs, we will examine a number of methods by which medical records can be kept on Shabbos without violating *Melechtes Koseiv*.

1. Disappearing Ink

The *Mishna* in *Shabbos* (104b) rules that impermanent writing ("*Ksav sheEino Miskayem*") using a substance such as dust, or upon a medium where it will not last ("*Davar sheEino Miskayem*"), such as writing on a food item, does not violate an *Issur d'Oraisa*. This *Halacha* is codified by the *Rambam* (*Hilchos Shabbos* 11:15).

In many cases², it is permitted to violate an *Issur d'Rabbanan* for the sake of a sick person. Therefore, it should be permissible to keep medical records using a *Ksav sheEino Miskayem* or inscribing them on a *Davar sheEino Miskayem* on Shabbos.

How long is considered to be "impermanent"? On the one hand, it is intuitive that writing does not have to last forever to be considered permanent, and it stands to reason that there must be a time beyond which it cannot be considered "*Eino Miskayem*". This is supported by the *Rambam's* ruling (*ibid.* 16) that if a person writes

¹ We discussed *Chatzi Shiur* in the essay on *Parshas Bo* 5780. See the online archive of *Divrei Torah* at <https://www.medicalhalacha.org/torah-archive>.

² If any of a patient's limbs are at risk it is permissible to violate an *Issur d'Rabbanan* on his behalf. For a patient whose life is not in danger, one should not do so unless there is no alternative.



on his own skin on Shabbos he is liable “*even though the heat generated by his body will erase the print **after some time***”.

On the other hand, the *Rambam* (ibid. 15) also rules that if a person writes on vegetable leaves he is not liable, as it is considered to be *Eino Miskayem* despite the fact that the writing can last until the end of Shabbos. Rav Shlomo Zalman Auerbach *zt"l* (*Minchas Shlomo* 1:91) therefore deduced that one is only liable for *Koseiv* if the writing will last for **several days**.

The *Minchas Yitzchak* (7:13) disagrees. He rules that if the writing will remain until the end of Shabbos one is liable. He bases his conclusion on another ruling of the *Rambam* (ibid. 9:13):

But for dye that will not last at all, such as applying red clay or vermilion to iron or copper, one is exempt, for one may remove it after a time, and it doesn't stain the medium at all. One is exempt for performing any Melacha whose results are impermanent.

The *Minchas Yitzchak* and *Sha'ar haTziyun* 303:20 explain that according to the *Rambam* one is liable because it is considered permanent if the results of a *Melacha* last until the end of Shabbos.

However, their position appears to be difficult to understand. It seems that Rav Shlomo Zalman's opinion is logical – the definition of *sheEino Miskayem* should not be dependent on whether or not the results last until the end of that Shabbos³. *Kesav sheEino Miskayem* should be defined by a variation in the performance of the *Melacha* itself that directly causes the writing to last for only a short time.

Therefore, the Halacha is in accordance with Rav Shlomo Zalman that one is only liable for *Koseiv* if the *Ksav* will last for several days.

This leads to a possible solution for writing in the hospital on Shabbos, namely, producing a *Ksav* which is *Eino Miskayem*. Though this would not be practical for permanent medical records, it may be a solution for daily lists of shifts and tasks. There are invisible ink pens available that have been developed for this purpose.

³ In other words, we should consider only the writing itself. There is no difference between temporary writing that lasts only a few hours if it is performed on Friday night (and disappears before Shabbos ends) and the same writing performed right before *Shkia* on Shabbos. Yet, according to the *Minchas Yitzchak* and *Sha'ar haTziyun*, it seems that one would only be liable in the latter case.



(On the other hand, writing a *Ksav* that is *Eino Miskayem* is still an *Issur d'Rabbanan* which is not permissible for the sake of a patient whose life is not in danger according to the third opinion recorded in *O.C.* 328. Nevertheless, the *Mishna Berura* rules that when a person has little choice he may rely on the lenient position of the *Chayei Adam*. Additionally, perhaps writing a *Ksav* that is *Eino Miskayem* could be deemed a *Shinui* and therefore permissible for the sake of a sick person, particularly with regard to an *Issur d'Rabbanan*.⁴)

A similar argument can be made regarding the use of a calculator on Shabbos. If medical staff need to make a calculation, Rav Shlomo Zalman (*Kovetz Assia* 31, p62) ruled that it is better to use a calculator than to write with a *Shinui* because the numbers displayed on a calculator disappear immediately after use and are thus *Eino Miskayem*.

Practically speaking, disappearing ink is not feasible in hospitals. Medication administration records and test results must remain on the patient's chart permanently, and there is not staff available to rewrite the records with regular ink. Therefore, there is a need for a more practical solution.

2. Writing on a Medium that is Usually Erased

The *Rashba* (*Shabbos* 115) rules that one is liable for etching letters into wax (as merchants would record their accounts) on Shabbos. Since the merchants would wipe away these records soon after they were written, the *Rashba's* ruling implies that one is liable for *Koseiv* even when writing on a medium that is usually erased. It is not considered *Eino Miskayem* as it doesn't erase itself.

This was also the conclusion of the *Beis Shlomo* (*O.C.* 37). He rules that one may not ask a non-Jew to write something on a chalk board on Shabbos (even to prevent a financial loss). Though a chalk board is usually erased very soon after it is used, that doesn't render the *Ksav* as *Eino Miskayem*.

Other Poskim disagree. They hold that if a person performs a *Melacha* and intends that its results shouldn't last, he is exempt, even though the results of his act are not inherently impermanent. Since, in this case, the person writing on the chalk board did not intend that the inscription remain there, and this form of writing is generally impermanent, it is not an *Issur d'Oraisa*. (The *Avnei Nezer* writes at length to defend this position.)

⁴ See our discussion of *Shinui* in the essay on *Parshas Vayakhel* 5780.



It follows that hospital staff could be lenient in this matter and make records on chalk boards over Shabbos. Additionally, the *Ksav* on a chalk board is not absorbed by the board in the slightest. It is this that makes it so easy to erase. This may be another reason to consider it *Ksav sheEino Miskayem*.

Another possibility discussed by the Poskim is writing with the non-dominant hand. The Mishna in *Shabbos* (103) rules that if a right-handed person writes with his left hand on Shabbos he is exempt. This would, therefore, appear to be a good solution for keeping records in hospitals on Shabbos.

Some argue that if a person becomes accustomed to writing with his weaker hand on Shabbos, he should be deemed ambidextrous and forbidden from writing with either hand. However, it is logical to say that since writing with his weaker hand still feels unnatural to him and is more difficult than writing with his dominant hand (the proof being that he does not choose to do so during the week⁵), he should not be considered ambidextrous (*Hilchos Shabbos b'Shabbos*).

This is not a perfect solution, as we are dealing with a *Melacha d'Oraisa*, and according to the *Mishna Berura*, we cannot be lenient with a *Melacha d'Oraisa* for a *Choleh she'ain bo Sakana* even if it is performed with a *Shinui*. However, we can combine the *Shinui* of writing with the non-dominant hand with other *Shinuyim*, as we will discuss below.

3. Digital Records – Permanent *Ksav*

Today, handwritten records have largely been supplanted in hospitals by computerized electronic health records such that the question of *Kesiva* on Shabbos is about the use of computers or other electronic devices. Is recording information digitally an *Issur d'Oraisa* or only an *Issur d'Rabbanan*?

Of course, the question of using electronic devices on Shabbos depends upon whether the use of electricity on Shabbos violates an *Issur d'Oraisa*. However, in this essay we will focus only on the questions that relate to the *Melacha of Koseiv*. We must note that, according to Rav Shlomo Zalman Auerbach *zt"l*, hospitals may be lenient with regard to the use of electricity on Shabbos, and rely on the opinion that it is only

⁵ I.e., his natural instinct will be to write with his dominant hand during the week even though he might deliberately choose to write with his weaker hand during the week in order to train himself to write with it in the hospital on Shabbos.



an *Issur d'Rabbanan*. Moreover, in most cases, the devices have already been switched on before Shabbos and the physician is not powering up a device that was turned off.

The question of whether one may record information on a digital device on Shabbos depends upon two factors: The status of words that appear on a digital screen, and the storage of information the device memory (or in the "cloud").

One could argue that words displayed on the screen are impermanent as computer screens usually go into "sleep" or "hibernation" mode after several minutes, thus "erasing" the *Ksav*. Furthermore, the *Ksav* will soon be removed from the screen when the document is scrolled up or down, the program is closed, or other tabs or applications are opened over it. Therefore, the *Ksav* is either "*Eino Miskayem*" or at least has been "*written on a medium that is usually erased*".

As far as the record of the *Ksav* in the computer's memory – information is not recorded in a format that is possible to read directly. Although there does not seem to be any precedent to consider this a form of *Kesiva*, we will discuss this in more detail later in the essay.

On the other hand, perhaps these two factors can be combined to consider it a permanent *Ksav*. The *Ksav* is inscribed upon the screen and recorded in the computer's memory. Perhaps between the two it should be considered a permanent *Ksav*, despite the fact that it disappears from the screen⁶. A similar argument is made in the case of invisible ink (where the *Ksav*, which cannot naturally be seen, can be revealed by applying a substance to the page). We will see later that the *Avnei Nezer* (O.C. 213) rules that if the *Ksav* was initially visible and can be revealed in the future, it is a violation of the *Melacha* of *Koseiv* even though it is currently invisible.

To summarize, the question of recording information on a digital device on Shabbos depends on the following:

1. Although one is exempt for writing impermanent *Ksav* or for writing on a medium on which *Ksav* will not last, one is liable, according to many opinions, if the *Ksav* could last but is likely to be erased. In fact, according to the *Rambam*, one is liable for writing on one's own skin even though the *Ksav* will ultimately be erased by the heat of the body.

⁶ Since it remains in memory and can be displayed (over and over) again,



2. We have noted that the information that the computer stores in its memory is not in readable form. The question is whether writing a *Ksav* that cannot be read constitutes *Koseiv*.
3. Finally, we questioned whether the facts that the *Ksav* was both written on the screen and recorded in the computer memory may be combined to consider it a permanent *Ksav*.

Regarding *Ksav* on a digital screen, Rav Shlomo Zalman Auerbach *zt"l* (cited in *Yeshurun* p636) agreed that it is considered impermanent. He further argued that words on a computer screen do not have the form of *Ksav* at all as they are merely a digital representation of the letters and do not have any tangible form.

Rav Elyashiv *zt"l*'s view in this regard is a matter of question. Rav Darzi *Shlit"a* (cited in *Yeshurun* p598) attests that Rav Elyashiv argued that the condition that *Ksav* must be permanent is not due to the unique requirements of *Melechtes Koseiv* (in which case one would require that the actual letters that have been written are permanent). Rather, it is part of the definition of the general requirement of *Melechtes Machsheves* that the product of a *Melacha* must be permanent. Since the computer does store the *Ksav* permanently, typing and causing the letters to appear on the screen is *Melechtes Machsheves*. He also argued that the fact that the letters on the screen do not have tangible form is irrelevant. Since people consider it to be *Ksav* and it appears as such, one would be liable for *Koseiv* in this scenario.

However, the *Sefer Kedushas haShabbos* cites Rav Elyashiv differently and relates that he held that one is liable for writing on a computer screen because the *Ksav* could theoretically remain on the screen indefinitely, just like the *Ksav* on one's skin. However, if a device is battery-powered and the *Ksav* cannot remain there indefinitely as the battery will eventually be depleted and the display would go blank, one would be exempt.

He further relates that according to Rav Elyashiv the fact that a screensaver will appear or that the screen will go into "sleep" or "hibernation" does not render the *Ksav* as impermanent. He compared it to writing on one's skin where it is still considered to be permanent *Ksav*, although the *Ksav* will soon be erased by an external factor (namely, the heat of the body). In short, according to Rav Elyashiv, *Ksav* is considered to be permanent if it is "*Ro'uy l'Hiskayem*" – "*capable of permanency*" (storage of the information in the computer memory does not make the letters on the screen *Ro'uy l'Hiskayem*). If not, the *Melacha* of *Koseiv* is not violated.



We should point out that everyone agrees that placing a slide on a projector (and thus causing words to be projected on a wall) does not violate the *Melacha* of *Koseiv*, as it is as if one has merely written something in the air. Though Rav Elyashiv held that writing words on a screen is *Koseiv*, that is only because people consider that to be *Ksav*.

As stated above, Rav Elyashiv and Rav Shlomo Zalman argue over whether words that appear on a digital screen should be considered *Ksav*. Their dispute appears to belie a fundamental difference in perspective on *Melachos* that are performed differently today than the way they were performed in the *Mishkan*. According to Rav Shlomo Zalman, the *Melacha* must retain the same physical form as it did in the times of the *Mishkan*. Therefore, words on a computer screen are not considered *Ksav* as they do not have the tangible form of the *Ksav* in the *Mishkan*. According to Rav Elyashiv, however, since people today would consider them to be *Ksav*, typing on a computer would be considered *Kesiva*, as a *Melacha* depends on the importance that people attribute to its product or outcome.

This fundamental question also appears to have been the subject of a famous dispute between the *Chazon Ish* and Rav Shlomo Zalman regarding electricity. According to the *Chazon Ish*, the use of electricity on Shabbos is an *Issur d'Oraisa* as the completion of a circuit is important enough to be considered a *Melacha* even though it does not resemble the manner in which any of the 39 *Melachos* were performed in the *Mishkan*. Rav Shlomo Zalman held that we cannot consider something to be a *Melacha* merely due to its significance. Therefore, he permitted the use of electricity on Shabbos in certain cases (such as in hospitals).

We noted above that Rav Elyashiv argued that the *Ksav* written on a battery-powered device is considered impermanent as the battery will be depleted and the display will disappear. However, Rav Shmuel Vosner *zt"l* disagreed. He argued that since the *Ksav* remains on the screen for as long as the person requires it, it is considered *Koseiv*, similar to the *Minchas Yitzchak's* position (cited above) that *Ksav* need only last until the end of Shabbos.⁷

4. Digital Records – *Ksav* that isn't Visible (“*Ksav sheEino Nikar*”)

⁷ As we noted above, Rav Shlomo Zalman ruled that using a battery-powered calculator is preferable to writing by hand with a *Shinui*. If he held like Rav Vosner, then perhaps writing with a *Shinui* would be less of an issue.



We questioned whether *Ksav* that isn't readable (such as that recorded in computer memory) constitutes *Koseiv*. This same question would arise if one were to type on a computer without a screen attached.

The *Yerushalmi* (*Shabbos* 12:4) states:

Said R' Chiya bar Ba: The people of Madincha are astute. When they need to send a message to their colleagues, they write it in Mei Milin (a solution of gallnut⁸). The recipient pours untanned ink over it and it sticks to the area of the original Ksav. What is the Halacha if the recipient does this on Shabbos?

R' Yochanan and Reish Lakish both say if a person writes with black ink onto existing black ink, or with red ink onto existing red ink [he is exempt]. But if he writes with black ink onto red ink, or red ink onto black ink, he is liable. R' Yitzchak bar Mesharshia said in the name of the Rabbis: He is in fact liable on two counts – one for erasing and one for writing.

The *Yerushalmi* is discussing a letter written in invisible ink which the recipient will need to decipher. He pours untanned ink (not containing gallnut) onto the page and it is caught on the areas of the page that previously contained gallnut, binding to where the writing had been and revealing the original *Ksav*. The *Gemara* is asking whether this would be considered *Meleches Koseiv*.

The *Yerushalmi* then abruptly discusses the law of a person who writes *Ksav* on top of existing *Ksav* on *Shabbos*. It rules that if the second *Ksav* is written with different ink than the original, the person is liable.

It is not immediately apparent whether the *Yerushalmi* ever answered its question regarding invisible ink. However, the commentators contend that the *Yerushalmi* meant to rule that the person who reveals the original writing is liable just as a person is liable for writing with one type of ink on top of another.

Rabbi Pesach Eliyahu Falk *zt"l* (*Machazei Eliyahu* 13) infers from the *Yerushalmi* that if a person writes a *Ksav* that is not immediately readable, he is liable. The reason the *Yerushalmi* considered exempting the recipient who deciphered the

⁸ [Editor's note: Plant galls are abnormal outgrowths of plant tissue caused by various parasites. Oak marble galls on oak trees resemble nuts and are called 'gallnuts'. Oak marble gallnuts have long been used to make high-quality ink in the Middle East.]



secret ink was because there was already an existing Ksav there. This implies that the original writing is considered a *Ksav*, even though it wasn't readable.

The *Megilas Sefer* disagrees. He argues that, in fact, the original writing was not considered a *Ksav*. Nevertheless, the *Yerushalmi* considered the possibility that the recipient who reveals the invisible writing would be exempt because he hasn't added anything to what was already present on the paper. However, the *Yerushalmi* ultimately concluded that the second person would be liable, just like a person who writes on top of *Ksav* with a different color ink who is liable even though he doesn't add any words that were not already on the page.

Even according to Rav Falk, the *Yerushalmi* doesn't clearly state whether the original *Ksav* needed to be legible at some prior time in order to be considered *Ksav*. The *Sefer Pesach haDvir* (340) discusses this and concludes that it would only be considered *Ksav* if it was originally legible and then disappeared, not if it was never legible.

A support for his position can be found in the *Bavli* in *Gittin* (19b). The Gemara discusses a case of a husband who handed his wife a blank sheet of paper and declared that it is a *Get*. *Shmuel* was in doubt whether to be concerned for the possibility that the husband had written a *Get* on the paper using *Mei Milin* that disappeared. *Rashi* explains that if the *Ksav* would have still been readable at the time that he handed his wife the paper, it would be effective, even if it subsequently disappeared. This supports the *Pesach haDvir's* premise that only *Ksav* that was originally legible is still considered to be *Ksav* after it disappeared.

The *Avnei Nezer* (203) asks how the Gemara could consider *Mei Milin* to be a valid *Ksav* for a *Get* when it is by definition impermanent writing! He answers that since it is possible to reveal the writing, it is not considered to be impermanent. The person who later reveals it is not creating new *Ksav* but revealing the original *Ksav*.

He then goes on to distinguish between the cases of the *Bavli* and that of the *Yerushalmi*. In the case of the people of *Madincha*, in order to reveal the invisible ink the recipient needed to pour ink over the area of the original *Ksav*. This is considered a new act of *Koseiv*, thus the *Yerushalmi* considered him liable. In the case of the *Bavli*, if the *Get* is considered to be *Ksav* if it was legible at the time the husband gave it to his wife (despite being invisible now), it would be a Kosher *Get*, even if revealing the writing would be considered *Koseiv*.



This same distinction can be used to answer a question that the *Acharonim* ask on the *Pri Megadim* (340, *Mishbetzos Zahav* 3). The *Pri Megadim* rules that if a person reveals invisible *Ksav* using fire on Shabbos (i.e. the heat of the fire causes the writing to appear) he is exempt. The *Acharonim* ask that this is surely refuted by the *Yerushalmi* which rules that one is liable for revealing invisible ink. The *Har Tzvi* (Y.D. 230) answers that there is a difference between causing the actual *Ksav* to appear by means of fire for which one is exempt and using ink to cause it to appear for which the *Yerushalmi* considers a person to be liable.

In light of the above, there would be room to consider the recording of *Ksav* in a computer's memory as *Melechtes Koseiv* since the *Avnei Nezer* considered words written in invisible ink that can later be revealed as permanent *Ksav*.

However, there is an important difference between invisible ink and writing on a computer. The *Ksav* that is retrieved from a computer's memory is not the same *Ksav* that was originally written on the screen, it is new *Ksav* that is generated from the information stored in memory. (*Sefer Zichron Ateres Shlomo*⁹).

Another possible factor is that according to Rav Moshe Feinstein *zt"l* (*Igros Moshe O.C.* 3:53), the regular manner of performing a *Melacha* can change over time. He ruled that although cooking in a microwave does not resemble the *Melacha* of *Bishul*, if it becomes a commonly accepted method of cooking, it will become a *Tolda* of *Bishul*. Perhaps the same argument could be made regarding writing on a computer. Since today this is the regular way of writing, perhaps it should be considered a *Tolda* of *Koseiv*!

On the other hand, the product of microwave cooking is similar to something that was cooked in an oven. This is not the case with writing on a computer – the product is vastly different to that of regular *Kesiva*, therefore, perhaps it could never be considered a *Tolda*.

HaGaon Rav Asher Weiss *Shlit"a* ruled that medical personnel should type on a computer using their knuckles as this is considered a *Shinui*. Although a *Shinui* is not usually enough to permit *Melachos* for a patient who is not dangerously ill, since there are those who hold that the *Ksav* on a computer is impermanent and is therefore only an *Issur d'Rabbanan*, one may be lenient to allow typing with a *Shinui* even for a *Choleh she'ain bo Sakana* on Shabbos. Additionally, using a "*Gramma*-keyboard", it would only be considered a *Gramma* which is an additional reason for leniency.

⁹ See there for a distinction between magnetic tape storage and computer memory.



Regarding using the computer mouse on Shabbos, it seems logical to say that using one's left hand would be considered a *Shinui* as using a computer mouse requires accuracy and precision and isn't something generally done with the non-dominant hand. Moreover, a mouse is designed – both in its shape and configuration of its buttons – for use with one's right hand.

A *Shinui* should be used with smartphones or other touchscreens. It is not clear if the use of a stylus would itself be considered a *Shinui* or if an additional technique (e.g. a thimble with a conductive pad) would need to be used.

In light of all of the above, it seems that typing with a *Shinui* on a computer is preferable to writing with one's left hand given the opinions that typing on a computer is not a *Melacha d'Oraisa* at all.