

ADDRESS ON TECHELET

Rabbi Dr. Norman Lamm

It is a truism of our times that events move so rapidly, new phenomena develop so swiftly, it is often hard to keep abreast of the many changes which follow one upon the other. A number of months ago, I encountered two colleagues at the convention of the Orthodox Union, and noticed that they were wearing *techelet*. Upon inquiring, I heard about new things happening in this field, and I took an interest in it, for "*meHashem yatza hadavar*", it seems to me we can almost perceive the Hand of Destiny. It seemed appropriate to me, therefore, to devote not only my own *shiur*, but also those of the other speakers, Rabbi Tendler and Rabbi Schachter, to this theme. This address will include not only halacha, but also a little bit of chemistry, a little bit of marine biology, a little bit of archaeology, for all of these are necessary as the realities upon which we erect the halachic structure.

MADA

The biblical verse directs us: *Venatnu al hakanaf p'til techelet*, you have to add to the *lavan*, the white, a *p'til techelet*, a thread of *techelet*, and this becomes *tzitzit*.

Where does this *techelet* come from? It comes from the *hilazon*. What is the *hilazon*? In a *Braitha* in *Menachot*¹ we find (hebrew) that "its body resembles the sea [in color], and biologically it is similar to a fish (*domeh ledag*).² It emerges once in seventy years, and with its blood, one dyes the *techelet*, and therefore, it is very expensive." According to many *Rishonim* this does not mean once in seventy years, but rather once in seven years, and actually it is a phrase used to denote something which is not common, only an occasional occurrence. The Rambam does not quote either--seven or seventy--time, and the Rav HaRashi, Rav Yitzchak Halevi Herzog in his book writes that the phrase merely comes to indicate that *techelet* was rare. Even in the days when *techelet* was used, it was difficult to obtain, and therefore it was expensive.

Furthermore, when the Gemara says "*dam*" it does not mean "blood", but refers rather to some type of secretion from this particular creature, which was used for the dyeing process of *techelet*. What happens is that the snail secretes from its gland a clear mucus which, upon exposure to oxygen and sunlight, and

¹ The top of p.44a.

² Rashi, *Shabbat* 74b calls it a "small fish or worm [*tola'at*].

under the influence of various enzymes, changes take place, and it turns from clear to whitish, from that to a pus-yellow hue, and then to blue-green and then purple and finally to *techelet*, which is defined as a violet blue.³

Now this procedure was known all through the biblical period and through the *tekufat hamishnah*, the era of the Mishnah. When did the Jewish people stop having *techelet*? From the sources that we have--questions that people asked about *techelet*, and correspondence of this sort-- we assume that use of *techelet* came to an end sometime during the *tekufat haGeonim*, the Geonic period, some time in the eighth century. At that time, *techelet* was lost. Others say it happened even earlier, about fifteen hundred years ago.⁴ We know from the texts themselves that it was not only a

³ Description of the color of *techelet* varies: In *Shemot* 25:4, Rashi terms it "*yarok*", green; and the Gemara in *Berachot* 9b, as well as *Responsa Divrei Menachem* I 3:3, cite a text in the *Yerushalmi* indicating that its color "resembles grass." In his *Sefer Sefunei Temunei Chol*, the Radziner cites sources which say that it is close to "black" (i.e., dark), as does the Rambam. In his introduction to *Seder Mo'ed*, *Tiferet Yisrael* describes it as "purple." And of course, there is the famous dictum of the Gemara in *Menachot* 41: " *techelet* resembles the sea, and the sea resembles the sky, and the sky [color] resembles the Heavenly Throne."

⁴ R. Yehoshua of Kutna, in his *Responsa Yeshuot Malko* 1:3, estimates that *techelet* ended during the last generation of Amoraim, in the days of the latter Ravina, who died 4234 A.M., around 474 C.E. But *Ein Hatechelet*, p. 112b, assumes that it happened during the lifetime of the author of *Halachot Gedolot*, due to the difficulties of the exile and because of governmental decrees. From the writings of the Gaon Sar Shalom in *Responsa of the Geonim*, *Sha'arei Teshuva* #159, it is evident that they no longer had *techelet* in his time. As a matter of fact, the *Ha'amek Sheilah* (*Shelach* , No.6) demonstrates that even one hundred years before that, in the days of R. Achai Gaon, there already was no *techelet*.

Based on various prophetic verses, and on references in the Talmud, we can postulate that *techelet* was known and used throughout that periods until after the completion of the Talmud, which would bring us at least until the demise of Ravina, as noted above.

In his book about *techelet*, *Sefunei Temunei Chol*, p.10, the Radziner Rebbe argues that even after the Talmudic period, there must have been *techelet*, for various Geonim wrote treatises on the laws of *techelet*, and it is accepted that the Geonim never wrote theoretical treatises, only about mitzvot which were current in their times. There are many others who have tried to pinpoint the

matter of time, it was a matter of geography as well. Some people lived in areas where they had more access to *techelet*, some people had less access. The *Smag*⁵ says that it was not lost! We stopped using it, but it was not lost. The creature still exists in the Mediterranean.⁶

About one hundred years ago, there was one man, Rav Gershon Henoch Leiner, the Hasidic Rebbe of Radzin, who renewed *techelet*. This was a very interesting personality. The Radziner Rebbe was a complete non-conformist. He disregarded the superficialities, eschewing the usual garb of the Rebbe; he did away with *shamashim* and *gabbaim*; he was poly-lingual, a man who spoke many languages. He was a world traveler, a poet, a man who understood many aspects of medicine--and with all that, he was a tremendous *talmid chacham* and he had thousands of Hasidim throughout Poland. He claimed that he had discovered the real *Hilazon*, it turned out to be part of the squid family, a cuttlefish, from which he prepared a blue dye. And his Hasidim wore *techelet*. Until quite recently, if you saw someone wearing a blue thread in his *tzitzit*, you knew he was a Radziner Hasid.

This caused a great historical polemic one hundred years ago. Involved in the *machloket* in addition to the Radziner were Rav Yitzchak Elchanon Spector, Rabbi Yehoshua Trunk of Kutna, author of *Yeshuat Malko*, Rav Yosef Ber Soloveitchek, author of *Beit Halevi*, and others. This gave rise to a very rich halachic literature, especially by the Radziner himself, who wrote several *seforim*.

Rav Herzog, *zatzal* as a young man got his PhD, and his PhD thesis was on the subject of *techelet*. Rav Herzog had serious doubts whether the Radziner's *techelet* was really *techelet* and whether the cuttlefish was really the *hilazon*.

end of *techelet*'s availability.

Ramban in his Commentary to the Torah, *Shemot* 22:2, asserts that *techelet* ended some time after the Geonic period, because the governments considered it a prerogative only of the nobility and would not permit Jews to wear a royal color. On the other hand, it is the opinion of the Radziner that Jews stopped using it because the many difficulties associated with importing and producing it, since in any case they felt they could observe the mitzvah of *tzitzit* with the use of white fringes alone.

⁵ Positive mitzvah 26.

⁶ Some rabbis opined that it was not absence of the *hilazon* which had led to the disuse of *techelet*, but rather the reality that knowledge of the dyeing process had been lost. They cite the Rambam, *Pirush Hamishnayot*, *Menachot* 4:1: "And we do not have it [*techelet*] today since we do not know how to dye it."

Two new things have happened in recent times. First, there has been a great deal of scientific elaboration exactly what is the *hilazon*, and what is the chemical structure of the dye *techelet*. Second, two young alumni of Yeshiva have identified those places where the *hilazon* exists in large numbers.

Among the scientists who have written on the subject are Edelstein, Ziderman, and Prof. Raold Hoffman, a nobelist in chemistry. They found that the dye which the Radziner prepared didn't come from the cuttlefish at all--it wasn't organic! What happened was that in order to prepare the dye, the Radziner Hasidim used not only the cuttlefish-squid, but also added other chemicals to make the dye fast. What happened was that these ingredients reacted with each other: The potassium and the iron reacted with the other components--and what they produced was Prussian Blue! This we know is a synthetic dye which was widely used for centuries. It is inorganic, synthetic. It has nothing to do with the snail, with the *hilazon* at all. Nevertheless, scientists who have written about it conclude that the Radziner made an error, albeit a brilliant error, and inadvertently produced a dye whose chemical structure is inorganic.

Now, for the biology of it: the snail that is now believed to be the real *hilazon* is a mollusc called *Murex Trunculus*, which appears in the Mediterranean, near the Israeli and Greek coasts. In ancient times, the Greeks and the Romans put a great deal of importance into colors. The two colors, *techelet* and *argaman* (blue and purple) were worn by the aristocracy; an unauthorized or unqualified person wearing these royal colors might be put to death! It was only for the great ones, not for common people.

They discovered that it was not the cuttlefish nor even the fish or snail identified by Rav Herzog (*Janthina*) which is the *hilazon* but another one. (pictures of various..) The world of snails is a very large one, it is not a simple matter.

Let me explain briefly about the colors, the dyes we are discussing: there are three--*techelet*, *argamon*, and then there is a third one, a fake kind of *techelet* called *kelleh ilan*. These three are similar to each other. *Kelleh ilan* is fascinating. *Kelleh ilan* is not organic, it does not come from an animal, but rather from a vegetable, a relative of the pea family, that in Talmudic times was imported from India. The color is very similar to *techelet*⁷ with some changes. If you look at the chemical diagram of the two, you will see that there are two Bromine atoms, in addition to carbon,

⁷ Let me add one thing: pure indigo, pure *kelleh ilan* does not look yet like *techelet*. There has to be added to it a certain amount of red dye, called *kermes*, which will give it enough tincture to make it the color of *techelet*.

nitrogen, and hydrogen. This is very similar to a dye called indigo (in one of the first post-talmudic books written, in Rome, the *Aruch*, explaining about *techelet*, when he mentions *kelleh ilan*, he writes it as *indigo*). *Kelleh ilan* is pure indigo, or its close cousin. If you add bromine to it, what you get is--argamon. So argamon and *kelleh ilan* are the same except for these two atoms. (Essentially, we are saying that the biblical color argamon which in ancient times was called Tyrian purple, chemically is dibromoindigo--indigo with the addition of a bit of red tincture.)

So, what is *techelet*? We know what *kelleh ilan* is, we know what argamon is, but what is *techelet*? If you make a mixture, half argamon and half indigo (*kelleh ilan*), what you get is *techelet*. (*techelet*, which comes from the *hilazon*, is half indigo and half dibromoindigo). Remarkably, it is only the male *Trunculus* snail which produces the particular mucus or glandular secretion from which *techelet* can be made, (half argamon and half argamon-indigo). The female *Trunculus* secretes only dibromo-indigo, and that makes only argamon. What we have then is that if you take half of the male *Trunculus* secretion and half the female *Trunculus* secretion and put them both together--you have *techelet*!

HALACHA

Now the question is, can we really identify colors? About a couple of hundred years ago, there was a *sefer* which came out, called *B'somim Rosh*. It was a cryptic *sefer*. Quite early on, there were many doubts about its authenticity. It purported to contain material from *Rishonim*, and indeed it does contain much material from *Rishonim*.⁸ However, the publisher also added considerable material of his own. And the problem is, how to determine what is his and what is authentic medieval material.

He writes that we can no longer have *techelet* today, because we cannot determine a color by words. By writing in a book, what *techelet* looks like, that cannot be sufficient to determine the true color. I can give you a general description, but I really cannot describe for you in words what the color red is. You have to see it to know it. In other words, the only way to determine which color is indeed the true *techelet* is based on *mesorah*, *ish mipi ish*. Otherwise, you can't know it.

Rav Menahem Mendel Kasher, *z'tzl*, in his *Torah Shleimah*, brings proof for this statement of *B'Somim Rosh* from a *Yerushalmi* which discusses various skin lesions (*nega'im*). Rav Yaakov Emden asks, why is it that today we don't keep the laws regarding *tume'at tzara'at* (ritual impurity arising from the presence in the skin of

⁸ The source has been attributed to the *Rosh*. However, inciting this book in his *P'til Techelet*, the Radziner notes that the Chatam Sofer referred to this book as "*kizvei haRosh*."

certain lesions. The lesions had to be viewed by a kohen and declared *tameh* by him)? After all, the Chazal and the Rambam ruled that the laws of *marot hametzorah* do apply *ba'aretz* and *chutz la'aretz*, whether in the Land of Israel or outside it, *bifnei habayit veshelo bifnei habayit*, whether there is a Beth Mikdash or whether there is none. Why then don't we follow this procedure? Because, the Yerushalmi says, it is written "*lehorot*". *Lehorot* means to teach. That means, from father to son, from kohen to kohen. It includes an actual clinical experience (with Marot). It is not enough to describe it in order to know it--you have to see it. The same would be true of *techelet*. You cannot just describe it, you have to see it.

That would seem to be the end of the discussion. Since we haven't had *techelet* for at least a thousand years and more, how can we know what color it should be? Yet, strange and exciting developments crop up, which may cast a whole new light on the subject.

About thirty-five years ago, the great archaeologist Prof. Yigal Yadin of the Hebrew University was digging and discovered caves that had been inhabited by Bar Kochba and his people during their rebellion in the second century. And he found a whole cache of wool which had been dyed and not yet woven into thread. He maintained that this wool--and its color was extremely fast, it would last forever--that it was the color of *techelet*. But he conjectured that really it wasn't the real *techelet* but was *kelleh ilan*. His thesis was that these people were holed up in a cave, it was an extremely dangerous time, a time of war, and they were a perfect "mark" for those who could take advantage of them, and sell them *kelleh ilan* while charging them for *techelet*. Thus, it is his theory that they were duped by the people who produced *kelleh ilan*.

Near the bag of wool they also found in the cave some *tzitzit*. They analyzed it, and they found that Yadin was right: indeed it was indigo, which comes from the pea plant, with the addition of a little bit of kermes, to make it the color of *techelet*. Since we have that, we know the color that *techelet* was. Even though it was not true *techelet*, yet we know that the color of *kalleh ilan* and *techelet* were indistinguishable. It should now be possible to make a dye from the mollusc identified as *hilazon* and compare it to the strands found in the Cave, in order to determine the authentic hue.

The rabbis read a tremendous significance into the addition of one strand of blue *techelet* into the fringes attached to the garment as *tzitzit*:

(hebrew)

Why was *techelet* singled out as different from all other colors [to be used in *tzitzit*? Because *techelet* resembles the sea, and the sea resembles the [color of

the] sky, and the sky resembles the [color of the] Heavenly Throne....Thus, techelet reminds the person of the Holy One Bless be He, who sits upon the Divine Throne.⁹

The Mishnah in Menachot¹⁰ states:
hatechelet eina me'akevet et halavan, vehalaven eino me'akev et hatechelet. (entire mishnah in hebrew)

On tzitzit, it is necessary to have lavan and techelet, but one does not cancel (mevatel) the other.¹¹ If you have only techelet without the white (lavan), you can use it, and if you have only the white without the techelet, you can use it as well. A similar rule applies to tefillin: tefila shel rosh eina me'akevet shel yad, ve-shel yad eina me'akevet shel rosh. Thus, if a person lost one or the other, he should still put on the one that he has--absence of one does not me'akev, nullify the other. This is the Mishnah.

The ruling in the Mishnah is not according to the opinion of Rebbe, who disagrees in this instance with the Sages (Chachamim). Rebbe says that absence of one or the other of the two elements does invalidate the tzitzit. Thus, since we have no techelet, there should be no wearing of tzitzit. Since the mitzvah has two parts, it's two or nothing. However, the Sages disagree and say that whatever you have, you put on.

Rambam, in his *Perush Hamishnayot* says (Hebrew), the mitzvah of tzitzit has two directives: the first is lavan and the second is to tie in with it a thread of techelet.¹² But, adds Rambam, we

⁹ Menachot 41.

¹⁰ 38a.

¹¹ Tzitzit are generally made by taking four long strands and doubling them (to make eight), then knotting them. If there is no techelet, the rabbis disagree how many strands should be used. Rashi, the *Sefer HaChinuch*, and others maintain that four white strands should be used, but the Rosh and Tosafot (*Menachot* 38b, s.v. hatechelet) are of the opinion that only two white strands should be used. *Orach Chaim* 11,12 rules "bechol kanaf arba kefillin shehem shemoneh" corner of the garment should have four strands doubled, to make eight.

¹² How many strands of blue should be used is also a disputed topic. Rashi and Tosafot (to *Menachot* 38a), the *Teshuvot HaRosh* 2:3, and others rule that there should be two blue and two white strands in the tzitzit. Ramban says there should be one blue and three white, and Rambam (*Tzitzit* 1:6) says that all should be white

cannot do the *techelet* part, because we don't know what it is. Moreover, although there are two commands, Rambam nevertheless rules that it we have here only one mitzvah, not two. Based on this, we may say that Rambam considers that according to *Chachamim* and certainly according to Rebbe, there is one mitzvah. Their disagreement is only whether they are *me'akev* (cancel) each other.

The source for the Rambam's ruling is to be found in *Sifrei*, which says

(Hebrew)

One might think that they are two separate mitzvot (*lavan* and *techelet*) but since the verse uses [the singular verb] "*vehaya*", it indicates that there is only one mitzvah involved.

Rambam follows this dictum in arriving at his ruling. Logic would therefore seem to dictate that he would also adopt the position of Rebbe, that absence of one of the two requisites of the mitzvah renders it impossible to observe that mitzvah. Nevertheless, Rambam sides with the *Chachamim* that absence of one does not prevent one from observing the mitzvah with only the other one.

In his *Hasagot* (disagreements) to the *Sefer Hamitzvot*, the Ramban challenges Rambam's conclusions. He maintains that one must look at the original Mishnaic text, wherein the discussion concerns two different mitzvot: *tzitzit* and *tefillin*. Each of these has two components--*techelet* and *lavan* for the former, and *tefillin shel yad* and *shel rosh* for the latter. Now, *tefillin* clearly are two mitzvot; therefore, reasons Ramban, *Chachamim* must also have considered *tzitzit* as two separate mitzvot (and that is why they discussed them together). What then do we do with the *Sifrei*, which says that *tzitzit* is only one mitzvah? That's simple, answers Ramban. *Sifrei* obviously concurs with Rebbe--that absence of one of the two components renders the mitzvah invalid--and logically that must be because they are one mitzvah. Ramban's argument remains as a challenge to the position of Rambam.

A putative response to Ramban can be found in the commentary of Rivash,¹³ who explains why the rabbis, albeit discussing the

except for one-half a strand of blue (making seven whites and one blue when folded). In *Iggerot Moshe Orach Chaim* 4:4, R. Moshe Feinstein writes that today, even without the *techelet*, the elevating benefits of *tzitzit* remain.

¹³ 137. See also *Responsa Ma'aseh Nissim*:5; *Sh'vut Yaakov* 3:4. The difficulty in the Maimonidean text is that in *Sefer Hamitzvot*, Aseh 12 and 13, he writes that *tefillin shel yad* and *shel rosh* are

two mitzvot under one rubric, might nevertheless not have considered them to be the same: when one dons *tefillin*, there have to be two distinct actions: putting one on the head and one on the arm. However, putting on *tzitzit* is only one act, even if there are two components of the *tzitzit*. Thus, it would be very logical to consider the former as being two mitzvot, while the latter as only one. On the other hand, the *Tashbetz*¹⁴ apparently finds Ramban's logic so compelling that he concludes that not only *tzitzit* but also *tefillin* must be only one mitzvah each!

What emerges from this is that there are two positions: Rambam, following *Sifrei*, as well as *Tashbetz* and many other *Rishonim*, are of the opinion that *techelet* and *lavan* in *tzitzit* comprise one mitzvah, and that both *Chachamim* and also Rebbe agree to this, although the Sages disagree with Rebbe whether absence of one of the components cancels the mitzvah. On the other hand, if we accept Ramban's challenge, we must conclude that when the Sages disputed Rebbe in the Mishnah, they maintained that in *tzitzit* there are two mitzvot, while Rebbe considered *tzitzit* as comprising only one.

Therefore, following this second position, if a person does not wear *techelet* when it is available-- and *techelet* is a separate mitzvah--he is nullifying (*mevatel*) a specific positive mitzvah of the Torah, even though absence of *techelet* would not cancel out the need to wear *lavan*. And if we adopt the first position, of Rambam and those who rule as he does, that although there is only one mitzvah in *tzitzit*, absence of one of the two components does not render the mitzvah invalid--nevertheless, we would have to say that at the very least, a person wearing only the white fringes has not observed the mitzvah completely. (Because if *techelet* is available, yet he chooses not to wear it, we cannot consider that he has fulfilled the mitzvah completely.) And if we follow the position of Rebbe, it is obvious that without *techelet*, the person has not fulfilled the mitzvah at all.

Now, there were some *Rishonim* and also some *Acharonim* who did say that so long as there is no *techelet* available (which has been the case for a good part of Jewish history), then wearing *tzitzit* with only white fringes does constitute total observance of the mitzvah. But this is only when *techelet* is not available!

two distinct mitzvot because they are not *me'akev* each other, yet when the same situation arises with the two parts of *tzitzit*, he remains with the opposite conclusion, that they form one mitzvah! R. Avraham the son of the Rambam asserts that we can see that *tzitzit* are only one mitzvah because only one *beracha* is recited, even if *techelet* is present.

¹⁴ III:137, and also in his *Zohar Harakiya*.

Moreover, Ramban¹⁵ quotes a responsum of Rashi that whoever wears *lavan* without *techelet*, has not fulfilled "a complete mitzvah" (*mitzvah shleimah*). And even if one maintains that at a time when there is no *techelet*, wearing *tzitzit* with only *lavan* is a *mitzvah shleimah*, yet that argument becomes untenable when *techelet* is available!

All that we have said so far follows the position of the *Chachamim* in the Mishnah, namely, that absence of one does not nullify observance of the other. Indeed, this is the halachic ruling of most early decisors, including Rif, Rambam, Tosafot, Ramban, and Rosh--who even goes so far as to maintain that this principle is *halacha leMoshe MiSinai* (a specific oral instruction to Moses at Sinai).

But the *Baal Hamaor*¹⁶ adopts the position of Rebbe, that absence of one of the two components renders the mitzvah void. Thus, he says that there is no mitzvah from the Torah if one does not have both *techelet* and *lavan*. His reason for accepting Rebbe's dictum is straightforward: there is a rule of talmudic learning that when Rebbe disagrees with a *colleague*, we follow Rebbe. It is only when Rebbe disagrees with all his *colleagues*, that we follow them, not him (*halacha keRebbe mechavero, velo mechaverov*). And although the Mishnah has Rebbe disagreeing with "the Sages", yet in the Gemara explaining it, we find mention only of R. Yitzchak. In other words, this is a disagreement between Rebbe and one colleague, not the entire group. Thus, claims *Baal Hamaor*, we should definitely accept Rebbe's position as authoritative.

At the end, he comments that apparently R. Shimon Kiyara, author of *BeHag*, concurred with this view, since he omitted the Mishnah (that absence of one does not deter the efficacy of the other) from his compendium of laws. The *Baal Hamaor* concludes his remarks, "and it is the custom of our rabbis who came after the Rif to rely on him." It is difficult to know how to apply this cryptic passage, due to the ambiguity of the pronoun "him." To whom is the *Baal Hamaor* referring--to the Rif or to the *Behag*?

There are those who explain "him" as referring to Rif, who did not accept the position of *Baal Hamaor*, which would mean that most later decisors did not accept that position either. On the other hand, there are those who maintain that "him" refers to *Baal Hamaor*, which would make his position the normative halacha. Indeed, Ramban (who disagreed with the *Baal HaMaor*) writes that all his life the latter did not wear *tzitzit* at all, since he held not only that without both *techelet* and *lavan*, there is no mitzvah, but moreover that it is not permitted even to put white (linen) fringes

¹⁵ Ramban, *Milchemot*, Shabbat 25.

¹⁶ Shabbat 25.

on a linen garment (*sadin*). (See our discussion of *sadin* later).

According to this, then, if *techelet* were to become available, we would have to use it; otherwise it would be willfull disregard of a positive biblical commandment.¹⁷ This becomes all the more compelling when we realize that if one doesn't use the *techelet*, there is no compliance with the need for *lavan* either, since according to this view both are necessary to effect the mitzvah. And even though it is not our custom to follow the *Baal Hamaor*, yet we cannot simply ignore him, nor Rabbenu Tam as well. (Parenthetically, I have found one latter-day posek (*Mekor Chaim*¹⁸) who does follow them in his ruling.)

I have heard in the name of the late R. Moshe Soloveitchek that even if we follow the approach of Rebbe--that without both *techelet* and *lavan* there is no mitzvah--nevertheless, there are two fundamental issues involved: one is the observance of the mitzvah of *tzitzit* while the second is the prohibition of wearing a four-cornered garment which does not have *tzitzit*.¹⁹ Rebbe's insistence that without both elements there is no mitzvah applies only to the first principle, but he would agree that even the presence of one of the two parts of *tzitzit* would suffice to remove the garment from the category of a non-fringed garment which may not be worn.

It seems to me, however, that this is a difficult argument to sustain, for we have seen that the *Baal Hamaor*, according to the testimony of Ramban, asserted that he had never worn *tzitzit* in his life. Yet, if R. Moshe Soloveitchek is correct in his analysis, the *Baal Hamaor* should have attached at least white fringes to his garments, to remove them from the prohibited category of "a four-cornered garment lacking *tzitzit*". Rather, we are constrained to say that attaching white fringes has no effect upon the status of the garment. Thus, one would either have to do without *tzitzit* due to the reality that it is impossible for him to observe the mitzvah--or else never wear a four-cornered garment. Consequently, it would seem imperative to use *techelet* when it is available, thereby seizing the opportunity both to observe the mitzvah as well as to avoid the *issur* of wearing a garment lacking *tzitzit*.

Let us turn now to the ruling which has been accepted as normative, viz., that absence of one of the two components of the

¹⁷ See *Menachot* 41, where an angel indicates that those who disregard a positive biblical command are punished with "*idan ritchah*". However, see the comments of *Tosafot* to *Erechin* 2b.

¹⁸ 9:1.

¹⁹ See *Tosafot Yevamot* 4b, s.v. "*kulho*"; Rambam, *Hilchot Tzitzit* 3:10.

mitzvah of *tzitzit* does not nullify the mitzvah. The *Pri Megadim*²⁰ wonders, if one wears a cloak and it has fringes of white, isn't he intentionally thereby cancelling the mitzvah of *techelet* (*docheh biyadayim*)? Doesn't this act constitute a deliberate nullification of a positive Torah command? Perhaps, he suggests, it might be preferable not to put on *arba kanfot* altogether, because even in his very act of fulfilling the mitzvah of *lavan*, he is intentionally nullifying the positive mitzvah of *techelet*.

However, the *Sha'agat Aryeh*,²¹ who was almost a contemporary, examines the question in a somewhat different manner. He says, if you put on a *tallit* of *arba kanfot*, and it has no *tzitzit*--have you performed a prohibited action, or is it simply that you have failed to perform a positive mitzvah? What's the difference? If you say that it is forbidden to wear a garment that lacks *tzitzit*, then this garment can't be worn at all. If the only proper *tzitzit* include both *techelet* and white fringes, and we don't have *techelet*, then nowadays one is not allowed to wear a four-cornered garment.

However, if we do not look upon it as forbidden to don a garment without *tzitzit*, then we can say that by putting on such a garment, the person has simply failed to perform a mitzvah, which in any case he is not able to perform due to absence of *techelet* in our era. As the *Sha'agat Aryeh* puts it (hebrew), "we have no complaints" about his action, because the person can't help himself, he has no access to *techelet*. Thus, if the fashion were to wear a loose garment of four corners, we would be permitted to wear it, according to *Sha'agat Aryeh*, as long as we have no ability to change it, to put on the proper fringes, "we would have no complaint about his action."

According to this, it is possible that *Pri Megadim* would also hold that if there is no *techelet* available, a person would not be considered as intentionally nullifying a mitzvah and it may even be desirable to put on only *lavan*, so that at least the mitzvah of *tzitzit* will not be forgotten. However, if *techelet* is available and the person doesn't use it, the *Pri Megadim* certainly would consider that he has actively cancelled a mitzvah.

But what about the *Sha'agat Aryeh*, who comes down on the side that if there is no choice, because there is no *techelet*, there is no *issur* in putting on the garment? What happens if you have *techelet* available? Then, it would not be possible to say that "we have no complaint" if he fails to use it; rather, he would have to wear the *techelet*, or else he would be considered as actively

²⁰ *Orach Chaim*, Introduction to Laws of *Tzitzit*.

²¹ *Siman* 32. See also *Ma'amar P'til Techelet*, chapter 3, for an extensive discussion of these points.

nullifying a biblical command (*Docheh mitzvat aseh biyadayim*).

SADIN

Our Rabbis taught: a *sadin* with *tzitzit*, the Academy of Shammai exempted it, the Academy of Hillel considered it mandatory.²²

There is a debate between the two great academies of Hillel and Shammai, whether it is permissible to attach a fringe of *techelet*, which is made of wool, to a *sadin*, a garment made of linen (which would make it *shatnez*, a forbidden mixture).

There is considerable controversy among the Rishonim in explication of this halachic topic.

(A) According to Rashi, the Rosh, and others, the Academy of Shammai did not permit one to have the forbidden mixture of *shatnez* in *tzitzit*, because of their principles of interpreting the Torah. They never extrapolated nuances in the law based on juxtaposition of verses (*s'muchin*). Thus, the Torah puts two laws together--(a) put fringes on your garments and (b) do not wear a garment made from a mix of wool and linen. The fact that these two laws follow one the other is meaningless for the Academy of Shammai. Therefore, they would not allow fringes of *techelet* (wool) to be attached to a *sadin*, a linen garment.

On the other hand, the Academy of Hillel did read relevance into the juxtaposition of commandments. Consequently, the fact that the law of *tzitzit* is right next to the prohibition of *shatnez* was interpreted by them as a directive that *tzitzit* are required to be of *shatnez*. Hence, they taught that the Torah required *techelet* (wool) on a *sadin*. However, they conceded that the Rabbis, for their own reasons, had made a *gezera*, an amendment not to use *techelet* in a linen garment.

(B) Rabbenu Tam, as well as others, had a different explanation of the dispute between the Academies: These rabbis consider that all agree that the Torah requires putting *techelet* in a linen garment. However, the Hillel Academy abrogated this requirement only because of a rabbinic enactment (*gezera*). (But insofar as a woolen garment is concerned, he must attach to it not only *techelet* of wool but also white linen fringes.) The halacha is according to the Academy of Hillel.

As far as normative law is concerned, there is debate whether one may or must attach even white linen fringes to a linen garment.

²² *Menachot* 40a. The *Minchat Chinuch* 383 has a very interesting approach to our text.

Rif, Rambam, Rashi, and Ramban (in *Milchamot*) rule that a linen garment must have *tzitzit* of linen, and the rabbis only made a decree about attaching *techelet* to such a garment.²³ However, *Baal Hamaor* and *Rabbenu Tam*²⁴ rule that it is forbidden to attach even white linen fringes to a linen garment, and they maintain that this is really what the respective Academies were arguing about in the *Mishnah*. I.e., they were arguing whether one may attach even linen fringes to a *sadin*, the reason being that if we permit white linen fringes in a linen *sadin*, a person might err and also put on *techelet*, which is always wool. Thus, this is forbidden due to the disagreement of the Academies of Hillel and Shammai.²⁵

Rabbenu Tam even writes that a person who puts on a *tallit* of linen is making a *beracha levatala*, while *Rosh* observes that in France and Germany, where he had lived in his youth, it was the custom not to make a *tallit* out of linen. However, when he came to live in Spain, "I saw that everyone wears a linen *tallit*." And although he continued to prefer not making a linen *tallit*, he ruled that one should not bother those who do. For this, he gave two reasons: (a) *tallitot* made of wool were not available, and if one were to forbid use of a linen *sadin*, he was afraid that they would not keep the mitzvah of *tzitzit* at all; and (b) in this custom, they are following the teaching of the Rif, who was a major authority for Spanish Jews. Furthermore, the *Rosh* adds, even if we follow *Rabbenu Tam*, it wouldn't make sense to restrict a linen garment with linen *tzitzit* just because we are afraid people might mistakenly attach *techelet* fringes as well--since nowadays there is no *techelet*! ²⁶

Consequently, if today we have recovered the true *techelet*, according to *Rabbenu Tam* and the *Baal HaMaor*, it should once again

²³ Because of problems which might arise if the garment were to tear, or if it were a nightgown or similar garment worn at night, or possibly because of *kalleh ilan*.

²⁴ *Tosafot*, d.h. *sadin*, *Menachot* 40a, *Shabbat* 25b.

²⁵ One of the strong arguments made against this position is voiced by *Ramban*, who complains that this ruling imposes a rabbinic restriction upon another rabbinic restriction, a procedure which rabbinic law does not permit.

A basic rationale for the *Baal Hamaor* is that once *techelet* is forbidden in a *sadin*, there cannot be justification for permitting *lavan*, since together they are one mitzvah. It would make no sense to forbid *techelet* while permitting *lavan*. Therefore, it is his contention that any type of *tzitzit* at all is forbidden in a linen garment.

²⁶ See *Aruch Hashulchan*, *Orach Chaim* 9:20.

be prohibited to attach linen fringes to a linen garment.²⁷

Let me summarize:

* The identification of the color of *techelet* is no problem. We know the chemical composition, we know the color. We have it, it is available, *min hashamayim*. Although it is true as the *B'somim Rosh* says, that you cannot describe a color in words, nevertheless, with the discoveries in the Bar Kochba Caves, we have overcome that difficulty.

The Gemara has said that *kalleh ilan* is so similar to the color of *techelet* that only the *Kadosh Baruch Hu* can distinguish one from the other. (Only the One who in Egypt was able to differentiate between the drop which created a *bechor* and the drop which didn't, only He can tell the difference between *kalleh ilan* and *techelet*). Other than that, one cannot tell the difference. So that if we take indigo and add to it the kermes, the red tincture, that would give us the exact color of *techelet*. Even though the wool found in the caves is *kalleh ilan* and not *techelet*, yet we know the colors are identical. Therefore, today this would not present an insurmountable problem.

* According to Rebbe, and the *Chachamim* in the Mishnah according to Ramban, *techelet* and *lavan* are two mitzvot; the one who does not wear *techelet* when it is available, is *mevatel mitzvah aseh biyadayim*. The only dispute is whether *me'akvin zeh et zeh*, whether absence of one renders the other component meaningless, and therefore obviates the mitzvah.

* According to the position that *techelet* and *lavan* are one mitzvah, which is the view of the Rambam, if *techelet* is available and one doesn't use it, at the very least, he has failed to fulfill the mitzvah completely. Even though there are *acharonim* who wrote that if *techelet* is not available, the mitzvah is totally performed even with the donning of *lavan* alone, yet to this there are two objections: First of all, Rashi in a responsum²⁸ has said that it is not so-- when *techelet* is not available, one who puts on *tzitzit* with only the *lavan* has not performed the mitzvah in its totality. Furthermore, even were we to concede that when *techelet* is not available the mitzvah has been wholly observed even with only one

²⁷ As for other garments, it depends on an ongoing argument from the Tannaitic period through all the decisors, whether the Torah requires all garments to have *tzitzit* or only wool or linen ones. Rif and Rambam wrote that they are required only because of rabbinic fiat, but Rashi, Tosafot, the Rosh, and the Smag considered that the Torah requires *tzitzit* for all, and that is the normative rule recorded by Ramo.

²⁸ Cited by Ramban in *Milchamot, Shabbat* 25.

type of fringe, yet certainly when *techelet* is available, it is not possible to take this position.

* According to the *Pri Megadim*, it would seem that if there is *techelet* and you don't wear it, you have actively and intentionally nullified a biblical command. In this case, it might be better not to wear a four-cornered garment at all, rather than to intentionally ignore a biblical directive.

* According to the *Sha'agat Aryeh*, we might say there is no *issur* of wearing a *tallit* without *techelet* when it is not available, but when it is available, one may be required to use it or be considered as actively nullifying a positive commandment.

Now all this holds if you agree that today, there has been a correct identification of the *hilazon* and the method of dyeing. Indeed, it would seem to me, based on all that we have said here, that indeed we have achieved this. Even if people are in doubt as to our ability to renew this practice at this point, yet I don't think it is possible to ignore the issue entirely. On the contrary, I think one has to consider it a serious possibility.

Let us say that after serious study, a person would come to the conclusion that there is a *safek* here, a doubt. What does one do now? There are those who say we should not use *techelet*, based on an incident recorded in the *Sifrei*,²⁹ that there is a certain element of danger for those who gather *techelet*. Also, they quote the *Ari Hakadosh* that *techelet* will not be renewed until the time the Third Beth Mikdash will be built. Regardless, it is clearly not enough to cause a positive directive of the Torah to be cancelled.

They also quote a *Tosefta*³⁰ (hebrew) "*techelet* is only kosher from the *hilazon*, and if it is not from the *hilazon* it is invalid." But I think what the *Tosefta* means is that if you have *techelet* but not from the *hilazon* that it is *pasul* only insofar as the *techelet* is concerned. If the *hilazon* we have today is not the right *hilazon*, it does not follow that one shouldn't wear it, but only that you don't get the mitzvah of *techelet*, although at the least you get the mitzvah of *lavan*. It can't be worse than any other color that is put into the *tzitzit*. Let's say someone has red *tzitzit*. With them, he does fulfill the mitzvah of *lavan*. *Lavan* doesn't mean they have to be white, it means any color not *techelet*.

Some further notations: there are a number of opinions about the color: (a) whatever is not from the *hilazon* is called *kalleh*

²⁹ *Vezot Haberacha* 354.

³⁰ *Menachot*, chapter 9:6.

ilan. However (b) there is an opinion that whatever is not *kalleh ilan* is acceptable as *techelet*. And as long as it comes from a *hilazon*, even if it is not the *hilazon* of the Torah, yet it is kosher for use as *techelet*, since it does derive from *hilazon*.

Even if you say that it is a genuine *safek*, and maybe this is not the real *techelet*, nevertheless there is no *p'sul* in using this particular dye which is colored the same way as *techelet*, because the Rambam says³¹ that if it was dyed using one of the other dyes which darken [the color] and are not permanent, not color-fast, it is not acceptable. But that's only when you don't have *techelet*. But when *techelet* is available, or the color is available, there is no *p'sul* involved. Indeed, R. Chaim David HaLevi³² and others have ruled that if you have a dye the color of *techelet* even if it is not authentic *techelet*, you have fulfilled the mitzvah of *lavan*.

Let me close with just a few words of Aggada: According to the *kabbala* of the *Ari*, there is a song, a song which is the source of all the hymns and songs we offer to G-d. And one of the songs which derives from this great *niggun*, which is the matrix of all songs, is the melody of the *geulah*, the redemption which is to come to the Jewish people. And this *niggun* will be played on a harp, a *kinor*. A harp has strings, and in the future time of redemption, the strings of the *tzitzit* will form the strings of the harp on which the music of the *geulah* will be played.

We can only hope that with the probable rediscovery of *techelet* and renewal of that mitzvah, who knows, maybe this is the time that the strings of the harp are ready for the Spirit to blow on them and play the song of the *Geulah*.

Indeed, R. Yehoshua Kutna³³ writes that although he hesitates to affirm the proposal of the Radziner to renew *techelet*, yet, he concludes, "we don't know for sure either that this is not the *hilazon*, and perhaps these are the first rays of the *geulah* itself..." Thus, he saw in the renewal of *techelet* a sign of the Redemption. May it be His Will.

³¹ Chapter 2:4, *Hilchot Tzitzit*.

³² Chief Rabbi of Tel Aviv, in *Aseh Lecha Rav* VIII:1.

³³ In his *Yeshuot Malko*.