

## LAST WORD SOCIETY

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## Wall Hangings, Hairs and The Holocaust

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**ABSTRACT:** Two wall hangings, from the time of the Second World War, were reportedly made from human hair. Laboratory examination of the hangings confirmed this fact. Fibers, holding the wall hangings together, and the weave of the hangings were also examined. Results and implications of the findings are discussed.

**KEYWORDS:** Last Word Society, hair, The Holocaust, wall hangings, fibers, weaving

Early in December 1992, we received a telephone call from Mrs. Irit Salmon, M. A., Director of the Yad Vashem Art Museum. (Yad Vashem is The Holocaust Martyrs' and Heroes' Remembrance Authority in Jerusalem, Israel.) Mrs. Salmon explained that she had received two wall hangings reputed to have been woven from human hairs taken from Holocaust victims. She had been referred to us, as forensic hair and fiber examiners, to assist in confirming whether the hangings were truly made from human hair.

A short time later, on an appropriately somber winter's day in December we had our first view of these macabre wall hangings. On her desk, Mrs. Salmon partially unwrapped two rug-sized, dark brown wall hangings, which we sampled for later laboratory examination.

A letter accompanying the hangings explained that in Italy on the 19th of November 1992, a lady named Malvina Perata had participated in a television interview program. Signora Perata said that in 1942 her father had worked for the Italian State Railways. He purchased, from a transit train in the Ligure region (northern Italy), two hangings made from the hair of Auschwitz deportees. Signora Perata expressed the wish to donate the hangings to any Jewish organization interested in them.

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TABLE 1—*Technical details of wall hangings.*

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1. Overall measurements: 97 × 94 cm.
  2. Weave: very thick warp-faced tabby.
  3. Warp: first yarn, brown hair, tight Z-spin, 3 S-ply, approximately 28–29 threads per 10 cm; second yarn same as first but gray in color.
  4. Weft: brown hair, Z-spin, 3 S-ply, approximately 10–10.5 threads per 10 cm.
  5. Decoration: the second warp yarn forms two contrasting stripes each 16 threads wide (5.75 – 6 cm) occurring 26.5 and 27.5 cm in from the selvages.
  6. Edges: two plain selvages; original transverse edges missing, cut edges secured by a Z-spin, S-ply line sewing thread in overcasting stitch and possible blanket stitch.
  7. Condition: generally good, clean, fraying at one of the two corners.
  8. The textile must have been made by an accomplished spinner(s) and weaver(s). It was not possible to comment on the spinning equipment but the loom or frame used for the weaving held the warp under considerable tension, causing the cloth to be warp-faced. Judging by the regularity of the weave the loom was equipped with at least one shaft or set of heddles.
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The same evening that this program was aired in Italy, a viewer in Israel saw the broadcast on cable television. She immediately informed Yad Vashem and offered her services in bringing the hangings to Israel.

The morning following the television program, Signor Emmanuele Pacifici of the Rome Jewish community, contacted Signora Perata. After overcoming some bureaucratic problems, he secured the hangings and in conjunction with the Israel Embassy sent them to Yad Vashem in Israel.

The central question posed to us regarding the two wall hangings was whether they were made from human hair. By microscopic examination we were able to confirm that most of the hairs in the two hangings were human. Two bands, a slightly different shade than the rest of the hangings, were noted to run through the hangings. These bands contained a mixture of animal and human hair. As no roots were found amongst the animal hairs, it was not possible to conclude whether the hairs came from cows or horses.

One of the hangings was subsequently examined by Avigail Sheffer, M. A., consultant on ancient textiles and Hero Granger-Taylor, M.A., textile historian. They found that the hanging was “. . . stretched at the center of one transverse edge, possibly where the cloth had hung over a nail or hook.” Moreover, “the fact that both pieces have cut transverse edges implies that they were cut from a cloth that was originally considerably longer.” Additional technical data found by Mrs. Granger-Taylor and Mrs. Sheffer is presented in data Table 1.

The stitching, securing two opposite sides of each of the hangings, was examined. This stitching was found to be a sewing thread composed of flax. The results of this examination are summarized in data Table 2.

TABLE 2—*Technical details of the threads used to secure the edges of the wall hangings.*


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Two opposite sides of the wall hangings were secured by a sewing thread. These threads were constructed of 2-plys in an S-twist, each ply consisted of individual fibers spun together in a Z-twist. The threads were coarse, having a mean diameter of slightly over 1 mm but showed notable diameter variations from place to place along the same thread. The light tan color of the threads may have been due to aging, but was more likely the natural color of the fiber.

By microscopic examination the threads were found to consist of only one type of fiber. These fibers consisted of bundles of individual fiber cells (ultimates) and exhibited transverse dislocations. The ultimates had a polygonal outline in cross section. The fibers had a density of less than 1.500 and in the Dry Twist Test gave a clockwise twist. On the basis of this information it was concluded that the threads were composed of flax.

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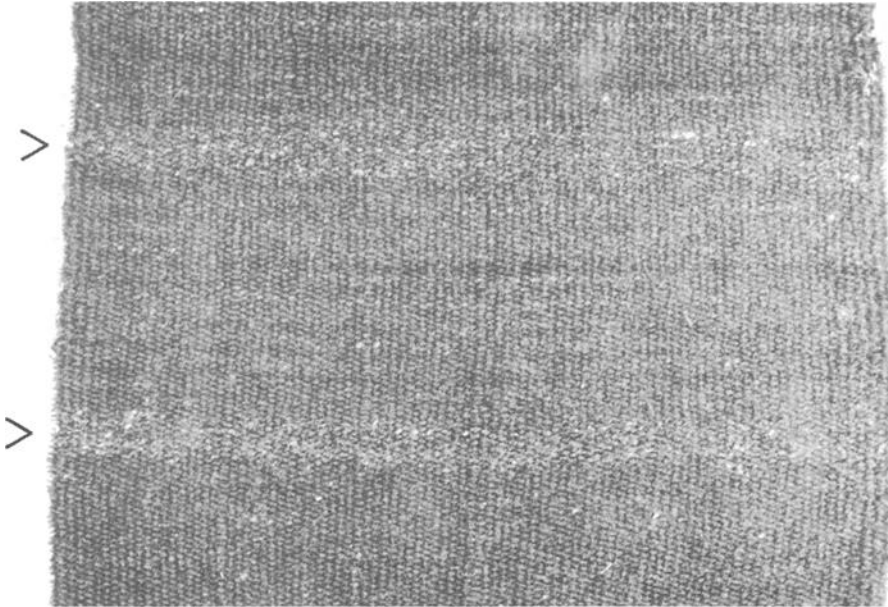


FIG. 1—One of the two wall hangings made from human hair. The two bands running through the hangings (indicated by the arrows) are composed of a mixture of human and animal hair.

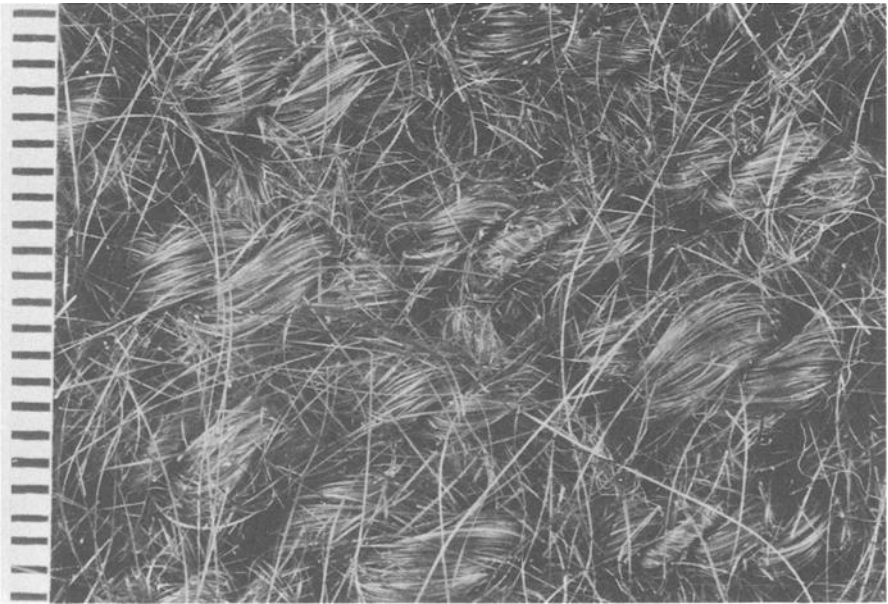


FIG. 2—Close-up of one of the wall hangings showing individual human hairs woven together.

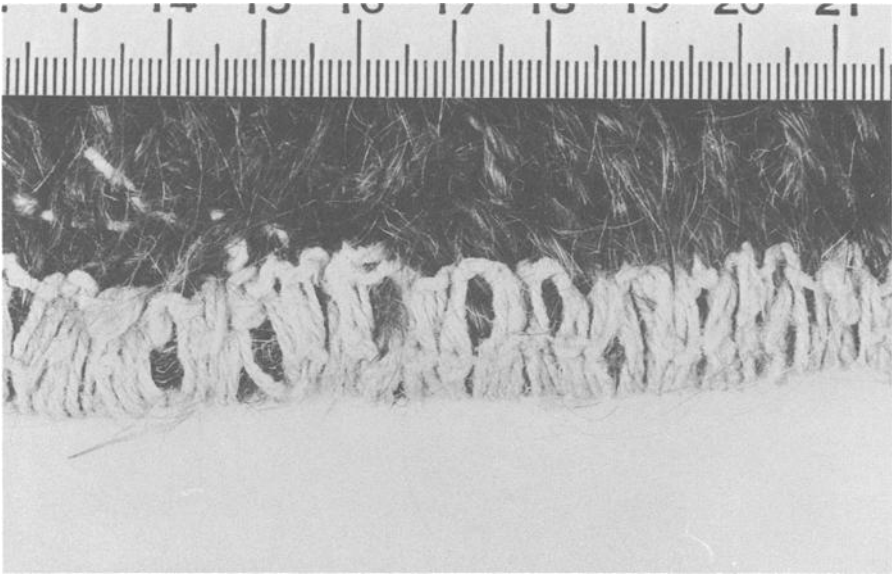


FIG. 3—The side of one of the wall hangings showing the flax based sewing thread used to stitch the edges.



FIG. 4—A braid (plait) of human hair cut from one of the wall hangings.

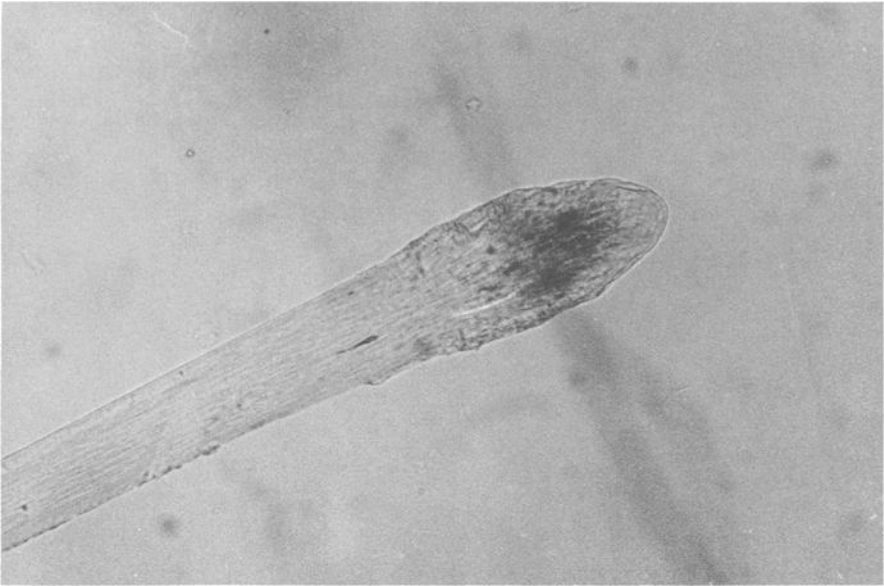


FIG. 5—*The root of one of the human hairs removed from one of the wall hangings (200 x).*



FIG. 6—*Animal hairs (cow or horse) taken from one of the bands running through the wall hangings (200 x). See Figure 1.*

### **Concluding Remarks**

Two wall hangings were sent to the Yad Vashem Holocaust museum with the claim that they were made from the hair of Auschwitz deportees (Figs. 1–6).

We were able to confirm that most of the hairs in the hangings were indeed human. The remaining hairs, found in two bands in each of the hangings, were of animal origin.

Two important findings were made by the experts on textiles. First, the stretching near one edge of the hangings indicates that they could truly have been wall hangings and used for that purpose. Secondly, the finding that the hangings were cut on each end would indicate that other “portions” may still be in existence.

Mrs. Salmon informed us that, in a search of the literature at Yad Vashem, no record was found of wall hangings made of human hair from the period of the Holocaust. However, she added that, as in the present case, individuals are, of late, starting to come forward with hitherto unknown items from the time of the Holocaust.

A number of questions concerning the wall hanging remain unanswered. Who made it, where, when and for whom? Was it made solely as a “decoration” or originally for another purpose? Were others made?

The hangings are currently being stored in the Yad Vashem Art Museum in Jerusalem, Israel.

### **Addendum**

Some time following the television broadcast, Mr. Shalom Nemni of Israel contacted Signora Perata in Italy. Signora Perata’s father told his daughter that during the Second World War, German soldiers travelled on transport trains from France to Italy. In Italy, the trains changed tracks and continued on to Germany. While changing tracks, German soldiers had an opportunity to barter goods for food with people on the platform. It was in this manner that Signor Perata obtained the wall hangings. (This information was supplied to us by Yad Vashem.)

### *Acknowledgments*

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