GENERAL NEWS & ARTICLES

LOOKING AT THE (REPLICATED) BACK OF THE TURIN SHROUD

By John Tyrer

Due to the kindness of Dr. Brian Sagar of the Shirley Institute, Manchester, I have had the opportunity over the last several weeks of examining, handling and testing a sample of the accurate Shroud replica made by his team for BBC TV's QED programme broadcast in 1982. This replica was made up according to the specifications of Prof. Gilbert Raes's analysis of a small cutting taken from the Shroud in 1973.

Whilst looking at the replica, I suddenly realised that I was having an unrestricted view of the back of the cloth, something that had not been possible with the Shroud itself from when its backing of Holland cloth was sewn on in 1534. Although some of the stitching holding the backing was unpicked during the 1978 examination, this left only a very small area viewable.

With the replica sample, on the other hand, I was able to manipulate, stroke, and appraise the surface in high close-up with my magnifying textile 'counting glass' - an exercise I have conducted on all kinds of textiles during the last forty-odd years!

In textile technology the term 'float' is used to describe the length of yarn in a cloth that lifts over more than one of the threads that run perpendicular to it in the other direction. Thus, in the 'herringbone' weave of the Shroud linen, each warp thread lifts and 'floats' over three consecutive weft threads before dipping under a fourth (3/1). The 'floats' of warp threads produce a smooth, lustrous surface which would be ideal for the outer side of a garment. It would have a pleasing appearance and would tend to shed dust and dirt quite efficiently. It is on the topmost fibres of these warp 'floats' that the image on the Shroud has been formed.

On the opposite side of the fabric the weft predominates and the warp is lifting over one weft thread and dipping under three (1/3). The Shroud replica shows that this 'back' surface is more uneven and probably more absorbent than the warp face. This would be more appropriate for the inside of a garment.

A plain weave (1/1) is what is commonly used for an artist's canvas, the yarns being generally 'hairy' with occasionally fibres protruding. In my mind I find doubt that a painter would select a fabric like the Shroud linen to work upon. Even if he did, I would have expected him to choose the back of this cloth, because it would tend to take and hold his artistic materials better than the face.

There is an interesting precedent in the Edessa icon kept in the Matilda Chapel of the Vatican [formerly known as the S. Sylvestro Holy Face: Ed.]. Photographs of this show areas in which the paint has flaked away, exposing the original fabric (opposite). When a cloth is viewed only from the back it is not always easy to discern the lift of warp and weft threads that identify a twill fabric, but by scrutinising the photograph of this icon, I am of the opinion that it has been painted on the back of a twill fabric, and close comparison with the back of the Shroud replica suggests that it is probably a 3/1 twill. It would seem rather more than coincidence for the icon to have been painted on just such a twill! Indeed, I seem to have heard one theory that this icon may have been made from a piece of the Shroud gummed onto the present-day icon-style backing board...

Flaked-away area of Matilda Chapel icon, showing herring-bone twill?