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The Noalejo Shroud copies  
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## INTRODUCTION

We have been gathering together all the information possible about copies of the Shroud for many years now, but we are still surprised every now and then. We know of over 40 copies in Italy, over 30 in Spain, about 10 in France and a further 15 in other countries (Portugal, Germany, the United States of America, Argentina, Belgium, the Czech Republic and Canada). We know of references to about another 40 although we do not know where they are, if they are still in existence.

The copies studied by the Centro Español de Sindonología in Noalejo (Figure 1), a small village in the province of Jaén in the south of Spain, revealed the work of a master craftsman. Here are two of the best Shroud copies, the most delicate and best preserved we know of. And of course ... they are also two of the oldest!

## HISTORY AND DOCUMENTATION

We do not exactly know how or when the copies came to Noalejo, as there are no documents. The most common opinion, as expressed in the study by Manuel Amezcua<sup>1</sup>, is that Doña Mencía de Salcedo, an intimate waitress or servant of Empress Isabel of Portugal (1503-1539, married to Emperor Charles V) and also the young prince's (the future Philip II) Mistress of the Laundry (in charge of his layette), who took the copies to Noalejo. Doña Mencía received great gifts from Doña Isabel. Some of them are listed in an inventory, although none of them make mention of the Shroud copies. A warrant signed by Charles in 1548 dismissed Doña Mencía as the prince's washerwoman, giving her a lifelong pension of twenty thousand maravedís a year. This shows the importance of her presence in court. She devoted her life from then on to her possessions in Noalejo, where she had purchased wasteland and made it fertile. She moved there in 1561 and lived there until her death in 1575. We could say that basically she founded the village of Noalejo. We do not know when or where she was born. Her first will dates from 1563, which would make us think she was born in the 1490's or the early 16<sup>th</sup> century. The expensive gifts given by Doña Isabel to Doña Mencía, of which there is proof, lead us to think that the Shroud copies were among them. They are difficult to catalogue, as they have no sacred value as relics and no material value as art. They might have been a family gift to Doña Isabel, who in turn gave them to Doña Mencía. They were not included in the inventories.

Tests carried out on the copies (Figure 2) and intrinsic data show that the date is accurate – this point is most significant for the following study.

Both copies have an inscription in golden letters around the edge, dated 1527, i.e. 5 years before the fire in Chambery. The inscription is the same on both copies. It is written in faulty Latin and says:

Upper part:

Sindonis imaginem sacri Chambariaci saccelli cernere hic potest recta dimensione per Gir.  
Actum

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<sup>1</sup> Manuel Amezcua, *El Mayorazgo de Noalejo*, Ayuntamiento de Noalejo, Jaen, 1992, pp. 28 to 36 and 81 to 84.

9 enero 2009

Lower part:

desuper extensa pictura hec simillia rei "sabaudieduc" sindonen piissime servatur

A preliminary translation would be<sup>2</sup>:

Upper part:

Here you can see the image of the Holy Shroud which is kept in the chapel at Chambéry, in its true dimensions, by "Gir" in 1527

Lower part

This depiction spread out from above is similar to the Shroud kept by the Duke of Savoy with great reverence

### CHARACTERISTICS

These are the oldest life-size copies of the Shroud that have been analysed. The Lierre copy (Belgium) is older (1516) but only measures a third of the original size (Figure 3). The Xábregas copy (Lisbon - Portugal, Figure 4) is life-size but is not dated. Tradition places it in 1519 and there seems no reason to doubt this. If we compare the Noalejo copies to these two, we see that there are various similarities and differences.

For example, all of them have the four sets of L-shaped holes present on all copies made while the Shroud was in Chambéry. We can deduce that these holes were very noticeable before the fire in 1532. It should come as no great surprise, therefore, that they were included in the Codex Pray miniature. It is curious that on all the copies that show them, these holes are painted red. A possible explanation for this is that the red silk the Shroud was wrapped in at the time<sup>3</sup> could be seen through them, if this red backing was kept in place behind the cloth when it was exhibited.

The Noalejo copies and the Xábregas copy all depict the bloodstain on the back. This was partially destroyed by the fire in 1532.

If we look at these coincidences in greater detail, we see that the Noalejo copies are more faithful to the original than the others.

The L-shaped holes are slightly better situated in comparison to the original on the Noalejo copies than on the Xábregas and Lierre copies. The bloodstain on the back of the Xábregas copy is depicted as a chain, which cannot be justified from the original.

More differences become evident when the copies are seen together. The Lierre and Xábregas copies can immediately be recognised as the work of artists. Faced with the difficulty of assimilating what they could see, the artists yielded to the force of imagination and invented a "figure" that was much easier for observers to interpret. The borders, especially on the head,

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<sup>2</sup> Preliminary translation by Mark Guscini and Alberto Alonso.

<sup>3</sup> Inventory in 1483 of the Sainte Chapelle at the castle of Chambéry, in which it is stated that the "sanctum sudarium" is rolled up in red silk, in a box lined with crimson velvet, decorated with gold-plated silver nails and locked with a golden key. Chevalier Ullise, *Etude critique sur l'origine du Saint Suaire de Lirey-Chambéry-Turin*. p44. Quoted by Odile Celier, *Le Signe du Linceul*. Cerf. Paris 1992. 59 and RILT n. 14. p.27.

are well-defined, the eyes are two dark dots that evoke a gaze and the hair on the dorsal image is well-combed into eight locks. It is easy to see the work of a human artist.

However, the Noalejo copies, especially the fainter of the two, do not seem so different from the original on a first viewing. The artist tried to reproduce a faithful reflection of what he saw, even though he might not have understood it. The borders are not clearly defined as they are on the other two copies in question. The artist, P. Gir, has tried to imitate the blurred edges of the original. Neither is the hair so well-defined on the dorsal image. The beard is forked, the thumbs are not visible on the hands, and one foot is on top of the other. The artist also wished to highlight the blood flowing from the left heel, visible on the dorsal image of the Shroud.

A closer inspection is needed to appreciate the differences in comparison to the original. It is true that the wounds have not been so well copied as they appear on the Shroud. For example, the inverted 3 (or epsilon) on the forehead has been copied as a more or less straight line, and the forked bloodstain on the wrist is reduced to a simple circle. The proof of its being a mere painting can be observed on the back, as the image has soaked through and when lights are shone through the cloth (transmitted light) we can see the silhouette of the figure made of paint added to the cloth. These two characteristics are what easily distinguish any copy from the Shroud of Turin; on the original there is no image on the underside of the cloth, and no image is seen with transmitted light. The image on the Shroud of Turin was **not** formed by the addition of fluid substances that soak through the cloth due to capillarity, or with any other substance added to the cloth.

The images on the Noalejo copies were painted with some kind of soil pigment. A preliminary analysis of the samples identified the presence of tin (Sn), calcium (Ca), aluminium (Al), iron (Fe), lead (Pb) and other heavy elements<sup>4</sup>. There was no previous preparation for the cloth and no oil was used. The binding substance is probably diluted gum.

Another detail that shows how faithful the copy is to the original is the above-mentioned bloodstain on the back, shown on few copies. The Noalejo copies imitate the original relatively well, especially the fainter of the two (see Figure 5). The part corresponding to the right of the corpse is broader than the left. Only the fainter copy shows a bloodstain on the frontal image on the right elbow (the same side as the spear wound). Right here on the original are two blood spots that caught Ian Wilson's attention<sup>5</sup>, aligned in the same direction as the bloodstain on the Noalejo copy.

#### THE IMAGE BEFORE THE FIRE

We have seen that the Noalejo copies are more faithful to the original than other copies, and we could therefore assume that the image they depict is a good indication of what there was in Chambery before the fire in 1532, and they can tell us things about the parts that were lost in the fire. The areas most damaged by the fire on the Shroud are the elbows and the parts of the arms nearest to the elbows on the dorsal image (see Figure 5, in centrefold). The Noalejo copies give us a rough idea of what there was in this area before it was lost forever in the

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<sup>4</sup> The analysis was carried out by M. Furió under the direction of Dr. A.V. Carrascosa (I. de Fermentaciones Industriales, CSIC) with the environmental scanning electron microscope (ESEM) using a Quanta 200 FEI microscope with energy dispersive X-ray spectroscopy (EDS) (7509 Oxford Instrument Analytical, UK), placed in the laboratory of non-destructive techniques (Museo Nacional de Ciencias Naturales, CSIC).

<sup>5</sup> Ian Wilson & Barrie Schwartz, *The Turin Shroud. The Illustrated Evidence*. Michael O'Mara Books Limited. 2000 p.52.

1532 fire. Both copies depict a forked bloodstain that could only be there because it was also present on the original. It consists of two lines of blood flowing away from the elbow at an angle (<). How the blood came to be thus impregnated on the Shroud of Turin is a question for further study.

However, the most remarkable feature in the eyes of the authors is the marked presence of the elbows on the dorsal image. Both copies show them at the same intensity as the rest of the dorsal image. This feature is common to all old copies (Figure 3). It is also evident on the oldest known copy of the Shroud of Turin – the pilgrim's medal from Lirey found in the Seine and preserved at the Cluny Museum in Paris (Figure 6). Despite its small size, this medal shows the herring bone weave on the Shroud and also the bloodstain on the back. In this case, all the details are depicted in relief, and we could say that the elbows are given the same relief as the arms, legs and the rest of the figure. All this leads us to think that the elbows were just as visible as the rest of the body on the dorsal image of the Shroud of Turin before the 1532 fire.

#### IMAGE FORMATION ON THE SHROUD

The presence of this part of the arm on the dorsal image sheds new light on the formation of the image, as there can have been no contact between the cloth the corpse was lying in and the elbows. The frontal image shows us that the hands were on the pubis, and so the elbows cannot have reached down to the stone the body and cloth was on, but must have been over 10 centimetres from it. If we suppose the Shroud was spread out on the stone under the corpse, the elbows cannot have been in contact with that part of the cloth and could not have made a contact image. If the Shroud image was a contact image, the lower part of the cloth would not have been lying on the stone but attached to the back, sides and elbows of the body. In other words, the body would have to have been wrapped in the Shroud for there to have been contact between the linen and the elbows. This hypothesis comes up against two main difficulties:

1. The elbows are on both the frontal and dorsal images.
2. The distance between the elbows is similar on the frontal and dorsal images.

Let us now study each of these points in more detail.

If we suppose that the half of the cloth that was under the body was adjusted to the body and reached the elbows, we should think about how it would do so in relation to the other half of the cloth that was on top of the body. We have tested the different hypotheses using a sculpture of the Man on the Shroud and a shroud, both half life size (Figure 7). If the bottom half of the cloth is fastened first to the body, the side of the linen covers the upper arms and part of the forearms, as can be seen in (Figure 8). According to this hypothetical sequence, the top part of the cloth would be fastened to the body afterwards and would not be in contact with the elbows as the lower part of the cloth is already covering them. Thus, the arms would not be seen on the frontal image. If, on the contrary, the upper part of the cloth was fastened first to the body, there would be no elbows on the dorsal image. Therefore, the simultaneous existence of the elbows on both the frontal and the dorsal images shows that the cloth was not fastened to the body, but rather that the upper part was gently hanging over the front of the elbows, leaving a space between the back part of the arms and the cloth lying on the stone (Figure 9). Only a highly contrived arrangement would allow both halves of the cloth to be in contact with the arms at the same time. It is physically possible that a deliberate arranging of

the cloth could have avoided either half overlapping the other, but this is highly improbable and can indeed be excluded by the second argument, expressed below.

If the part of the cloth corresponding to the dorsal image had been adjusted to the body in order to reach the elbows, the distance between the images of the elbows on each side would be greater than the distance between the elbows on the frontal image as the distance between the elbows over the top of the body was shorter. Measurements taken on sculptures showing the position of the Man on the Shroud show a difference of c. 18% in the distance between the elbows round the back compared to the same round the front (Figure 10 and Figure 11). This means that of the distance between the elbows across the front of the body on the Shroud was c. 52.5 cm, if the back part was fastened to the body the distance between the elbows would be c. 62 cm across the back. The burn marks from 1532 have erased the elbows on the dorsal image to such an extent that it is impossible to know how far apart they were on the image, although this would have been visible before 1532. This can be solved by observing the copies from before the fire that have been preserved up to the present. Both the Noalejo copies (Figure 12) and the Lierre (Figure 3) and Xábregas copies all show the same distance between the elbows on both the dorsal and the frontal images. In the case of Xábregas, the image with transmitted light (Figure 4) is a perfect example to compare the distances as the copy is kept folded in the middle. We can see that the elbows on the frontal and dorsal images of the Xábregas copy are perfectly aligned. The same conclusion can be drawn from the Lirey medal, although one of the frontal elbows is deteriorated (Figure 6). To sum up, everything points towards the distance between the elbows on the frontal image on the Shroud before 1532 being very similar to that on the dorsal image.

We can conclude from studying the Noalejo copies and other copies from before the fire in Chambéry that most probably the cloth corresponding to the back was not wrapped round the body and that the image is not a contact image. Not only that, but in the case of the elbows, the image could have been produced by a vertical projection from a distance of over 10 cm. The greater length between the knee and the ankle on the frontal image as compared to the dorsal image also leads us to think that the back of the Shroud was lying on the stone and that the image of the back of the legs was produced by a projection from over 20 cm away<sup>6</sup>.

## CONCLUSION

The two Noalejo copies have enabled us to "rescue" a photograph from the "past", in which we can see what the Shroud was like before the fire in 1532 when part of the arms were lost on the dorsal image. We know what they were like thanks to these copies, as the painter was an excellent "secretary" taking minutes of what he saw back in 1527. The clear presence of the elbows on the dorsal image is a further question that needs answering in the image formation process.

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<sup>6</sup> de Bazelaire, E., Alonso, M., y Castex, T. (2007) Nouvelle interprétation de l'image du linceul de Turin à la lumière du codex de Pray. *Revue Internationale du Linceul de Turin*, n. 30. pp. 12-14 (available at <http://www.thierrycastex.com/>).

9 enero 2009



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7





Figure 8



Figure 9



Figure 10



Figure 11

9 enero 2009

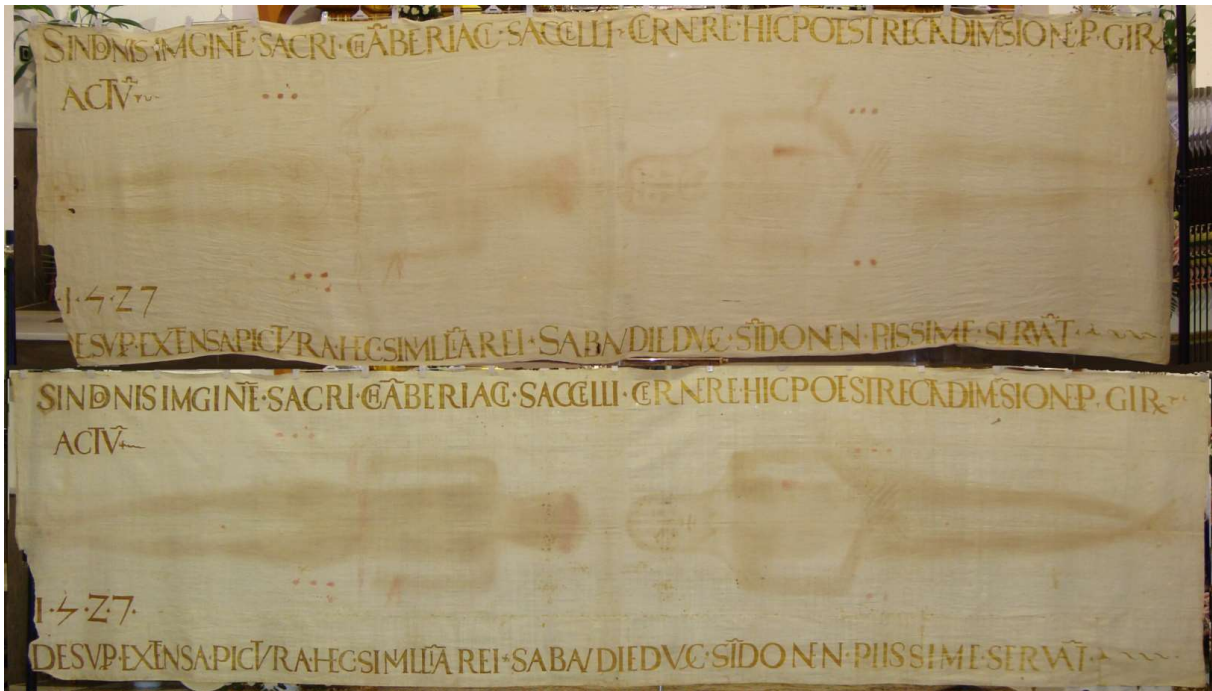


Figure 12