# THE HALO AROUND THE HEAD OF THE IMAGE OF THE MAN ON THE SHROUD

### By DR. PETRUS SOONS

Is this the proof that the EDESSA Cloth (Tetradiplon, Mandylion) and the Shroud of Turin are identical?

ABSTRACT: The discovery of a HALO around the head of the Man on the Shroud of Turin in different photographs and two other details in the neck area under the beard are a strong indication that the theory of historian IAN WILSON, that the Cloth of EDESSA and the Shroud of Turin are one and the same, is most probably correct. These details are being found also regularly in icons and mosaics portraying the face of Jesus Christ in the Byzantine Empire as of the VI-th Century A.D., showing that artists had access to the Cloth of EDESSA and copied very truthfully the details that they encountered. If true, it would date the Shroud back to the year 525 A.D., proving that the piece of cloth used in the radio carbon dating of 1988 was probably not representative for the whole Shroud.

### THEORY OF IAN WILSON 1978

Ian Wilson developed the theory in the seventies that based on one of the names given to the Cloth of Edessa namely: "TETRADIPLON" or "doubled in four", he had very strong indications that the Cloth of Edessa and the Shroud of Turin are identical. TETRADIPLON is a word that is not in normal usage in the Greek Language, but is only used for the Cloth of Edessa. Ian Wilson was educated as a historian at Magdalen College, Oxford, U.K.

When the Shroud is "doubled-in-four" (four times two folds) and mounted on a board, only the face is visible. The length of the Shroud is 442 cm and the width is 113 cm. When you double the Shroud in four the sizes are 113 x 55.25 cm. The "doubled-in-four" crease lines, visible in raking light, were identified by Dr. John JACKSON in 1979, consistent with this one-time "doubled-in-four" folding arrangement. In his latest book: "THE SHROUD, Fresh Light on the 2000-year —old Mystery....." Wilson gives a lot of proofs for his theory.

#### INVESTIGATIONS DONE ON A VARIETY OF PHOTOGRAPHIC IMAGES

During the last three years (since 2008) I did a lot of research on the 3D images that were created, including the holograms and lenticular images that were produced. The conversions from 2D to 3D were done based on black-and-white photographs of 1931 made by Giuseppe ENRIE and in the process I found that around the head of the Man on the Shroud a HALO was visible. It was very similar to the HALO that is visible around the head when you double the Shroud in four (four times two folds) cover it with a precious cloth and make a round opening to make the face visible. Later I had access to photographs of Vernon Miller and Barrie Schwortz made during the STURP investigations in 1978. The Ultra Violet photographs made by Miller showed clearly this HALO. Later investigations included raking light photographs (STURP 1978) and also images created by the so-called Image Overlay technique by Aldo Guerreschi and Alan Whanger, also showing this HALO. In 2010 this was also confirmed by Tom D'Muhalah (Raleigh, N.C.) and Avinoam Danin (ISRAEL), studying photographs of Vernon Miller and Giuseppe Enrie. The reason this HALO is visible around the head in a variety of photographs is, that according to the theory of Ian WILSON, during hundreds of years the Shroud was doubled in four and the only part exposed to light during viewings was the round opening showing the face. Natural aging will turn a new and white linen over time into a yellowish color and the fact that most of the Shroud was hidden and only the round opening showing the face was exposed to different light conditions means, that the linen in this area aged more than the rest of the Shroud and this shows up specially in the Ultra Violet photographs of Vernon Miller taken in 1978 during the STURP investigations. It is of interest for future investigations to check fibers of the HALO area and fibers of the non-HALO area to see if there is any difference in the chemistry of these fibers due to different aging processes.

### INVESTIGATION WITH THE VP-8 IMAGE ANALYZER IN DECEMBER 2013

In December of 2013 in cooperation with Pete Schumacher we did an investigation with the VP-8 Image Analyzer on different photographs to see if we could prove the presence of the HALO. We used a life-size fascimil of the Shroud based on a photograph by Barrie Schwortz, taken in 1978 during the STURP investigations. We also used some of the Ultra Violet photographs taken in 1978 by Vernon Miller. We could prove the presence of the outlines and the relief of the HALO in these materials.

### The CONCLUSION of my investigations was:

The HALO that has been discovered in a variety of photographs and that fits the size of the round opening in the TETRADIPLON showing only the head of the Man on the Shroud is a very strong indication that IAN WILSON's theory that the Shroud of Turin and the Cloth of Edessa (Tetradiplon, Mandylion) are identical, is true. Because there is no anatomical detail visible of the surface of the body in the region of the upper thorax, the head looks like disembodied and floating. That was probably the reason that for

many centuries people did not know and realize that this cloth contained the image of the whole front and back of the body, apart from the fact that the tetradiplon was mounted, framed and covered with a precious cloth, leaving the round opening showing the face only. This object was considered so sacred that very few people were permitted to even touch it. This discovery means also that we can date the Shroud of Turin to at least the year 525 A.D. when the Cloth of Edessa was rediscovered in the niche above the city gate. This would also prove that the little piece that was taken from the Shroud for the radio carbon dating of 1988 was not representative of the whole Shroud.

### TWO OTHER DETAILS VISIBLE IN AND AROUND THE HALO THAT WE WILL FIND BACK IN BYZANTINE ART

When you take a good size photograph of the whole Shroud and double it in four you will find on one side the image of the face only. Reconstructing what the Byzantine artist did in the past when framing the image and finding the center of the circle around the head, you will first make a <u>vertical line in the middle of the cloth</u> and then make a <u>horizontal line crossing both eyes</u>. Artistically speaking, the center of the face is between both eyes. The vertical and horizontal lines cross at the center for the construction of the circle cutout of the cloth in order to make the Shroud face visible. Thus, the round opening is in the middle of the cloth. If you follow the vertical center of the circle it will end up IN THE CORNER OF THE RIGHT EYE, NOT IN THE "ARTISTIC CENTER" OF THE FACE. The reason for this is that the image of the Man on the Shroud is not exactly in the middle of the cloth, but displaced about 2-3 cm to the left side of the median line. Also, a second observation is that the border on the top of the HALO is smaller than the border at the bottom of the Halo. The diameter of the HALO was measured by me to be about 48 cm.

In our presentation we show a series of images of the Mandylion (Cloth of Edessa) where indeed the upper border is shown to be smaller than the bottom one, so the artists copied these details truthfully.

After that we show a series of images of icons and mosaics of the Byzantine Empire of the face and image of Jesus Christ with a HALO and measuring the center of the HALO you will observe that this is exactly in the corner of the right eye, the same as we have shown with the reconstruction of the HALO in the Tetradiplon and explaining the reason why. The Byzantine artists copied all these details very accurately in their icons and mosaics and these images where considered by them to be very sacred explaining also the constant copying of these details without changing them.

### TWO MORE DETAILS IN THE IMAGE OF THE MAN ON THE SHROUD THAT SUPPORT IAN WILSON'S THEORY

Sevetny years ago, PAUL VIGNON identified a series of markings on the face and the head of the image of the Man of the Shroud frequently recurring in Byzantine portraits of Jesus and seemingly deriving from features visible on the Shroud. He identified 15 of these markings and did quite some research of Byzantine artworks to identify these. In the nineteen-eighties Alan WHANGER (USA) continued with his work and investigated images of Jesus Christ on Byzantine coins. He found the same occurrence of these markings. In some instances the marks in the artworks appear in mirror image.

What is of interest here is the feature numbered fifteen of the markings that VIGNON mentions. This is described by him as: ------"Transverse line across the throat"----. This is exactly the area where I concentrated my research, because according to my investigations in the 3D field there was an oval solid object with (on the surface in relief) three Hebrew letters. I first did a study on many photographs from different photographers who took photographs the recent hundred years of the Shroud. Always the outline of the object is present. Next I studied all the previous 3D studies done by John JACKSON and Eric JUMPER in 1977 and also the 3D studies that were done in Italy in the nineteen-seventies by Prof. Tamburelli and Nello BALLOSINO. In all the 3D images, under the beard there was a clearly visible vertical relief. This suggests that there is indeed the presence of some solid object. Last but not least, Pete SCHUMACHER did an investigation for me in 2010 of this area with his VP-8 Image Analyzer. This investigation was repeated 2011. The VP-8 Image Analyzer was used in 1976 by JACKSON and JUMPER to provide a proof of the existence of the 3D information in the Shroud Image. This instrument translates differences in density (brightenss) of an image to vertical relief. Only the image of the Man of the Shroud gives an anatomically correct 3D image. Any other photograph of a person gives a lot of distortion because this instrument was not made for the purpose of making anatomically correct 3D plots from 2D images, but simply maps brightness variations in X,Y, Z graphics. The fact that the Shroud image produces this result is another unique quality of the Shroud Image!

#### The conclusion of Pete Schumacher was:

"Using minimal classification Image Processing Techniques involving isometric projection and level slicing functions of the VP-8 Image Analyzer we were able to assess the region of interest (ROI) defined by Dr. Soons. It is apparent that some object, having some pattern detail within that object, resides within the defined ROI." Pete SCHUMACHER was able to confirm the presence of the image outline of an object within the ROI.

This oval solid object was placed under the beard of the Man on the Shroud and because of the anatomy in that region with the two collar bones higher than the throat area in a person in a horizontal position; the object was in an oblique position. Scientist believe that the image was formed collimated, meaning vertical upwards-and-downwards, so that the front and under side being higher and nearer to the cloth, would be projected with a double line because of the thickness of the oval object and the upper side like

a vaguer visible line because of a further distance to the surface of the Shroud, and that is exactly what we observe in the image under the beard in the photographs.

In the presentation we show a series of coins of the period of the reign of Justinianus II (692-695 D.C.) and also several coins from the reign of Emperor Michael III (842-867 D.C.) were this double line is perfectly visible and interpreted by the artist as the upper edge of a tunica. It is worth mentioning that these gold coins are the size of a quarter, so the artist put in very tiny details that obviously were taken from studying the Shroud Image very detailed.

## THE SECOND DETAIL VISIBLE OF WHAT VIGNON CALLS "THE TRANSVERSE LINE ACROSS THE THROAT" ALSO ASKS FOR OUR ATTENTION.

In the positive image of the Shroud the left corner on the end of the horizontal transverse double line curves in an upward direction and was seemingly interpreted by the artists who had access to the image as a fold in the upper edge of a tunica. The same seemingly happened with the double line that was interpreted by the artists as the upper edge of a tunica. It is worth mentioning again that the head looks disembodied and floating because there is no image visible of the upper thorax. There are many examples in Byzantine art where this "fold" is being represented on exactly the same location where in the positive image of the Shroud the upward curving left corner is located. All these little details make the case of Ian WILSON very strong indeed!

#### **CONCLUSION OF MY INVESTIGATIONS:**

IAN WILSON'S THEORY THAT THE CLOTH OF EDESSA AND THE SHROUD OF TURIN ARE ONE AND THE SAME IS BEING REINFORCED BY THESE NEW DISCOVERIES:

- 1) The HALO found in various photographs representing the area of the round opening in the TETRADIPLON and showing the head of the Image of the Man on the Shroud.
- 2) The center of the circle of the round opening in the TETRADIPLON. The center is located in the corner of the right eye (positive image). This is also seen in the images of the Mandylion and the face of Jesus Christ with HALO in Byzantine art.
- 3) The transversal double line under the beard of the image with the upwards going left edge, interpreted by the Byzantine artist as the upper edge of a tunica with an upward going fold on the left side and also encountered in Byzantine coins and images of the face of Jesus Christ. These new discoveries prove that Ian WILSON is right with his theory that the Cloth of Edessa and the Shroud of Turin are the same. This dates the Shroud of Turin back to at least the year 525 A.D. This also proves that the little piece of cloth that was used for the radio carbon dating of 1988 was not representative for the whole Shroud of Turin.