

The Halo Around The Head

Pistacia fruits, Rhamnus thorns and the Halo around the head of the Man of the Shroud

Latest Findings Concerning The HALO around the head 2012/2013. And an addition concerning new information obtained during 2009

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.

1988: THE RADIO CARBON DATING OF THE SHROUD OF TURIN.

A great difficulty for Sindonology was that in 1988 the credibility of the

Shroud of Turin as a genuine two-thousand-year old burial cloth had been very seriously undermined by highly publicized radio carbon dating tests which had adjudged it to date between the years 1260 and 1390 AD. This in spite of the fact that there are many indications that date the Shroud back to the first century AD.

INDICATIONS OF THE AUTHENTICITY OF THE SHROUD OF TURIN AS A 2000 YEAR OLD BURIAL CLOTH.

First of all there are the qualities of the image, that combined, make this image unique in the world.

- 1) The image has the quality of a photographic negative
- 2) The superficiality of the image on the upmost fibers of the Shroud
- 3) Distance information in the density of the image translating in 3D-information
- 4) The image is anatomically correct
- 5) Monochromatic coloration of the image
- 6) No adhesion of the fibers and no impregnation in the fibers
- 7) Real human blood in the wounds of the image
- 8) Serum separation of the post mortem blood under UV lighting.

Other indications of authenticity:

- 1) Ray ROGERS proposed a different kind of dating for the linen, a process that uses microscopic spectrometric mass pyrolysis of the linen-

vanillin-lignine proportions. He demonstrated that the Shroud could be between 1300 and 3000 years old.

2) The Hungarian Prayer Book that is dated between 1192 and 1195 AD and that shows a drawing with many of the details present in the Shroud, like the folding of the arms, the non-visibility of the thumbs, the herringbone weave of the Shroud and the inverted 3 bloodspot on the front of the head and also the so-called “pokerholes”.

3) The Sudarium of Oviedo. This cloth is mentioned in the Gospel of John as being in the tomb in Jerusalem and is presently in Oviedo, Spain. Scientifically spoken we know that it covered the same body as the Man on the Shroud of Turin. The history of this Sudarium is known as of the year 614 AD.

4) Textile archaeology. Mechtild Flury-Lemberg, a textile archaeologist from Switzerland noted that the details of the stitching that joins the side-strip to the main fabric of the Shroud is the same as a peculiar type of stitching found in textiles in graves in the fortress of Masada from the first century AD. (Destroyed by the Romans in 71 A.D.)

5) The so-called VIGNON markings. Many of the details of the head and in the face of the Man on the Shroud are being seen in images of the face of Jesus Christ in icons and mosaics as of the VI-th century AD in the Byzantine Empire.

BRIEF HISTORY OF THE EDESSA CLOTH.

30 AD; According to the Acts of Taddeus, King ABGAR- V of the city of Edessa receives an image of Jesus Christ from the disciple Taddeus and by touching it he is cured from lepra and converts to the teachings of Jesus

Christ.

55 AD; The second son of king ABGAR becomes king after the death of his father in the year 50 AD and his brother in 55 AD. He converts to paganism again and starts a prosecution of the Christians in his kingdom. The Cloth bearing the image of Jesus Christ is hidden in a niche above one of the city gates and consequently the whereabouts of this hiding place is being forgotten.

525 AD; Rediscovery of the Cloth during remodeling of the city walls after a disastrous inundation that destroys a great part of the city. It is being recognized as the Cloth that was brought to Edessa by the disciple Taddaeus because the tradition of that story was still known.

943-944 AD; The Emperor of Byzantium sends an army of 70.000 soldiers to Edessa to take possession of the Cloth of Edessa. He offers 200 Muslim prisoners and a great amount of silver to the Kalif of the city. Edessa at that moment was in Muslim possession. The Kalif agrees eventually and forces the Christians of the town to hand over the Cloth to Kurkuas the general of the Byzantine army. In august of 944 the Cloth is paraded in the city of Constantinople and put in a chapel of the royal Palace together with all the other relics of the passion of Christ.

1204 AD; After a short siege of the city of Constantinople the Crusaders of the IV-th Crusade take possession of the city and for three days are looting everything they could lay their hands on. In times of distress the Cloth of Edessa would be transferred to the church of Saint Mary of Blachernae to protect the city from disasters where it was seen a short time before the sack of the city by one of the French crusaders, Robert de Clari. This gentleman describes that the Cloth disappeared and nobody knew the

whereabouts anymore.

1355 AD; In Lirey a small village in the north of France a nobleman by the name of Geoffrey de Charny holds an exposition of a Cloth telling that this was the original funeral Cloth that covered the body of Jesus Christ in the tomb. On the side of the family of his wife, Jeanne de Vergy, he was related to one of the crusaders, Otto de la Roche, who took seemingly the Shroud from the church of Saint Mary of Blachernae in Constantinople about 150 years earlier, became then the Duke of Athens in Greece and brought it later to France.

THE BOOK OF MARK GUSCIN: THE IMAGE OF EDESSA Published in 2010.

Mark Guscin did a research of the Cloth of Edessa in the archives of the monasteries in ATHOS in Greece and translated many of the texts regarding the Cloth of Edessa. His conclusion was:

“ ———It is true that the same texts (and numerous others) refer to nothing more than a facial image when describing the FORMATION of the portrait (be it before the passion or in Gethsemane), but even so it can confidently be stated that some people at some times believed, rightly or wrongly, that the Image of Edessa contained a full-body imprint of Jesus of Nazareth.

OTHER INDICATIONS THAT THE IMAGE OF EDESSA CONTAINED A FULL-BODY IMPRINT OF THE BODY OF JESUS OF NAZARETH.

1) The sermon in the Hagia Sophia in Constantinople of Gregory Referendarius in 944 AD, just after the arrival of the Cloth in the city (from a manuscript in the Vatican Library):—————For the radiance was not depicted with the techniques of the art of painting, which fashions images

------(page 85)-----This reflection---has been imprinted only by the sweat from the face of the ruler of life, falling like drops of blood, and by the finger of God-----Because that from which (the true imprint of Christ) they dripped, was also embellished by drops from his own side. Both are highly instructive---blood and water there, here sweat and image.---The source of living water can be seen and it gives us water, showing us that the origin of the image made by sweat (FACE) is in fact of the same nature as the origin of that which makes the liquid flow from the side (LANCE WOUND).”

2) A French Crusader, ROBERT de CLARI, who toured Constantinople in 1203, before the taking and the sacking of the city, wrote in his memoirs: ----- “ There was another church which was called My Lady St. Mary of Blachernae, where there was the SHROUD in which Our Lord had been wrapped, which every Friday raised itself upright, so that one could see the figure of Our Lord on it.”

3) Letter of Theodore Angelos (cousin of two Byzantine Emperors) to Pope Innocent III , dated 1st of august 1205 AD, one year after the sacking of Constantinople. In this letter he writes: “Theodore Angelus wishes long life for Innocent III, Lord and Pope at old Rome, in the name of Michael, Lord of Epirus and in his own name. In April of last year a crusading army, having falsely set out to liberate the Holy Land, instead laid waste to the city of Constantine. During the sack, troops of Venice and France looted even the holy sanctuaries. The Venetians partitioned the treasures of gold, silver and ivory while the French did the same with the relics of the saints and THE MOST SACRED OF ALL, THE LINEN IN WHICH OUR LORD JESUS CHRIST WAS WRAPPED AFTER HIS DEATH AND BEFORE HIS RESURRECTION. We know that the sacred objects are preserved by their

predators in Venice, in France and in other.....”

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: “TETRA DIPLON” or “doubled in four”, he had very strong indications that the Cloth of Edessa and the Shroud of Turin are identical. TETRA DIPLON 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 Schwartz 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.

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, Mandyllion) 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 vertical line in the middle of the cloth and then make a horizontal line crossing both eyes. (artistically spoken the center of the face is between both eyes). Where the vertical and horizontal line cross you will find the center that you need to construct the circle to create the round opening in the covering precious cloth to make the face visible. Now we have the round opening in the middle of the cloth. If you do that you will find that the center of the circle will end up **IN THE CORNER OF THE RIGHT EYE**. 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. A second observation is that the border on the top of our HALO is smaller than the border on 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 were 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

Seven decades ago the French scholar PAUL VIGNON identified a series of markings on the face and the head of the image of the Man on the Shroud frequently recurring in Byzantine portraits of Jesus, 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 eighties Alan WHANGER (USA) continued with his work and also investigated images of Jesus Christ on Byzantine coins and 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 number fifteen of the markings that VIGNON mentions. This is described by him as: ———Transverse line across the throat———. Now 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 present there with on the surface in relief three Hebrew letters. I first did a study on many photographs from different photographers who took photographs the last hundred years of the Shroud and there was always the outline of the object. 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 seventies by Prof. Tamburelli and Nello BALLOSINO. In all the 3D images under the beard there was a clearly visible vertical relief suggesting that indeed there was 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. an investigation that we repeated together in 2011. The VP-8 Image Analyzer was used in 1976 by JACKSON and JUMPER to finally prove with success the existence of the 3D information in the Shroud Image. This instrument translates differences in density of an image in 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 that purpose. 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 up- 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.) where 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.

All 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.

Avinoam Danin, Petrus Soons, Mary Whanger, Alan Whanger.

Introduction:

Intensive efforts took place to obtain and scan black and white photographic material of the Shroud made by Enrie in 1931 and Ultra Violet photographs by Vernon Miller (the Chief Technical Photographer of STURP 1978)). The aim of this paper was to continue our search for plant images. These plants may account for areas of partial blockage of 3D imagery. If they were between the body of the Man of the Shroud and the Shroud linen they may have blocked the 3D imagery, accounting for the dark areas on the face and neck. The first results of this search have been reported (2xreported) already by Danin (2008b). Various photographic materials were used in this enterprise and are noted here in our preliminary findings.

Methods:

Second generation photos of the Shroud, shot by Enrie (in 1931) were used as background basis for mapping of **Pistacia** fruits (as discussed by Danin et al., 1999 and by Danin & Guerra, 2008) identified by the first author. The 2nd generation films were obtained by the 2nd author from Alan Whanger and scanned by the Dutch Holographic Laboratory in Eindhoven, The Netherlands. Mrs. Or-El Aviram-Tzimmer at Photo Schwartz, Jerusalem printed the photos from electronic files at magnification of 46% of the real size. Thus the size of the prints of the Enrie photos was 200 cm long and 50 cm wide. For practical measures the 200 cm photo was divided in two; the ventral part became “photo 1” and the dorsal one “photo 2”. We also printed the Vernon Miller’s UV photos at 170% life size. The areas suspected of containing **Pistacia** fruits (cf. Danin et al., 1999) were marked on transparent cellophane sheet and manually transferred and marked on the 46% photos mentioned above. Prominent plant images of pairs and single thorns of **Rhamnus** (Danin 2006a) were drawn as well. After completion, the 46% photos with their cellophane overlay were photographed at the

Dutch Holographic Laboratory. These photographs were than studied using the computer and were after that copied into a PowerPoint presentation and this increased the contrast of the images. It clearly revealed a lighter-colored circle around the head. In the small three images(Fig. 1b, 1c, 1d) on the right side of the large photograph (Fig. 1a) this lighter-colored circle shows up also very prominent.



Enrie Photograph Showing Halo Around The Head

Results:

The number of large dark dots interpreted as **Pistacia** fruits, counted on the Shroud was around 2,600. They appear to be distributed at random (although no statistical analysis was done). We could not contradict the opinion presented by us in Danin et al., (1999) suggesting that the **Pistacia** fruits were “burial spices”.

The finding of a pair of **Rhamnus lycioides** thorns at the anatomical right side of the head was reported earlier (Danin, 2006a). Two additional pairs were discovered now on the Shroud. The three pairs share an angle of 150° – 155° between the two thorns. Two other straight single thorns and the one which was already reported share the property of being sharp and have dark small dots on the lateral thorn surface. These are suspected of being the lateral buds, so typical of thorns of **Rhamnus lycioides**.

When preparing Fig. 1 for printing, the first author noticed, on the computer- screen, a circular discoloration around the head on the ventral part of the Shroud (Fig. 1a). After obtaining the prints that had intensified contrasts, the circular area was clearly visible, and once seen, it proved to be visible in other photos as well. The photo made by “PrintScreen”, including the right side small photos, when matched with previous findings needs no explanation (Fig. 1b-d). Showing it to the 2nd author (P.S.) the latter stated that he did his investigation also on the 2nd generation digitized Enrie negatives in 2007 and 2008 and came to the conclusion that the diameter of the circle was about 51 cm. The center of the circle (Halo) was in the corner of the anatomical left eye. The first author measured (July 20, 2009) the 1:1 recently displayed photograph (facsimile) of the Shroud at the

Permanent Shroud Exhibition in Notre Dame, Jerusalem. The size of the Shroud there is 435 cm X 110 cm. (Measurements by Barberis and Zaccone in 2002 resulted in measures: 442 x 113 cm). The distance between the centers of the eyes is 5 cm; the halo diameter is 57 cm. Taking any “ortho” photograph of the ventral (What does “ortho” mean???) view of the Man of The Shroud, and increasing the contrast (on PowerPoint on a PC while keeping the brightness high), will result in the appearance of the lighter colored circular area around the head, as shown in Fig. 1.

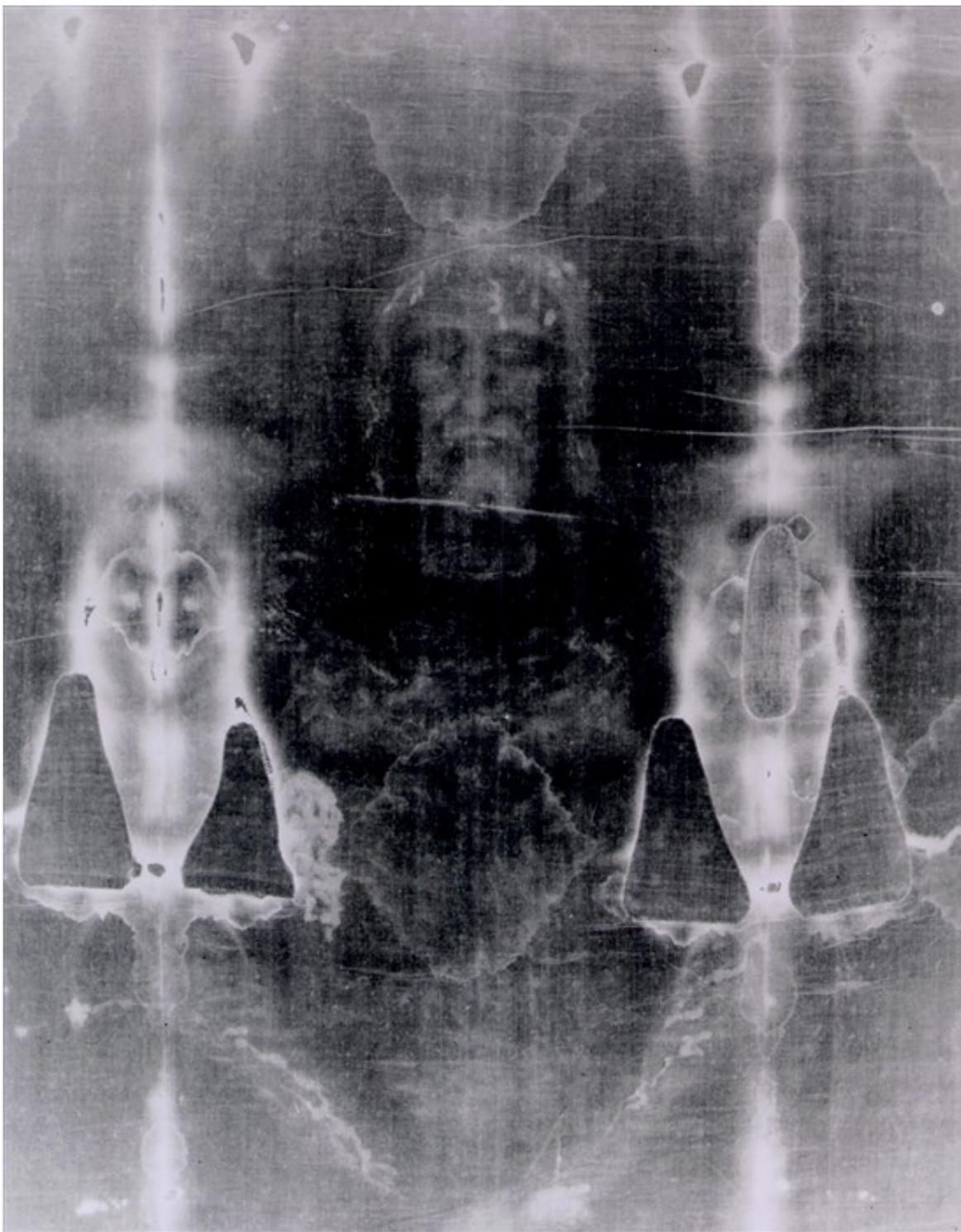


Photo Vernon Miller Showing Halo Around The Head

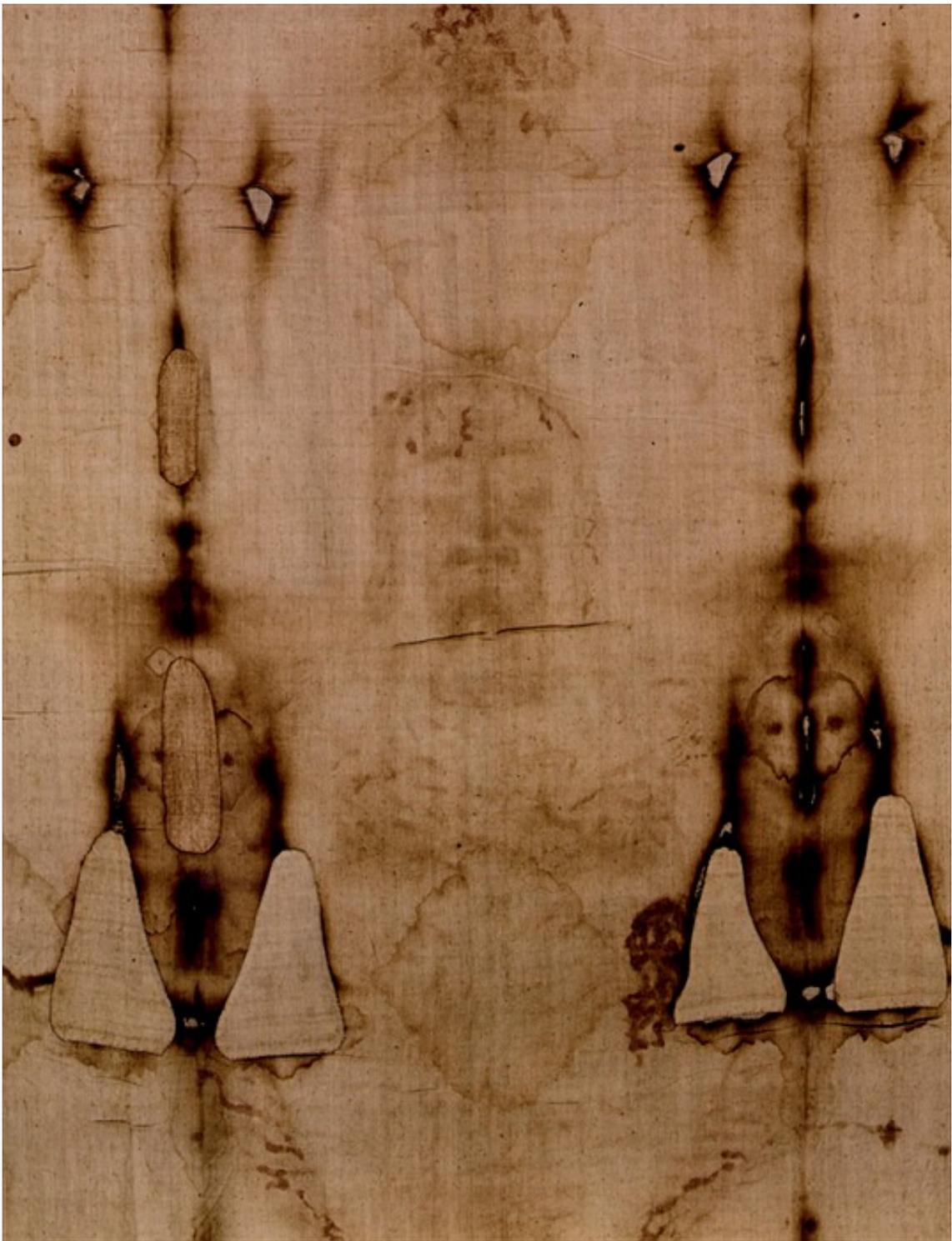
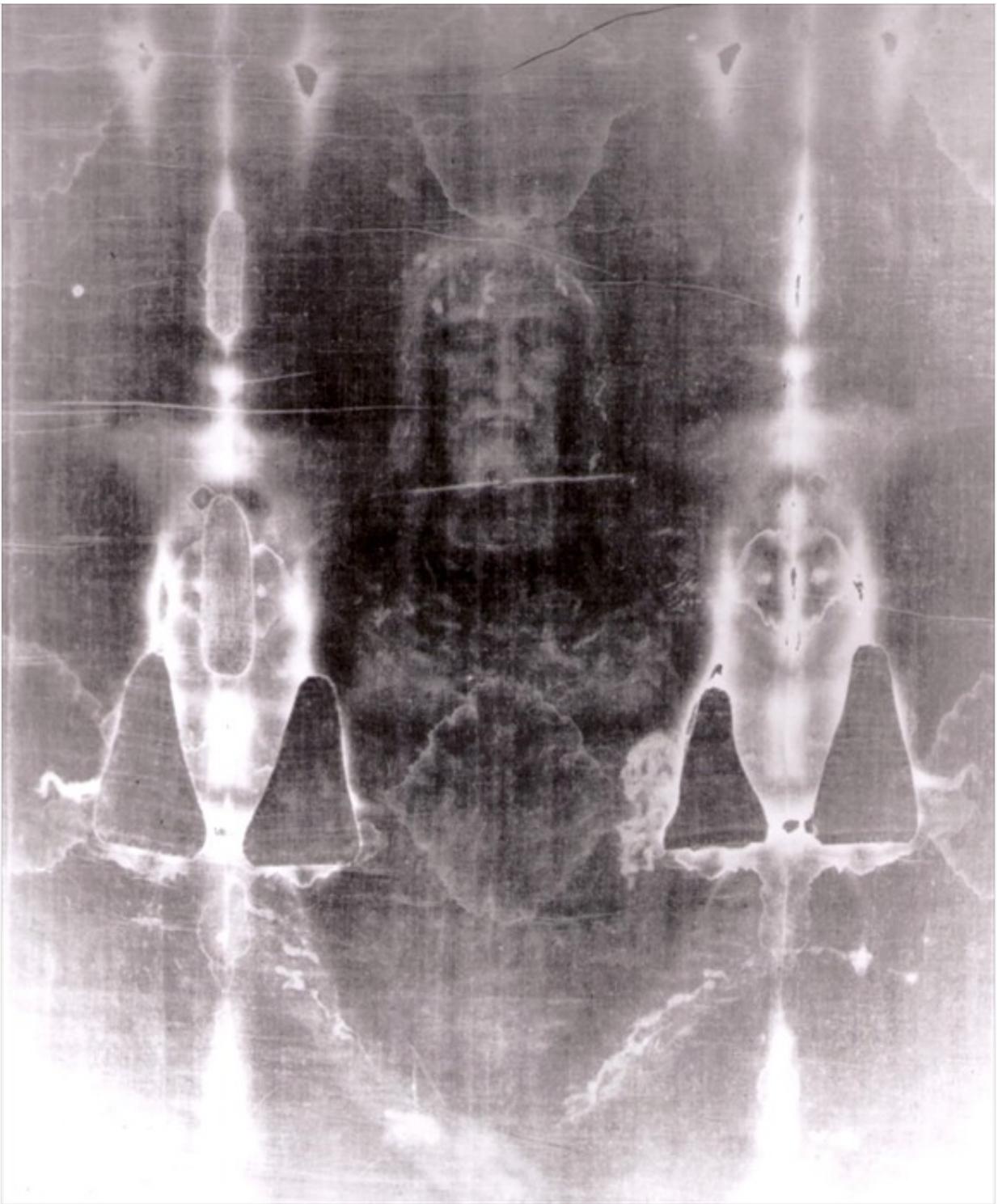


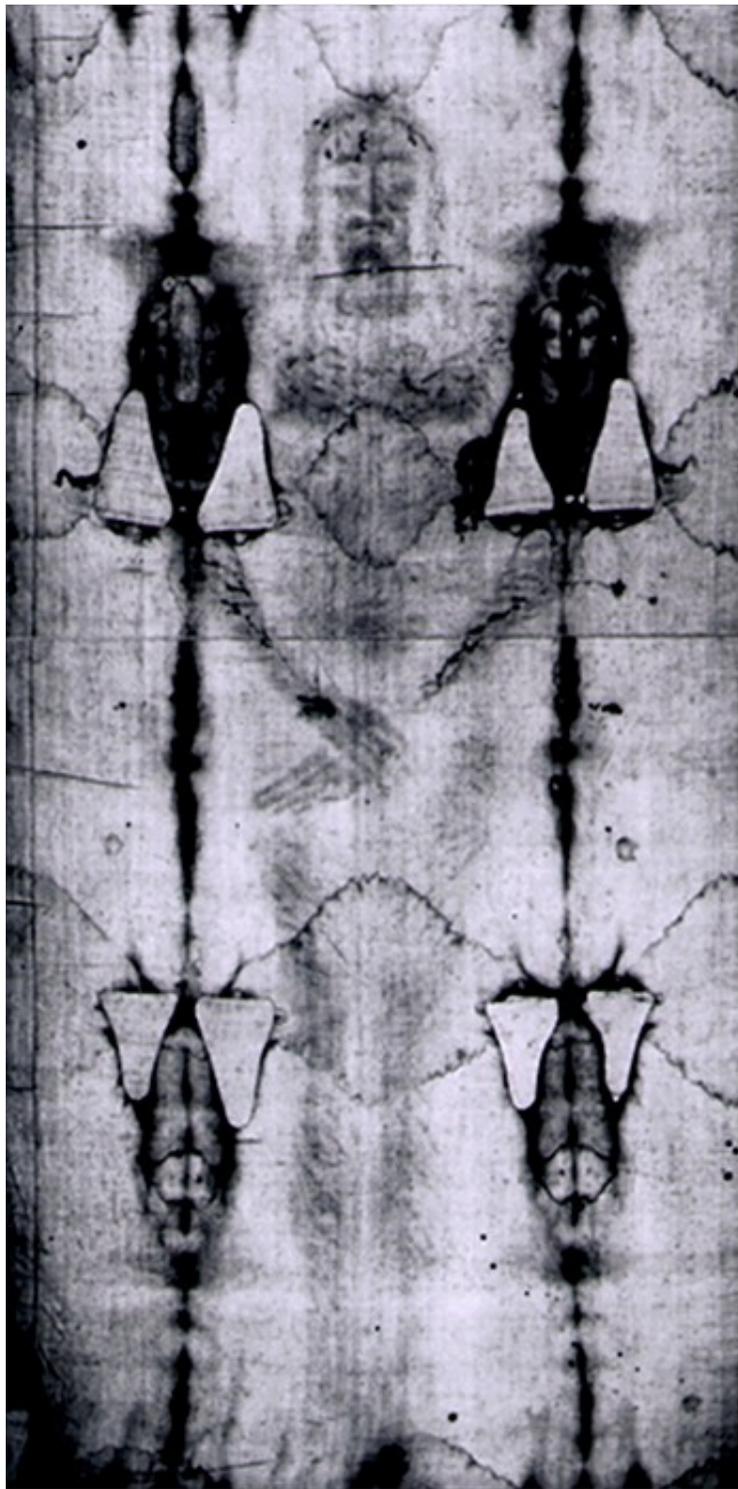
Photo Vernon Miller Showing Halo Around The Head



Photograph Vernon Miller Showing Halo Around The Head



Photograph Vernon Miller Showing Halo Around The Head



Photograph by Vernon Miller of Halo Around The Head

Discussion and conclusions:

The” Halo” around the head of the Man on the Shroud seems to be the most important bit of information revealed through the above observations. The

“Halo” around the head of the man on the Pantocrator icon is reported already by Whanger & Whanger (1998). They measured the diameter of the circle on the 1:1 photo of the Pantocrator icon and reported it to be 17 and 5/8 inches (=44.8 cm) and noted it was slightly off center. Our measurements of the “halo” on the Shroud photos vary from 51 to 57 cm, which is not far from the size of the “Halo” on the Pantocrator icon.

The Whangers (1998) displayed several times the “Halo” of the Shroud in their book: in Fig. 2 of page 57, p. 73 upper photo, and the top left photo of p. 115 but without explanation. Using their Image Overlay Technique, the Whangers compared the image of the Man of the Shroud (“Mandyllion” or “Mandyllion/Shroud” in their text) and the Pantocrator icon. They found 250 points of congruence between the face of the Man in the two items. A court in the USA, considers two photos with 40-60 points of congruence as displaying the same person. If these criteria were used, it would appear that the two images are tightly linked.

Our findings on 2nd generation photographs of Enrie show the Whangers’ Halo. The “Halo” appears to confirm that the Mandyllion, source of the 6th century icon of the Pantocrater (cf. Whanger & Whanger 1998: p.13-22), originated in Edessa and, saved in the library of the St. Catherine Monastery in the Sinai Desert, displays the same person. The Shroud of Turin folded by eight (doubled in four) and known also as “Tetradiplon” was available to the artist who created the icon of the Pantocrater (cf. Whanger & Whanger 1998). We assume, that the reason for the circular area around the head on the Shroud being dis-colored in a different way than the rest of the Shroud is, because of the different aging of the fibers of that area. This area was exposed to diffused light for a much longer time than the rest of the Shroud. The “Halo” has become an important

component in the Christian art according to Hardon's (1999) dictionary: "In Christian art a glow of light or ornamented circle is surrounding the head of Christ or one of the saints. It symbolizes holiness, the light of grace, and glory. (Etym. Latin halos; from Greek halos, a round threshing floor; disk; halo.)". Langmuir (2000) refers to the Halo as following: "There is one biblical metaphor which largely eluded early Christian artists: Christ as the Light of the World, the LUX MUNDI. (Luke 2:32 and John 8:12). They hinted at it; they identified Christ with pagan sun gods; they pictured him with a golden Halo, or clothed in the radiance and glitter of gold mosaic." The comparison of the Pantocrater icon and the image on the Shroud linen makes them synchronous and connected by the Halo in each. It is known that the Pantocrator icon was given to the St. Catherine Monastery around 550 C.E. Because 550 C.E. is earlier than indicated by carbon 14 dating, the appearance of the Halo in this earlier work, confirms that there was some error in the procedure of the carbon 14 dating.

(In February of 2009 Tom D'Muhala observed in the ultraviolet photographs of Vernon Miller of 1978 also the Halo around the head).

Acknowledgements:

We thank Walter Spierings and Walter Bliet of the Dutch Holographic Laboratory, Eindhoven, the Netherlands for their photographic assistance. Thanks are due to Prof. Peter Raven, Dr. Anthony Brach, and Mrs. Valerie Whitworth for their help in the preparation of the manuscript.

References:

Danin, A. 2006. The nature of thorny plants, the images of which are observed on the Shroud of Turin. CSST Newsletter 10 (2): 1-4.

Danin, A. 2008. Botany of the Shroud of Turin, an addition concerning new information after the 1999 report. CSST Newsletter Insert 12 (3): 1-4.

Danin, A. & Guerra, H. 2008. L'uomo della Sindone. Un botanico ebreo identifica immagini di piante della Terra Santa sulla Sacra Sindone. Edizioni ART, Rome, 88 pp.

Danin, A., Whanger, A.D., Baruch, U., & Whanger, M. 1999. Flora of the Shroud of Turin. Missouri Botanical Garden Press. 52 pp.

Langmuir, E. 2000. The Image of Christ. In: Catalogue of the exhibition "seeing salvation", the National Gallery in London.

Hardon, J.A. 1999. Modern Catholic Dictionary, Inter Mirifica.

Whanger, M.W. and Whanger, A.D. 1998. The Shroud of Turin, an Adventure of Discovery. Franklin, Tennessee, Providence House Publishers. 144 pp.