

The Shroud of Turin: A Cumulative Case for Authenticity

Peter S. Williams

The Shroud of Turin is an ancient linen sheet¹, approximately 4.36 metres long by 1.10 metres wide (which corresponds to a standard measurement of 8 x 2 cubits in use in first century Palestine), and which bears the as yet scientifically unexplained image – front and back - of a man who died from crucifixion. The shroud is thought by many people to be the burial cloth in which Joseph of Arimathea and Nicodemus draped the body of Jesus before they laid him in the tomb.²

Dr. Kenneth E. Stevenson and Dr. Gary R. Habermas report that ‘The Roman Catholic Church. . . has never claimed that the Shroud is genuine.’³ Indeed, some medieval bishops were sure that the Shroud was a painting; but a painting is one thing that scientists who have studied the Shroud are now sure it is not.⁴ In fact, it is true to say that: ‘Now. . . some scientists accept the Shroud’s authenticity more readily than medieval Christians did.’⁵ This is because, as Stevenson, who served as official spokesperson for the Shroud of Turin Scientific Research Team, writes: ‘The Shroud of Turin was an unexceptional relic until people began to examine it with modern scientific instruments.’⁶

Scientific Examination of the Shroud

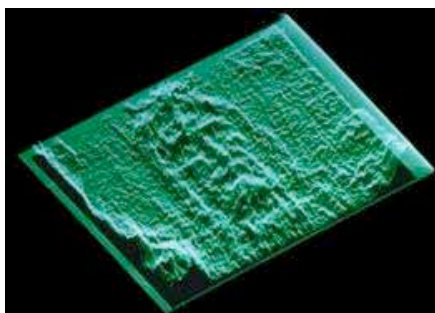


Scientific examination of the Shroud began in 1898, when it was first photographed and the image was found to be a photographic negative – it’s light and dark values were reversed when it was ‘printed’ on a piece of film. The resulting image was far more life-like than the faint original.

(Above: negative shroud image on the left, positive image revealed in photographic negative on right).

Then, in the 1970’s, microscopic examination of the cloth failed to find anything an artist would have used to paint the image.

In 1976, a NASA image analyser connected to a computer discovered that the Shroud image contained ‘three dimensional’ information: ‘a wholly astounding and unexpected discovery, and one which still has no convincing explanation.’⁷



(Left: 1970’s 3D image made using NASA image analyser. Above: Modern 3D computer image.)

The Shroud is perhaps the most intensely investigated artefact in history, and has come under the scrutiny of a diverse group of scholars and researchers including: historians, archaeologists, chemists, physicists, botanists, engineers, doctors, forensic pathologists and experts in painting, photography, textiles, as well as philosophy, theology and apologetics.

Hasn't carbon dating proven that the Shroud of Turin is Medieval?



In 1988 the Turin Shroud was carbon dated, and the results published in *Nature*:

‘The results of radiocarbon measurements. . . yield a calibrated calendar age range with at least 95% confidence for the linen of the Shroud of AD 1260-1390 (rounded down/up to nearest 10 years). These results therefore provide conclusive evidence that the linen of the Shroud of Turin is mediaeval.’

Scientists compared those who still thought the Shroud was authentic to flat-earthers.

While a headline in the New York Times read: ‘Test Shows Shroud of Turin to be a Fraud’, this conclusion does not necessarily follow. The evidence indicates that the Shroud is a genuine burial cloth, a cloth that once wrapped a dead (Jewish) male who died by crucifixion. That is, the image on the Shroud does not appear to be an *artistic* fraud (whether by painting or photography). If the Shroud is mediaeval, it must therefore have once wrapped the body of a *mediaeval* dead Jewish man who died by crucifixion! However, the improbable correspondence between the sufferings of the Man in the Shroud and the unusual sufferings of Jesus as reported by the Gospels would indicate that the Shroud is a *non-artistic fraud* produced by the beating, scourging, crowning with thorns, crucifixion and stabbing to death of a mediaeval Jewish man, a murder carried out in such a way as to purposefully reproduce the sufferings of Christ as described in the gospels! Such a scenario is perhaps in itself so unlikely as to cast some doubt upon the mediaeval date produced by the 1988 carbon dating.

The evidence of the carbon dating test is only one piece of evidence among many that must be taken into account when attempting to determine the antiquity of the Shroud:

Touted far and wide as proof that the Shroud is a hoax, this late addition to Shroud investigation is not all what it is cracked up to be. In short, the C-14 data flies in the face of all the other data and. . . most scientists will readily admit that C-14 is not infallible. . . On the other hand, multiple fields of research indicate scientific evidence, including pollen, coins, mites, and textile data, to support the Shroud’s antiquity and its Middle Eastern origin.⁸

- Gilbert Raes, a professor at the Ghent Institute of Textile Technology in Belgium, concludes from an examination of threads from the Shroud that the weave of the linen was of a type common in the Middle East in the first century AD.⁹

- ❑ Swedish textile expert Dr Mechthild Flury-Lemberg discovered a sewing seam at the back of the Shroud during a recent restoration project: ‘There have been attempts to date the shroud from looking at the age of the material,’ says Flury-Lembereg, ‘but the style of sewing is the biggest clue. It belongs firmly to a style seen in the first century AD or before.’¹⁰
- ❑ ‘In 1982, Dr. Joseph Kohlbeck, Resident Scientist at the Hercules Aerospace Centre in Utah, with assistance from Dr. Richard Levi-Setti of the Enrico Fermi Institute at the University of Chicago, compared dirt from the Shroud to travertine aragonite limestone found in ancient Jewish tombs in Israel. The particles of dirt on the Shroud matched limestone found in the tombs.’¹¹
- ❑ John Jackson and Eric Jumper, the physicists who discovered the ‘three-dimensional’ information contained in the Shroud, observed the faint trace of objects placed over the eyes of the Man in the Shroud, which they suggested might be coins (which would fit with first century Jewish burial customs¹²). If so, they noted that the coin was the same size as the ‘lepton’ of Pontius Pilate, which was only minted before 37 AD. Francis Filas, a professor at Loyola University in Chicago, says the images are coins, and that the coins are leptons. According to Filas, computer enhancement and analysis of the images reveals that the objects have a number of coincidences ‘fitting only a coin issued by Pontius Pilate between 2 and 32 AD.’¹³

Below Left: comparison of a lepton and the shroud, showing the astrologer’s staff, Pilate’s emblem.
 Below Right: Close-up of a Jewish bronze Pontius Pilate lepton dating from 29 -31 AD.



- ❑ Historical evidence points towards an identification of the Shroud of Turin with the so-called ‘Edessa Cloth’:

Somehow, and at sometime, a cloth, with what was believed to be the image of Jesus, turned up in Edessa. Legend tells us it was brought to King Abgar V, the ruler of Edessa, by one of Jesus’ disciples, perhaps Thaddeus. . . There may very well be a core of truth in this legend. . . We know that the cloth was hidden away. We don’t know when or why. It could well have been because of floods to which Edessa was prone, because of the threat of invasion, or because of Christian persecutions. What is not legend is that the cloth, with an image of what everyone then believed was an image of Jesus, was discovered in

the walls of the city in the sixth century. In 525 CE during repairs of the city walls, or, more likely, in 544 CE during a Persian invasion of the city, the cloth was recovered and placed in a church built especially for this sacred cloth. In 944, Emperor Romanus I sent an army to remove the Edessa Cloth and transfer it to his capitol in Constantinople. There it remained until 1204 when it disappeared during the sacking of the city by the crusaders of the Fourth Crusades. During its known history, the Edessa Cloth was variously described as a *divinely wrought* image, and an image *not made by hand*. A diptych painted in the tenth century shows a cloth with an image of Jesus being held by King Abgar V. Clearly inspired by the legendary story, it is significant to note the width of the cloth and the centrality of a facial image suggesting what may be the folded Shroud. We know that the crusaders of the Fourth Crusade looted the treasures of Constantinople in 1204 and carried away many riches and relics. There is good evidence that the Edessa Cloth was taken to Athens. Then, about 150 years later the Shroud was displayed in Europe for the first time in the small town of Lirey, France.¹⁴

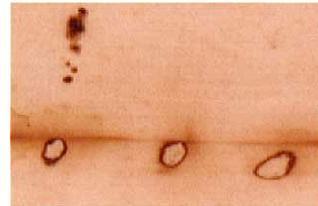


Hence, while the *documented* history of the Turin Shroud as such begins in the 14th century, an application of Occam's Razor (i.e. 'don't multiply entities beyond necessity') would suggest the economical hypothesis that the Shroud of Turin and the Edessa cloth are one and the same, with a *documented* history that can be traced back to the sixth century.

- In 1973, Swiss criminologist Max Frei, a botanist by training, identified spores from forty-nine plants in samples taken from the Shroud. While some of these spores came from Europe, thirty-three of them came from plants that grow only in Palestine, the southern steppes of Turkey, and the area of Istanbul: 'These studies have recently been confirmed by Avinoam Danin, the director of the Botanical Institute in the Hebrew University in Jerusalem.'¹⁵ Since the Shroud has never left France since its appearance in Lirey in 1357, this data suggests that the Shroud was exposed to the open air in Palestine and Turkey at some point *prior* to 1357. Indeed, these findings correlate with the history of the Shroud one would expect if it were genuine (starting in Jerusalem and ending up in Spain) and with the history obtained by its identification with the Edessa Cloth. Moreover: 'Professor Danin has identified the pollen particles. . . of three plants that are found only in Jerusalem. One of them, *gondelia turnaforte*, was present in extraordinary numbers. It's the same plant that scholars believe may have been used as the crown of thorns worn on Jesus' head.'¹⁶
- Historian Ian Wilson hypothesises that a common set of facial characteristics in artistic depictions of Jesus only became the norm in the sixth century because of the discovery of the Edessa Cloth, previously concealed in the city's walls, in 544 CE. These common characteristics (known as 'Vignon markings' after French scholar Paul Vignon who first noted a set of common

characteristics visible in many early artistic depictions of Jesus in the 1930's) all appear on the image of the Shroud, a fact suggesting once again that the Turin Shroud and the Edessa Cloth are one and the same, and that the Shroud is the common, originating source for the (thereafter) 'standard' image of Jesus. Art historians have argued that 'Medieval crucifixes. . . underwent evolutionary changes as the Christian world became increasingly aware of the crucifixion details evinced by the sindonic image. By identifying significant revisions to the crucifix and to crucifixion art, it is possible to discover the historical path taken by the Shroud as it travelled. . . from place to place.'¹⁷

- The Shroud of Turin has an L shaped series of small burn holes: 'Because there are four matched mirrored repetitions of the holes showing progressive levels of burn penetration so that each pattern has four burn marks or holes, it appears that the cloth was folded in half lengthwise and then width-wise when the burns were made.'¹⁸ However these burn holes came about (and there are a number of plausible theories, including being burnt by incense), they happened before 1516, 'because a copy of the Shroud, the Lierre Shroud painted in 1516, possibly by Albrecht Durer or Bernard van Orley, clearly shows the burn holes.'¹⁹



The Budapest National Library holds an ancient codex, commonly known as the 'Hungarian Pray Manuscript', named after György Pray (1723-1801), the scholar who made the first detailed study of it: 'Written between 1192 and 1195, the codex includes an illustration, one of five in the manuscript, showing Jesus being placed on his burial shroud, *a shroud with the identical pattern of burn holes found on the Shroud*.'²⁰ Moreover, 'The artist drew the *very unusual herringbone weave* on the shroud and a number of other graphic characteristics consistent with the Shroud.'²¹ For example: 'Jesus is shown naked with his arms modestly folded at the wrists. . . and there are no visible thumbs. (There are no thumbs visible in the images of the man of the Shroud either.) Forensic pathologists tell us that this makes sense since nails driven through the wrist would likely cause the thumbs to fold into the palms. In the drawing, there is also a clear mark on Jesus' forehead where the most prominent 3-shaped bloodstain is found on the forehead of the man of the Shroud.'²² In light of these similarities: 'There can be little question that this illustrator of the Pray Codex, far removed from France, working at a time before the sacking of Constantinople by French knights, before the time given for the Shroud by carbon 14 testing. . . knew about the Shroud.'²³



- The many points of coincidence between the 'Sudarium of Ovideo' (see below) and the Shroud of Turin also support the case for viewing the shroud as

a pre-medieval artefact, because the Sudarium has a reliable history, confirmed by pollen studies, that can be traced back until at least the seventh century AD.

The results of the 1988 carbon dating tests do not necessarily trump the combined weight of all the other dating evidence. Indeed, given the totality of available evidence, it seems reasonable to suggest that the Carbon 14 data is simply incorrect.

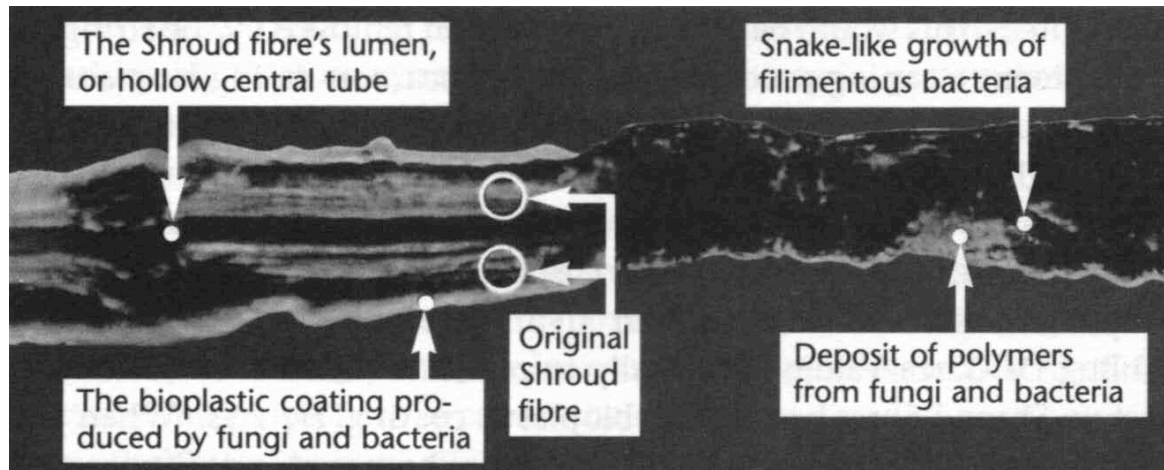
Carbon 14 Tests Skewed by Contamination

There are in fact a number of reasons for thinking that the 1988 carbon dating test results were flawed: 'there is now serious evidence that the samples cut from the Shroud and provided to the laboratories were contaminated', reports Daniel R. Porter: 'the clear evidence of substantial contamination is enough to call the carbon 14 results into question. They can no longer be thought of as definitive.'²⁴ Ian Wilson, co-author of *The Turin Shroud: Unshrouding the Mystery* says that the carbon dating process went wrong at the very beginning: 'What I found quite incredible was that when they had all the scientists there and ready to go, an argument started about where the sample would come from. This went on for some considerable time before a very bad decision was made that the cutting would come from a corner that we know was used for holding up the shroud and which would have been more contaminated than anywhere else.'²⁵

Experts 'now say the team unwittingly used cloth that had been added during a 16th century restoration'²⁶ Discussing the so-called 'patch hypothesis', M. Sue Benford and Joseph G. Marino report 'new evidence demonstrating that it is highly probable that the C-14 samples were not characteristic of the main Shroud and were spurious.'²⁷ The 'patch hypothesis' suggests that 16th Century weavers using the technique of 'French' or 'invisible weaving', wherein individual frayed threads are woven together by hand in a manner invisible to the naked eye. Arguments supporting this hypothesis include calculations performed by Beta Analytic, the world's largest radiocarbon dating service, showing 'that the observed proportion of medieval material in relationship to assumed 1st Century material, matches the findings of the AMS labs in 1988.'²⁸

Following up Ian Wilson's observation that the linen of the Shroud 'although ivory-colored with age, was still surprisingly clean-looking even to the extent of a Damascus-like surface sheen'²⁹, Leoncio A. Garza-Valdes MD, Adjunct Professor of Microbiology, and Dr Stephen J. Mattingly (Professor of Microbiology, University of Arizona and President of the Texas branch of the American Society for Microbiology) have shown that the fibres on the Shroud are coated with a 'bioplastic' coating: 'it is a polyester produced by bacteria, as a reserve polymer, and deposited on the surface of ancient artefacts. The Shroud of Turin is a naturally plasticized textile. The plastic (reserve polymer) deposited inside the bacteria has a well-known structure. It is a 3-hydroxyalkanoic acid. . .'³⁰ Dr. Garza first came across such a biogenic varnishes on an ancient Mayan carved jade called the Itzamna Tun, which had been labled a fake by New York art connoisseurs: 'Carbon dating failed to come close to the carved stone's true age, and Dr. Garza identified masses of varnish that prevented accurate dating, thus upholding the jade's authenticity. The varnishes, he learned, are a plastic-like coating that is a by-product of bacteria and fungi. In the Itzamna Tun's case, this bioplastic coating threw off the carbon date of ancient blood on the artefact by about 600 years.'³¹ More recently, comparative testing of the bones and wrappings

of an Egyptian mummy from the British Museum has shown that the presence of this 'bioplastic' coating can lead to a 1500 year discrepancy in dating.³² This coating cannot be removed using the conventional cleaning methods as used by the 1988 carbon-dating labs. Hence the 1988 carbon dating of the Shroud included these contaminants as well as the cellulose of the fibres.



Above: Microphotograph of microtomed shroud fibril by Dr. Garza-Valdez showing typical deposition of bioplastic coating and other fungal and bacterial accretion (from *The Blood and the Shroud* by Ian Wilson, (New York: The Free Press, 1998), p. 225).

In sum: There are a number of reasons for rejecting the accuracy of the 1988 C-14 test results and supposing that the true data must be earlier, as well as a strong, positive, cumulative case for accepting a first century date for the Shroud.

What has the Sudarium of Oviedo got to do with the Shroud of Turin?



The 'Saudarium', a piece of bloodstained cloth measuring approximately 84 x 53 cm, is a relic held by the cathedral in the town of Oviedo in northern Spain. Tradition and scientific study both suggest that this face cloth was used to temporarily cover the head of Jesus during and after his crucifixion (cf. John 20:6-7) in accordance with Jewish custom.

The history of the Sudarium is well documented. The sudarium was in Palestine until shortly before 614 AD (when the king of Persia attacked Jerusalem), and its journey to Oviedo can be traced through Alexandria, across the north of Africa, into Spain at Carthagenia (along with people fleeing the Persians), to Seville, Toledo and finally to Oviedo (in order to avoid a Muslim invasion of the Iberian peninsula at the beginning of the eight century). This reported historical journey has been confirmed by an analysis of pollen samples taken from the cloth that found species typical of Oviedo, Toledo, North Africa and Jerusalem.

The Sudarium has been extensively studied by the Investigation Team of the Spanish Centre for Sidonology. The stains on the Sudarium, deposited by a man initially in an upright position with his head tilted seventy degrees forward and twenty degrees to the right, consist of one part blood and six parts fluid from a pleural oedema. This liquid would collect in the lungs of a crucified person who died of

asphyxiation, and would come out through the nostrils if the body suffered subsequent jolting: 'the only position compatible with the formation of the stains on the Oviedo cloth is both arms outstretched above the head and the feet in such a position as to make breathing very difficult, i.e. a position totally compatible with crucifixion. We can say that the man was wounded first (blood on the head, shoulders and back) and then "crucified".'³³ This confirms that: 'The man was dead. The mechanism that formed the stains is incompatible with any kind of breathing movement.'³⁴

There are in fact a series of superimposed stains, showing that one stain had already dried when the next was made. Dr Jose Villalain has used a specially modelled head to reconstruct this process of progressive staining. Investigation shows that the head cloth was initially not wrapped entirely around the head, because the right cheek was almost touching the right shoulder, suggesting that the sudarium was put in place while the body was still on the cross, and at this point the first oedema stain was deposited. A second stain was made about an hour later, presumably when the body was taken down from the cross. A third stain was made about forty-five minutes later, presumably as the body was prepared for burial. The marks of fingers (although *not* fingerprints) that held the cloth to the nose are also visible (the fingers in question presumably belong to Joseph of Arimathea and/or Nicodemus, cf. John 19:38-40):

The body was. . . placed on the ground on its right side, with the arms in the same position, and the head still bent 20 degrees to the right, and at 115 degrees from the vertical position. The forehead was placed on a hard surface, and the body was left in this position for approximately one more hour. The body was then moved, while somebody's left hand in various positions tried to stem the flow of liquid from the nose and mouth, pressing strongly against them. This movement could have taken about five minutes. The cloth was folded over itself all this time. The cloth was then straightened out and wrapped all round the head, like a hood, held on again by sharp objects. This allowed part of the cloth, folded like a cone, to fall over the back. With the head thus covered, the corpse was held up (partly) by a left fist. The cloth was then moved sideways over the face in this position. Thus, once the obstacle (which could have been the hair matted with blood or the head bent towards the right) had been removed, the cloth covered the entire head and the corpse was moved for the last time, face down on a closed left fist. This movement produced the large triangular stain, on whose surface the finger shaped stains can be seen. Like the previous movement, this one could have taken five minutes at most. Finally, on reaching the destination, the body was placed face up and for unknown reasons, the cloth was taken off the head. Possibly myrrh and aloes were then sprinkled over the cloth.³⁵

This data is consistent with the burial of a crucified man, and with the burial of Jesus as described in the gospels.

There are a number of reasons, apart from tradition, for tying the Sudarium of Oviedo to the Shroud of Turin:

- Like the blood on the Turin Shroud, the blood on the sudarium belongs to the rare AB group
- The length of the nose through which the oedema fluid came onto the sudarium is exactly the same length as the nose on the Turin Shroud

- If the face of the image of the Shroud is superimposed over the stains on the sudarium, there is an exact correspondence of facial and neck stains (there are seventy points of coincidence with the front image on the Shroud and fifty points of coincidence with the rear side image – 120 points of coincidence)

In short: ‘the blood types match, the wound marks match, the facial features and measurements coincide. . .’³⁶ These coincidences indicate that, in all likelihood, the man whose head was wrapped by the Sudarium of Oviedo and the man whose corpse was wrapped in the Shroud of Turin were one and the same person.

Since the Sudarium of Oviedo can be traced back to Jerusalem before 614 AD, this fact supports the case for the pre-medieval antiquity of the Shroud of Turin. As Mark Guscin, a member of the Investigation Team of the Spanish Centre for Sidonology, writes:

There are many points of coincidence between all these points and the Shroud of Turin - the blood group, the way the corpse was tortured and died, and the macroscopic overlay of the stains on each cloth. This is especially notable in that the blood on the Sudarium, shed in life as opposed to postmortem, corresponds exactly in blood group, blood type and surface area to those stains on the Shroud on the nape of the neck. If it is clear that the two cloths must have covered the same corpse, and this conclusion is inevitable from all the studies carried out up to date, and if the history of the Sudarium can be trustworthily extended back beyond the fourteenth century, which is often referred to as the Shroud’s first documented historical appearance, then this would take the Shroud back to at least the earliest dates of the Sudarium’s known history. The ark of relics and the Sudarium have without any doubt at all been in Spain since the beginning of the seventh century, and the history recorded in various manuscripts from various times and geographical areas take it all the way back to Jerusalem in the first century. The importance of this for Shroud history cannot be overstressed.³⁷

Isn’t the Shroud an Artistic Fake?

Working on the assumption that the Shroud is medieval (an assumption undermined and contradicted by the evidence presented above), sceptics have concluded that the Shroud must be a medieval artistic fake. However, in order to fake the Shroud of Turin by hand, a medieval artist would have needed to meet a series of exacting requirements, including the following:

- Use a 1st century burial cloth from Jerusalem, or obtain and ‘salt’ a suitable cloth (with the right 1st century weave) with pollen from just the right flowers
- Paint an anatomically correct human using a degree of medical knowledge otherwise unknown in the fourteenth century
- Paint the body nude, against the conventions of the day
- Paint the body in a photographically negative manner, centuries before the invention of photography
- Paint blood flows in perfect forensic agreement with death by crucifixion
- Do so using rare blood from the rare AB group with a large amount of bilirubin in it

- Plot scourge marks consistent under forensic examination with two scourgers of different height
- Accurately illustrate the nails going through the wrists rather than the hands, as in all other conventional medieval portraits of the crucifixion
- Incorporate dirt consistent with the calcium carbonate soil of the environs around Jerusalem
- Somehow incorporate ‘terrain-map’ data that would only be re-discovered in the twentieth century using computer technology

As Kenneth Stevens and Gary R. Habermas point out:

The artist would have had to have been one of the greatest who ever lived, a man capable of painting an image with the finest detail in a *negative* form. He would also have to know these medical facts many centuries before they were described by anatomists and pathologists: a severe chest beating can cause the pleural cavity to fill with a bloody fluid; this fluid would separate into two layers of heavy blood and lighter serum; a puncture through the fifth and sixth ribs would drain this cavity; a crucified man’s abdomen would swell; the weight of the body can be supported on a cross if the arms are nailed through the space of Destot in the wrist; and this nail would likely sever the median nerve, causing the thumbs to cling tightly to the hand. This hypothetical artist would also have had to be daring enough to depart from Christian tradition in art by depicting Jesus nude, nailed through his wrists, wearing a cap of thorns covering the entire head, bearing approximately 120 scourge wounds, and wearing his hair in a pigtail. Finally, he would have had access to a Roman *flagrum* and *lancia* so that he could draw wounds that would exactly correspond to these archaeological artefacts.³⁸

That a medieval forger *could* meet all of these requirements, let alone *would* meet them, seems extremely unlikely: ‘The technical demands of such a forgery appear far beyond the capabilities of a medieval artist. . .’³⁹ And if these demands are too stringent for a medieval artist, they are certainly too stringent for a *pre-medieval* artist.

Meticulous testing by STURP in the 1970’s ‘failed to find any evidence of pigment, powder, dyes, acids or any known colorant or medium to apply it.’⁴⁰ The image on the Shroud is composed of yellowed linen fibrils: ‘The image is on the surface of the fibrils only (to a depth of microns) and in no way soaks through the fibres. This would eliminate any pigment medium applied as a fluid; a fluid would have penetrated and travelled along the fibres, and its presence would have been detected.’⁴¹ Computer analysis by the Jet Propulsion Laboratory ‘found no directionality in the image areas other than the vertical and horizontal patterns of the threads themselves. That meant there was no sign of brush strokes, finger strokes or other methods of artificial application.’⁴² In short, says Dr. Kenneth Stevens, ‘there is no evidence of a forger’s methods, mediums, or pigments’⁴³ on the Shroud.

Professor Nicholas Allen, featured in the recent PBS documentary on the Shroud⁴⁴, thinks that the image is a medieval photograph. Such a theory certainly avoids some (not all) of the problems noted above, and Allen has proven that the raw materials to produce a photograph existed in medieval times, and that those raw materials can be used with modern knowledge to create an image on cloth that looks very much like the image on the Shroud. However, our hypothetical medieval

photographer would have needed to create a light sensitive emulsion, coat it onto a linen cloth and exposed this medieval 'film' using a room sized camera obscura and a dead body hanging for over a week's worth of exposure time in front of a crystal lens as subject matter (and this in a cold climate to prevent the body decaying too quickly). If Allen's theory were correct, the Shroud would be an astonishing work of art, predating the documented invention of photography (in 1818) by 500 years. Indeed, it would be astonishing – i.e. an unlikely occurrence – for a medieval artist to have correctly combined a medieval knowledge of lenses and camera obscura's 'with the sophisticated chemical and physical requirements of photographic science and brought them all together to make the process work.'⁴⁵ Allen's 'reproduction' of the shroud image is performed *with the benefit of hindsight*: 'if we accept the argument that the mere existence of certain raw materials is reason enough to believe someone actually used them to invent a technology that was still 500 years in the future, we should start searching archaeological sites around the world for the remains of medieval cellular phones. . .'⁴⁶

Moreover, photographer Barrie M. Schwartz argues that Allen's photographic process results in an image that is incorrectly illuminated when compared to the Shroud image, and totally fails to reproduce the 'terrain map' properties of the Shroud:

since the densities on a photographic negative are not dependent on the distance between subject and film [as with the shroud image], there is no way that this density information can be incorporated into an image photographically. Consequently, when subjected to VP-8 analysis, Allen's results do not yield a proper dimensional relief of a human form like that on the Shroud. This is reason enough to disqualify photography as a possible explanation for the image on the Shroud and is supported by research from a number of independent sources.⁴⁷

Daniel Porter notes that:

The peer-reviewed journal of the Institute of Physics in London, on April 14, 2004, announced that Giulio Fanti and Roberto Maggiolo, both of the University of Padua, Italy, have found a second face image on the back [reverse side] of the Shroud of Turin. This image corresponds to the front image but is much fainter. And this image, like the front image, is completely superficial to the topmost crown fibres of the cloth. Because both images are superficial (meaning there is no image or colorant of any kind between the two image layers on the extreme outer faces of the cloth) and because the images are in registry with each other, it virtually eliminates all so far proposed fakery proposals. The images are not paintings and not some form of medieval proto-photography.⁴⁸

According to Fanti: 'It is extremely difficult to make a fake with these features.'⁴⁹ It seems that the Shroud is not a work of art, medieval or otherwise.

Was the Man in the Shroud Jesus?

‘The Quest for the Shroud can lead only to the quest for Jesus’ – John A. T. Robinson

If the Shroud of Turin is indeed a genuine, first century burial garment, which once held the corpse of a real man who was crucified by the Romans (as the evidence considered thus far suggests), we are faced with two alternatives. Either the man buried in the Shroud was Jesus, or he was some other victim of crucifixion. The evidence indicates with a high degree of probability that the man buried in the Shroud was not only a Jewish man, but the specific Jewish man whom Christians know as Jesus Christ.

If the man in the Shroud was not a Jew, then he cannot have been Jesus. However, Kenneth E. Stevens and Gary R. Habermas explain that:

Experts agree that facial features identify the man buried in the Shroud as a Caucasian. Carlton Coon, a leading ethnologist, says he has the physical features of a Jew or Arab. The man’s hairstyle, characterized by a beard and long hair parted in the middle, further identifies him as a Jew. In addition, the hair in back is cut in the form of a pigtail, a hairstyle very common in first-century Jewish men. It is thus probable that this crucified person was a Jew.⁵⁰

In 1999 Giulio Fanti, Emanuela Marinelli and Alessandro Cagnazzo, of the Department of Mechanical Engineering at the University of Padua, presented a paper on ‘Computerized anthropomorphic analysis of the Man of the Turin Shroud’.⁵¹ Among the amazing results of this study were that the Man in the Shroud had a tibia length of 42.7 cm, and that he was 174 cm high (plus or minus 4 cm)! They conclude: ‘from a comparison among the anthropometric indices characteristic of different human races and those of the Man of the Shroud [that] the Semitic race is the closest one to the Man’s features.’⁵² Since the man in the Shroud was Semitic, he *could* have been Jesus. Was he?

The correlation between the wounds inflicted upon the Jewish man buried in the shroud and the wounds the New Testament reports as having been inflicted upon Jesus is remarkable: ‘comparison of the gospel accounts with the sufferings and burial of the man in the Shroud points to the strong likelihood that the man is Jesus Christ. The evidence is consistent at every point. The man of the Shroud suffered, died, and was buried the way the gospels say Jesus was.’⁵³ These similarities don’t fit any other known victim of crucifixion, except Jesus.

The sufferings, crucifixion and burial of Jesus, as described by the gospels, were different from the ordinary ways the Romans crucified criminals and the Jews buried their dead: ‘Jesus’ case was irregular. He was scourged, crowned with thorns, nailed to his cross [rather than tied], stabbed in the side (instead of his legs being broken), buried well [rather than thrown to the dogs] but incompletely, and his body left the cloth before it decomposed.’⁵⁴ Because we know quite a lot about Roman and Jewish customs in these matters, we can estimate the probability of *two* men being treated, crucified and buried in this way, and hence the probability that the Jewish man in the Shroud was Jesus.

Kenneth E. Stevenson and Gary R. Habermas note just eight irregularities present in both the New Testament and the Turin Shroud (there are others⁵⁵) and make conservative estimates of the probability that these irregularities would occur in other crucifixion victims:

- 1) Both exhibit a severe beating and scourging (Matthew 27:26-30; Mark 15:15-19; Luke 22:63-64; John 19:1-3). (1 in 2 probability that a crucified man other than Jesus was beaten in this way)
- 2) Both had a crown of thorns (Matthew 27:29; Mark 15:17-20; John 19:2) – ‘Crowning indicates majesty and a crown of thorns would, of course, mock that proclaimed majesty. Jesus was crowned with thorns for this very reason. . . the man buried in the Shroud was also pierced through the scalp. If the man in the Shroud is not Jesus, what are the chances that this man, probably a criminal or slave, would have been crowned with thorns?’⁵⁶ (1 in 400 probability)
- 3) Many crucifixion victims were tied to their crosses with ropes, but both Jesus and the man in the Shroud were nailed there (Luke 24:39; John 20:20, 25-27).⁵⁷ (1 in 2 probability)
- 4) Neither Jesus nor the man in the Shroud had their legs broken, the normal procedure for ensuring death (John 19:31-32). (1 in 3 probability)
- 5) ‘To ensure that Jesus was dead, a soldier stabbed him in the side, and blood and water flowed from the wound (John 19:33-34). The same thing happened to the man in the Shroud.’ (The wound in the side of the Man in the Shroud exactly corresponds to the size of the tip of the *lancia*, a Roman spear with a long, leaf-shaped head.) (1 in 27 probability)
- 6) Few victims of crucifixion were given individual burials in a fine linen Shroud (Matthew 27:57-60; Mark 15:43-46; Luke 23:50-55; John 19:38-42). (1 in 8 probability)
- 7) Both Jesus and the man in the Shroud were buried hastily (Mark 16:1; Luke 23:55-24:1). (1 in 8 probability)
- 8) Neither man decomposed in their Shroud. (1 in 10 probability)

Despite using ‘deliberately conservative’⁵⁸ estimates of probability that ‘are most likely too low’⁵⁹, Stevenson and Habermas observe that: ‘multiplying these probabilities, we have 1 chance in 82,944,000 that the man buried in the Shroud is not Jesus.’⁶⁰ To get a handle on just how improbable it is that the man buried in the Shroud was not Jesus, 82,944,000 dollar bills laid end to end would stretch from New York to San Francisco three times over. Supposing that just one of these bills is marked and a blind-folded person is given just one chance to pick it up, the odds that he will succeed are 1 chance in 82,944,000: ‘These are the odds that the man buried in the Shroud is someone other than Jesus Christ. . . Thus we conclude that, according to high probability, the man buried in the Shroud is none other than Jesus.’⁶¹

Photographer Barrie Schwartz, one of the Jewish members of the Shroud of Turin Research Project concludes:

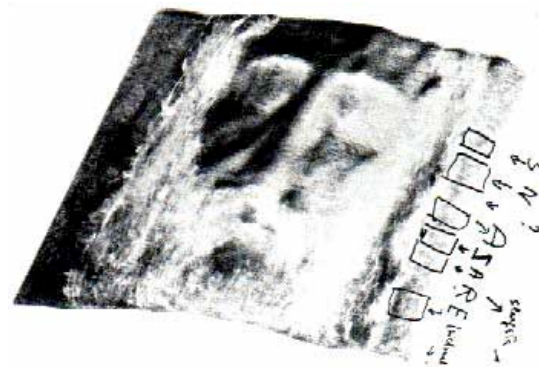
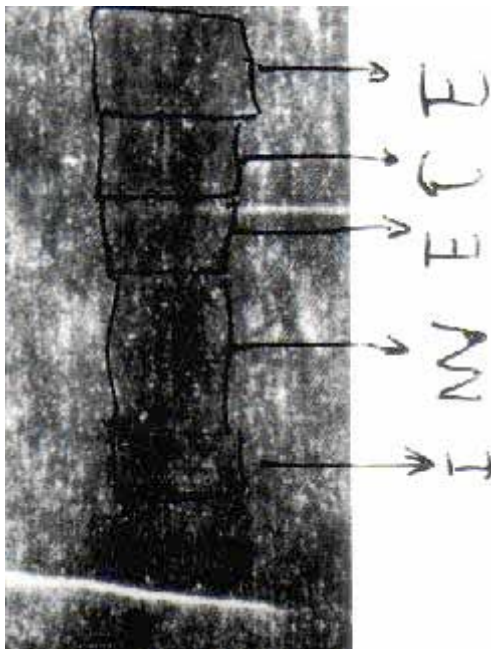
The image on the Shroud matches the account of the crucifixion in the New Testament down to the ‘nth degree. Evidence is mounting that the Gospels are quite accurate. This may cause consternation among my family and other Jewish people, but in my own mind, the Shroud is the piece of cloth which wrapped Jesus after he was crucified.’⁶²

In the late 1990’s the Paris based organization CIERT (Centre International d’Etudes sur le Linceul de Turin, The International centre for studies on the Shroud of Turin) conducted studies at the most advanced institute in Europe for image

analysis by computer: the Institute Optique d'Orsay. 'For years, people had been asking why below and to the sides of the chin there are three clear and regular lines where no imprint is present'⁶³, says Swiss archaeologist and Shroud expert Dr. Maria Grazia Siliato, who represents CIERT in Italy: 'All official photographs of the Shroud were divided into tens of thousands of squares which were then given a corresponding optical density and transferred into a visualisation programme. By means of an extremely advanced programme, some letters gradually began to emerge, in Latin and in Greek: under the chin, we found written "Jesus" and on one side, "Nazarene".'⁶⁴ Dr. Siliato suggests that: 'The "exactor mortis" the centurion charged with ensuring the execution of the condemned, had drawn strips of "glue" onto the cloth on which he would write the name of the deceased with a red liquid. Where these strips were drawn, the cloth was impermeable and would not, therefore, be subject to the chemical process [whatever it was] which subsequently formed the imprint.'⁶⁵



Working from photographs of the Shroud, Father Aldo Marastoni, Professor of Ancient Literature at the Catholic University of Milan, confirm the presence of what he says is 'unquestionably the remains of the word: NAZARENUS.'⁶⁶ He also detects the words 'IN NECE' ('to death'), and what *may* be the remains of the words 'TIBERIUS CAESAR': 'the inscription NAZARENUS may constitute proof of an historical order, hitherto lacking, of the identity of the one who is called "the man of the Shroud", and who would be Jesus of Nazareth,' says Professor Marastoni, 'whilst the words TIBERIUS CAESAR would corroborate this identification.'⁶⁷



(Photo's, Piero Ugolotti)

Although this palaeographic evidence may rest upon a certain amount of educated guess-work, and could stand to be confirmed by direct examination of the Shroud, when

added to the statistical evidence from the correlation between the Shroud and the New Testament records of Jesus' sufferings, as well as the correlation between the Shroud and the Sudarium of Oviedo, it seems to me that we have a strong cumulative argument for the authenticity of the Shroud of Turin.

What Implications Are There if the Shroud and the Sudarium are Genuine?

Given that the Turin Shroud is indeed Jesus' burial cloth we can say that (together with the Sudarium of Oviedo) it constitutes astonishing archaeological evidence that verifies a number of Christian truth claims:

- The Shroud of Turin and the Sudarium of Oviedo confirm the New Testament account of Jesus' Passion: After his trial, Jesus suffered a *severe beating and scourging* (Matthew 27:26-30; Mark 15:15-19; Luke 22:63-64; John 19:1-3), *had a crown of thorns thrust upon his head* (Matthew 27:29; Mark 15:17-20; John 19:2), and was *made to carry his cross-beam*⁶⁸ – a task that was re-assigned to someone else after Jesus *fell to his knees* (Matthew 27:32; Mark 15:21; Luke 23:26).⁶⁹ Jesus was then *killed*⁷⁰ by being *nailed* to a cross (Luke 24:39; John 20:20, 25-27). He *did not have his legs broken* in line with normal procedure (John 19:31-32), but was *stabbed in the side by a roman soldier* - and *blood and water flowed from the wound* (John 19:33-34).⁷¹ He was given a *hasty* (Mark 16:1; Luke 23:55-24:1) *burial in a fine linen Shroud* (Matthew 27:57-60; Mark 15:43-46; Luke 23:50-55; John 19:38-42).
- *Jesus' corpse occupied a shroud for only a short period of time* (John 20:3-9). As Gary R. Habermas writes:

the body wrapped in the shroud apparently did not decompose. . . the absence of bodily decomposition means that the body was not in contact with the cloth for a prolonged period of time. In a Middle Eastern environment in Jesus' time, a significant amount of bodily decomposition would occur even after four days (see Jn. 11:39). While an exact time period cannot be assigned to the contact between the body and the cloth, it was not long enough to cause any such advanced decomposition.⁷²

- *After a short term of entombment in a shroud, Jesus was resurrected (leaving his shroud behind)* (Matthew 28; Mark 16; Luke 24; John 20 & 21; 1 Corinthians 15:3-8, etc). Neither the Shroud of Turin nor the Sudarium of Oviedo can *prove* that Jesus rose from the dead. However, it does provide evidence pointing towards this conclusion. Because the Shroud and the Sudarium both confirm that Jesus died, they constitute archaeological evidence against any so-called 'swoon' explanation of the emptiness of Jesus' previously occupied tomb⁷³ and the many New Testament accounts and reports of (over five hundred) people meeting Jesus alive after he had been crucified and entombed. That is, explanations of this data that hypothesize Jesus did *not* die, as the New Testament affirms, are flatly contradicted by the medical evidence presented by these two archaeological gems (such explanations are in any case generally dismissed by scholars today – but such confirmatory evidence is nevertheless welcome).

Moreover, Gary R. Habermas observes that: 'the body does not appear to have been moved by conventional means. . . due to the condition of the bloodstains, which are anatomically correct, including precisely outlined borders, with blood clots intact. If the cloth had been pulled away from the body, the blood clots would have smeared or broken.'⁷⁴ How do you remove a

corpse from a shroud that it has inhabited for several days *without smearing or breaking the blood clots that fuse it to that shroud*? The resurrection hypothesis posits an adequate historical cause for this data. As Phillip H. Wiebe, Professor of Philosophy at Trinity Western University, argues:

A problem now arises in connection with the tiny fibrils comprising the threads of the blood-impregnated cloth, for these are not torn. It is reasonable to suppose that the blood that was in contact with the cloth dried, thereby causing the body to stick to the cloth. Three possibilities present themselves: (a) the body rotted, (b) the body was moved, and (c) the body “disappeared.”. . . The first two possibilities are improbable. . . [a] decomposing body would surely have left some evidence of rot on the cloth lying under the body. Since no such rot on the cloth bearing the dorsal image exists, the first possibility is rendered implausible. The second possibility is that the body was removed from the Shroud. . . However, the act of removing the body, some parts of which would be stuck to the cloth by dried blood, would tear the blood-impregnated fibrils. The absence of torn fibrils suggests that the body was not taken out of the Shroud.⁷⁵

And yet the body is gone.

Recommended Resources

Gary R. Habermas, ‘Historical Epistemology, Jesus’ Resurrection and the Shroud of Turin’ @ www.shroud.com/pdfs/habermas.pdf

Secrets of the Dead: Shroud of Christ? @ www.pbs.org/wnet/secrets/case_shroudchrist/

Shroud of Turin @ www.shroudstory.com/

The Shroud of Turin @ www.shroud.com/

The Holy Shroud @ <http://sindone.torino.chiesacattolica.it/en/welcome.htm>

[Leoncio A. Garza-Valdes, *The DNA of God?*, \(Hodder & Stoughton, 1998\)](#)

[Kenneth E. Stevenson, *Image of the Risen Christ*, \(Frontier Research Publications, 1999\)](#)

[Kenneth E. Stevenson & Gary R. Habermas, *The Shroud and the Controversy*, \(Thomas Nelson, 1990\)](#)

[Ian Wilson & Barrie Schwartz, *The Turin Shroud: Unshrouding the Mystery*, \(Michael O’Mara Books, 2000\)](#)

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- 1 The cotton is *Gossypium herbaceum*, a Middle Eastern species not found in Europe.
- 2 According to the on-line poll @ www.geocities.com/player2000gi/turin.htm, 81% of people voting think that the shroud is genuine.
- 3 Kenneth E. Stevenson & Gary R. Habermas, *Verdict on the Shroud*, (London: Robert Hale, 1981), p. 14.
- 4 cf. www.shroudstory.com/notofhand.htm
- 5 *ibid*, p. 14.
- 6 Kenneth E. Stevenson, *Image of the Risen Christ*, (Frontier Research Publications, 1999), p. 22.
- 7 *ibid*.
- 8 Stevenson, *op cit*, p. 91.
- 9 *ibid*, p. 43.
- 10 Dr Mechthild Flury-Lemberg, quoted by David Edwards, 'The Proof That This Is The Face Of Christ: Fresh Clue Shows Turin Shroud May Be Genuine', *Mirror.co.uk*, April 3, 3004
- 11 www.shroudstory.com/fabric.htm
- 12 Coins have been placed over the eyes of deceased persons to hold eyelids shut since antiquity. John C. Iannone, in his book *The Mystery of the Shroud of Turin*, states: 'Recent archaeological digs have unearthed skeletons around Jericho that date back to the time of Christ with coins placed on the head and in En Boqeq in the desert of Judah, a skeleton dating to the second century with coins in each of the eye sockets - evidence that Jews, on occasion, placed coins over the eyes of the deceased in the time of Jesus.'
- 13 Quoted by Stevenson, *op cit*, p. 44.
- 14 www.shroudstory.com/early.htm
- 15 Dr. Maria Grazia Siliato, 'The Man of the Shroud has a name!', *The Messenger of At. Anthony*, Feb 1998 @ www.british-israel.ca/shroud.htm
- 16 Megan Goldin, 'Science gives hope to shroud believers' @ www.british-israel.ca/shroud.htm
- 17 Jack Markwardt, 'The Cathar Crucifix: New Evidence of the Shroud's Missing History' @ www.shroudstory.com/faq-pray-manuscript.htm
- 18 www.shroudstory.com/faq-pray-manuscript.htm
- 19 *ibid*.
- 20 *ibid*, my italics.
- 21 *ibid*, my italics.
- 22 *ibid*.
- 23 *ibid*.
- 24 Daniel R. Porter, 'Dear John, What Were You Thinking? An Open Letter to John Dominic Crossan' @ www.shroudforum.com/dearjohn.pdf
- 25 Ian Wilson, quoted by David Edwards, 'The Proof That This Is The Face Of Christ: fresh Clue Shows Turin Shroud May Be Genuine', www.Mirror.co.uk, April 3, 3004
- 26 David Edwards, 'The Proof That This Is The Face Of Christ: fresh Clue Shows Turin Shroud May Be Genuine', www.Mirror.co.uk, April 3, 3004
- 27 M. Sue Benford and Joseph G. Marino, 'Textile Evidence Supports Skewed radiocarbon Date of Shroud of Turin' @ www.shroud.com/pdfs/textevid.pdf
- 28 *ibid*.
- 29 Wilson quoted by Garza-Valdes, *The DNA of God?*, (Hodder & Stoughton, 1998), p. 133.
- 30 Leoncio A. Garza-Valdes, *The DNA of God?*, (Hodder & Stoughton, 1998), p. 133-134.
- 31 Jim Barrett, 'Science & the Shroud' @ www.british-israel.ca/shroud.htm
- 32 cf. Garza-Valdes, *The DNA of God?*, (Hodder & Stoughton, 1998), p. 138-140.
- 33 Mark Guscini, 'Recent Historical Investigations On The Sudarium Of Oviedo' @ <http://66.102.11.104/search?q=cache:85jhOEWSFfwJ:www.shroud.com/pdfs/guscini.pdf+The+Sudarium+of+Oviedo:+Its+History+and+Relationship+to+the+Shroud+of+Turin&hl=en>
- 34 *ibid*.
- 35 *ibid*.
- 36 Mary Jo Anderson, 'The Other Shroud of Christ' @ www.catholicculture.org/docs/doc_view.cfm?recnum=3953
- 37 Mark Guscini, quoted @ www.shroudstory.com/faq-sudarium.htm
- 38 Stevenson & Habermas, *op cit*, p. 40-41.
- 39 Stevenson, *op cit*, p. 62.
- 40 *ibid*, p. 57.
- 41 *ibid*, p. 57.
- 42 *ibid*, p. 58.
- 43 *ibid*, p. 59.

44 Secrets of the Dead: Shroud of Christ? @ www.pbs.org/wnet/secrets/case_shroudchrist/

45 Barrie M. Schwartz, 'Is The Shroud of Turin a Medieval Photograph? A Critical Examination of the Theory' @ www.shroud.com/pdfs/orvieto.pdf

46 *ibid.*

47 *ibid.*

48 www.shroudstory.com/faq-second-image.htm

49 www.shroudstory.com/faq-second-image.htm

50 Stevenson & Habermas, *Verdict on the Shroud*, *op cit*, p 118.

51 cf. www.shroud.com/pdfs/marineli.pdf

52 cf. www.shroud.com/pdfs/marineli.pdf

53 Stevenson & Habermas, *Verdict on the Shroud*, *op cit*, p 124.

54 *ibid.*

55 For example, the knees of the Man in the Shroud are cut and bruised, especially the left kneecap – an indication that the man fell to his knees before his crucifixion. It has traditionally been believed that Jesus fell to his knees on his way to be crucified, this being the reason why Simon of Cyrene was pressed into service carrying Jesus' cross-bar from that point on until Golgotha (Matthew 27:32; Mark 15:21; Luke 23:26).

56 Stevenson & Habermas, *op cit*, p 126.

57 'The wound inflicted upon the Man in the Shroud by the nail planted in his wrist, exactly one centimetre square, corresponds to the size of the nail found by Saint Helen [the mother of Emperor Constantine, and donated to the Holy Cross of Jerusalem church in Rome, who discovered the nail at Golgotha, where her son had conducted an archaeological dig.]' – Dr. Siliato, *op cit*. This doesn't necessarily mean that the nail in question is the very same nail that caused the wound – since this may represent a standard type of nail used in crucifixions at Golgotha. Even so, the correlation is another indication of historical verity in the Shroud.

58 *ibid.*, p 128.

59 *ibid.*

60 *ibid.*

61 *ibid.*

62 Barrie Schwartz, 'The Shroud; It's Even Changed the Lives of Scientists Studying It', *Globe* 22 Sept. 1981: 26.

63 Dr. Maria Grazia Siliato, 'The Man of the Shroud has a name!', *op cit*.

64 *ibid.*

65 *ibid.*

66 www.british-israel.ca/shroud.htm

67 www.british-israel.ca/shroud.htm

68 Examination of the Shroud shows that Jesus 'had to walk barefoot over rocky ground, hence the blood and soil around the feet.' – Dr. Siliato, *op cit*. 'An interesting finding is noted over the shoulder blade area on the right and left sides. This consists of an abrasion or denuding of the skin surfaces, consistent with a heavy object, like a beam. Resting over the shoulder blades and producing a rubbing effect on the skin surfaces.' – Robert Bucklin MD, 'An Autopsy of the Man in the Shroud', *op cit*.

69 cf. note 38.

70 'The man was dead. The mechanism that formed the stains is incompatible with any kind of breathing movement.' - Mark Guscini, 'Recent Historical Investigations On The Sudarium Of Oviedo', *op cit*. The stains on the Sudarium consist of one part blood and six parts fluid from a pleural oedema. This liquid would collect in the lungs of a crucified person who died of asphyxiation, and would come out through the nostrils if the body suffered subsequent jolting.

71 'Mingled with these large bloodstains are stains from a clear bodily fluid, perhaps pericardial fluid or fluid from the pleural sac or pleural cavity. This suggests that the man received a postmortem stabbing wound in the vicinity of the heart.' – Porter, 'Dear John, What Were You Thinking?', *op cit*.

72 Gary R. Habermas, 'Historical Epistemology, Jesus' Resurrection, and the Shroud of Turin' @ www.shroud.com/pdfs/habermas.pdf

73 William Lane Craig, 'The Historicity of the Empty Tomb of Jesus' @ www.leaderu.com/offices/billcraig/docs/tomb2.html

74 *ibid.*

75 Phillip E. Wiebe, 'Design In The Shroud Of Turin' @ www.shroud.com/pdfs/wiebe.pdf

(Wiebe applies what amounts to William A. Dembski's design filter to the conjunction of the Shroud data with a speculative physical account of the 'dematerialisation' of the body from the Shroud to advance a design argument from the shroud.)