

EVENTS (1)

ADVANCES IN THE TURIN SHROUD INVESTIGATION

4 & 5 September, Bari, Italy.



ATSI 2014

Sadly this small and distinctly Italy-centred conference was not only somewhat overshadowed by the larger and more international one in St Louis a month later, but few of its papers are available to those who were not able to attend. The program lists presentations by several well known names in Shroud studies, such as Bruno Barberis, Paulo di Lazzaro and Giulio Fanti, and a report on the conference mentions “some interesting presentations” by Nello Balossino, Giovanna de Liso, and Francesco Lattarulo, as well as “a weird presentation by Prof. Valery Shalatonin from Belarusian State University, describing the detection of an electric field around a real size replica of the Shroud and its biological effects - this was indeed very interesting and a brand new issue.”(1)

I believe the proceedings of the conference were transcribed into a single 137-page .pdf file, but have not been able to discover it. In the meanwhile, these are all we have to go on:

- 1) *Shroud-like colouration, conservation measures and image processing. A survey of experiments at ENEA Frascati*, by Paulo di Lazzaro.
- 2) *Multidisciplinary study of the Shroud of Arquata, “extractum ab originale”*, by Paulo di Lazzaro et al.
- 3) *Uncovering the Sources of DNA in the Turin Shroud*, by G. Barcaccia et al., including Giulio Fanti.
- 4) *The Shroud of Turin - A Historiographical Approach*, by Tristan Casabianca.

In the first presentation, di Lazzaro addresses the idea that the Shroud image is a 'scorch' of some kind which a) only affects the uppermost fibres of the threads of the cloth and b) occurs at much lower temperature than would normally be required. He finds that short-wave ultraviolet radiation delivered in rapid bursts is required to achieve this, and in 2013 actually used the Excimer Laser machine as a kind of paintbrush, producing a UV-scorched 'sketch' of the Shroud face.

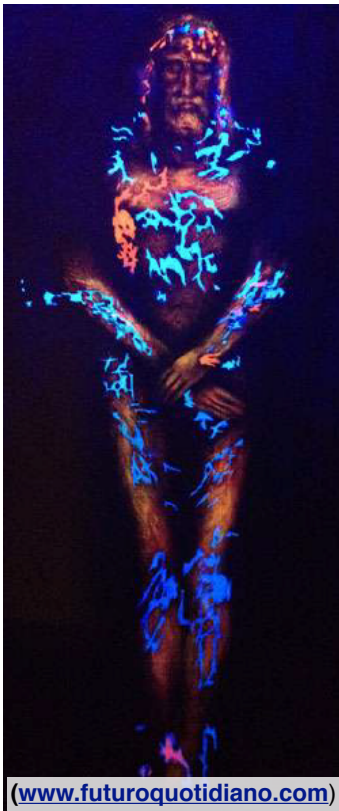


Paulo di Lazzaro and the team in front of the copy of the Shroud at Arquata.
(from <http://www.frascati.enea.it/fis/lac/excimer/sindone/report%20arquata.pdf>)

The second presentation is an account of a detailed study of a "true copy" of the Shroud, made in 1653 and now kept in the Convent of St Francis in Borgo di Arquata, Italy. The cloth was photographed in white light, UV fluorescence, and laser-induced fluorescence, and scanned with an Imaging Topological Radar and various points were analysed for absolute reflectance at all wavelengths between UV and NIR. Not only was a huge amount of data on this copy collected in a completely non-destructive manner, but the whole process acted as a kind of dry-run for the sort of experiments which could be carried out on the Shroud, if new access were ever granted to it.

The third paper is a short account of some analyses of plant chloroplast DNA and human mitochondrial DNA from dust collected by vacuuming the back of the Shroud while it was still stitched to the old

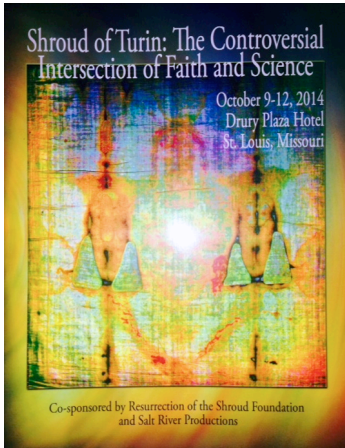
Holland backing cloth. The brevity of the account makes it difficult to assess the value of the findings: plant material was found, by genetic comparison, to have come from all over the world, including the southern United States, while human DNA is said to contain “distinct haplogroups; including R0 and R8, U2 and U5, several H haplotypes (e.g. H1, H2, H3, H13 and H33), and few L3 and M haplotypes.” Like the plants, these are typical of a huge range of the human population, and cannot reliably be said to identify any particular ethnic or geographic entity, nor any particular period in history, although the 1st century Middle East certainly cannot be ruled out. The authors conclude: “Our experimental findings and additional clues pose a further difficulty to those who postulate a central European origin and a historical interval corresponding to the Middle Ages of the Relic.”



Finally, the fourth paper, also published in *The Heythrop Journal*, is an attempt by Tristan Casabianca to derive a probability that the Shroud is the direct product of the resurrection from a dispassionate assessment of undisputed facts. He is not altogether successful, as so few of the facts are, in fact, undisputed, and his conclusion is tenuous in the extreme.

Apart from these, artist Veronica Piraccini introduced her iridescent painting “Dall'impronta di Gesù” (left), Marzia Boi presented her ideas relating plant material found on the Shroud to ancient funerary practices, César Barta and the University of Oviedo demonstrated some new comparisons between the Shroud and the Sudarium (a paper also presented at St Louis), and Orit Shamir illustrated and compared 1st century Jewish and Roman burial textiles.

EVENTS (2)

THE CONTROVERSIAL INTERSECTION OF FAITH AND SCIENCE
9 - 12 October, St Louis, Missouri.

The second conference of the year took place barely a month later, with a huge battery of papers, nearly all of which are now published at <http://www.shroud.com/stlouis.htm>. Bruno Barberis, Paulo di Lazzaro and Giulio Fanti were here too, but now in company with many of the great figures of Shroud studies from the past 40 years: John Jackson, Barrie Schwartz, Robert Villarreal, Joe Marino, Mark Antonacci, Kelly Kearse, Thibault Heimburger, Pam Moon and our own member Andrew Silverman, to name only a few.

Selecting representative papers to comment upon here is not easy, but I have chosen a few of particular interest, showing current thinking about image formation, theological speculation, and recent new analysis.

- 1) *Natural, Manufactured or Miracle?*, by Andrew Silverman MD
- 2) *Speculations on the 14th Century Origins of the Turin Shroud*, by Joseph Accetta PhD
- 3) *The Seven Secrets of the Sacred Shroud*, by Russ Breault
- 4) *Further Evaluation of the Radiocarbon Samples*, by Pam Moon
- 5) *Hypothesis that Explains the Shroud's Unique Blood Marks and Several Critical Events in the Gospels*, by Art Lind PhD and Mark Antonacci

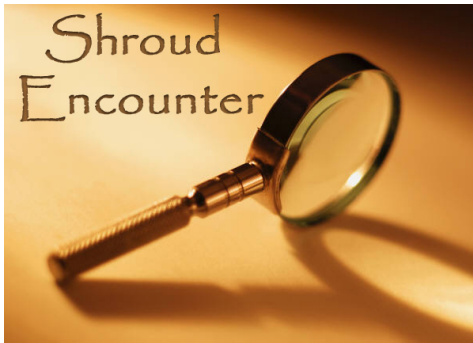


Andrew Silverman draws on modern speculation among physicists that consciousness and will are not simply consequences of the material world, but may be fundamental to it. He discusses the possibility that the image on the Shroud was caused by an intense burst of electromagnetic radiation, mediated by the conscious resurrection of Christ. In support of his

hypothesis, Silverman notices the apparently upright stance of the image - the hair falls naturally beside the face rather than dropping behind as it would do if the body were prone, and there is no sign of any flattening of the back or buttocks as there would be if it were lying flat on a hard surface - and biblical accounts of Christ's occasional defiance of gravity, such as when he walked on water. By combining accounts of Near Death Experiences, the ideas of some of the pioneers of quantum science, such as Max Planck and Erwin Schrödinger, on the importance of consciousness in the determination of reality, and the equivalence of matter and energy (describing matter as "frozen light") Silverman synthesises a coherent narrative relating the nature of our eternal existence to the message of Christ, of which the image on the Shroud is both a byproduct and an important witness. For further exploration of Silverman's ideas, readers are directed to his website at: www.lightoftheshroud.com

Joseph Accetta was one of the original STuRP team, although his own particular experiments, Infrared Reflectance Spectroscopy and Thermography, yielded nothing very interesting or conclusive. Unlike the majority of his published colleagues, Accetta rejects the authenticity of the Shroud, but he does acknowledge the unique characteristics that set it apart from any known 14th century image. In particular, Accetta has investigated the three-dimensional aspects of the image, and for practical and mathematical reasons has decided that the only way of achieving them was to have used a woodblock printing technique. Having established that wood-engraving and printing on textiles of considerable

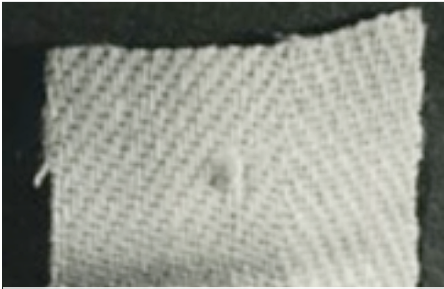
size was practised in Europe in the 14th century, Accetta then searches for an appropriate medium and fixes on an iron gallate ink, which was the normal writing and drawing ink throughout historical times. He is unclear as to whether the ink caused cellulosic degradation of the cloth, or discolouration of a superficial layer, as postulated by Ray Rogers, and is fairly sure that whatever it was must largely have flaked off, leaving a fainter image behind. He concludes that "these are relatively compelling reasons to assert that the 14th century Shroud of Turin image is the remnant of a woodprint or similar intaglio. It may represent an unusually high quality print for its era."



Russ Breault is a popular and well known lecturer on the Shroud, whose multi-media big-screen presentation Shroud Encounter (shroudencounter.com) has toured the United States for some years. He normally covers all the scientific, historical and artistic investigation, but here he concentrates on some of the theological aspects of the Shroud.

His "Seven Secrets" presentations looks at biblical references to Mystery, Fire, Witness, Linen, Transformation, the Face, and Receipt, and argues that the Shroud embodies many of the theological ideas expressed therein. To take two that resonate particularly with me: firstly, after intense investigation for over 40 years, there is no doubt that the Shroud remains a mystery, refusing to be pinned down to any specific place, time or method of formation. So ubiquitous is this inconclusivity that one is almost convinced that somehow its mystery is part of the essence of the Shroud, and as such, also part of the 'cloud of unknowing' that veils us from the light of life. The other novel interpretation I particularly like is that the Shroud is a Receipt; if Christ was the price God paid for our redemption, or a ransom for our sins, then a transaction has occurred, a price changed hands, and a receipt returned as Proof of Purchase; and the Shroud can be seen as that proof.

Earlier this year Pam Moon commissioned a detailed examination of the Shroud as a textile based on photographs of the radiocarbon samples recently released by the Oxford Radiocarbon Accelerator Unit. Two papers have resulted: *Consideration to the Uniformity and Effects of the Fabric in the Shroud of Turin*, by Donna Campbell of Thomas Ferguson Irish Linen, and, after an impromptu presentation at the St Louis conference, *Blessed Sebastian Valfrè: the Black Thread, Reweave, and Unravelling the Shroud*, by Pam Moon herself.



The image side (left) and back (right) of the Oxford radiocarbon sample.
Photos released by the Oxford Radiocarbon Accelerator Unit

In the first, Donna Campbell discusses variations in the weave tension visible in the samples, and observes stains and marks of abrasion and compression. She considers that some interpolation cannot be ruled out. She also observes a minute black fibre, barely thicker than one of the fibres of which the thread of the Shroud is spun, entangled in one corner, and in the second paper Pam Moon not only discovers a few more, but relates this discovery to the repairs known to have been carried out by Blessed Sebastian Valfrè in 1694. His stitching is described as clumsy, but more importantly he insisted on using black thread, presumably so that his own work could not be confused with the original threads of the Shroud. He repaired several of the earlier 1534 patches, and may also have added stitching to the edges of the Shroud as well. Pam Moon also discusses various loose fibres of the same colour as the flax of the Shroud, and attributes these to 'invisible' repair of the radiocarbon corner, although similar occurrences occur across the Shroud. Pam's website is at www.shroudofturinexhibition.com, and is thoroughly recommended.

The last paper I have chosen to highlight is divided into two very different sections. The first is a restatement of the highly controversial hypothesis that the image was formed by the sudden total dematerialisation of the body within the Shroud, which released an indeterminate soup of sub-atomic particles and associated radiation able to produce an image. While the body rematerialised here and there (Emmaus, the locked room, the shores of Galilee) after this resurrection event, the blood rematerialised on the cloth. Antonacci explores the whole idea more fully in his book *The Resurrection of the Shroud* (New York, 2000), where it was first called the Historically Consistent Hypothesis, and in a later paper: *Particle Radiation from the Body could Explain the Shroud's Images and its Carbon Dating* (Scientific Research and Essays, 2012).

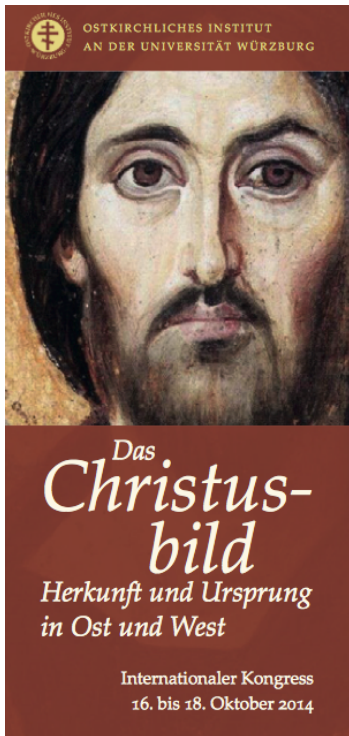
The second part is a classic forensic investigation into the behaviour of blood as it dries. Three sequences of photos show the drying of a drop of human blood on plastic, skin and cloth. These are followed by a detailed account of attempts to paint with blood on cloth, and to transfer blood from skin to fabric, using the blood of 23 freshly slaughtered pigs and the good auspices of Williams Brothers Meat Market, Washington, MO. Fresh untreated blood was unsatisfactory as it clotted too quickly for clear experiments, so further experiments were made using blood treated in two ways, by vigorous stirring (with a blender for 5 minutes) and by adding 1% lemon juice as a decoagulant. An experiment to transfer a bloodflow from an arm to a cloth was thwarted as the blood dried so thoroughly after 30 minutes that there were no marks at all, so various devices were made to keep it moist, and both leather and chicken skin were used as substrates (to save the inconvenience of the volunteers) so that experiments could be carried out after hours rather than minutes.

Sadly the authors use their results to bolster their less than convincing miraculist theories of image formation, but in themselves the experiments remain valuable and interesting even so.

A personal account of the conference by Barrie Schwartz can be found on his website at www.shroud.com.

EVENTS (3)

**THE IMAGE OF CHRIST:
PROVENANCE AND ORIGINS IN THE EAST AND WEST
(DAS CHRISTUS-BILD: HERKUNFT UND URSPRUNG IN OST UND WEST)
16 - 18 October, Würzburg, Germany.**



Even less well publicised, and exclusively concerned with the historical antecedents of the Shroud, was this gathering under the aegis of Professor Karlheinz Dietz of the Eastern Orthodox Institute at the University of Würzburg. Participants included the ubiquitous Bruno Barberis, the textile expert Mechthild Flury-Lemberg and Giuseppe Ghiberti. This is a précis of the report published at the University of Würzburg website (<http://www.theologie.uni-wuerzburg.de/es/aktuelles/meldungen/single/artikel/das-christ-1/>), compiled with the assistance of Google Translate.

Under the patronage of the Bishop of Würzburg scholars from many countries and from different disciplines lectured on the early image of Christ in comparison with the image on the Shroud of Turin.

Christoph Dohmen (Regensburg) addressed Old Testament influences on the adoration of the Christ image. The Jewish prohibition of images of God developed from a reaction to the pagan habit of worshipping such images, not from any objection to the images themselves. Christians recognise that images are only representations, and do not venerate them for themselves.

Stefan Heid (Rome) discussed the design of early Christian churches and the visual elements of liturgy and Josef Rist (Bochum) spoke of the image of Kamuliana, which was the oldest and most celebrated of the miraculous images in Constantinople until it dwindled into obscurity during the Byzantine iconoclasm.

Hans Georg Thümmel (Greifswald) gave an overview of the iconographic images of Christ from the 6th to the 8th century and Karl Christian Felmy (Effeltrich), emphasized the incarnational-christological anchoring of icons in Eucumenical Conciliar decisions and the theology of John of Damascus, illustrated with particular examples.

Gregor Emmenegger (Fribourg) and Peter Bruns (Bamberg) discussed the importance of the legend of king Abgar in the development of Christian imagery, while Andrew Palmer (Etten-Leur) dealt with the Mandyllion of Edessa in the Greek tradition to 944.

Regional artistic traditions were covered by Christian Hannick (Würzburg), for Armenia, and Jadranka Prolović (Vienna), for Russia.

The ancient history of the Turin Shroud itself was explored by Mechthild Flury-Lemberg (Bern), and the physicist Bruno Barberis (Turin) gave an overview of the current state of scientific research, what was ongoing, and some suggestions for the future.

Exegete Giuseppe Ghiberti, President of the Turin Diocesan Commission for the Shroud, reconciled the biblical descriptions of the graves clothes with the Shroud of Turin, and Gian Maria Zaccone, Director of the Museo della Sindone in Turin, related the early Acheiropoieta to the Shroud.

The vigorously disputed relationship between the Image of Edessa and the Shroud was pursued more deeply by a number of speakers, including Rainer Riesner (Dortmund), Karlheinz Dietz (Würzburg) and Carolina Lutzka (Würzburg), while Jannic Durand (Paris) investigated the

'Veronica', and there were further contributions from Ilaria Ramelli (Milan) and Alexei Lidov (Moscow).

Enrico Morini (Bologna) discussed the Orthodox liturgical cloths known as Aer, Epitaphioi and Antimension in relation to the Shroud, while Martin Illert (Hannover) explored the theological content of the legend of the Christ image of Edessa.

Bishop Friedhelm Hofmann wound up the conference. For three days exegetes of the Old and New Testament, patristic scholars and philologists of the Christian Orient, historians and experts in Byzantine and Slavonic studies, art and textile historians had debated a highly interesting subject to very high standards.

From the start the question of the authenticity of the Turin Shroud was not the concern of the conference. The natural sciences can at best say what it is not, not least because, as a Jewish Shroud scholar once said: "There is no scientific test for Christness." What remains is to seek the truth and to be content with probabilities. Even after this symposium, the paradox remains that the Shroud emerged into public recognition quite late in the chronology of crucifixion art, although typologically and for various other reasons it seems more typical of the beginning. Whatever it is, the Shroud of Turin is a both a poignant reminder of man's capacity for limitless cruelty and an expression of hope that it will one day be overcome.