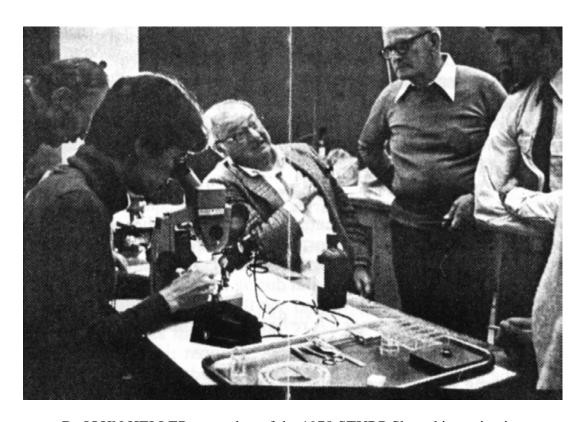


A NEWSLETTER ABOUT RESEARCH ON THE HOLY SHROUD OF TURIN **published in Australia for Worldwide circulation** edited by REX MORGAN, Author of several books on the Shroud **Issue Number 92**DECEMBER 1995



Dr JOHN HELLER a member of the 1978 STURP Shroud investigation team, announces that he has positively identified human blood on the Shroud. Others in the picture are Dr Ray Rogers, Dr Joan Janney, Fr Adam Otterbein and Dr John Jackson

[Pic: Vernon Miller]

Dr JOHN HELLER DIED THIS MONTH IN THE USA

EDITORIAL

The past year has seen further increase in the renewed interest in the Turin Shroud. There have been many major newspaper and magazine articles, new books have been published and radio and televisions have run sporadic items on the subject. There has been a plethora of new ideas for the image-making process, some of them demanding serious attention, others in the realms of fantasy. More and more theories about the C14 dating have been put forward and there have been minor Shroud conferences here and there and more are forecast. At least two major researchers died: Msgr Giulio Ricci and Dr John Heller. The most important development was the announcement of the forthcoming two expositions of the Shroud itself in 1998 and 2000. This news was closely followed by the Turin announcement, contained in this issue, of the new public attitude to the Shroud being taken by the Church.

Amongst the proposers of image-making processes the commentary by Bro Michael Buttigieg on the reported work of Dr Nicholas Allen has drawn fire, brought to you in this issue. Other very interesting theories have been sent to us by Dr Allan Mills of Leicester, England who suggests in a recent learned paper that oxygen centred free radicals were involved. I hope to bring you a review of this work shortly.

Another interesting theory is presented in a recently published booklet by an Italian university medical professor, Nicolo Cinquemani, who, taking into account the transmitted light photographs which prove partial contact of the cloth with the body, then proposes that during a radiation process evidenced in the image, parts of the body moved and thus a double image was formed for which he shows his evidence. A review of this theory is also planned for publication shortly.

After a very long silence I have received a letter from William Meacham, the Hong Kong based archaeologist and C14 expert who has been carrying out significant archaeological site work in China and is now pondering his position post-1997. He was one of the first to alert the scientific world of the unlikelihood of obtaining an accurate date from the C14 procedure. Most indications are that he was correct. I wish all my readers the peace and joy which Christmas brings as we celebrate, with our children and our grandchildren, the birth of the Man whose image is indisputably depicted on the Shroud.

REX MORGAN

THE SHROUD: IMAGE FOR THE YEAR 2000

From Avvenire 7 October 1995

Translated by Fr Paolo Caporali, edited by Rex Morgan

Saldarini: "The obstinate pursuit of the authenticity is born of misunderstanding."

Torino. Shroud, Shroud, and again Shroud. Newspapers and magazines continue to speak about the most famous cloth in the world. The announcement of the two exhibitions forecast for the years 1998 and 2000, reaffirmed by Cardinal Saldarini with authoritative overtones, that the Shroud is not only the original Sudarium (burial cloth) of Christ but that the Holy See, from 1988 on, did not authorise any other experiments on the sacred linen. Consequently, every presumed discovery of recent years is refuted by the Church since no one, unless illegally, could have removed samples from the cloth. For Saldarini, however, beyond past and future controversy, it is important to clarify for the people of the year 2000, the message that could come from this relic.

Your Eminence, what importance do you attribute to the examination performed on the Shroud by the C14 method? What is your position regarding the continuing "discoveries", not least, that of the presence of female DNA on the Shroud linen?

The examination of the age of the cloth by the C14 method was requested insistently, by scientists the world over and the Holy See, after mature reflection, yielded to their requests. The preparations were carried out in meetings of specialists of the subject matter, the Pontifical Academy of Sciences and trustees of the Papal Custodian, at the time still Cardinal Ballestrero. Three particularly qualified laboratories were singled out for the examination, the samples were removed and assigned to the laboratories. Then, the ecclesiastical authority withdrew from the process which was now beyond its competence. Unfortunately, some of its wishes, presented as conditions and accepted by the laboratories, were not fulfilled (above all, the secrecy of the process and the divulging of the results). The Custodian, however, judged that the substance of the performance might be acceptable, and, in accord with the Holy See, he announced the results communicated to him.

IMAGE FOR THE YEAR 2000 (cont'd)

In reference to their results, a judgement is given, which is customary for scientific conclusions. When it is obvious that these results were reached without prejudice and with the correct procedure, normal trust is granted, pending their confirmation or correction by subsequent scrutiny of the results. Since the time of their publication debates sparked from which, however, the religious authority chose to remain outsiders, while recommending to the scientists of this specialist field to accept indications that could affect eventual verification.

The subsequent presumed "discoveries" on the Shroud, however interesting, are problematical to the extent that they are derived from experiments conducted on the syndonic material. In fact, as one of the declarations publicised in a recent press conference states, syndonic material has not been taken since 1988. How, then, can one be sure that the work was conducted on the authentic fabric of the Shroud?

The DNA analyses, on the other hand, were carried out on miniscule samples, the extraction of which was authorised in 1978. The presence of feminine DNA was taken for granted and does not represent a significant discovery. The DNA presumed on a cloth, touched during its history by numerous persons, offers only the proof of this history. We know, for example, that in 1534, the Shroud was entrusted for two weeks to the Poor Clare Sisters of Chambery to be repaired from the damage caused by the fire of 1532. To isolate, however, the DNA of the Crucified placed in that linen sheet, is still a long journey."

How do you plan to involve the city of Torino and the Italian Church in the two showings of 1998 and 2000?

"The exhibitions are generated by the religious nature and the history of the Shroud. Upon the Holy Shroud images are visible that recall with exceptional effectiveness the ineffable mystery of our redemption, especially the Passion of Jesus. The exhibit has the purpose of offering an expansion of the message, for today's people, of the salvation that comes only from the Lord Jesus and from His love. Through the centuries this message generates fruits of conversion and sanctity. In the forthcoming exhibitions we will ask the Lord to grant us these same fruits in abundance."

IMAGE FOR THE YEAR 2000 (cont'd)

How would you interpret the program of both exhibitions within the jubilee of the year 2000 and also in reference to the "Tertio Millennio Adventiente?" [Third Millennium]

"The message of the Shroud may be part of the 'New Evangelisation' to which the Pope has frequently made reference. I am convinced that it has a particular 'modernity' because of its nature and as an image to contemplate. In no other epoch of the past has the message transmitted by images influenced so much the informational and behavioural fields. The pastoral experiences accumulated in past years confirm how sensitive people are to the message of the 'Silent Witness'.

What is the meaning in the message of the Shroud for us humans of the year 2000? Why is it that today continuing attempts are directed towards demolishing the image, the truthfulness and authenticity of this relic?

"I can attempt to summarize in one sentence the meaning of the Shroud. Truly, He could not love us more.' I speak obviously of Jesus and of the tangible confirmation that the evangelical narrative derives from that painful story offered to our very eyes when they stop to 'read' the details of the sorrowful image that speaks from that linen sheet. This insistent stubbornness against the Shroud is almost incomprehensible. Perhaps it is the fear of an exaggerated veneration of an image, or perhaps the message of suffering is too hard to accept. It is possible that this aggressiveness against authenticity could have been born of a misunderstanding. Many think that the religious value of the Shroud may be conditioned by the fact that it had contained historically the body of Jesus, following the deposition from the Cross. It is said, then, that since scientific motives exist to deny this fact, consequently the veneration of the Shroud should be abandoned. Instead it is not so.

The scientific research on the authenticity of the linen sheet is not by any means concluded. Independently from it the fact remains undeniable that the image always looking at us from that sheet reproduces the suffering and the Passion of Jesus as the four Gospels narrate, above all St John. Furthermore the formation of this image continues to this very day to be inexplicable. It is obvious then, how senseless it is to speak of the Shroud as a counterfeit. The simple fact that the Shroud is present (and has influenced for centuries the piety of many committed Christians) recalls us to our responsibility before this gift of God, even as the modern Church of today.

IMAGE FOR THE YEAR 2000 (cont'd)

Your Eminence, beyond the polemics that undoubtedly will still be moved within the arc of time that separates us from the coming exhibitions, what does the image of the Shroud transmit to you, personally?

"If truly, the man-God could not love me more, that He took upon Himself these sufferings, I must think that even my love should feel called daily to a growth without pause. And since He has loved all my brothers the way He has loved me, to respond to that love I would have to call my daily journey a continuous self-giving to my brothers. May the Lord grant that this will be truly realised, beginning with my life."

The 'Sublime Passion Icon', as Pope Paul VI called it in the message for the 1978 exhibition, may not then, even according to Saldarini, prevent the meditation of today's Christians on the "scandal of the Cross of Christ."

SHROUD SEMINAR IN BOSTON MARCH 1996

Fr ADAM BERARD SJ of WESTON, Massachusetts, USA, advises us:

JOHN AND REBECCA JACKSON WILL PRESENT THEIR SINDONOLOGY COURSE FOR THE FIRST TIME AT BOSTON COLLEGE. THE SHROUD SEMINAR, SPONSORED BY THE HOLY SHROUD COMMITTEE OF BOSTON, WILL BE HELD ON SATURDAY AND SUNDAY March 23 and 24, 1996 AT THE BURNS LIBRARY. THE BURNS LIBRARY HAS A CAPACITY OF ONE HUNDRED PEOPLE. SO TICKETS (\$25; \$15 for students) WILL BE REQUIRED. THEY CAN BE OBTAINED FROM:

THE HOLY SHROUD COMMITTEE 114 THE FENWAY BOSTON, MA, 02115-3715 USA

LIVING ACCOMMODATIONS ARE ALSO AVAILABLE AT CAMPION CENTRE, WESTON, Ma for \$30 per night

"IT IS OUR HOPE THAT THIS SEMINAR, WHICH WILL INCLUDE THE FIFTH SUNDAY OF LENT LITURGY WILL SPARK A RENEWED AWARENESS OF WHAT THE SHROUD IS, AND ITS BEING THE SILENT WITNESS OF THE COSMIC EVENT THAT TOUCHES THE LIVES OF US ALL FOREVER"

IN PURSUIT OF THE TRUTH

- A commentary on the Turin announcements by Rex Morgan

In this issue *Shroud News* brings you a translation of another press conference given by the Shroud's official custodian Cardinal Saldarini, Archbishop of Turin. Received only a few days after the event was published on 7 October 1995 in the Italian newspaper *Avvenire*, through the good offices of Father Fossati in Turin, Ilona Farkas in Rome and Isabel Piczek in Los Angeles, the translation was made by a friend of the late Fr Peter Rinaldi, Fr Pasolo Caporali.

Remarkable Interview

Following upon the recent announcement of the forthcoming exposition of the Shroud in 1998 and again in 2000 the interview given by Saldarini is remarkable in a number of respects. He expands on the fact that the C14 tests of 1988 were conducted only after years of pressure from scientists in a number of countries. He reiterates that after the laboratories had received the samples the Church withdrew from the activity and left it to the scientific experts.

Re-assessment

He also recalls that the original conditions agreed to by the C14 laboratories were not adhered to but nonetheless the custodian of the time, Ballestrero, announced what the scientists had to say. He acknowledges that arguments have been raging about the validity of the results ever since and that although scientific results are normally subject to peer review and criticism which in many cases leads to re-assessment by the experimenters concerned, this has not happened in the case of the Shroud's C14 dating.

Suspicion

There have also been, the Cardinal notes, reports of recent tests carried out on what are claimed to be fragments of the Shroud. Such tests are open to suspicion since no samples of Shroud material have been made officially available since 1988. He also dismisses the claim for discovery of "female DNA" on the cloth as no more than a result of its handling over a long period. On the question of whether the Shroud has relevance for today, Saldarini rightly points out that it has caused more intense interest, research and speculation in recent years than any other image in existence. This is hardly a circumstance which indicates irrelevance.

In Pursuit of Truth (cont'd)

No forgery

Whilst Saldarini stops short of claiming that the Shroud is the undoubted burial cloth of Christ he states quite clearly and correctly that nevertheless numerous people believe it is and that no satisfactory explanation has yet been put forward to explain the nature and formation of the image, the unmistakable implication being that the Church actually believes it not to be any kind of forgery.

Fundamental change

For the Church to speak out in this manner represents a fundamental change in attitude. For a century we have heard and read of scientists and historians, medicos and artists, religious and laymen, argue their points of view for and against the possible authenticity of the Shroud. In fact the total number of "experts" interested in the Shroud over that century numbers, throughout the world, only in the hundreds and these few have been pitting their wits against each other only in ones and twos over that time and yet with an increasing audience of onlookers, especially since 1978, the general public who read the media reports, buy the books, visit the exhibitions, watch the television programmes and observe at the seminars.

Private preserve

But the argument has been almost a private preserve of a few Shroudies and those who happen to be interested. The great silent majority has never had a voice on this issue, apart from a line of three and a half millions who stood in Turin in 1978 to view the Shroud itself and another million or more who have visited the photographic exhibitions displayed from time to time.

Powerful public relations

Yet, suddenly, in 1995, the Catholic Church has realised that not only does it possess the most priceless and inexplicable item, (relic if you like), in Christendom, but also the most powerful public relations object it could ever wish for. Unlike some tattered or decayed or microscopic "relics", some of which are so absurd as to be beyond belief, let alone to be regarded as agents which might strengthen belief, the Shroud is an object which inspires, on one hand, such veneration, on another, such impassioned criticism by fearful sceptics and in general such intense interest by so many on account of the perfection and accuracy of its image and the inexplicability of its nature and origin, that it continues to defy any logical explanation and certainly defies the fanciful, eccentric and absurd hoaxes published in recent years.

In Pursuit of Truth (cont'd)

Return to prominence

I recall a telephone conversation in August 1988 with a despondent Peter Rinaldi, this century's Henry Kissinger of Shroud study (if such an analogy be apt). He had just had inside information about the apparent dating results and was distressed to think these might be represented as proof that the Turin Shroud could not possibly be genuine. I recall saying to him then, and I have said it since, that it would take five to ten years for the Shroud to return to prominence if it were to be dismissed that year. And so, within such a span, although Father Peter is not here to witness it, such a circumstance is well under way.

In favour

For, almost in a flash, as it were, seme 2000 years after the event, the Roman Church, with its vast array of traditions, its mighty army of adherents and its immense influence in the four corners of the earth, has put aside its hitherto polite reticence and its diplomatic sidestepping of the issue and has weighed in at last in favour of the Shroud's apparent authenticity.

Supreme importance

This shrewd and welcome act has moved the Shroud and its students from being mere bit players in the dark recesses of the wings to the full glare of centre stage. Thus the spotlight can fall again upon the Shroud and its study for the next five years and more in the knowledge that a whole people, a huge influential sector of the Christian Church, at least, of every race and class will support the view of the supreme importance of the Shroud as an object no one has yet convincingly or conclusively shown to be any kind of fake or to bear a man made image.

An icon for today

As late twentieth century values in most societies, especially the west, decline, and as ordinary increasingly leaderless people continue to lose their direction and purpose and dignity so, it seems, the Roman Church has hit upon the one matter it can promote in a modern context. The Shroud is an icon which lends support to the concepts of two millennia ago of martyrdom, of sacrifice, of divine intervention, of crucifixion and of Resurrection and yet, at the same time, is an icon for today: for unity, for belief and for hope as we thunder along the superhighway, both that of "information" and that of real life, towards the third millennium.

In Pursuit of Truth (cont'd)

Brilliant move

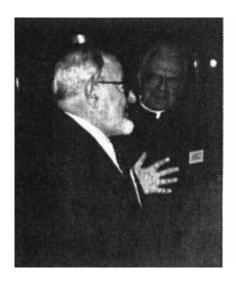
As man pursues his innate drive to seek the truth for tomorrow this brilliant move by Turin and Rome serves to strengthen the view that I put so recently: The 1998 exposition of the Shroud, whether it be the burial cloth of Christ or not, will be one of the biggest events of this century eclipsing in interest and significance, the space shots and the epidemics, the nuclear blasts and the earthquakes, the assassinations and the coronations.

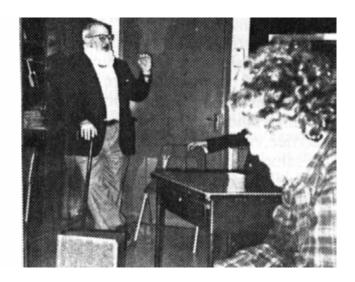
We shall see...



At the 1986 Hong Kong Shroud Symposium: Rex Morgan, Ian Wilson, William Meacham, Luigi Gonella, Alan Adler and JOHN HELLER. Below (1) John Heller with Fr Peter Rinaldi. Below (r) John speaking at an informal session at Hong Kong University.

His colleague Dr Alan Adler in foreground





Dr JOHN H. HELLER

- An appreciation

by REX MORGAN

We have just heard that Dr John Heller died this month. Heller, a Doctor of Medicine from Case Western Reserve University, also held degrees from Yale and Cornell. He was professor of internal medicine and medical physics at Yale and received many international awards for his work.

He became involved with the study of the Shroud of Turin as a member of STURP (Shroud of Turin Research Project) which conducted extensive research programmes in 1978. Heller's expertise was in blood and together with Dr Alan Adler he identified the bloodmarks on the Shroud as actual human blood. In 1983 he wrote an excellent book *Report on the Shroud of Turin* (Houghton Mifflin, Boston, ISBN 0 395 33967 7) in which he describes in an engaging manner his involvement with the project. His writings give learned accounts of the scientific work together with entertaining anecdotal information reflecting important insights into the character of many of the participants.

It is interesting to note that the opening remarks in his book are:

"By faith, I am a Christian; specifically, a Southern Baptist.

By profession I am a scientist; specifically a biophysicist.

By genesis, I am a New Englander, with all the skepticism and conservatism of the breed.

All this being the case, I have always felt that relics are nothing but flummery from the Dark Ages."

And after his years of work on the Shroud at the end of his book he writes:

"So where does all this huge amount of science leave us? The Shroud of Turin is now the most intensively studied artifact in the history of the world. Somewhere between 100,000 and 150,000 scientific man hours [by STURP alone and up to 1983] have been spent on it, with the best analytical tools available. The physical and chemical data fit hand in glove. It is certainly true that if a similar number of data had been found in the funerary linen attributed to Alexander the Great, Genghis Khan, or Socrates, there would be no doubt in anyone's mind that it was, indeed, the shroud of that historical person. But because of the unique position that Jesus holds, such evidence is not enough."

JOHN HELLER - AN APPRECIATION (cont'd)

"The images are the result of dehydrative acid oxidation of the linen. The blood is human blood. How the images got on the cloth is a mystery. We would love to have the answer to this mystery, to explain the science of it.

"Science undertook its speciality, which is measurement. We were supremely confident that the answers would - indeed, must - be forthcoming. And we failed.

Many team members were ordered or threatened to desist from the project, yet they persevered.

Though it was believed that there would be a confrontation between science and religion, none occurred. Rather, the relationship was harmonious and synergistic.

All of us have been changed by the project. I believe we have grown."

It is also interesting to note that although some of the most widely published photographs of the Turin research work and its subsequent analysis show Heller at the microscope, in his own book he showed only his colleagues in the photographs he chose.

I met Heller at the 1986 Hong Kong Shroud Symposium organised by William Meacham in conjunction with my showing there of the Brooks Photographic Exhibit, described in *Shroud News* No 34 (April 1986). John proved to be an exceptional colleague during the programme of lectures and public discussions held over that week in Hong Kong by a group of major Shroud experts. He had a ready sense of humour, an encyclopaedic knowledge of his discipline and of the Shroud and, together with Adler, made sure there was never a dull moment whether we were on duty or off.

And so as another late-20th Century member of the Shroud Crowd leaves us we might take the opportunity to be thankful for the enormous work he did. Like so many other people he began work on the Shroud from a purely sceptical point of view but gradually came to the conclusion, in the face of the scientific evidence, that the image on the cloth could not have been man-made, that the blood on it was real and that it is one of the world's greatest mysteries deserving of serious consideration.

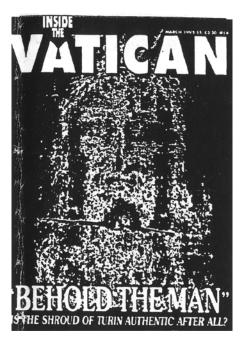
LATEST FINDINGS

by Emanuela Marinelli

This article first appeared in *Inside the Vatican* (March 1995). The excellent setting is taken directly from Ian Wilson's *British Society of the Turin Shroud Newsletter* No 40 (May 1995)

From Rome: Vatican English Language Journal Calls for Open-Mindedness and Fresh Studies on the Shroud

Inside the Vatican is a superbly produced colour journal published ten times a year by Urbi et Orbi Communications of 3050 Gap Knob Road, Kentucky, 40052, U.S.A. The Editor is Robert Moynihan, and included in the March issue [see cover right] is a magnificent 16 page Photo Essay on the Shroud, full of colourful



photographs, and accompanied by articles by Professor Emanuela Marinelli and Dr. Orazio Petrosillo of Rome's Shroud group Collegamento Pro Sindone. In his Editorial, Robert Moynihan outlined why he had chosen the theme of the Shroud for the Journal's March issue:

We chose to do so in part because it is the season of Good Friday and Easter Sunday, and we thought the Shroud might provide material for reflection during this special time in the Church year. We do not insist on the Shroud's authenticity as a matter of faith, but we do insist that the question of its date remains open despite the Carbon-14 dating of 1988. We would hope the Vatican, together with disinterested scientists, might agree to once again study the Shroud and respond to the arguments of those who believe the dating was wrong. We feel the early reports from Edessa and Constantinople of the existence of a long cloth which bore the image of Jesus on it are evidence that some kind of Shroud was revered long before the 1260-1390 window set by the Carbon-14 dating. We

feel that the Turin Shroud is so mysterious, so fascinating, so moving, that it demands further study. We think such study should be undertaken calmly and patiently, but we would also be pleased to see the new studies undertaken prior to the year 2000 since the Incarnation.

Clearly these are sentiments with which many members of the British Society for the Turin Shroud will find both common ground, and cause for encouragement.

It is also rewarding to have a professional translation into English of Professor Emanuela Marinelli's review in Inside the Vatican of the current state of knowledge on the Shroud. This is as follows:

Latest Findings by Emanuela Marinelli

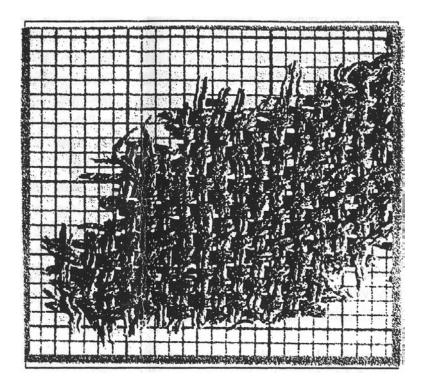
The Shroud of Turin continues to fascinate and astonish us. New discoveries and theories are front-page news. Here it is worth noting some of the more valid recent experiments.

French biophysicist **Jean-Baptiste Rinaudo**, a researcher in nuclear medicine in Montpellier. This scientist offers as a possible explanation for the acid oxidation of the Shroud's surface fibres in the area where the image was formed, the three-dimensional data contained in the figure, and the vertical projection of all the image marks: an irradiation of protons released by the body, under the effect of some unknown source of energy.

Experiments conducted on linen cloth have produced results comparable to the Shroud. It is interesting to note that successive artificial ageing of the cloth samples reinforces the colouring of the oxidized fibres. Rinaudo maintains that the atoms involved in this process are those of the deuterium molecule, present in the organic material: this is the element which requires the least energy for the extraction of a proton from its nucleus, formed by a proton and a neutron. It is a stable nucleus, which requires an energy input

to break it.

Thus, the protons produced in the process could have formed the image, while the neutrons irradiated the tissue with a consequent increase in C14, thus confusing and falsifying the dating of the Shroud.



Right: Comparative linen specimen used by Kouznetsov, as reproduced from *Inside the Vatican*

Of great significance is another set of experiments carried out by the Russian scientist, **Dmitri Kouznetsov**, recipient of the Lenin Prize for Science, and director of the E.A. Sedov Biopolymer Research Laboratories in Moscow. Kouznetsov obtained a piece of linen cloth from the En Gedi area of Israel which had been dated to around the time of Christ. (The sample was provided by the researcher **Mario Moroni** with permission of the Israeli Antiquities Authority of Jerusalem). C14 examination at laboratories in Tucson (Arizona), Toronto (Canada), and Moscow subsequently and separately verified the date to 200 A.D.

The cloth was subjected to conditions similar to those in the Chambery fire of 1532, which engulfed the church where the Shroud was kept: high

temperatures in a closed area with the presence of silver. Silver (which dripped onto the folded Shroud [in 1532]) in fact, acts as a catalyst for carboxylation of the cellulose, so that subsequently the cloth becomes enriched with carbon. After Kouznetsov's experiment, the cloth underwent another C14 examination, with subsequent dating to fourteen centuries later!

The "rejuvenating" effect of silver seems to be confirmed by certain archaeological excavations in Pompeii, where textiles, and particularly linen, were found in the ruins of the volcanic eruption of 79 BC These apparently suffered different rates of combustion according to the sites at which they were discovered: materials which burned in the close vicinity of silver objects appear, even to the naked eye, much "younger," that is, they seem to have had a slower process of decay.

Another discovery has been announced in the United States. **Leoncio Garza-Valdes**, a researcher at the Institute of Microbiology at the University of San Antonio, Texas, claims to have identified upon the Shroud the presence of *lichenothelia*, a biological composite of fungus and bacteria. This, says Garza-Valdes, covers the Shroud's threads with a thin coating and is not removable by cleaning processes. Such a mold could have caused inaccuracies in the carbon dating.

Concerning the blood present on the Shroud, **Jerome Lejeune**, Nobel Prize in the field of genetics, had initiated, before his unfortunate death last spring, a research project aiming for the genetic demonstration of a molecule of human haemoglobin on the Shroud. Meanwhile, Lejeune had already identified and analyzed some red blood cells he affirmed to be human blood, thus confirming the conclusions reached in 1981 by **Pier Luigi Baima Bollone**, medical examiner at the University of Turin. Lejeune had also planned to study the ageing of the proteid molecules by means of racemization.

Other scientists are working on DNA tests on the Shroud. In Genoa analyses promoted by Baima Bollone are continuing. While from Strasbourg there is news of isolated genes of both chromosome X and Y, confirmation that this was masculine blood. **Victor Tryon**, from the University of San Antonio,

Texas, announced the same results, from his experiments with blood from the occipital (skull) area. From the same sample, Garza-Valdes affirms discovery of a camel's hair [textile scrap], probably left from a head-band.

Even the historical field is contributing interesting findings on the Shroud. **Gino Zaninotto**, a Greek and Latin instructor in Rome, has discovered a tenth-century document which throws some light on the dark centuries of the Shroud's "disappearance" in Turkey. This manuscript, the *Codex Vossianus Latinus Q* 69, mentions an eighth-century Syrian report that Jesus had left an imprint of his whole body on a cloth which was preserved in the church of Edessa, Turkey - an unmistakable reference to the Shroud.

Zaninotto also stresses that a passage from the Acts of St. John (cited in the so-called Cyprian Manuscripts of the third-fourth centuries), in which Jesus says: "You will see me as if reflected in water or in a mirror."

And this is how we contemplate the Crucified Christ in the Shroud of Turin.

False Inferences [Emanuela Marinelli's article continued]

Not all the new theories concerning the Shroud are worthy of credulity - or attention.

From the United States, two University of Tennessee professors, **Emily A. Craig and Randall R. Bresee**, affirm that the Shroud image could be caused by using a powder pigment, spread with a brush or the flat side of a wooden spoon.

The Shroud of Turin Research Project (STURP) scientists, who examined the Shroud with the most advanced method and instruments, excluded the presence of paint or any type of pigment upon the Shroud; and thus the Craig-Bresee theory is inconceivable as an explanation. Furthermore, it is often noted that the Shroud image is not recognized as belonging to any definite artistic style or period; no artist could have achieved such a work, in any period of history.

Nevertheless, two English researchers, **Clive Prince** and **Lynn Picknett**, have been claiming that the Shroud was the work of Leonardo da Vinci. That is truly absurd, since we know the Shroud was given to the Savoy family on March 22, 1453, when Leonardo was still in the cradle. Furthermore, the cloth with its famous image, had already been in circulation in France for over a century.

In Germany, a young theology student at the University of Freiburg, **Holger Kersten** upholds the authenticity of the Shroud, but insists that Jesus did not die on the cross. Jesus was only drugged, he says; when taken down from the cross he was revived and cured by Joseph of Arimathea and Nicodemus, who rubbed him with myrrh and aloe. The C14 "plot," Kersten asserts, provided the Church with a useful cover-up for the embarrassing truth.

The blood stains on the Shroud, Kersten insists, could only be left by a beating heart. And, he continues, there are traces of the ointments "partially vaporized by a warm body, completely lacking the signs of *rigor mortis*." "I personally carried out a reconstruction of this process, covering myself with such substances" Kersten asserts in his report, "and the marks left on my linen were amazingly similar to those of the Turin Shroud."

I guess we might ask Kersten, why he tried out only the "ointment" process, rather than undergoing the sufferings of the Man of the Shroud (120 lashes of the terrible *flagrum romano*, coronation with a cap of sharp thorns, crucifixion with nails at the wrists and feet, piercing by a lance in the right side between the fifth and sixth ribs) - and then try the cure!

How can anyone deny that the Shroud contained a corpse, the body of a dead man? The sign of *post mortem* blood and already-separated serum from the crucified man's side are unequivocal proof. And then there are the feet, with the converging toes, a clear sign of the *rigor mortis* which had blocked the lower limbs during the crucifixion. Finally, the complete immobility of the body, with no sign of the slightest shifting or displacement, either in the imprinted image or the coagulated blood, is indisputable.

In fact, the bloodstains on the Shroud could not possibly have been left after

the body was placed on the cloth: the streamlets of blood traced on the Shroud attest to the vertical position of the body, wounded *intra vitam*. If the blood had come from a supine body covered by a cloth, the effect would have been rounded droplets of blood formed around the wounds as the sheet was progressively soaked through.

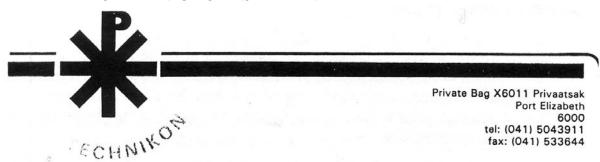
The blood, already congealed when the body was on the cross, liquefied again by a gradual process of *fibrinolysis*, in contact with the myrrh- and aloe-soaked cloth. This procedure probably lasted about thirty to thirty-six hours, after which the body-sheet contact was interrupted, without the slightest evidence of lateral shifting.

It is not conceivable that Kersten, or anyone else, could remain thirty to thirty-six hours, completely immobile with feet curved inwards, wrapped up in a myrrh and aloe drenched sheet - even without all the painful wounds demonstrated by the Shroud.

RESPONSE TO BRO MICHAEL BUTTIGIEG - Dr NICHOLAS ALLEN IS AMUSED

In SN 87 we published an article by Brother Michael Buttigieg of Malta in which he responded to a newspaper report generated by a Reuter story concerning the work of Dr Nicholas Allen of South Africa. Dr Allen has sent us a copy of one of his papers which was subsequently published in the journal of the Department of History and Fine Arts of the University of South Africa in April 1995. This paper is very interesting and describes details of Dr Allen's work based on his assumptions (the Shroud is medieval; it did not have contact with a body, etc). We have sent a copy to Bro Buttigieg and to other Shroud researchers who may be interested in assessing it. Dr Allen's letter is reproduced in full in this issue. The only generally available information on his work has hitherto been in the form of press articles he has generated, a BBC report and two papers in obscure publications (The South African Journal of Art History and The Southern African Journal of Medieval and Renaissance Studies). It appears a touch uncharitable for Dr Allen to be critical of Buttigieg (or anyone else) for not having read his unannounced work which includes even an unpublished thesis on the matter! There are several aspects of his letter to SN which are likely to invite comment.

LETTER FROM Dr NICHOLAS ALLEN



The Editor Shroud News

23rd October 1995

Dear Mr Rex Morgan

I read with some measure of amusement, a most spurious 'article' which appeared in your edition of *Shroud News* No 87 (pp. 14-17), entitled: *Challenge to Allen's Findings*.

Indeed, it would appear that the author of this disparaging script, a certain Brother Michael Buttigieg, forearmed only with the summary contents of a newspaper report, felt that he was perfectly entitled to misrepresent my work in a public forum.

I should state that, unlike Brother Buttigieg I do not fear any seminally critical challenge to my ideas, so long as that opinion is adequately substantiated. In addition, I would require that such an opinion be forwarded by such a person, only after they had had the courtesy to read my own (not inconsiderable) work in this field.

For the sake of responding to Brother Buttigieg's challenge, viz: 'Let the intelligent and unbiased reader make his/her own judgement about how correct is the theory of Prof Nicholas Allen [sic],' I have enclosed one of my articles for your enlightenment.

After reading this document, the 'intelligent and unbiased reader' will soon realise that my arguments are far from 'dubious' and will realise with some trepidation that I have both been misquoted as well as unfairly besmirched.

I refer specifically to the following points which are numbered according to Brother Buttigieg's obviously translated text, viz:

1. I am indeed the first researcher to formulate the photographic hypothesis i.e. that which refers to my explanation concerning the *Shroud*'s manufacture. Secondo Pia was the first person to photograph the *Shroud* and record the fact that the image acted like a photographic plate. Secondo Pia **did not** say that the *Shroud* was a photograph!

LETTER FROM Dr NICHOLAS ALLEN (cont'd)

I should also mention, that unlike most other arm-chair 'researchers', I did not sit down one day and suck my hypothesis out of my thumb. Indeed, I spent five long, lonely years carefully checking my results, before I even dared to put my findings in print and share the fruits of my labour with what I then naively believed would be an appreciative group of sindonologists, **who** like myself were eager to uncover the truth, whatever the impact that might have on their own pet theories.

2. Brother Buttigieg refers to the badly worded contents of a newspaper article, and then fabricates an interpretation that for the life of me I cannot fathom! What the newspaper article refers to is nothing more than the procedure followed by myself when I duplicated the photographic technique employed over six centuries ago for the original manufacture of the *Shroud of Lirey*. In short, the article refers to the correct placement of such vital elements as the human subject (corpse), the positioning of the crystal lens in the aperture of the *camera obscura* and the precise location of the linen material within this *camera obscura*. Although this arrangement is adequately explained in my enclosed article I shall describe the set up as follows:

The subject (corpse) is suspended vertically, by means of a rope or other suitable device, some four meters from the aperture of a large *camera obscura*. In this regard, the corpse is positioned such that it receives both the morning and afternoon sunlight in equal proportion. The aperture of the *camera obscura* contains a crystal bi-convex lens, which has a focal length of about 2 metres. Inside this *camera obscura* may be found a large screen, which supports the linen (*ie* stretched taut). The screen, like the subject, is also placed some four meters from the lens in the aperture. Thus, we now have an arrangement of subject - lens - screen, such that the distance from subject to lens is four meters, from lens to screen is four meters and the total distance from subject to screen is eight meters.

By virtue of this simple arrangement, it is possible to focus an image (albeit inverted) of the sunilluminated subject, onto the screen inside the *camera obscura*. Brother Buttigieg may like to try this for himself (perhaps on a smaller scale) and observe that this phenomenon is perfectly natural and corresponds to the very basic principles of pinhole imagery and indeed the modern day camera!

To make a shroud, take a four metre length of linen cloth (previously prepared with a dilute solution of silver sulphate or silver nitrate), stretch it over the screen, such that two metres of its length is facing the lens and two metres of its length is rolled up (albeit temporarily).

Focus the inverted image of the subject onto this section for three to four days until a negative, three-dimensional image of the subject forms. This will occur, because the silver salt is affected by the limited spectrum of ultraviolet radiant energy that occurs in natural sunlight. Once this frontal image has been obtained, the section which 'contains' this likeness is rolled up and the section that was previously rolled up is opened out. This previously un-exposed section is now affixed to the screen and the subject (corpse) is turned in order that its dorsal image is presented to the lens and is (in its turn) also focused onto the cloth. After another three to four days this section will also be graced with a subtle negative image of the subject.

LETTER FROM Dr NICHOLAS ALLEN (cont'd)

If you now open up the entire cloth, it will be observed that two images appear, one dorsal and one frontal, positioned head to head (exactly as they do in the Shroud).

If this cloth is now submerged in ammonia, the silver salt will be completely stripped away leaving nothing behind except oxidised linen. These areas of oxidised linen occur only in those areas where the image had previously formed in the silver salt. Thus we have a negative, two-fold image of the subject, formed from oxidised cellulose. This image is subtle and may only be viewed adequately from a distance upwards of six to seven metres.

Brother Buttigieg asks his reader 'How could a corpse stand (by itself? or be held and supported in the space and vacuum?) some 12 feet away from the Shroud?'

Well, actually I have never ever made such a statement! Who said anything about a vacuum? I speak only of supporting a corpse from a gibbet or beam (in the fresh air and under the gaze of the sun). I never stated that the corpse was 12 feet from the cloth! I have clearly indicated a distance upwards of eight meters (24 feet) between corpse and screen.

Brother Buttigieg states that 'Science has proved beyond any shade of doubt that the Shroud was in direct contact with the body.'

What patent nonsense! Dr Vignon proved as far back as 1902, that any direct contact between cadaver and cloth would produce a distorted image. Only a photographic technique could produce an image like the one which appears on the Shroud of Turin today. It is no use pointing aimlessly to the denatured haemoglobin which is found on the Shroud, since this was applied by brush or stylus after the image was produced. There is more than one way of applying blood and serum onto a piece of linen and in this regard using a human corpse as if it were some giant potato printer is not the best method, I assure you.

Why does Brother Buttigieg bother to mention William Harvey? So what if the circulation of blood was only 'discovered' in 1628? How does this in any way discredit the substantiated fact that Islamic scholars knew how to make such salts as silver nitrate and silver sulphate in the ninth century?

The Romans discontinued the practice of crucifixion after the 4th century. So what? Crucifixion was practised in many parts of the world at many different times. In addition, the newspaper article has me stating that the image was definitely of a crucified man. Yes, the man in the Shroud was most likely crucified. However, whether he was or not is just not that critical to the production of a Shroud-like image, since such details as the missing thumbs (often viewed as proof of this form of torture) could also be explained by the fact that the arms of the deceased had to be held in place so as to form the *Venus pudica* pose. Thus the thumbs may have been tied together. The stigmata itself was added after the image was made. If Brother Buttigieg had bothered to read any of my articles on the subject (or even perhaps my thesis), he would have read that I have considered many possibilities as to the status of the corpse, ranging from crucified victims, to cadavers, to embalmed cadavers to frozen cadavers and even bodycasts from living persons!

LETTER FROM Dr NICHOLAS ALLEN cont'd)

3. Prof J Le Jeune's views concerning the pedigree of the *Shroud* are irrelevant to my argument. I have deduced that iconographically the *Shroud* must date from sometime after the beginning of the 13th century. Due to the documented references of the *Shroud*'s existence by the midfourteenth century together with the 1988 carbon-dating, I feel safe in stating that the *Shroud* was most likely produced sometime between 1280-1320. If the *Shroud* was exposed at the height of summer then it could only have been produced at a geographic site positioned somewhere between the 45° and 49° meridian.

Even so, it was perfectly possible for a person living after the ninth century in either China, the Islamic East, Venice or Byzantium, to have produced a photographic negative image. Reports of so-called *acheiropoietai* (image-not-made-by-human-hands), abound in Byzantine literature. In this regard the description of two different *Shroud*-like objects by both Nicolas Mesarites and Robert de Clari in 1201 and c. 1204 respectively, seem to support the early occurrence of this technology.

4. Whether a person accepts the carbon dating or not, depends largely on their understanding of this process. I also would not rely too heavily on it for absolute accuracy. But, a person would have to be pretty thick-skinned not to accept that the *Shroud* which now resides in Turin, could not have been made before 1000 AD, given the worse odds possible with this measuring technique.

In conclusion, let the inquisitive and undogmatic compare my ratiocinations with the phenomenon of the *Shroud of Lirey-Chambery-Turin*. Let them also compare my findings with the various reports written by the members of the STURP commissions of 1973 and 1978.

Look at the images that I have produced employing medieval technology and then let them make their own judgement.

I am yours sincerely

(signed)

Dr Nicholas Peter Leigh Allen Laureatus Tech PA, DPhil, M F A, D F A

SHROUD SYMPOSIUM IN NEW YORK

Fr Fred Brinkmann, C.Ss.R, has taken over as leader of the Holy Shroud Guild of New York on the retirement of Fr Adam Otterbein. The re-vamped *Holy Shroud Guild Newsletter* of November 1995 announces a Holy Shroud Symposium to be held at Mount St Alphonsus, Esopus, New York State, on 23, 24 and 25 AUGUST 1996. Further information will be published by *SN* as it comes to hand.

Shroud News began in 1980 when Rex Morgan, author of three books on the subject of the Holy Shroud (Perpetual Miracle, Shroud Guide and The Holy Shroud and the Earliest Paintings of Christ) and editor of several others, began sending a few notes about current developments in the study of the Shroud of Turin (Sindonology) for a small circle of interested people in his home country of Australia. He didn't expect it to go beyond a few issues.

Today, the bulletin, now highly acclaimed, reaches subscribers all over the world and is written, produced and disseminated more quickly than any other Shroud publication in the English language. It contains information, news, articles and illustrations gathered from sources of Shroud study worldwide through Rex Morgan's extensive network of personal connections with what has been described as the "Shroud Crowd".

Rex Morgan is a frequent traveller overseas which gives him the opportunity to keep abreast of latest developments in Shroud study and research at first hand. He was present at the world media preview of the Shroud itself in August 1978 in Turin, Italy and has met and knows numerous Shroud researchers in many countries. His quest for Shroud information became, as he described it, "a passionate hobby". He took the world famous Photographic Exhibition created by Brooks Institute, California, to Australia, New Zealand, Hong Kong, Macau, and Canada and during those tours it attracted more than 600,000 visitors. The exhibition was subsequently donated by Brooks to the non-profit making organisation, The South East Asia Research Centre for the Holy Shroud (SEARCH) of which Morgan is President. He is also a Board member of the US based Association of Scientists and Scholars International for the Shroud of Turin (ASSIST) and was a member of the scientific team which conducted environmental experiments in a Jerusalem tomb in 1986 (ESSJ). He has made a number of original contributions to Shroud research has presented major papers at international Shroud conferences has written numerous articles and has given hundreds of broadcasts and telecasts on the subject in many countries.

The list of *Shroud News* subscribers continues to increase internationally and it has been described many times as one of the best available. *Shroud News* comes out six times a year. Its production is obviously privately subsidised as we request a subscription in Australia of only \$6 for six issues posted. The USA subscription is \$12 (posted airmail - there is no longer any surface mail from Australia). Postage to other countries varies. ALL back issues are available for \$1 (US or Aust) each plus postage. The famous 50th issue is \$3 plus post. Customers should note that as it costs us \$8 to negotiate each foreign cheque we request all payments be made in currency banknotes of your country or charge to Visa, Master or Amex cards.

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