



A NEWSLETTER ABOUT RESEARCH ON THE HOLY SHROUD OF TURIN  
Was the most frequent Shroud-related publication in the English language  
published in Australia for worldwide private circulation since 1980  
edited by REX MORGAN, author of several books on the Shroud

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HERO MARIO TREMATORE, THE MAN WHO SAVED THE SHROUD,  
WITH HIS INTERPRETER AT THE DALLAS INTERNATIONAL  
CONFERENCE OCTOBER 2001

"If it were not for him, I suggest, none of us would be here  
because we would have nothing further to talk about."

(Rex Morgan, Keynote Speech, Dallas)

## EDITORIAL

This is only the second issue of *SN* for the year and I regret that, despite the fact that I should be retired, the enormous pressures of my professional life have precluded the usual intensity of this Shroud work which I have pursued as a mission since 1980.

During the past year a number of new Shroud books have been published as well as many new articles and research reports. My Shroud desk now has a mountain of material which I should much like to cull and bring to you through *Shroud News*. I shall do this as soon as I can.

One of the original Shroudies of the 20th century wave, Dr Bob Bucklin died during the year. He was the medical practitioner who appeared in the great movie *The Silent Witness* in 1979 and has been involved ever since in Shroud research.

Probably the most significant event to occur this year was the Dallas International Conference held in October. This was organised jointly by the American Shroud of Turin Association for Research (AM\*STAR) and the Holy Shroud Guild of New York. Its leading organisers were Mike Minor, Isabel Piczek, Fr Fred Brinkmann and Tom D'Muhala and it was a high powered affair which attracted a number of overseas contributors. These included Professor Avinoam Danin from Israel; Dr Michael Hesemann from Germany; Dr Marie Claire van Oosterwyck Gastuche from Belgium; Mark Guscini from Spain; Emanuela Marinelli, Alberto di. Giglio and Mario Trematore from Italy; William Meacham from Hong Kong; Ron and Gabrielle Tesoriero and Mike Willesee from Australia as well as Rex Morgan.

Amongst the speakers from USA were Thomas D'Muhala; Kim Dreisbach; Alan and Mary Whanger; Bryan Walsh; Gilbert Lavoie; Richard Orareo; Russ Breault; Dan Scavone; Isabel Piczek; Michael Minor; Fred Brinkmann; Diana Fulbright; John Markwardt; Barrie Schwartz; Stephen Mattingly; Fred Zugibe; Paul Maloney; August Accetta; Mark Antonacci; Kevin Moran, to mention only some. I hope to bring you a proper summary of the work presented in a future issue of *SN*. There was, indeed, a good deal of new and interesting material.

It was disappointing that the conference was marked by the absence, in some cases at the last minute, of several high profile Shroudies such as Italian Bruno Barberis, whose tickets were not delivered thus forcing him to withdraw and telephone his good wishes to the conference; Americans John and Rebecca Jackson for financial reasons, and Englishman Ian Wilson. It was disappointing to hear of what appeared to be some fits of pique or petulance regarding what had been perceived as the way the conference was organised. It was sad, but instructive, to hear numerous discussions and comments provoked by the wide circulation of emails and articles which did nothing to enhance reputations. What de-stabilisers often forget is that such actions open many cans of worms which might otherwise have been forgotten and past events also reappear to be re-worked and haunt the reputations of those involved.

*(Please turn to inside back cover – Page 35)*

THE SHROUD IN THE NEW MILLENNIUM

KEYNOTE ADDRESS

GIVEN AT THE

DALLAS INTERNATIONAL CONFERENCE

27 October 2001

by

REX MORGAN



At the Dallas International Conference the organisers with  
Professor Stephen Mattingly.  
L to r: Tom D'Muhala, Dr Mattingly, Isabel Piczek, Mike Minor



Following the Keynote Address at Dallas, Rex Morgan and two others were  
presented with Certificates from the Governor of Texas appointing each of  
them as an "Admiral of the Texas Navy"

L to r: Morgan, Richard Orareo, Chairman Mike Minor, Mario Trematore, Governor's  
representative

## **THE SHROUD IN THE NEW MILLENNIUM**

Rex Morgan

Keynote Speech to the International Shroud Conference  
Dallas, Texas 28 October 2001

Ladies and gentlemen, this important international conference represents one of those pivotal moments in the history of the Shroud and sindonology. And I therefore regard this opportunity to deliver its keynote address here in wonderful Dallas, Texas, a very great honour indeed.

In doing so I would like first to extend on behalf of all of us here, every member of this distinguished assembled company, our gratitude to the organisers of the conference for the work they have done, exhibiting the energy, vision and foresight to provide such an enjoyable and intimate forum in this vibrant city of Dallas and state of Texas, known all over the world, as it is, for its hospitality, congeniality and the warmth of its welcome, and for allowing the continuation of our vital collective work towards a better understanding of the Shroud of Turin.

You have provided us with a magnificent opportunity for information exchange and the expression of our ideas, our research, our hypotheses, the results we have achieved, and most importantly, I believe, our celebration of friendship and our spirit of common purpose which binds us, reflecting those intangible qualities which are revealed whenever we come together, wherever in the world it might be, to share our knowledge and our work regarding this enigma, this extraordinary object, this perpetual mystery, the Shroud.

I congratulate Thomas D'Muhala and the American Shroud of Turin Association for Research (AM\*STAR) and also Rev'd Frederick Brinkmann and the Holy Shroud Guild on their joint staging of this magnificent conference. We must especially thank the principal organisers, our valued and trusted friends the genial Michael Minor and the inimitable Isabel Piczek.

And I would also like to say how much we have all appreciated the work behind the scenes of Barry Schwartz who has been there for every minute of every part of this conference working all the technical matters.

I am also delighted that you had the foresight to invite our friend Mario Trematore to be here as a special guest because if it were not for him, I suggest, none of us would be here because we would have nothing further to talk about.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

At the very outset I would like to add my own sentiments to those which have already been expressed by so many others here regarding the recent events which have taken place in your beloved America. You have faced appalling acts of aggression and terror. Your citizens have been victims of atrocity and slaughter. We, as citizens of the free world, who share a common bond uniting free peoples all over the world, share deeply in your distress; we feel as you do the terrible sadness and the sense of loss which your nation has faced and we mourn these losses as you do. We share equally your resolve to rid the world of terror and to face down despicable cowards and to triumph over the evil manifest in their barbaric actions. I want to thank you for having the courage and strength of mind to continue with this vital international conference which celebrates so clearly a message of goodness and hope in the world despite these troubled times.

I can tell you that the people of my own adopted country, Australia, are standing firmly at your side ready to take up the challenges which lie ahead facing all free peoples in ridding the world of such brutal terrorism. By standing firm, as you have done, in going ahead with this conference you bring strength to the message of hope in the world at this time - that essential message which shows us that good does win out over evil in the end and that what we know to be good and right will endure in the world. The message of the Shroud itself is proof enough of that.

This conference represents a pivotal moment in the history of the Shroud for we are given the opportunity through accident of time, date and calendar in this millennial year to take stock of the events in Shroud history of the past two millennia, and of sindonology in the past century. We are also given the opportunity to look forward, to redefine our hopes and dreams as Shroud researchers in the light of what we have already learned about the Shroud.

We have a unique opportunity, and many are already embracing it, to advance with a fresh outlook, a renewed spirit, a strengthened desire, to work together asking the questions of science, religion, history and art which might yet reveal answers to the unresolved issues of the Shroud.

In February 1997 I wrote the 100th issue of *Shroud News*. In it I wrote of my own 'Shroud Odyssey', as I called it, which began in Turin in August 1978 when I first saw the Shroud the day before the public were admitted into the Cathedral for the great exposition of that year, and that odyssey became more and more intense as the years went on. It became a commitment for me to continue to bring out *Shroud News* whose first issue appeared in September 1980. I watched the subscription list grow and widen to embrace people in countries all over the world.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

I noted at that time that I had no real editorial policy, no mission statement of any significance, no editorial board with individuals forcing their opinions on the publication, no initial requirement for peer review (and therefore allowing an important immediacy of information), no deadline to meet apart from the approximate bi-monthly production (which I must admit has been rather flexible in the last year or two) and no pretensions about being a scholarly or scientific or prestigious publication. For these reasons *Shroud News* became a success and filled a void in communication amongst Shroudies all over the world.

It was very evident to me at the outset that effective communication is and always will be a key to the success and viability of sindonology as a whole.

This observation was further borne out by several tangential developments which followed. Some years ago, for example, the British Society for the Turin Shroud led by Ian Wilson adopted both the same format and a similar policy as *Shroud News* thus rendering his work, and that of the British Society even more useful, accessible and therefore complementary to my own newsletter which had become, in the English speaking part of the world of sindonology, an apparently useful and, I'm glad to say, welcome device for communication.

One notes also the excellence of such publications as the Italian *Il Telo* and the *Collegamento Sindone* of Emanuela Marinelli's group.

A further and very contemporary example of this need for effective communication amongst Shroud scholars can be observed in the remarkable development and significance of the really superb internet website generated over thousands of hours by Barrie Schwartz in the last few years which brings immediacy to the current news and developments amongst sindonologists and provides access to our work for the interested general public all over the world. The websites of Schwartz and the many others which have been developed are essential to the sharing of information as our collective research programmes continue in the new millennium

In 1997 I said:

"If the anti Shroud crusade and skeptics had never put up their absurd theories and if the world media, ever keen for a scandal and for negative reporting, had not taken up, for example, the forgery story (of Walter McCrone) and continued to beat it up for the entire period since 1980, then perhaps the

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

intensity with which those of us who had read all the other research and who understand the implications of the enormous preponderance of evidence for probable authenticity would not have occurred."

I also said in 1997 that:

"I have no personal reason for wanting the shroud to be genuine. (My religious beliefs or practices, such as they are, do not depend on its existence or its authenticity.) What I do know is that when I first saw the Shroud in 1978 it became immediately apparent to me, like any other self evident truth, that it must surely be genuine although I could not then, cannot now and do not expect in the future, to prove such a statement. It was certainly a purely subjective attitude formed in my mind by the evidence of my eyes, my other senses and, above all, my third eye. And whilst I have always been ready to be convinced that it is a fake no-one has yet been able so to convince me by outweighing that vast body of evidence to the contrary."

It has been a fascinating twenty five years delving into the numerous areas of research and interest. I have been able to meet and befriend many of the world's great sindonologists and then through *Shroud News* to pay tribute to the large number of them who have died during the period.

Many of us can remember these wonderful personalities of sindonology with admiration and affection. Such great Shroud researchers and enthusiasts now departed such as:

Don Piero Coero Borga, Giovanni Tamburelli, Dr Jean Volkringer, Professor Max Frei, King Umberto II of Italy, Professor Jerome Lejeune, Monsignor Giulio Ricci, Group Captain Lord Cheshire VC, Dr David Willis, Rev Fr Peter Rinaldi, Claire McAllister White, Werner Bulst, Rodney Hoare, Hilda Leynen, HE Baron Straten-Waillet, Rev Fr Adam Otterbein, Cardinal Anastasio Ballestrero, Dr John Heller, Father Francis Filas, Roger Apple, Anna Hulbert, Bro Michael Buttigieg, Dr Alan Adler, Don Lynn and Dr Bob Bucklin to mention a few.

The first great generation of twentieth century Shroudies has, then, almost disappeared. I belong to the second wave and I am no longer young. My earnest hope, shared by many, is that we shall find enough of the third wave of sindonologists to persist with the work and carry into the next millennium the continuing quest for more information, investigation and discussion about the most fascinating mystery in the world.



## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

When we, gathered here, all of like mind, think back over the past twenty or thirty years, and further back indeed to the dawning of the scientific age for the Shroud of Turin which began with Secondo Pia and his massive cumbersome plate-camera in 1898, I think that we would all agree that one of the most rewarding aspects of the exercise has been in those friendships and collaborations which we have made along the way, and this is particularly true for me as I have had the opportunity of moving freely amongst the worldwide Shroud circle for many years.

There is, as with most fields of study, a special affinity which is manifest amongst those of the same mindset. There are also to be observed, unfortunately, the less noble human failings of academic jealousies, back biting, personal vendettas, scandals and, in some cases, near criminal activity which attends upon all intensive and passionate human behaviour. I have tried to keep clear of these and hope I have been successful apart from the frustration or annoyance which I might have caused occasionally to those who cannot face candour.

I have had the great pleasure and privilege of attending and giving papers at many international Shroud conferences. I have managed to write several books on the subject and be involved in one way or another with the production of others. I have given countless lectures on the Shroud to public groups. I have, since 1982, controlled the original Brooks Institute Photographic Exhibition based on the 1978 research work in Turin and have added to and enhanced that exhibit. It has been seen by nearly three quarters of a million people in many countries since that time. I have enjoyed the challenge of doing several pieces of original research and have been a member of a number of expeditionary teams undertaking research in the field of one kind or another.

And added to that, I have produced 117 issues of *Shroud News*, my humble newsletter, helping to keep the communication lines open as well as I could.

My intention tonight is to remind us of several themes which link the past century of Shroud research to the century which lies ahead. I shall offer you a synopsis of just some of the landmark events which shaped sindonology at the close of the second millennium. I shall mention just some of the outcomes of our research in order to demonstrate what is fairly certain today. I shall present a view of the radiocarbon polemic and support a way forward. I shall present an overview of the key issues which we must embrace in the new millennium of Sindonology. And I shall call upon all active Shroudies to maintain their passion and their resolve to continue in the great challenge of unlocking the mysteries of this remarkable Shroud of Turin.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

As a prelude to considering the challenges of the future and to put into perspective the present, let us ponder then, briefly, some of the major events which have shaped sindonology in the scientific era of Shroud history which began in 1898.

In May 1898 Pia's photographs revealed the Shroud image to have the same characteristics as a photographic negative.

In 1902 the first modern scientific paper on the subject of the Shroud was presented to the Academy of Sciences in Paris by Professor of Anatomy Yves Delage who argued for the medical and general scientific plausibility of the Shroud image.

In 1931 two million visitors flocked to see the exposition of the Shroud in Turin. Giuseppe Enrie photographed it and Secondo Pia was there as well, as were scientists of the French Academy.

In the same year Dr Pierre Barbet conducted experiments to reconstruct the Passion of Jesus as exhibited in the Shroud image, work now updated by Dr Fred Zugibe.

In 1933 Fr Peter Rinaldi attended the exposition of the Shroud and Barbet, through direct close observation, realised that the bloodstains were derived from direct contact between the cloth and a body.

In 1938 Paul Vignon who had studied the Shroud for many years published the most definitive book on the subject to that time - and much of our later work has been in verifying the hypotheses put forward by him.

In 1939 the first International Congress on Shroud Studies was held in Turin, at which 20 papers were presented, and which was the forerunner of all international conferences such as this one here in Dallas.

In 1951 the Holy Shroud Guild was formed in New York.

In 1954 Group Captain Leonard Cheshire VC toured Britain with a photographic exhibit about the Shroud based on the photographs of Enrie.

In 1959 the formation took place of the Centro Internazionale di Sindonologia in Turin.

In 1960 British Shroud enthusiast Vera Barclay raised with the Atomic Energy Research establishment, Hartwell, UK, the idea of the viability of radiocarbon dating of the Shroud.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

In 1969 Cardinal Michele Pellegrino initiated an examination of the Shroud to study its state of preservation by a team of experts.

In 1969 The Shroud was photographed by Giovanni Battista Judica - Cordiglia in colour for the first time, and again in black and white, and by Woods Light / Ultra Violet.

In 1973 the Shroud was exhibited for television for the first time and a group of international sindonologists was able to examine it. This included the removal of a significant sample by Professor Gilbert Raes and the removal of 12 samples on adhesive tape by Dr Max Frei.

In 1976 Drs John Jackson and Bill Mottern viewed a Shroud image through a VP8 image analyser, invented by Dr Peter Schumacher, for the first time revealing the three dimensionality of the image.

In 1976 Max Frei demonstrated that some pollens found on the Shroud were unique to Israel and Turkey.

In 1977 Fr Rinaldi, Fr Otterbein, Sox, Robinson, Rolfe, Jackson and many others met at the first United States Conference of Research on the Shroud, and the Shroud of Turin Research Project (STURP) team later evolved as a result of this meeting.

In 1977 Rev David Sox, of the newly formed British Society for the Turin Shroud contacted Professor Harry Gove about carbon dating the Shroud, Gove having pioneered accelerator mass spectrometry in the same year and Sox later to desert the Shroud.

In 1977 a Shroud Symposium was held in London at which Jackson, Jumper, Frei, McCrone, Rinaldi, Otterbein, Ricci and Coero-Borga spoke among others.

In 1978 Cardinal Ballestrero announced a Shroud exposition and international congress for later in the year. The team which became the Shroud of Turin Research Project (STURP) met in Colorado Springs and again in Connecticut to plan scientific testing of the Shroud. Harry Gove met Edward Hall (who has just died) to discuss carbon dating of the Shroud. The Second International Symposium on the Shroud was held in Turin.

In 1978 Ian Wilson's book "The Turin Shroud" became the most significant book on the subject to that date in which he published his hypothesis that the folded Shroud and the framed Mandylion of Edessa are one and the same.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

In October 1978 STURP carried out its extensive battery of tests. A complete photographic study was undertaken by Vernon Miller, Barrie Schwartz and Ernie Brooks among others. An independent research programme was undertaken by Frei, Jackson, Riggi, Baima-Bollone, Gonella and others. Dr Ray Rogers took 32 samples of particulate matter, removed from the Shroud surface by Frei, and sent to microscopist Dr Walter McCrone.

In 1979 The film "The Silent Witness" was released by David Rolfe.

In 1979 Fr Frank Filas first identified the coin images on the eyes.

In 1979 Harry Gove formally offered to carbon date the Shroud.

In 1981 The Brooks Institute exhibited photographic material from the 1978 study.

In 1981 Jackson, Schwalbe, Gonella, Otterbein and Rinaldi visited ex King Umberto of Italy to report initial findings of the STURP investigations.

In 1981 Dorothy Crispino inaugurated *Shroud Spectrum International*, since regrettably defunct.

In 1983 King Umberto died and the Shroud was bequeathed to the Pope.

In 1984 Jackson and D'Muhala presented Cardinal Ballestrero with proposals for further scientific work on the Shroud.

In 1986 the US Shroud group the Association of Scholars and Scientists International for the Shroud of Turin (ASSIST) was formed and Paul Maloney received five of the Frei pollen samples which were examined by a Shroud conference in Pennsylvania.

In 1986 a Shroud symposium was organised by William Meacham in Hong Kong at which I also exhibited the Brooks Photographic Exhibit drawing. a quarter of a million people.

In 1986 Whanger and Whanger demonstrated their Polarized Image Overlay Technique which revolutionised the iconographic study of the Shroud face image.

In 1986 the Environmental Study of the Shroud in Jerusalem (ESSJ), of which I was a member, led by Dr Eugenia Nitowski, was conducted in a tomb complex under Jerusalem.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

In 1988 samples were cut from the Shroud for Carbon 14 testing. Riggi also took blood samples and retained a portion of the cut Shroud material.

In 1988 Frei's entire collection of samples became the property of ASSIST. These were examined by Dr Alan Adler and others revealing plant and floral debris and more pollens.

In August 1988 I recall being at a private Shroud group meeting at Dorothy Crispino's home when Rinaldi telephoned gravely disturbed that he had been told that the carbon dating results were likely to be a medieval date. It was interesting that Fr Fred Brinkmann corroborated that view of Rinaldi in his talk this morning.

In August 1988 the London *Evening Standard* had got hold of this information and declared the Shroud to be a fake made in 1350.

In October 1988 the results of the carbon dating were announced by Hall as 1260 to 1390 (!).

In 1989 an International Shroud Symposium was held in Bologna and the first Centre Internationale d' Etudes sur le Linceul de Turin (CIELT) Shroud Symposium was held in Paris.

In 1991 Isabel Piczek showed conclusively that the image cannot be any kind of painting.

In 1991 an international Shroud Symposium was held in St Louis, Missouri (the proceedings of which were produced the same year) organised by Joe Marino and Fr Aram Berard.

In 1992 five textile experts examined the Shroud including Landi, Flury-Lemberg, Cardamone, Diana, Luigi.

In 1993 Leoncio Garza-Valdes examined the Shroud sample retained by Riggi leading to his observations of bioplastic coating on the fibres.

In 1993 the second CIELT International Shroud Symposium was held in Rome.

In 1993 STURP was formally dissolved.

In 1995 expositions of the Shroud to be held in 1998 and 2000 were announced by Cardinal Saldarini.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

In 1995 Saldarini declared that any Shroud samples other than those taken with official permission in 1978 are unauthorised and asked for their return to the Holy See.

In 1995 Barrie Schwartz created the first major Shroud website.

In 1997 the Shroud was rescued from certain destruction in the burning and collapsing Turin Cathedral by hero fireman Mario Trematore. The Shroud was examined and found to be undamaged.

In 1997 The Third CIELT International Shroud Symposium was held in Nice, France.

In 1998 an exposition of the Shroud took place as did an International Shroud Symposium in Turin and included several important exhibitions of Shroud related material including the highly significant collection of ex-King Umberto II of Savoy, Pia's original photographic plates from 1898, and other important artefacts associated with sindonology.

In May 1999 a conference on relics was held in Rome (including the Shroud and allied cloths) at which HRH Princess Maria Gabriella of Savoy gave a significant paper on the Savoy collection.

In 1999 an International Shroud Conference in Richmond Virginia was held which included the exhibition of Richard Orareo's collection.

In 2000 the Shroud was again on exposition and a Scientific Congress was held in Turin to discuss the past, present and future of the Shroud.

In 2000 a one week examination of the Shroud took place by a group of Italian scientists initiated by Cardinal Poletto. The underside of the Shroud cloth was examined by Soardo with a scanner, presided over by Ghiberti, which confirmed what had been observed by STURP in 1978, but which apparently gained other as yet unannounced data.

In 2000 an international Shroud conference was held at Orvieto, Italy.

In 2001 the Shroud was placed in a new storage arrangement and kept flat in a chamber filled with an inert gas to assist in its long term conservation.

In 2001 we meet for this International Conference in Dallas.

In 2002 CIELT will hold its fourth International Symposium in Paris.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

Now, at the dawn of the new millennium, thanks to the contributions of a very large number of sindonologists and associated researchers of the first and second waves some definitive statements can be made about the Shroud, its images and the evidence contained in and upon it.

And it's worth drawing attention, in giving these statements, to the published proceedings of the International Scientific Symposium which was held (by invitation only) in Turin in March 2000 under the auspices of the Centro Internazionale di Sindonologia. This volume is one of the most rapidly produced of any Shroud conference proceedings that I can remember, eclipsing in production time even the St Louis proceedings of 1991 and the CIELT proceedings of 1997.

That significant gathering in Turin, which also included a private hour long examination of the Shroud itself for that select group, produced some very perceptive and valuable presentations and discussions which help us set a useful benchmark in Shroud research as we determine the course of future priorities and from which I have drawn some of the statements which follow.

Further to this, another important conference was held last year in Orvieto, organised by the significant Shroud author Emanuela Marinelli, which reflects the current focus and progress of different areas of contemporary Shroud research in all its multi disciplinary fields by those like you and me and many others all over the world.

We must remember that the statements we make about the Shroud, based on the huge corpus of knowledge which has been amassed over the last hundred years, are mostly polemical - they are open to varying degrees of argument and varying methods of validation- for as all of us know there are potentially about as many opinions about each characteristic of the Shroud, and as many opinions about each hypothesis accounting for these characteristics, as there are Shroud researchers living and working in the world.

Our late friend Al Adler, in his last published work, pointed out that the validation of scientific conclusions differs from the criteria applied to historical arguments in that in science hypotheses must be tested by a reproducible experiment. He reminded us that scientific studies cannot establish the authenticity of the Shroud but only its disauthenticity. He noted that in the testing of hypotheses by experiment the investigator must carry out enough measurements to establish precision and enough control experiments to distinguish which of all reasonable possible testable explanations best fits all the data.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

He said:

"Scientific truth becomes a matter of relative probabilities to which one approximates by continued application of the scientific method utilizing further testable hypotheses and experiments".

These statements are supported and reiterated frequently in the contemporary literature as a response to the scene many of us observed at the huge International Symposium held in Turin in 1998 at which some quite ridiculous and unsubstantiated and unverifiable papers were put forward from the extreme outer fringes of sindonology. Although we must bear in mind that everyone who submitted a proposed paper was sincere in their beliefs and was accepted without question to that conference although, as I recall, some of our esteemed and legitimate colleagues in sindonology packed up and went home in disgust when some of the lightweights took to the podium.

This may have been the cause for the current degree of focus on determining the veracity of research. Barberis comments, in relation to the image formation process, for example, that serious theoretical and experimental research based on strictly scientific foundations must be applied. This comment demonstrates the difference between developing validation in the sciences and the arts.

Another of our great friends John Jackson, surely one of the best analytical minds of the second wave of sindonologists, comments that:

"It is only through a careful application of the scientific method, which relies ultimately upon empirical observation, that we can focus on the correct scientific explanation and resolve contradictory hypotheses, many of which abound about the Shroud."

Regarding the criteria used in historical argument as opposed to scientific method, Adler had pointed out that reasonable theories well supported by a great deal of varied historic, artistic, iconographic and other circumstantial evidence, although remaining polemical, are regarded as acceptable in the determination of Shroud history.

But Ghiberti, who identifies a greater problem, takes a harder line. He states that we must work on the problem of "the force of habit and conceit in 'presuming to know' holding sway over contact with serious primary sources" and he calls on the need to rigorously verify, on an incontrovertible documentary basis, historical descriptions which are made.



## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

And Jackson further indicated that some of the most compelling historical arguments are based on direct scientific observation of aspects of the Shroud itself. The way forward, he suggests, is through the coupling together of the scientific method, through empirical observation, with the historical data supported by strong circumstantial evidence, which although in the crucial period before 1350 remains polemical, will hopefully produce a convincing and satisfying history of the Shroud from its origin until the present.

To guide us into the New Millennium of research let me now recall some of the main definitive statements of empirical fact and of near certainty, albeit polemical, that can be, in my opinion, confidently made about the Shroud of Turin as a result of the combined interdisciplinary approaches of scientific, historical, artistic, religious, iconographic and other fields of study over the last 100 years - each of these statements dare I say - with its own separately evolved methodology for validation - their differences being perhaps the catalyst for many of the greatest disagreements, exclusions, arguments and jealousies which have occasionally, but perhaps in the long run beneficially, punctuated the work of sindonology in the past.

And obviously it is beyond the scope of this paper to cover all the detail which can be derived from the huge corpus of published Shroud research and so I am able only to touch upon some of the key arguments and observations to at least give an indication of where we stand now and which will guide our thinking as we contemplate sindonology in the new millennium.

### THE NATURE OF THE CLOTH

We have a quite clear understanding of the nature of the Cloth itself.

- 1) We know with absolute certainty that the major part of the Shroud was manufactured from flax to become a linen cloth, in herringbone twill weave, and it is widely accepted that its manufacture is compatible with the skills, methods, style and technology of, and location in, first century Palestine.
- 2) It is also widely accepted that these skills, the method, style and technology of manufacture are completely anomalous in the 14th century in Europe and that there are no similar examples extant from this period.
- 3) We know with certainty that the backing 'Holland' cloth is medieval in origin and exhibits normal characteristics of medieval textile technology.
- 4) We know that the side strip, as sampled by Raes in 1973 is distinguishably different to the main body of the cloth, which he also sampled, because it was sewn onto the edge of the cloth.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

5) We are almost certain that additional strengthening and repair materials such as cotton threads, which can be observed microscopically on the cloth, have been added long after its time of manufacture possibly therefore altering the composition of some parts of the cloth.

6) Importantly it is currently proposed by Benford, Marino and Rogers that, based on strong evidence derived from direct observation of pictures of samples used, that some secondary re-weaving took place in the area of the cloth which underwent radiocarbon dating in 1988 although further demonstration of this would be helpful.

## HISTORY

A few statements regarding Shroud history can be confidently made.

1) We have clear documentation of the history of the Shroud from 1350 onwards since De Charney owned it and some convincing theories suggesting its whereabouts in the short gaps which exist in its documented chronology since that time are also generally accepted - Some of my own work relates to these periods, along with the work of many others (Zaccone, De Brienne, Wilson, Scavone, Markwardt etc).

2) We have a series of very plausible hypotheses based on a whole range of circumstantial evidence, on the Shroud itself, in the historical record, through art history and iconography, through the interpretation of religious texts, from eye witness accounts reported in the New Testament, supporting the prior existence of the Shroud back to the first century (Dan Scavone, Meacham, Wilson, Dietz and so many others).

3) We know with a high degree of probability that the Shroud conforms exactly, through analysis of existing complex fold marks, with descriptions of a shroudlike object being hoisted up for exposition in Constantinople in the middle of the twelfth and probably in the eleventh centuries demonstrating strongly the likelihood of its existence before 1350 (thanks to John Jackson and his research team).

4) We know that it is highly likely that it is the Shroud itself which is depicted, along with its 'poker holes' in the Hungarian Pray Manuscript of 1192-5, in stone reliefs from 1150, and it is highly likely that the Shroud face and 'poker holes' appear in representations of the cloth of Edessa, and in Byzantine coinage back to 944 AD (thanks to the work of Zaninotto and Wilson and others).

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

5) We know from Wilson and others the high likelihood that the Shroud, the cloth of Edessa and the Mandylion are the same historical object demonstrating a date for the Shroud back as far as 525 based on historical, artistic, iconographic and other circumstantial evidence (of which certain fold marks and the presence of the poker holes along with the features of the face are but a few examples) and Mark Guscini added to our knowledge of early documentation only yesterday.

6) We know certainly that the historical accounts of the passion of Jesus of Nazareth speak of a shroud used in his burial which belonged to Joseph of Arimathea placing such an object in the correct context of the time and place of the entombment of the body of Jesus of Nazareth.

## THE BLOOD STAINS AND THE WOUNDS

1) We know with absolute certainty that the blood stains on the Shroud are composed of real human blood and blood derived materials of the blood group type AB (Adler and Heller - USA, and Tamburelli - Italy).

2) It is almost universally accepted that these stains were transferred onto the shroud by direct contact between a deceased human male corpse and the cloth because they have been established as post mortem bloodflows and that these stains are not in stereo register with the body images.

3) It is almost universally accepted that these bloodflows are derived from injuries which comply forensically with the written historical accounts of the passion and crucifixion of Jesus of Nazareth and that some of the injuries revealed by the blood stains (particularly the crown of thorns injuries) are unique to the passion and death of Jesus in the historical record (Zaninotto, Adler, Zugibe and others).

4) We know with certainty that the bloodstains were transferred onto the cloth before any image formation of the man in the Shroud took place.

5) It is widely accepted through direct experimental evidence that the patterns of bloodflows in the head region of the image on the Shroud conform exactly with the highly complex bloodstains observed on the cloth of Oviedo whose existence is historically proven back to at least the seventh century and that therefore both cloths must have been imprinted with blood from the same corpse at the same point in historical time through the work of Ricci, Alan and Mary Whanger, Guscini and others which also correlates with evidence on the Tunic of Argenteuil.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

### THE BODY IMAGE

- 1) We know with absolute certainty that the body image on the Shroud is not the product of human artistic endeavour. This has been demonstrated through rigorous testing of all known artistic criteria and convincingly presented time and again particularly by Piczek and is scientifically proven through chemical analysis and observation recently summarised by Adler.
- 2) We know with certainty that the image lies only on the topmost exposed fibrils of the fibres of the weave threads of the cloth and penetrates no deeper.
- 3) We know with certainty that the body image shows the exact forensic accuracy of wounds and the correct medical proportions of the body shape expected of a flogged and crucified man, aged in his thirties, laid out in death, despite the arguments for and against distortion of the cloth itself (Barbet, Zugibe, Rodante, Lavoie, Zaninotto and others).
- 4) It is widely accepted that the man in the image conforms with the expected physical characteristics of a Sephardic Jew of first century Palestine irrespective of whether he should have been tall or short (Rebecca Jackson).
- 5) We know with certainty that the body image was transferred onto the cloth by a completely independent process from the transfer of the blood stains and some type of imposed linear field is implied because of the absence of image formation to the sides of the body shape (Adler, Jackson, Lavoie and others).
- 6) We know with certainty that the image has the properties of a photographic negative whereby many of its visually observable characteristics are only revealed when seen in photographic negative form.
- 7) We know with certainty that the image is coded in three dimensions and exhibits this three dimensionality only when processed through a VP8 Image Analyzer or other instruments employing appropriate algorithms for 3-D image analysis. And the image of no other object does so without distortion.
- 8) It is widely accepted that photographs by Enrie in 1931 reveal details which cannot be readily observed in later photographs suggesting the possible deterioration of the Shroud image since that time.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

### OTHER IMAGES, POLLUTANTS AND ARTEFACTS OBSERVABLE ON THE CLOTH

- 1) We know that the cloth itself carries a wide variety of particulate matter, surface pollutants and other indicators such as burn marks, water stains, poker holes, fold marks, DNA traces and other historical indicators on its surface from which much historical evidence can be corroborated.
- 2) We know with certainty that the cloth carries specific pollens on its surface which are unique to Palestine and Turkey indicating that the Shroud must have been in those places, and the historical record confirms that this could not have taken place after 1350 demonstrating firstly the plausibility of its earlier existence and secondly its provenance to the correct geographic location and possibly even the time period for direct association with the entombment of Jesus of Nazareth. (Frei, Whanger, Danin, Maloney).
- 3) It has been demonstrated by direct microscopic examination of samples that a dirt mark on the heel of one foot area on the surface of the cloth contains particles of calcite and aragonite which have been identified as unique to geological limestone formations in the area of Jerusalem suggesting an association between the cloth and the limestone cut tombs of Jerusalem in use in the first century (Nitowski and colleagues) (I assisted her to take these samples).
- 4) It is generally accepted that human DNA traces have been detected on the surface of the cloth and that a whole range of different DNA got onto the cloth throughout its history.
- 5) It is widely accepted that a complex pattern of fold marks on the Shroud conform to a range of patterns of folding of the cloth both since 1350 supported by direct historical evidence and prior to 1350 supported by extensive circumstantial historical evidence suggesting that the Shroud and the cloth of Edessa are the same historical object (Wilson's Mandyliion theory).
- 6) It is widely accepted that coin images are present as part of the body image over the eyes (Filas) and that these are Roman colonial coins of Emperor Tiberius minted by Pontius Pilate in Jerusalem or Caesarea Maritima in the year 29 or at the beginning of the year 30 AD and that these coins were not placed randomly but exactly according to the vertical axis of the symbols on them which strongly suggests a high order of purpose in their placement on the body prior to image formation (Bollone).
- 7) It is claimed that several graphic traces of writing exist on the cloth observable in the 1931 photographs some of whose traces are also visible to the naked eye belonging to a particular palaeographic style of the first century (Baima Bollone).

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

8) It is suggested by observation of the Enrie photographs that flower and plant images appear on the cloth detectable by the use of polarising filters and that these correspond with significant pollen accumulations on the Shroud surface in these areas and that these images are most likely to have been formed in the same process which transferred the body and coin images onto the cloth through the work of Whanger, Whanger and Danin and Paul Maloney's oil lamp described this week.

9) It is claimed through direct microscopic analysis that a bioplastic coating exists on the surface of the fibres of the cloth (Garza -Valdez).

10) It is widely accepted that much other particulate matter on the cloth is the residue of direct contact with other objects such as silk wrapping cloths, paintings and so on.

11) Nitowski has published 106 colour photos of highly magnified microscopic observations of some of the 1978 samples. These include her identification of body tissue, blood, burial spices, contaminants, image, calcium, pollens and fibres.

## ART HISTORY

1) It is widely accepted that a single and constant received likeness of Christ has been handed down through art since at least the sixth century and it is highly likely that primary or subsequent observations of the Shroud face were prototypes for this artistic tradition (Vignon, Piczek, Pfeiffer, Manton, Crispino, Fulbright, etc).

2) It is strongly suggested that certain untypical anomalous extant possibly late first century frescoes of Jesus of Nazareth found in the Roman catacombs conform with the face image on the Shroud demonstrating that they are likely to be representations of the same man thus dating possible observations of the Shroud to the first century (Bogdanescu, Morgan and Morgan, Piczek).

3) It is generally accepted that the great proportion of iconic pictures of Jesus of Nazareth, and representations of the Mandyion and Edessa Face seem to be derived from the Shroud image given the high number of recurring points of congruence in these images when compared directly to the Shroud face image (Whanger, Manton, etc).

4) Hundreds of examples in iconography, numismatics, sculpture and other artistic forms throughout the first millennium show high levels of congruity with the Shroud face image.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

## RADIOCARBON DATING

- 1) We know that the radiocarbon dating test of 1988 achieved a date for that sample area of the cloth of 1260 - 1390, and we must assume that it was achieved with good precision (Gonella, etc) or that it probably was, given that the methodology is problematic in the case of old linen (Meacham).
- 2) But it is now widely accepted, through direct scientific measurement, that the one piece of the Shroud which was cut into samples and radiocarbon dated by three laboratories achieving a date of 1260 - 1390 shows a completely different micro spectroscopic chemical structure to other measured areas of the main body of the cloth, demonstrating a different composition and that the sample area is therefore atypical of the Shroud, and that as a consequence, if the dating study can claim good precision for its reported date, the radiocarbon test cannot assign any accuracy to the date of the whole cloth because it is not clearly established that the location of the sample is typical of the whole cloth (Adler).
- 3) It is currently postulated, on the basis of direct microscopic observation, that the exact area of the radiocarbon dating sample contained threads of cotton and possible evidence of re-weaving in this part of the cloth at a time later than its original manufacture suggesting that this area of the cloth is atypical (Benford, Marino and Rogers).
- 4) It is also currently postulated that the fire of 1532 caused multi-century shifts in the C14 contained in the cloth (Kouznetsov, Ivanov, Jackson, etc) and the effect of water borne salt described this week by Bryan Walsh.
- 5) It is postulated that any number of a range of contaminants could have affected the dating (Marie-Claire Oosterwyck Gastuche).

And yet still, we are unable to state with absolute certainty what is the exact nature of the body image, what process formed it, why it has the properties of a photographic negative, why it has three-dimensional and other singular phenomena associated with it, or how it comes to have anatomical and other data encoded in it unknown in the middle ages, and certainly unknown at the time of Christ.

And despite this there are still some 'flat earthers' who would claim and even publish that it was "made by someone" as a fake, a dupe, a sideshow exhibit, or a confidence trick with little reason for so doing in the middle ages. It cannot be satisfactorily reproduced by any known method even now at the beginning of the twenty first century despite having witnessed the most spectacular advances in science and technology of all history in the last

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

generation. We see absurd, ugly and crude 'reproductions' claiming to be produced by the same mechanism, whatever that may be, as the Shroud image. For example Nickel, Picknett and Prince.

One even proposed that it was manufactured by stringing up a real crucified corpse in the sun for a few days beside a camera obscura which had conveniently been invented for the purpose and then forgotten again for five hundred years, and the image formed onto a shroud cloth made using rediscovered ancient techniques also conveniently forgotten again.

Many such theories abound about the Shroud but nonetheless they all need assessment.

### PLAUSIBLE IMAGE FORMATION THEORIES

There are several of the most plausible image formation theories which need to be thoroughly re-examined and tested with our rapidly expanding technological possibilities in the New Millennium.

Amongst them are:

- 1) Volckringer was the first to talk of cellulose degradation of the fibres as in botanical specimens preserved in paper (1942) and published in my daughter's [Victoria Harper] English translation in 1991 and subsequently supported by the work of Jackson et al.
- 2) Rodante's theory of contact transference of chemical substances present on the corpse and now Mattingly's proposal of oxidisation of bacterial fatty acids.
- 3) Nitowski's effect of ambient microclimatic conditions in the burial chamber upon substances on the corpse.
- 4) Igor Benson and Whanger's coronal discharge through the body caused by the effect of lightning generating radiation images.
- 5) Lindner's theory that electron radiation caused reactions in the cellulose supported by Wolkowski's paper read this week by Piczek and the biophoton emissions of all bodies.
- 6) And those who tend towards thermonuclear flash radiation by an as yet unidentified mechanism generating the image (De Malijay, Ashe, Judica-Cordiglia, Jackson etc) and postulated by Moran as a change in gravity medium or by Lavoie as radiation from a vertical body.



## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

And just because science as defined by scientists cannot explain nor admit the nature of apparently miraculous occurrences is hardly enough reason for discarding consideration of such possibilities in a world where the impossible becomes the possible on a daily basis.

And so several key areas of our research emerge which must be addressed to allow us to move forward in the new millennium.

We must revisit the issue of radiocarbon dating as a very high priority. This is essential because, as Meacham has so clearly pointed out, many of the general public who do not necessarily understand the subject as we do regard the October 1988 announcement of the dating of the Shroud as the point of closure for the debate which, if true, would consign so much of our work to the garbage bin of history.

Meacham also claimed that the handling of the C14 radiocarbon testing was a debacle and he was one of the very few who predicted its probable failure from the outset of the debate in the early 80s.

After the event, of course, many Shroudies struggled to comprehend how a radiocarbon date, announced so smugly and in such contempt of the sensibilities of religion, history and science by Tite and Hall, could be possible in the face of the mass of Shroud knowledge which had been borne of a century of research and observation. The reported date was totally incongruous to most of us and a complete anomaly when set against all the other massive assemblage of evidence to the contrary.

And as Meacham points out the resolution of this conflict remains a vital and crucial issue for Sindonologists of the New Millennium.

Some argue that new measurements must be taken using several sample sites across the cloth as proposed by Meacham in this conference.

There are others who hold out hope that a single thread might one day be a satisfactory sample size to redo the C14 experiment. And it is said that plenty of residual single threads lie even now in the secret archives of a number of those who have had access to the cloth over the years although none of these could now be accepted as having original uncontaminated provenance.

Some argue that a radiocarbon dating test is totally inappropriate for a textile which has been exposed to so much disturbance over such a long period as this one certainly has.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

Many believe that the C14 testing was unwise and pre-emptive, telling us more perhaps about our own arrogance - our search for a 'once and for all' solution to the riddle of the Shroud - than about the Shroud itself, and that because it is a one off unverifiable test which is unlikely ever to be repeated, unless a procedure requiring minute sample sizes is invented, and the protocol itself is undertaken in a far more comprehensive and transparent manner, that this particular test only demonstrates that one very small corner snippet cut off the Shroud was dated to 1260 - 1390 for some reason or another, probably with good precision, but this one off sample does not, and cannot, assign any accuracy to the date of the whole cloth.

This is what probably should have been pointed out in October 1988 for it was never established that the location sample is typical of rest of the cloth.

Jackson, Fornof and Propp are currently demonstrating that the fire of 1532 may have caused multi-century shifts in the C14 content of the cloth anyway through mechanisms of isotropic exchange. Moroni and Saillard also support this research.

And there are perhaps hundreds of other studies and hypotheses such as those of Van Haelst, directly challenging the veracity of C14 testing as applied to the Shroud.

And I was present at a private meeting in 1986 at which it was reported that someone had secretly carbon dated another Shroud sample and came up with a date of about the year 500 AD - and although this evidence is inadmissible, nor can it be corroborated, it still demonstrates the vagaries of C14 dating when applied to textiles.

The future debate about C14 needs to address the issue from the point of view that it is the cloth itself which contains characteristics which may defy a meaningful C14 result rather than any conspiracy theories or alleged incompetencies in actually carrying out the measurements themselves.

Experts such as Gonella have always indicated that the science of radiocarbon dating can only make the measurements of samples which are supplied. It is up to other researchers, not the C14 experts to determine whether the samples were typical of the whole object and whether the results are appropriate indicators of the whole object.

All of this shows that we must find out once and for all why the anomaly of the radiocarbon date contradicts so much other data. We must evaluate and test the current hypotheses which could explain it. Jackson, Fornof and Propp need to be encouraged to keep working on the possible 1532 fire effect.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

Benford and Marino and Rogers must be encouraged to further test their hypotheses that the 1988 samples contained rewoven and added medieval materials.

The continuation of the work of the late Alan Adler, and Selzes and DeBlase regarding variations in the microspectroscopy results observable across the Shroud must be encouraged for they demonstrate variations in the chemical composition of the cloth at different points. The degree to which the bioplastic coating observed by Garza-Valdez on the thread fibres affects the carbon dating process must be further explored as well.

We must also take into account the opinions of other contemporaries such as Antonacci, who have considered the C14 polemic.

Adler says that further radiocarbon dating of the Shroud should not be carried out until we really understand why the present study failed. Whanger hypothesizes that a possible image formation process involving type x radiation, corona discharge and weak dematerialization would result in a younger carbon date.

Meacham states that:

"the C14 dates have been given a hugely disproportionate importance by the general public and intellectuals, whilst being given too little importance by some Shroud researchers let us hope" he says, "that ... Shroud studies can begin the new millennium with new [C14] data"

Far from being the point of closure for the debate about the history of the Shroud the carbon date is in fact an opening for a whole period of new research and experiment. And who knows, the outcome might lead to a complete review of the science of radiocarbon dating of textiles and of fire damaged objects.

And so it seems to be very important to move forward in this new millennium knowing absolutely that the C14 testing is by no means the final verdict on the Shroud and if anything only serves to demonstrate that any particular atypical result derived from a one off unverifiable test is exactly the type of scenario which should be avoided in the future.

Because the C14 episode did not 'solve the mystery' or 'end the debate' or consign people like you and me to the lunatic fringe of 'flat earthers' who are 'onto a loser' (as Hall said in 1988) but instead demonstrated once more that a multi disciplinary approach is needed when assessing the characteristics of the

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

Shroud, by focussing our attention on the real issues derived from the arts, history and the sciences which only in combination can answer the outstanding questions of the Shroud. One can feel confident that many of the third wave of Sindonology will therefore make great progress in the years ahead by taking up this challenge.

And we have to ask ourselves the question, as Meacham recently asked in Turin, is it enough to know ourselves that the C14 debate solved nothing - or do we need to re engage the public on the whole question of the antiquity of the Shroud. Because what's the point of us doing all this work if the majority of the worldwide public - the audience if you like - can't see beyond 1988. And does the public really care anyway?

There is also much to be done in other areas. The emphasis in recent years has been on the conservation of the Shroud. Science has learned what religion already knew - that the Shroud, whatever its provenance, is a unique and special object which is precious beyond description and must be preserved, protected and conserved.

As the new millennium dawned, contemporary conservation ideas caught up at last with the Shroud. But as with all aspects of Shroud study, agreement over appropriate storage and conservation requirements for it took a long time to be reached. It is certainly a step forward that the Shroud is now maintained in a controlled environment and is kept flat. Flury-Lemberg and many other textile experts and conservators had a hand in these very positive outcomes.

Some there are who propose that the image will shortly disappear altogether and they may be right although I have to remind you that I commented during the international press conference in Turin in 1998, as one of the few present who had seen the Shroud both in 1978 and in 1998, that my subjective observation was that the image looked better twenty years later, but that may be a view some would relegate to the onset of senility or an unlikely improvement in my eyesight.

It seems unlikely that the experts and the custodians will agree on protocols for further testing unless these are presented by a unified and comprehensive group of top line researchers who have demonstrated that the envisaged tests will be non intrusive and will be broadly beneficial to future research. It would be unfortunate to undertake tests which will not yield data which is widely available to all or which simply repeat aspects of previous testing if there is no need for further verification of those earlier ones.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

We are in general agreement that future direct testing of the cloth will have to be unintrusive. The tests we may yet devise must not harm the cloth or deplete the evidence contained in and on it.

Some of us of the second wave, and those of you of the third, are engaged in a major effort to define and propose whole fields of new constructive testing procedures which might clarify for example the nature of the image itself and will hopefully lead to a better understanding of the image formation process. For this is the other outstanding issue which we are called on to explore.

Jackson, reflecting the views of many, pointed out that finding a satisfactory mechanism for the origin of the Shroud image has shown itself to be a complex and difficult problem and is one of the most profound that exists in modern science. Testore declared image formation as the most important mystery. Barberis noted that the problem of formation of the image remains the most open and interesting field of research regarding the Shroud.

Barberis says:

"Improving knowledge about the characteristics and properties of the image will assist in gaining a better understanding of the mechanism of its formation as well as indicating possible improvements to the conditions of its conservation"

We know that a large number of hypotheses exist which can generally or partly explain the image formation process but nearly all of these fail to account for all the properties of the image. Nearly every speaker at the Turin Scientific Symposium of March 2000 and many others at Orvieto made this observation.

Therefore a new series of tests and measurements of the cloth itself will need to be undertaken sooner or later by a research team, probably over several weeks, not unlike the great STURP effort of 1978, to gather evidence specifically directed towards an understanding of the chemistry of the cloth and the image formation process. For such a proposal to be taken seriously by Turin this will have to be an international effort based on total cooperation, supported by perhaps years of planning and requiring a spirit of generosity and friendship which reaches far beyond our own egos and the advancement of our own pet theories.

Many Sindonologists have observed that new technologies are available coupled with the incredible advances in data retrieval, storage and interpretation by digital computer systems and that the appropriate application

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

of these technologies to the Shroud might reveal new information allowing a better understanding of the image formation process.

There seems little likelihood of the experts and the custodians agreeing on protocols for further testing unless these are presented by a unified and comprehensive international group of top line researchers who have demonstrated that the envisaged tests will be non intrusive and will be broadly beneficial to future research.

It would be unfortunate to undertake tests which will not yield data which is widely available to all or which simply repeat aspects of previous testing if there is no need for further verification of those earlier ones, or if every new fangled machine is wheeled up to the Shroud for some specific measurement in isolation from any others because the machine may seem promising at the time, or those using it are the flavour of the month. If this were to be the way forward we will be no wiser in another hundred years.

You will recall that further tests on the Shroud itself were suspended by the authorities for a long time in view of the acrimonious exchanges amongst the experts since the last round. There are still many political mysteries surrounding the Shroud, many intrigues and plots, cover-ups and scandals, and many big egos are involved.

Barberis notes that the acquisition of new data from the Shroud is essential. He has said:

"I think the time is now ripe to propose a campaign of data collection to be conducted with the most suitable and avant-garde equipment - in the absolute respect of the integrity of the Shroud cloth and of its new conservation requirements."

He further proposes the establishment, with the consent of the owners of the Shroud as a prerequisite, of an International Committee to examine research proposals and to devise a precise and detailed work protocol for such testing."

"I believe", he states, "it is absolutely essential to begin the new millennium with a concrete and detailed plan of work because the acquisition of more data on the image is the indispensable starting point for any future research."

Here then are some examples of these proposed tests based on the most contemporary available literature.

1) Adler recommends a biological assay for the micro flora and microfauna actively resident on the cloth as imperative.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

- 2) Adler also recommends the application of improved spectroscopic instruments to better understand the chemical structures found on the cloth. And he is supported by many others calling for spectroscopic analysis such as Cardamone who seeks better understanding of the flax fibre and its role in image formation; Virlet who calls for the use of Nuclear Magnetic Resonance spectroscopy; Pellicori, who offers a plan for the provision of calibrated measurements to ensure the accuracy of such tests and DeBlase who calls for the removal of fibres from key areas to help build a larger data base of spectroscopic and infrared spectra through the use of off-site instruments, to monitor the integrity of various regions of the Shroud, which is supported by Adler.
- 3) Wilson calls for a spectroscopic analysis of the 'poker holes' to determine the specific regional geological signature of the black pitch substance found in these areas, and is supported by Schwartz.
- 4) Adler calls for surface pH measurements to be taken.
- 5) Jenkins suggests a range of further x-ray radiography and fluorescence experiments on the Shroud using improved technology to build on research already obtained.
- 6) Soardo, Iacomussi and Rossi suggest that a complete colour map of the Shroud be obtained through a Mobile Imaging Radiometer to increase knowledge of the colourimetric characteristics of the Shroud particularly to verify any possible future colour drifts - in other words to test whether the image really is fading as quite a few have suggested.
- 7) Balossino demonstrates the importance of computer science through digital imaging of the Shroud to future research adding support to the colour map proposal.
- 8) Vercelli places at the disposal of experts an exact reproduction of cloth sample with the same textile characteristics as the Shroud cloth, as well as the data demonstrating its conformity.
- 9) Meacham calls for a few grams of the cloth from six new locations coupled with the latest technology to conduct new radiocarbon tests. Otlet and Evin demonstrate these improvements in the technology.
- 10) Ivanov calls for a more accurate examination of the molecule-isotope structure of the fabric including those not containing carbon - to give precision to the values required in any further carbon dating.

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

11) Bryan Walsh calls for further work on the carbon gradient.

And, of course, from the point of view of its history and iconography the "Historical Detectives" must be encouraged to continue their arduous task. There is more work to be done to strengthen further the case of circumstantial evidence supporting Shroud history prior to 1350.

It is surely only a matter of time before someone comes up with hard evidence proving beyond dispute the whereabouts of the Shroud at some time in the first millennium. All the signs are there. Maybe we will find more clues amongst the ruins of Edessa, or in Constantinople, or tucked away in a medieval manuscript, as yet unseen in a hidden ancient library. We can follow the work of those like Scavone and Markwardt who continue to lead the debate in pre 1350 Shroud historical studies.

We must encourage sindonologists of the third wave such as Hesemann, Dayvault, Upinsky, Marinelli, Guscini, Borkan, Accetta, Breault, Antonacci, Marino and many others to continue their work.

It is also important to continue to develop a global index or archive of the vast mass of Shroud material spawned in the past hundred years. There are now so many thousands of books, papers, articles, published proceedings, photographs, videos, websites, research group and society newsletters, in so many languages reflecting Sindonology that it is beyond the scope of any single mind to accommodate anything like them all.

And so part of our way forward must be to collaborate, to share, to advise, to seek peer review, to offer viewpoints, to remain open to the findings of others and to realise that it is teamwork at the local, national and international levels which will overcome the danger of individual research being lost in the mass.

We must be vigilant in our desire to encourage legitimate research. We must be vigilant, albeit with compassion, in our desire to sort out the straw from the chaff, to separate the distractions of the sideshows from the action of the main arena, and to draw each other's attention to the credible and the plausible. Remember, as Richard Orareo said yesterday, "The best of the Shroud is yet to come."

And so therefore, these, it seems to me, are the major issues which represent the way forward in the new millennium:

1) We must **focus** on the contemporary issues as defined at conferences like this one.



## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

- 2) We must **resolve** the radiocarbon polemic once and for all.
- 3) We must **encourage** those who seek to explain the image formation process.
- 4) We must **inspire** the 'historical detectives' not to give up their arduous search.
- 5) We must **unite** internationally in devising a new and beneficial round of direct testing based on the huge advances in technology since 1978 applicable to the Shroud itself.
- 6) We must **assemble** our corpus of Shroud knowledge into an accessible data base for the benefit of all through the websites, the museums and the collections.
- 7) We must **demonstrate** absolutely our good intentions and goodwill towards those charged with the onerous responsibility for allowing or denying access to the cloth itself in the 21st century.
- 8) We must **embrace** teamwork and encourage peer review in all our work.
- 9) We must **remain** focussed on the need for a multi disciplinary approach.
- 10) We must **seek** high standards of verification for our claims and hypotheses.
- 11) We must **sustain** and support those of the younger generations who represent the third wave of Sindonology to take up our work and continue the research.

Let us **look back** this evening with pride and satisfaction over the work we have done in the last century and let us remember with affection those who have made their contribution and are now gone.

Let us also **look forward**, turning to the sons and daughters of the first and second waves.

Let us **be positive** and remain challenged and excited.

Let us be **inspired** by this extraordinary piece of linen which has not only survived the last twenty five years of malicious controversy, criticism, lampooning, ignorance, personal grandstanding and sensationalism, but has

## THE SHROUD IN THE NEW MILLENNIUM - Rex Morgan (cont'd)

survived, perhaps, two thousand years of abuse, damage, attack and often negligence and yet remains the greatest single mystery on earth and attracts more attention than any other object in existence. And which for a century has brought people like you and me together in our quest to unlock its mysteries.

And let us once more **think deeply**, each of us, about the implications of the Shroud and how it touches our hearts and souls, and continue to consider what this object really means and what it tells us about the message of the man it represents. Here, where religion, the arts and the sciences collide, lies, does it not, a vessel of great hope, containing a message of enormous power, and an expression of enormous love.

And it's up to us to **harness** this same love which brings us all together in places like here in Dallas, Texas, and at every other Shroud convention or conference all over the world, at every Shroud exposition, or meeting, to remember and learn from the message which lies within that enigmatic image as we continue to unlock its secrets. And, as Fr Fred Brinkmann reminded us so eloquently this morning, **try to bring** healing and goodwill to all Shroudies, everywhere.

Once more I must thank the organisers of this conference for showing us, by holding it in these difficult times, that free peoples like us will not be forced into hiding by terrorists to dwell in the murky shadows as they themselves do, but rather to stand in the light and celebrate what is good, to celebrate what unites us and to try to be conciliatory about the issues that would divide us.

If so many thousands of people in the world regardless of their religion, their age group, background, training, nationality or any other apparent difference are united in their quest for the truth about this extraordinary and unique object surely it **simply cannot be some kind of monstrous fraud**.

And finally, my brothers and sisters, may I thank you all for the great honour you have granted me in being able to deliver this keynote address to you on this auspicious occasion tonight, and thereby giving me the opportunity to attempt to take stock of our hopes and dreams for the Shroud in the New Millennium.

EDITORIAL (*cont'd from inside front cover*)

Another major event of the year was the publication of Ian Wilson's *Shroud Newsletter* No 54 in which he was constrained to write a four page apologia for the mission of that newsletter and then a spirited criticism of AM\*STAR, its Board and the planned Dallas Conference and what he has called "the current state of US-led Shroud politics" which has persuaded him to give up writing his newsletter and retire from active duty in the public Shroud scene.

I have watched Ian's newsletter, on behalf of the British Society for the Turin Shroud, which he, as one of the leading 20th century Shroudies, founded many years ago, grow from an insignificant sheet to a splendid publication, using all the benefits of computer technology to bring to the Shroud world a magazine containing much useful information and some excellent contributed papers. Indeed, only a year ago (*SN* 117) I again praised his newsletter for its high standard of production and content.

It is with great relief then, that we read that Wilson has anointed Mark Guscini as his successor in that newsletter's production. Mark is a younger, enthusiastic, competent researcher in Shroud matters and is, in particular, an expert on the Oviedo cloth in Spain. I much look forward to his first edition during 2002.

But, back to the Dallas Conference. On 14 July, and knowing nothing of the unfortunate exchanges between Wilson and others, I was invited to give the Keynote Address at the conference in addition to an already accepted paper on aspects of iconography.

Accordingly, on Saturday 27 October 2001 I gave a paper in which I tried to encapsulate some of the main milestones of the 20th century and identify the task before those of us who want to continue the great work of Shroud investigation into the New Millennium.

I was humbled, yet proud, to have been accorded a prolonged standing ovation at the conclusion of this presentation in Dallas as well as numerous congratulatory comments.

I therefore bring its text to you in this edition of *Shroud News* with permission from the Dallas Conference organisers who will subsequently publish it in the proceedings.

And, as the warm glow of Christmas 2001, in which we remembered the birth of the Man in the Shroud, in my case with my children and seven grandchildren, all biennially assembled at my country home, begins to fade, and as the nearby bushfires rage in this sometimes fierce country, I wish all of you a very happy 2002 and hopefully the receipt of a few more issues of *Shroud News* than you got in 2001.

REX MORGAN

[This was the final issue of Rex Morgan's *Shroud News*]

*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 700,000 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 and the 100th is \$5 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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