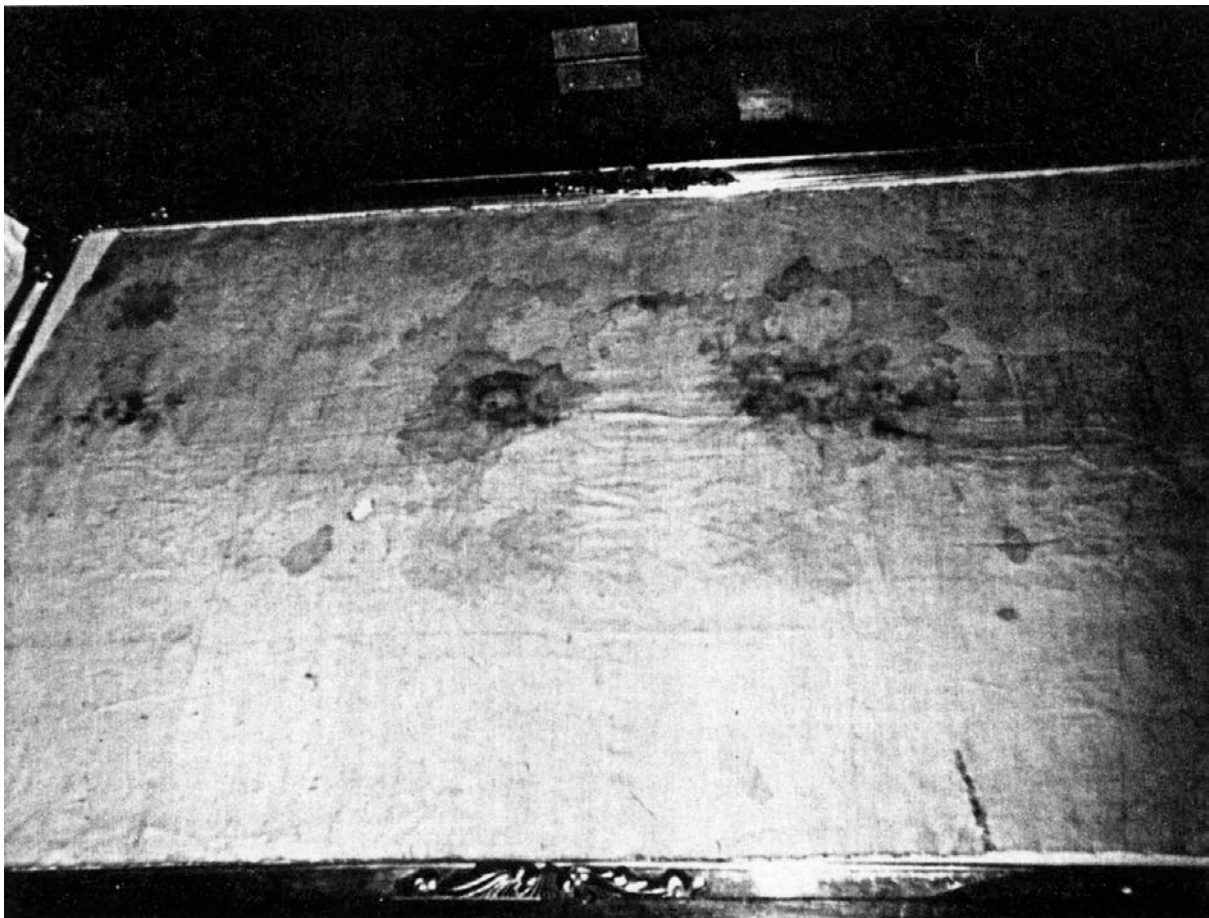


A NEWSLETTER ABOUT RESEARCH ON THE HOLY SHROUD OF TURIN
published in Australia for Worldwide circulation
edited by REX MORGAN, Author of several books on the Shroud
Issue Number 86 **DECEMBER 1994**



THE OVIEDO SUDARIUM BELIEVED TO BE THE FACE CLOTH
FROM THE TOMB OF CHRIST. ITS BLOODSTAINS MATCH
EXACTLY THOSE ON THE FACE OF THE MAN IN THE SHROUD
A contemporary photo by Michael Minor

EDITORIAL

It would be banal in the extreme to say that this issue is a Christmas feast of reading as do so many popular magazines but at least it is a variety of Shroud items and information. The Shroud is beginning once again, as I had forecast five years ago, to command some attention in the media as the research and theorising continues undaunted in many parts of the world. This issue contains brief reference to a conference on the Oviedo Sudarium, an important area of study associated with the Shroud and one which adds further to the evidence for the Shroud's existence well before the Middle Ages.

As the material continues to flood onto my desk from the four corners of the earth I note that recently, known Shroud researchers and organisations have been asked in a personal letter from the Cardinal Archbishop of Turin to submit a survey of all their research work, publications, Shroud resources, etc for deposit in an archive, the property of the Papal Custodian of the Holy Shroud. Researcher Paul Maloney of the USA, despite ill health, continues work on his massive 2 volume bibliographic encyclopaedia of the Shroud. The December issue of *La Lettre Mensuelle de CIELT* (the French group) has a fascinating article about the connection between the Shroud and Nice in the South of France. I see in the journal of the Carmelite Order, *Garabandal*, in three issues in 1989 there were three very comprehensive articles entitled *The Shroud of Turin Controversy* by Stanley Smolenski and Marie Fitzpatrick.

I was unable to attend a Shroud conference in Oregon, USA, in December under the auspices of Imagi Christi Group and the Mt Angel Abbey of St Benedict, where I had been asked to deliver a paper but I see that Rodger Apple, John Schulte, Alan Whanger and Fr Aram Berard made presentations.

And now, as looms the end of the fifteenth year in which *Shroud News* has been published, and we all approach that season where we remember the nativity of the man whose image on the Turin Shroud has captivated the interest of every reader of this little journal, I wish each one of you all the joy that Christmas can bring as we meet with our loved ones and I pray for the blessings which God will surely bestow upon us all in the forthcoming year of 1995.

REX MORGAN

MORE REACTIONS TO CRAIG AND BRESEE

**Daniel C. Scavone, Professor of History,
University of Southern Indiana, USA**

(An article by Craig and Bresee attracted wide publicity in 1994. See SN 83, June 1994)

REACTIONS TO Emily A. Craig and Randall R. Bresee, "Image Formation and the Shroud of Turin," in *Journal of Imaging Science and Technology*, Vol. 38, No. 1, Jan.-Feb. 1994, 59-67.

FOREWORD: Isabel Piczek has written the classic rebuttal of this article. The following are merely some personal insights based on my reading and long-time familiarity with the Shroud of Turin. I ask for comments on any flaws in my understanding of Shroud science mentioned in my reactions.

Important to notice is that the "Tennessee solution" of the Turin image is the latest of dozens of other explanations. Before Craig/Bresee were numerous scholars and critics of the Shroud of Turin who never thought of or heard of carbon dusting and its Craig-Bresee variation, red oxide dust printing, to produce the yellow coloration of the Shroud's fibers. So many "solutions," each "so easy" as to make the lie of previous "solutions." But each previous "solution" was claimed with as much confidence by its proposers, especially those who would expose the fakery of the Turin cloth (Nickell, McCrone, Schafersman, others). That "medieval forger" did something that modern experimenters cannot quite duplicate, but can only approach by means of a diversity of opinions.

REACTIONS:

59. Their précis claims only to "produce images exhibiting numerous features of the Turin cloth" and that "the dust transfer technique is able to form images more similar to the Turin cloth than any previously described technique."

Reaction. These claims are too modest. What we need is a technique or image-formation process that perfectly replicates all the difficult-to-replicate features of the Turin cloth's image. Their technique fails to do this and they do not even claim to do this.

59. "Because tools, materials, and concepts required to use the drawing technique have been available for centuries, we concluded that a 13th or 14th century artist could have created the image on the cloth known as the Shroud of Turin."

Reaction. Their argument is that because it was possible for an artist to create many features of the Shroud's image, then an artist did create it. Note that by elaborate trial and error experiments, attempting to COPY the existing Turin image, they achieved their best final offering. Their supposed original artist did not have this luxury. Further, medieval art's ideal was the same as that of ancient art: not originality, but *mimesis*, copying but improving on what had been done before. The Turin image is unique. It fits no genre or history-of-art style. It is the "Mother of originals." Giotto never did anything like it. If it

MORE REACTIONS TO CRAIG AND BRESEE - Scavone (cont'd)

is an artwork, it deserves page one of any history of Renaissance art, and we seek earnestly for other works in the same genre by the same anonymous master.

Isabel Piczek's comments about future inter-galaxy travel technology and materials being available now, but its achievement still far in the future effectively expose the weakness of their argument. Moreover, the ineptness of the 40-odd copies of THE Shroud made with reverence during the 14th-19th centuries, argues that artists-at-large did not, even so late, naturally utilize that very-well-known-even-in-the-Middle-Ages red oxide powder technique of approaching the qualities of the Turin image. Why did they not immediately see its aptness in making their copies? The only one of the copies having a remote propinquity to the Turin image is one produced by air brush technique in 1898. (See Fr. Fossati's series in *Spectrum*.)

59. They correctly state that "mass spectrometry, histological staining, ultraviolet fluorescence failed to detect the presence of collagen in important image areas."

61. "We used various powdered substances to produce images ... a mixture of iron oxide and collagen ... Because collagen was reported to be present as a thin coating on the fibers of the Turin cloth, we held the linen fabric over a pan of boiling water to dissolve the collagen ... 62. For steamed fabrics some of the collagen dust dissolved and formed a thin coating on the surface of the fibers, which seemed to secure iron oxide dust onto individual fibers. In any case iron oxide and collagen were present only on the most superficial fibers of the fabrics, as reported for the Turin cloth."

Reaction. This combination of statements is internally contradictory. They pay homage to McCrone, who alone claimed the presence of collagen in a thin coating on Shroud fibers. Why else introduce it when the authors had already acknowledged (59) that collagen was absolutely not detected on the Shroud? Why introduce it only to have it steamed off? The claim that their experimental cloth had a thin coating of collagen (as McCrone) fails to replicate a crucial feature of the collagen-free Shroud.

61. "We found that three-dimensional information could be accurately represented in a dust transfer drawing ... and areas that are lower are rendered with more dust."

Reaction. John Jackson has emphasized in every presentation of his discoveries on the Turin cloth that the darker image areas are not the product of darker color, but of more fibers in those areas being equally faintly stained. He emphasizes that microscopically one can see non-stained fibrils (not fibers) adjacent to stained fibrils in lighter image areas.

MORE REACTIONS TO CRAIG AND BRESEE - Scavone (cont'd)

63. "This series shows that a correlation exists between color density and the amount of iron detected by x-ray analysis. In addition, these data show that color is detectable by the eye when the iron x-ray signal is too small to be detected by x-ray analysis over a 300mm X 300mm fabric area."

Reaction. In fact color detectable by the eye is a crucial point: The Shroud of Turin Research Project (STURP) team found just the opposite of the above statement. They detected by scientific instruments iron oxide on non-image areas which the eye could not see. Iron showed up in off-image areas in about the same degree as on image areas. Thus the iron cannot be the cause of the image one sees.

66. "... this paper show[s] that important image features of the Turin cloth can be satisfied with a dust drawing process."

Reaction. Again the authors make no claim to perfectly replicate the Turin image. This is just not enough claim or product for defining the image-formation process on the Turin cloth.

67. "However, it is impossible to satisfy simultaneously all observations reported for the Turin image, because **many reported observations conflict.**" [Emphasis added.]

Reaction. It is important for the authors to acknowledge, as they implicitly have done, that Nickell's and McCrone's theories did not solve the Turin image. Once that is acknowledged, then besides their procedures, so also must most or all of their premises and claims be discarded. It is these that have produced the "**conflicting reported observations.**" Admitting this, omitting the erroneous reports of Nickell and McCrone, the authors now must satisfy all the corrected list of image features, the list STURP scientists have virtually unanimously asserted.

66-67. "Many works produced during the Middle Ages were said to include direct divine intervention ... legends about art miraculously wrought were especially appealing."

Reaction. True. But whatever medieval people thought about miraculous art, those we can see today are seen to be man-made. This argument of the authors is faulty.

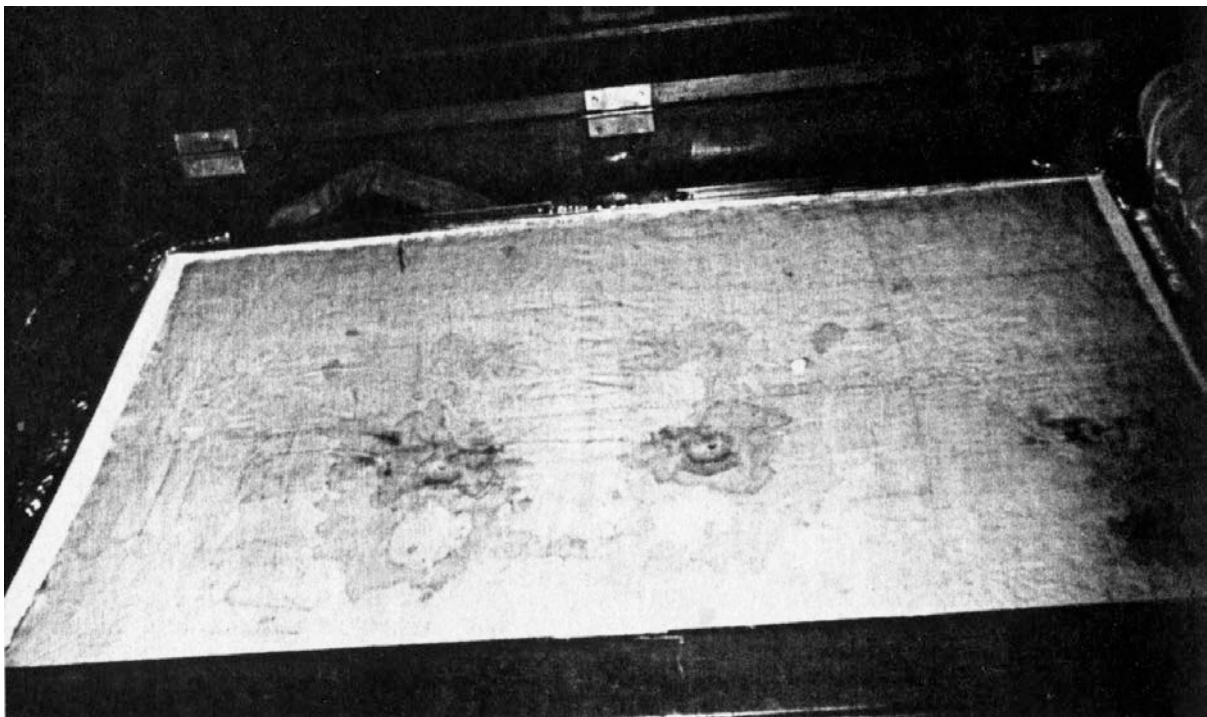
67. Citing Frank Tribbe, the authors state: "The hypothesis that an artist could have created the image on the Turin cloth also finds support in historical accounts of the burial shroud of Jesus. Historians have counted more than 40 copies of the shroud during the 14th-16th centuries and point to the likelihood that other copies were made earlier."

MORE REACTIONS TO CRAIG AND BRESEE - Scavone (cont'd)

Reaction. What historians have really counted are 40 copies of THE Shroud of Turin. Outside of the Turin Shroud, before or after, no faint, non-outlined, twin-imaged, head-to-head, front and dorsal, bloodstained*, naked, anatomically realistic, Christ image is known in art or in the literature about art. Most of all, one that inspired such stand-on-your-head difficulty to replicate.

* Detail: only one foot left a full bloodstain, half only of the other foot. This is realism centuries beyond Gothic. The bloodstains are composed of real human blood, proved by all juridically accepted immunological tests and by the fluorescence of blood-serum haloes around each bloodstain.

CONCLUSION: The authors may have achieved what they set out to do in their initial claims: They may have come closer than anyone before in replicating the Turin image. But they have not actually produced another Turin image, one that even opponents of Shroud authenticity who have cared to examine the Shroud agree must have come from a human corpse.



Another view of the Oviedo Sudarium pic: Michael Minor

THE OVIEDO CLOTH - activity update

Rex Morgan

Dr Alan Whanger, widely known Shroud researcher from North Carolina and his researcher wife, Mary, have established the Council for the Study of the Shroud of Turin (CSST) with a fulltime Executive Director. The Whangers were major participants in a hands on study of the Sudarium of Oviedo, Spain earlier this year. Dr Whanger removed three threads from each of two blood areas and two control areas for blood testing comparisons with the blood on the Shroud. (New readers might not be aware that the Oviedo cloth is widely thought to have been the headcloth associated with the burial of Christ and all research work on the bloodstains indicate an exact match with the bloodstains on the Shroud face). This work by the Whangers is an exciting and major breakthrough since the only major researcher who had previously had access to the Oviedo cloth was Msgr Giulio Ricci of Rome whose photographs constituted virtually the only authentic record of the cloth until the work of Moreno, Blanco and Gomez of Spain.

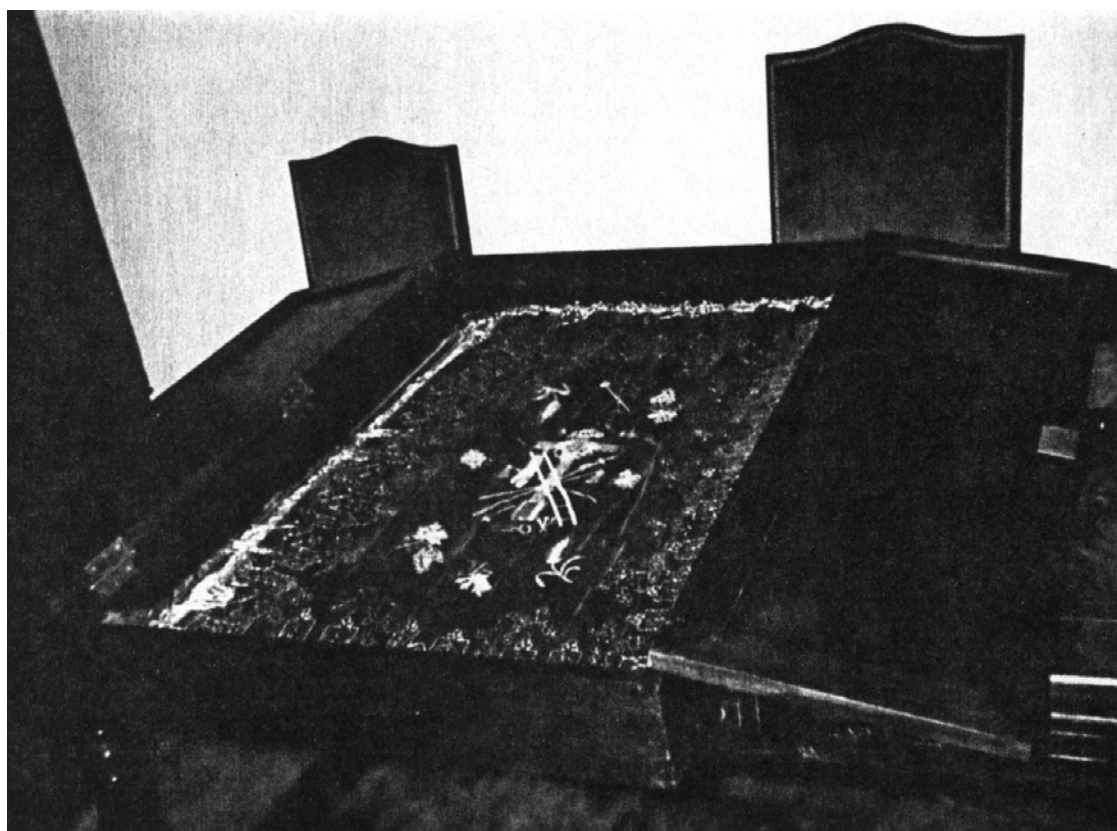
Together with their major work on photographic overlays spanning many years as well as their research into the images of flora and objects believed to be on the Shroud, as well as their possession of the priceless Max Frei collection of pollens etc., the Whangers are poised to make further major discoveries and have a significant effect on late 20th century Shroud research. The fact that Alan has retired from his professorship and medical practice suggests that he and Mary will be able to devote even more time to their remarkable work for Shroud study.

In October this year, a significant conference was held in Oviedo to consider the cloth and its connection with the Shroud of Turin. Although I had been specifically invited I was unfortunately precluded from attending owing to other agenda at that time. I am awaiting reports from those who did attend and will share them with you as soon as possible.

Each day was planned to consider a different perspective: the first day being descriptions of the cloth and the formation of the bloodstains upon it; the second day dealing with the connection between it and the Shroud of Turin and on the third, other related studies. The programme was set to include papers by Guillermo Heras, Felipe Montero, Carmen Gomez, Enrique Monte, Chica Mantilla, Jorge Manuel Rodriguez, Jose Delfin Villalain, Jose Antonio Sanchez, Miguel Angel Hacar, Angel del Campo, John Jackson, Giulio Ricci, Alan Whanger, Carlo Goldoni, Enrique Lopez, Luis Garcia

Garcia, Gino Zaninotto, Braulio Manzano, Florentino Diez, Rebecca Jackson, Manuel Sancho, Antonio Alonso, Jaime Izquierdo, P Carreira, Francisco Alvarez, Celestino A Cano Tello as well as a report on the May 1985 and May 1994 observations to be given by Baima Bollone, Nello Balossino, Mario Moroni, Stefano Zacca and a round table involving Jackson and Whanger (USA), Bollone and Zaninotto (Italy) and Villalain and Heras (Spain).

The Conference was billed as the First International Congress on the Oviedo Sudarium so this hopefully implies that it will not be the last.



The reliquary of the Oviedo Sudarium pic: Michael Minor

THE OVIEDO SUDARIUM

Michael Minor, USA

RE: PRIVATE EXPOSITION OF THE SUDARIUM
AT THE CATHEDRAL IN OVIEDO, SPAIN

DATE: 11 o'clock A.M., Saturday, May 28, 1994

THOSE PRESENT: Don Rafael Somoano Berdasco, Dean of the Cathedral, Dr.
& Mrs. Jose Fernandez & Michael Minor

Through the good offices of Father Adam Otterbein and Father Fred Brinkmann, who kindly wrote a letter of introduction in my behalf to the Spanish authorities, and Paul Maloney, who graciously called his friend Jose Fernandez in my behalf, and Isabel Piczek, who kindly shared with Paul that I was going to Spain and made the contact possible, I recently had a marvelous and serendipitous experience in Spain which I will remember for the rest of my life: I was given a private exposition of the Sudarium in Oviedo, Spain. (I was in Spain on a holiday).

Dr. & Mrs. Jose Fernandez of Madrid kindly and generously drove me to Oviedo, which is about five hours North of Madrid. We arrived in Oviedo on Friday evening. The drive to Oviedo was most interesting, scenic and through rugged mountains. After we crossed the mountains the terrain drastically changed and became very green and lush and looked positively Alpine. I would not have been surprised to hear a yodel at any time!

On Saturday, May 28, 1994, at the appointed hour for the private viewing, Dr. & Mrs. Fernandez and I met at the Cathedral. We were escorted into the Cathedral offices where we were met by Don Rafael Somoano Berdasco, Dean of the Cathedral. Don Rafael is a most gracious and courtly man. After a brief exchange of pleasantries he escorted us to a room behind the Sacristy. There, on a table in the center of the room, was a large, flat wood reliquary. Don Rafael carefully opened the doors of the reliquary to expose a piece of fringed red velvet with elaborate gold embroidery thereon. The central figure on the red coverlet was a large gold embroidered cross which appeared to be part of .a coat of arms. The red velvet cover is backed with white silk.

Don Rafael folded the coverlet back to expose the Sudarium which is framed in a handsome silver frame with gold ornamentation. The frame has no glass.

THE OVIEDO SUDARIUM - Minor (cont'd)

My first and immediate impression of the Sudarium was how extremely bloody it is and how dark and distinct the blood stains are.

The Sudarium is loosely stitched to a slightly larger piece of cloth and is made of thin, tightly woven linen of approximately the same weight as a good quality handkerchief. It is approximately 2' x 3' in size. There are four quite distinct fold marks on the cloth, both vertically and horizontally. In the central part of the cloth is a hole about the size of a dime which appears to have been caused by burning. The edges of the hole appear to be burned or charred. The cloth is lightly but unevenly soiled and wrinkled in its entirety. A large long, narrow strip has been cut from one end of the cloth, which includes one corner, and goes through a blood stain. When I noticed that a corner was missing I mentioned that someone had apparently cut off a piece of the Sudarium. Don Rafael said yes, it was true, and that the piece had been cut off by Father Ricci when he visited Oviedo.

The photographs I took do not accurately depict the darkness of the blood stains. When viewing the Sudarium one is struck by how dark and vivid the blood stains are to the naked eye.

On one end of the Sudarium there is a cluster of small, but very dark and roughly circular stains which appear to have been made by puncture type wounds. These particular stains are perhaps the darkest on the cloth. They range in size from a pencil lead to the size of a pencil eraser with one or two the size of a dime.

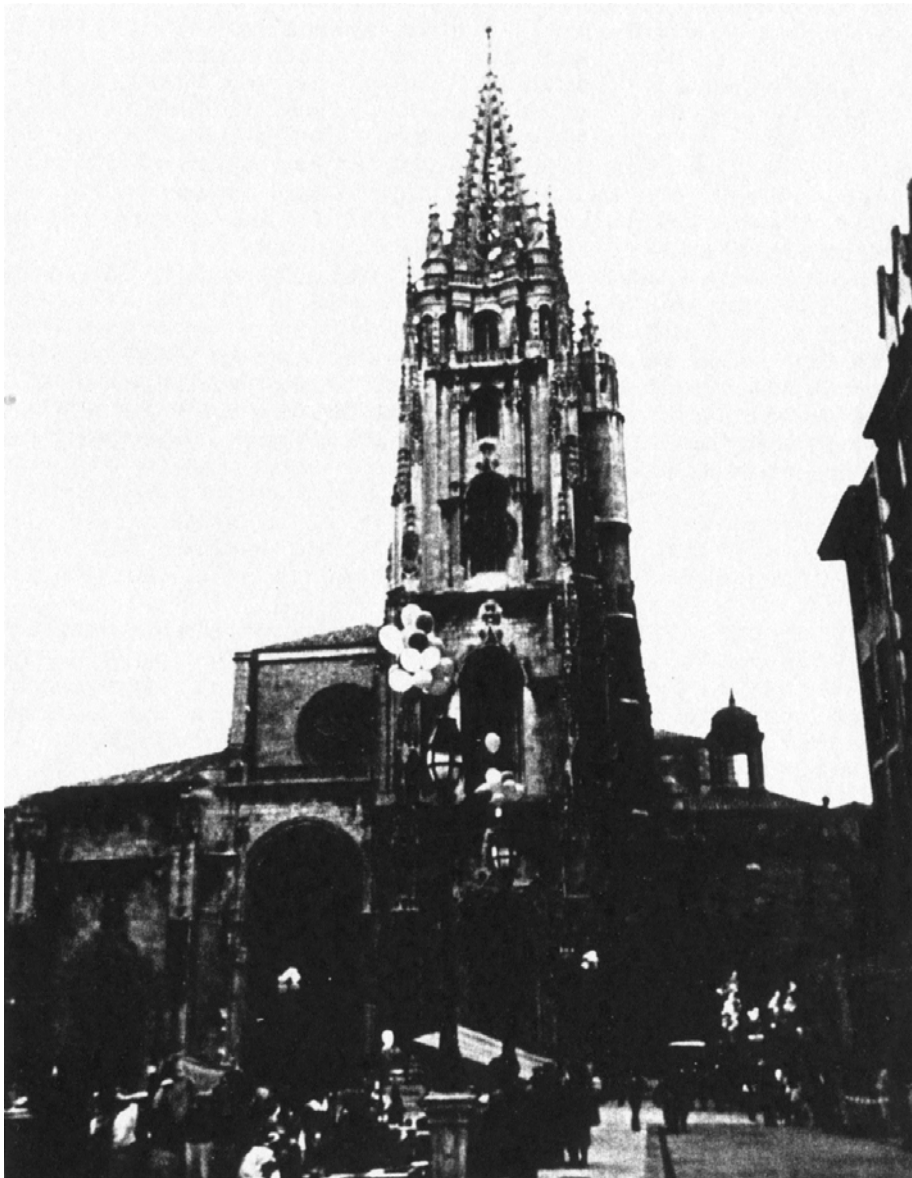
Based on sheer logic and common sense, it is my guess that the stains on the Sudarium are from the back or occipital region of the Head. One can see apparent blood flow(s) in the two major stains, which are mirror images of each other and seem to have been made by a dripping but decreasing flow of blood from the same wound(s). The stains are a series of increasingly smaller concentric circles. Since blood does not drip or drain upward it seems to me that the stains could not have been from the Face area, assuming the Corpse was in a supine position. Several of the stains appear to have a "halo" around them similar to those on the Shroud which were caused by blood sera or lymphatic fluid.

A comparative study of the blood stains and other data on the Shroud and Sudarium should be made. It is my distinct impression that the Spanish authorities would welcome scientific studies by bona fide scientists and experts. It is also my impression that a conservation protocol would be welcomed by the Spanish authorities.

We were allowed to examine the Sudarium as long as we wished

THE OVIEDO SUDARIUM - Minor (cont'd)

and to take as many photographs as we wished. We viewed the cloth for 45 minutes to an hour. During the exposition Don Rafael touched my gold Shroud medal to the Sudarium and at the end of the exposition asked me "are you satisfied?" We could have remained longer had we wished. Don Rafael also told me that my being allowed to view the Sudarium was a high honor and a very rare occurrence.



Oviedo Cathedral, Spain

pic: Michael Minor

KOUSNETSOV NOT SUPPORTED BY CIELT

- Remi Van Haelst, Belgium

In the CIELT Newsletter (Nr 49-50) Prof. Salet (Scientific Comite CIELT) did PROVE strictly following the normal procedures for radiocarbon-dating, that the hypothesis put forward by Kouznetsov-Ivanov are NOT correct.

A : Following Kouznetsov the concentration in ^{13}C and ^{14}C are NOT the same in the different parts of crude flax.
Following Salet this does not alter radiocarbon dating, because the ratio $2d^{13}\text{C} = d^{14}\text{C}$ is about the same in the different fractions of the harvested crude flax.

Remark : The Kouznetsov paper gives the following data :

-‰	Central Russia			Middle Asia		
	^{13}C	^{14}C	Ratio	^{13}C	^{14}C	Ratio
Lip.	41	72	1.76	39	69	1.77
DNA	32	61	1.90	32	64	2.00
RNA	33	59	1.84	36	62	1.72
Prot.	24	53	2.21	26	54	2.01
Polysc.	19	41	2.16	16	29	1.81

Prof. Salet is right, the ratio $2d^{13}\text{C} = d^{14}\text{C}$ is about 2 in all fractions of the crude flax .

During the experimental heating of linen, this is mainly cellulose, the ratio $^{13}\text{C}/^{12}\text{C}$ did change as follows:

Time	0			10			15			30			60			
-‰	C	13	14	R	13	14	R	13	14	R	13	14C	R	13	14	R
Gas	:	12	36	3.00	13	37	2.65	14	39	2.79	21	58	2.76	24	50	2.08
Linen	:	29	53	1.83	29	52	1.79	28	51	1.82	22	38	1.73	22	38	1.73

Kouznetsov is right for in the gas the original ratio changed from 3 to 2, in the linen from 1.83 to 1.73

B : Kouznetsov the factor $-d^{13}\text{C} = 0.025$ should be 0.019.
Following Salet this can only cause a difference of 120 years.
Following Dr. Hedges of Oxford, a difference of a few thousandths of years.

Remark : This "minor" difference is very important, for a reason not noted by Kouznetsov, Salet nor Hedges!

If one assumes that all $d^{13}\text{C}$ measurements by the 3 laboratories and Kouznetsov are correct, than one can recalculate from the radiocarbon date from the *Nature* data, (in first row) the estimated CRUDE ratio $^{14}\text{C}/^{12}\text{C}$ for $d^{13}\text{C}.0$ and $d^{13}\text{C} = -0.019$.

$d^{13}\text{C}$	Arizona				Oxford			Zurich		
	-0.025	0	-0.019	-0.027	0	-0.019	-0.0251	0	-0.019	
	591	878	685	795	1121	923	733	1026	830	
	690	980	785	730	1053	857	722	1014	817	
	606	893	700	745	1069	872	635	927	731	
	701	991	796				639	931	735	
							679	970	775	
Mean	646	935	741	750	1073	876	676	968	772	
		G.Mean.		689	968	773				
		Chi ²		6.4	12.1	11.7		(Max.: 5.99)		
		%Sig.		5.0	0.24	0.28		(Min.: 5%)		

Note : The correction for $d^{13}\text{C}$ is about 200-300 years, which is certainly very important for samples of an age of less than 2000 years During the CIELT-Symposium Rome (1993) I presented a critical analysis of the radiocarbon data, corrected for $-d^{13}\text{C}$ 25-27. The Chi² value 11.7 and %Sig. 0.28% , based on $d^{13}\text{C} = -0.019$ DO PROVE, that the radiocarbon data for the Shroud are NOT CONSISTENT.

KOUZNETSOV NOT SUPPORTED BY CIELT (cont'd)

C : Kouznetsov the fire of Chambery did cause an enrichment in ^{13}C and ^{14}C . He found experimentally that a 1200 year old linen, dated after heating, 200-300 year younger. Salet recalculated the data of Kouznetsov, strictly following the theory and found only 27 years.

Comment.

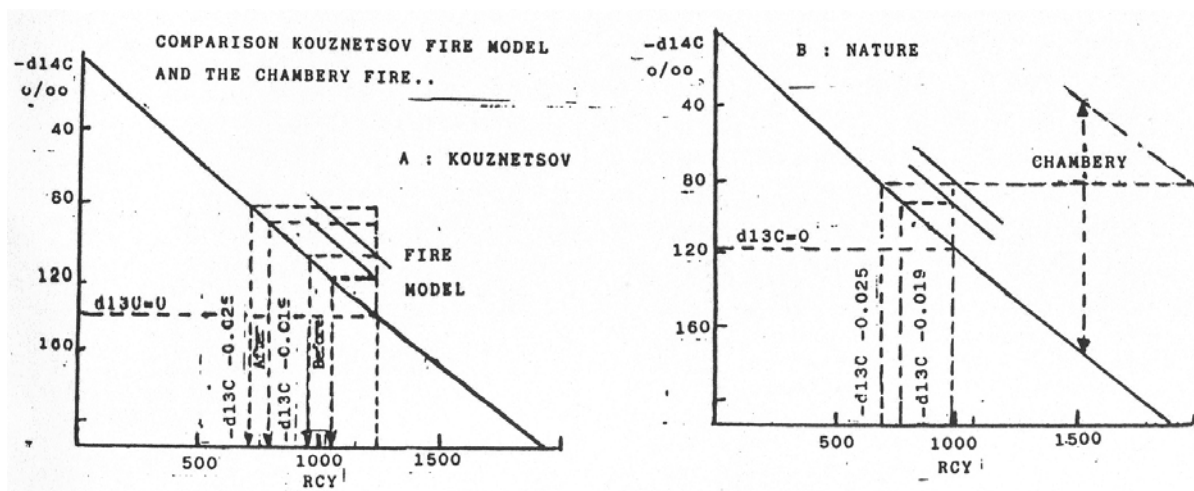
The findings of Drs Kouznetsov-Ivanov are extremely important, for they DO prove that the basics of radiocarbon are not inviolable. Until now, the radiocarbon experts do tell us, that the ^{14}C concentrations are about the same in all living matter. That the ^{13}C concentration remains the same in time and under all conditions ... That the disintegration process of ^{14}C is not subject to any changeable physical conditions...

Do not forget, that in the time of Dr. Libby, the half life of ^{14}C was estimated about 5400 years. Kouznetsov uses the value of 5570 years, while the up-to date value is 5730 ± 40 years...

Scientists of Lamont University found important deviations from the INVIOABLE disintegration pattern (Deviations up to 3000 years for an age of 20,000 rcy).

In earlier papers I did show (like Mr. Salet) that the Kouznetsov hypothesis DOES NOT prove, that the Chambery-fire could have changed the radiocarbon-dating of the Shroud, from 690 till 1930 RC-years. Because the measurement of $\delta^{13}\text{C}$ is a routine matter, which can be performed with a mass-spectrometer, there can be no doubt that the laboratories but also Kouznetsov-Ivanov did measure correctly.

This proves that the concentration ^{13}C and ^{14}C are subjectable to natural phenomena Therefore it is not excluded that the ^{13}C value for the Shroud did change from -0.019 (at origin estimated by Kouznetsov) till -0.025 (measured by the laboratories in 1988).



THE SPEAR OF LONGINUS

The Spear of Longinus is a whole fascinating field of study in its own right and in an interesting comment on the lance and death on the cross is contained in an extract from *Jesus In His Time* by Henri Daniel-Rops of the Academie Francaise (1945) translated by R. W. Millar and published in 1956.

"The lance thrust is sometimes shown in art as being on the right side of Jesus, sometimes on the left. The latter seems at first more likely, owing to the position of the heart. Yet an artist so scrupulous as Rembrandt shows it on the right side, and on the right side of the relic venerated as the Holy Shroud of Turin there is the unquestionable trace of a wound. The right hand thrust was the classic manoeuvre of Roman sword drill since the left side would, in combat, be covered by the shield. Most conclusively, we know from anatomical research that after death the blood collects in the right auricle. If the blow had been struck on the left it would either have penetrated the left auricle, which would be empty, or else, since the position of the heart is oblique, the left ventricles, which would also be empty. The thrust must therefore have been on the right side. Physiology also confirms that Jesus must have been dead when the thrust was made; had he been alive the lungs would have retracted and retained the flow of blood.

"The dramatic gesture of the lance thrust and its obvious symbolism has made it one of the most famous incidents of the Passion and Christian tradition has naturally made much of it. The soldier who used the lance has been given the name of Longinus, obviously derived from a corruption of the Greek *Lonche*, a lance. Legend states that he suffered from eye trouble which was miraculously cured when a drop of the sacred blood spurted into his eye, that he became a Christian and died a martyr after having been for twenty-eight years in a monastery in Caesarea. From the incident also arose the body of legend centring around the Graal, the vase or chalice in which the disciples are supposed to have collected the blood of Jesus."

FROM THE JOURNAL *FIDELITY*, Melbourne, December 1994

The Holy Shroud of Turin

Millions of Catholics around the world believe that the Shroud of Turin is the one used to wrap the body of Christ and they therefore revere it as a sacred relic. Numerous scientists and non-Catholics support their belief. Others say the Shroud is a fake. Who is right? Fidelity presents the evidence from both sides.

God plays tricks on us

By Leo O'Leary

Pardon the agricultural nuance; it seems appropriate, especially in this drought year: when a cow flounders in the mud of a drying dam the odds are that the more she struggles the more deeply she will bog.

Something like that happens to those who pronounce the death, scientifically or historically, of the Shroud of Turin. Each challenge, no matter how sincerely proposed, generates a new spurt of supporting evidence which reinforces the Shroud's authenticity and a new surge of useful publicity for the Christian faith.

Critical interest in the Shroud bloomed in 1898 when Secondo Pia took the first photograph of it.

The fascinating point about Secondo's photograph was that it revealed the Shroud to be a negative image, something unheard of until the invention of photography in the latter end of the 19th century. However, the Shroud was known to be at Lirey, in the Diocese of Troyes, Champagne, France, in 1354 and a distinguished French scientist and student of the Shroud, Brother Bruno Bonnet-Eymard, has established that the Shroud was at Constantinople in 944 and stayed there for about 300 years.

In 1988 three laboratories at Arizona, Oxford and Zurich, using the comparatively new Carbon 14 technique, announced that the linen was produced in medieval times.

But a Russian scientist, Lenin prize winner Dimitri Kouznetsov, said they were wrong.

Before testing some ancient linen he studied the history of the Shroud, which included exposure to two fires. Writing on his findings and emphasising that he was not a Catholic, Kouznetsov said: "As I studied the history of the Shroud I

realised that the linen had fallen foul of an extremely traumatic event, the Chambery fire in 1532.

"So I set about creating the same conditions in the laboratory: a humid, gassy atmosphere that also featured carbon dioxide, carbon and oxygen raised to a temperature of 140 degrees. I then hunted for a piece of ancient linen and procured some threads which had been definitively dated at about 750-840 AD ... I placed them within the conditions of the heat and humidity and carried out the tests.

"It clearly emerged that there had been a considerable exchange between the gases in the air and the fabric and that modified the C14 content of the cloth. The change was great in volume; about 25 per cent of the total.

"This falsifies the results of the tests and when examined for radio-carbon deposits, the linen proves to be much more recent than it really is."

In Britain's *Christian Order* magazine, Dr Kitty Little, MA, BSc, DPh (Oxon), describes the Carbon 14 tests as a "fiasco". Like other scientists she is critical of the limited data supplied by the 21 members of the C14 team. "Also, for their approach to be scientifically valid, since they were dismissing as 'false' a mass of previous evidence, they ought to have given, point by point, their reasons for doing so. They made no attempt to do so," she says.

Carbon testing itself suffered "inherent errors ... because the amount of carbon in their atmosphere is not a constant," she says. "It varies with the level of sun-spot activity and the thickness of the ozone layer, both of which are variable. There can also be procedural errors."

GOD PLAYS TRICKS ON US - O'Leary (contd)

Shroud News, published in Sydney, by Runciman Press, quotes a Turin University don, Professor Luigi Gonella, as saying: "There was one imprecision after another. Our C14 colleagues behaved despicably."

Kouznetsov also was unsparing in his criticism of the C14 tests.

"Those scientists did not take account of of the enrichment of C14 that takes place during linen-working to transform it into fabric

It is changed-to become cellulose — a polysaccharide increases and a lipid decreases. In short, in this case, too, there is an enrichment of carbon 14 that makes the fabric seem younger."

By allowing for the effects o manufacture and exposure to the heat o fire, Kouznetsov calculated the age of the Shroud to be at least 19 centuries.

He could not prove that the Shroud had been wrapped around the Body of Christ but, he said,

"... the linen was used to wrap a contemporary of Jesus Christ and ... he suffered exactly the same passion as that described in the Gospel."

Melbourne Catholic layman and former CSIRO scientist Paul R. Smith offers some explanation for the confidence of the C14 team. He wrote in Chemistry in Britain magazine:

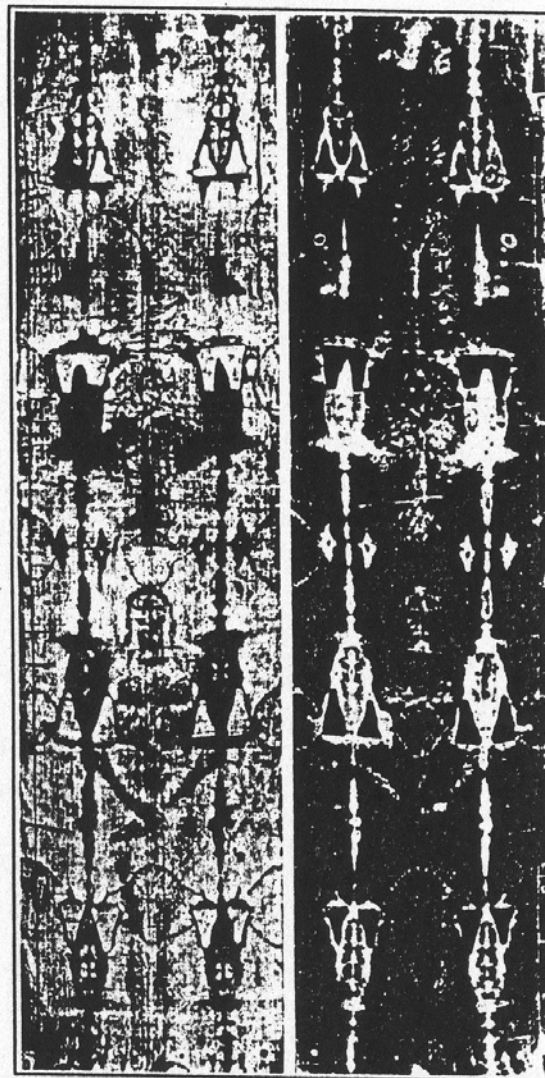
"Carbon dating scientists had felt they must be correct as their results seemed to fit in with the memorandum of the Bishop of Troyes (circa 1380). What they did not realise was that they were working from a mistranslation of the original Latin (a document, incidentally, still in existence)."

Although the C14 finding was reeling under withering attack, interest in the Shroud was still booming.

Two English writers, Lynn Picknett and Clive Prince, presented readers of the *Daily Mail* issues of August 15 and 16 this year, with the fascinating proposition that the famous Italian artist, Leonardo da Vinci, produced it.

They argued that Leonardo had developed a photographic process 350 years ahead of its acknowledged invention. They said the salts involved in photographic development and fixing were already well-known to alchemists.

Prince described how he (Prince) made a box-type camera and, using the sun as his light source (which Leonardo would probably have done), projected images on to a sheet treated with chemicals known in da Vinci's day, and fixed the images on a sheet using salts also known then. The two writers produce many points that appear to offer some support for their proposition that da Vinci perpetrated a fake now known as the Shroud of Turin.



The Holy Shroud full-length image positive and negative © Vernon Miller, 1978 from Shroud Guide by Rex Morgan, Runciman Press, 1983.

A minor objection is that modern science surely would have discovered and identified the presence of any developer or fixer used on the linen. A major obstacle, however, is Isabel Piczek. This woman, whom Picknett describes as a "leading religious artist", wrote in the November 1990 issue of *Sources for Information and Materials on the Shroud of Turin* that the Shroud was displayed at Lirey in 1357, a date confirmed by other writers, including Br Bruno and Dr Kitty Little, and more than 90 years before Leonardo's birth.

GOD PLAYS TRICKS ON US - O'Leary (contd)

Melbourne's *Herald-Sun* of September 25 this year entered the Shroud debate when it ran a review by Anne de Courcy of two new books that declare the Shroud is " ... the one used to wrap the Body of Jesus in 33AD."

But then comes the jolt: The East Midlands Forensic Laboratory is quoted as finding that, by modern criteria, an analysis of the blood stains on the Shroud shows that Jesus was alive when it was placed around Him.

Allegations of a "Jesus conspiracy" followed. As de Courcy says, this "could mean we will have to rethink the story of the Resurrection" — if the allegation is proved.

The authors are Cambridge-educated scientists Rodney Hoare, who wrote *The Turin Shroud is Genuine* and two German writers, religious and theological historian Holger Kersten and scientist Elmer Gruber, co-authors of *The Jesus Conspiracy*.

According to de Courcy, the co-authors Gruber and Kersten say in their book the carbon dating was wrong, the error being caused by the Vatican which, they allege, switched samples because the Shroud carried the image of a living man, which, if it became known, would destroy the dogma of the Resurrection.

Gruber and Kersten suggest that the vinegar offered to Christ was laced with a drug, probably opium, strong enough to make a badly wounded man lose consciousness quickly. Hoare, she says, believes the carbon dating was doomed to failure because of changes in the carbon content of the materials and the effects of handling, presence of finger prints, pollutants, exposure to candlelight and the heat from a brace of fires.

Hoare says Jesus would have appeared to be dead to those who saw Him on the Cross. Joseph of Arimathea and his friends left the Body in the tomb during the strict Jewish Sabbath and returned on Sunday night to complete the interment. They would have found the Body of Christ warmer than a dead body, would be. Joseph and his friends hid Jesus for three weeks, in which time He was fit enough to rejoin His disciples, according to Hoare's theory.

But Dr Kitty Little says bluntly that Jesus was dead before being lanced by a Roman soldier.

She writes that the stains contained bilirubin; "produced by the degradation of red globules following His ill-treatment. The man who left his blood on the cloth had therefore suffered numerous blows and wounds shortly before.

"Fibrils around the blood stains and flagellation marks were honey-yellow. These when tested were found to contain the main protein component of serum from the blood. Similarly the marks from the wound in the side were found to be separated blood and serum — an indication that death had occurred before this wound was inflicted."

Little provides convincing evidence of the Shroud's formation. She says the American STURP (Shroud of Turin Research Project) made a "very thorough examination of the Shroud" in 1978 under Professor John Jackson of the U.S. Air Force Academy at Colorado Springs.

STURP brought seven tonnes of equipment, including a VP-8 Image Analyser which showed,

"the serenity on the face of a badly battered man", and that the "source of the illumination that had formed the image came from within — that is, from the body — and that whatever caused it had a range of about four centimetres."

Little suggests that gamma radiation, emitted by the body, formed the image. She cites the main elements in the human body — hydrogen, carbon, oxygen and nitrogen — as "light elements" which could have a range of four centimetres.

STURP firmly established the age of the Shroud. "The Image Analyser provided completely new evidence," Little writes. "With the 3-D effect it could be seen that the eyes of the corpse had been covered with two small objects that could be identified as coins."

These coins, she says, were minted by Pilate whose authority for minting coins existed only between 19-30 AD.

The debate continues to make headlines in the European secular media, and even in comparatively uninterested Australia. Without meaning to, those challenging the authenticity of the Shroud are keeping the Gospels, the Crucifixion and the Resurrection before people, many of whom might otherwise have heard little or nothing about Jesus. Believers' responses to the many challengers have publicised Christian truths.

Even challengers acknowledge that the Shroud really did wrap the Body of Christ.

And so it seems clear that God, the loving parent, having pigmented the Shroud with mystery, is using it to educate His children, gently, subtly, and probably playfully, in a humbling yet very persuasive way.

SHROUD GUIDE Rex Morgan

Large Format 64 pp 31 pages of pictures
some in colour.
Great Value at \$8.00

A BRIEF BIBLIOGRAPHY OF SOME BOOKS RECENTLY ACQUIRED BY *SHROUD NEWS*. In each case I have given (as available) author, title, publisher, date ISBN and an occasional comment. Text in English unless otherwise noted. The last such list was in *SN* 64, April 1991).

Compiled by **REX MORGAN**

Siliato, Maria Grazia, *Il Mistero Della Sindone*, Piemme, Rome, 1989, Hard Cover 334 pp, 2 pp col plates, Italian, ISBN 88 384 1363 X.

Good quality, much plagiarism.

Malantrucco, L and Saginaro, G., *La Sindone - Testimone Della Nostra Redenzione*, Nuovo Frontiere, Rome, 1988, Soft cover, 208 pp, many b/w plates, Italian.

Standard pics, much devotional material, brief history and a bit of science.

Papini, Carlo, *Sindone, Un Mistero Che Si Svela*, Claudiana, Turin, 1982, Soft cover 102 pp, few b/w pics, Italian, No ISBN.

Discussion of scientific analysis.

Gramaglia, Pier Angeli, *Le Ultime "Scoperte" Sulla Sindone*, Claudiana, Turin, 1981, Soft cover 104 pp, Italian, No ISBN.

A critical analysis.

Orlandi, Alfredo, *Il Punto Sulla Sindone*, Elle Di Li, Turin, 1993, (Collana "Mondo Nuovo" No 136) Soft cover 48 pp, Italian, ISBN 88 01 07136 1

Up to date overview.

Ricci, Giulio, *L'Uomo Della Sindone E Gesu*, Carrocio, Vigodarzere, 1989, Soft cover, 98 pp, Art paper, Italian, No ISBN.

Many coloured illustrations, usual Ricci overview with devotional content

Lanza, Giovanni, *La Santissima Sindone Del Signore*, Roux Frassati, Turin, 1898, No cover, 168 pp, several b/w/ etchings, Italian.

A general history produced for the 1898 exposition. A classic collector's item.

Colli, Giovanni, *Storia e Scienza Di Fronte Alla Sindone*, Astesano Turin 1942, Soft cover 96 pp, Italian.

A general coverage

Recent bibliography (cont'd)

Fino, Saverio, *Album Ricordi Della Solenne Ostensione Del 1931*, S. E. L. P. Turin 1931, Soft Cover 16 pp.

Produced for the 1931 exposition with drawings.

Judica-Cordiglia, Giovanni, *L'Uomo Della Sindone: E Il Gesu Dei Vangeli?* Pelizza, Chieri, 1974, Hard Cover 148 pp, pics and diagrams, Italian.

Ricci, Giulio, *La Sindone Contestata Difesa Spiegata*, Colima Emmaus, Rome 1991, Soft cover 422 pp many illust col and b/w, Italian.

Update of Ricci's extensive scientific work.

Malantrucco, Luigi, *L'Equivoco Sindone*, Elle Di Li, Turin 1992, Soft cover 144 pp, Colour plates, ISBN 88 01 12021 4, Italian.

Update on his work including comment on C14 testing.

Bulst, Werner and Pfeiffer, Heinrich, *Das Turiner Grabtuch Und Das Christusbild, Band II: Das Echte Christusbild*, Joseph Krecht, Frankfurt 1991, Hard cover 168 pp, col and b/w plates, ISBN 3 7820 0633 X. German.

Grammaglia, Pier Angelo, *L'Uomo Della Sindone Non E Gesu Cristo*, Claudiana, Turin, 1978, Soft cover 88 pp, Italian.

Ricci, Giulio, *La Sindone Santa - Documento Originale Della Passione Di Cristo*, Centro Romano di Sindonologia, Rome 1979, Hard Cover 400 pp, many pics and diagrams, Italian.

Library Edition, Large Format, Art Paper, Collectors item.

Piano, Lazzaro Giuseppe, *Comentarii Critico-Archeologici Sopra La SS Sindone di N. S. Gesu Cristo Venerata in Torino*, Evedi Bianco, Turin 1833, Paper cover, 4to uncut, 2 vols, 440 and 460 pp, some etchings, Italian.

A gem of sindonology; a rare collector's item.

Biagent, Michael and Leigh, Richard, *The Temple and the Lodge*, Corgi, London 1990, Soft cover 416 pp, photos, ISBN 0 552 13596 8

An "expose" of Freemasonry. Many references to Templars and thus of Shroud interest

Recent bibliography (cont'd)

Freze, Michael, *They Bore the Wounds of Christ, Our Sunday Visitor*, Huntington, USA 1989, Soft cover, 350 pp b/w illust. ISBN 0 87973 422 1

A major work on the stigmata with many Shroud references

Swennen, Rene, *Le Roman Du Linceul*, Gallinard, Paris 1991, Soft cover 154 pp French

A work of fiction about how a faker made the Shroud in the Middle Ages

Berard, Aram (Ed), *History, Science and Theology and the Shroud*, The Man in the Shroud Committee of Amarillo, Texas, 1992, Soft cover 358 pp b/w photos and diagrams No ISBN
17 papers given at St Louis, Missouri Shroud Conference in June 1991. Very well produced. A classic example of how to produce conference proceedings and in time to be relevant.

Ladu, Tarquinio, *La Datazione Della Sindone* (Proceedings of Shroud Conference April 1990 at Cagliari, Sicily), Edicar, Quarticcia 1990, Soft cover 550 pp, many col and b/w photos.

The text of 33 papers given. A very well produced book but with appallingly translated English summaries

Reeves-Stevens, Garfield, *Children of the Shroud*, Seal Books, Toronto, 1988, soft cover 320 pp, ISBN 0 7704 2124 5

A work of horror fiction much in the Stephen King genre with some Shroud basis

Laszlo, Viz, *A Torio Halotti Lapel Es Koranail Meghatarozasa*, Ecclesia, Budapest 1990, Soft cover 276 pp, standard pics ISBN 963 363 964 6, Hungarian

Comprehensive account brought to the Hungarian people

Conti, Hilary, *Seeking the Face of Jesus*, Holy Face Monastery, New Jersey, 1990, Soft cover 204 pp many b/w photos

Biographies of three people associated with the Monastery of the Holy Face

Bollone, Pier Luigi Bama, *Sindone O No*, Societe Ediatrice Internationale, Turin, 1990, Hard cover 333 pp, col, b/w pics and diagrams, ISBN 88 05 05190 X, Italian

An overview of scientific and medical work

Recent bibliography (cont'd)

Calova, Giovanna, *The Face of the Man of the Shroud and His Message*, Opera Salesiana, Turin, 1991, Soft cover 52 pp
A devotional interpretation of the image on the Shroud

Kallos, Bishop John, *What About the Holy Mandylion / Turin Shroud?* :Light and Life, Minneapolis, 1991 soft cover 38 pp
An insubstantial paper on some perspectives of the Orthodox

Moroni, Mario et al, *La Sindone Questo Mistero*, Centro Internazionale della Sindone, Turin 1991, soft cover 56 pp col and b/w pics, Italian
A rather odd collection of seven papers by various Italians from a conference in November 1991 at Masciago

Hajduk, Anton, *Turinske Platno, Q III*, Bratislava, Czechoslovakia 1991, soft cover 96 pp col and b/w pics ISBN 80 85401 06 1 Czech
A general overview for the Czech people

Carmo, Antonio, *Joao Viiu E Acreditou*, Imprensa Oficial de Macau, 1990, soft cover 84 pp many col photos Portuguese
An interesting collection of modern scientific research

Raffard de Brienne, D., *Le Secret du Saint Suaire*, Editons de Chire, Chire-en-Montreiul 1993, soft cover 128 pp ISBN 2 85190 077 3 French
A brief historical overview from the Middle Ages and brief comment on the authenticity based on the standard sources

Celier, Odile, *Le Signe Du Linceul: Le Saint Suaire de Turin: de la Relique a l'Image*, Editions du Cerf, Paris, 1992, soft cover 256 pp +32 pp b/w/ pics and tables ISBN 2 204 14648 5 French
A broad account of Shroud history since the 1st century, a commentary on some scientific aspects and a section on biblical references relevant to Shroud studies

Cerri, Msgr Vincenzo, (Trans Paul T Y Atworth), *The Holy Shroud and the Visions of Maria Valtorta*, Kolbe, Sherbrooke, Canada, 1994, soft cover 240 pp pics and diagrams ISBN 2 920285 12 2

Recent bibliography (cont'd)

Emmerich, Anne Catherine (from), *The Dolorous Passion of Our Lord Jesus Christ, (with a preface by the Abbe de Cazales)*, The Christian Book Club of America, Hawthorne, California, 1968, Hard cover 382 pp No ISBN

Reprinted from an earlier version contains also a life of Emmerich

Minor, Michael, *A Lawyer Argues for the Authenticity of the Shroud of Turin*, Elite, Terrell, Texas, 1990, soft cover 32 pp No ISBN

A limited edition on "special" paper containing an 8 page article reprinted from "The Manuscript Society News" (Fall 1990) and some illustrations. A collectors piece of anecdotal material

Trenn, Thaddeus J., *An Update on Why Science Cannot Cope with the Shroud of Turin*, (Text of a lecture presented at the University of Toronto 2 March 1993), for private distribution, soft cover 40pp.

Photostat production typesize reduced to almost unreadable.

Hepper, F. Nigel, *Illustrated Encyclopaedia of Bible Plants*, Intervarsity Press, London 1992, hard cover 192 pp, profusely illustrated col and b/w, maps and diagrams ISBN 0 8010 4361 1

A comprehensive descriptive work with indices, bible references, etc.

Fox, Robin Lane, *The Unauthorized Version - Truth and Fiction in the Bible*, Viking, Penguin, London 1991, soft cover 478 pp ISBN 0 670 82412 7

A substantial historian's discussion of the (atheist) author's view of the Bible.

Metzger, Bruce M., and Coogan, Michael D., (Eds), *The Oxford Companion to the Bible*, OUP, New York 1993, Hard cover 874 pp + col maps ISBN 0 19 504645 5

A substantial companion.

Funk, Robert W., and Hoover, Roy W., (Trans), *The Five Gospels - The Search for the Authentic Words of Jesus*, Macmillan, NY, 1993 hard cover 554 pp + xxi ISBN 002 541949 8

A quirky translation of the four gospels plus St Thomas and commentary throughout.

Recent bibliography (cont'd)

Wilson, Ian, *Holy Faces, Secret Places - The Quest for Jesus' True Likeness*, Corgi, London, 1992 (first published Doubleday 1991), soft cover 320 pp diagrams, col and b/w pics ISBN 0 552 13590 9.

A paperback edition of the original in which Wilson debunks the work of Thomas Heaphy (later retracted) (reviewed in *SN* 68, Dec 1991).

Holy See, The, *Catechism of the Catholic Church*, Society of St Paul, NSW 1994 (Australia and New Zealand edition) soft cover 803 pp col pics ISBN 1 875570 20 9.

Enrie, Giuseppe, *La Santa Sindone Rivelata Dalla Fotografia*, Societa Editrice Internazionale, Torino, 1933, hard cover 162 pp b/w photos

An original edition rebound in hard case.



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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