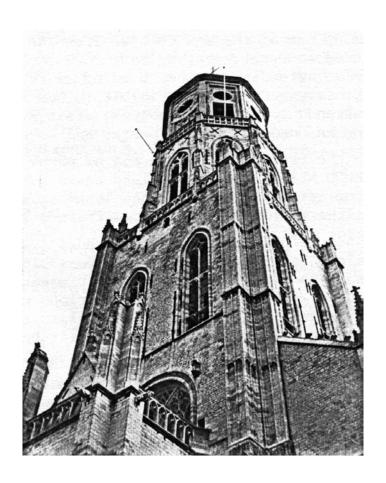
SHROUD NEWS

A NEWSLETTER ABOUT THE HOLY SHROUD OF TURIN By REX MORGAN - Author of PERPETUAL MIRACLE

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THE CHURCH OF ST GUMMARUS IN LIER, BELGIUM, WHERE THE COPY OF THE HOLY SHROUD, ATTRIBUTED TO ALBRECHT DÜRER IS KEPT. THIS COPY PREDATES THE CHAMBÉRY FIRE AND WAS MADE IN 1516.

EDITORIAL

Another Shroud year draws to a close. Among its highlights have been the formation of Sr Damian's Environmental Study of the Shroud in Jerusalem group and her publication of what may well be controversial views on the Shroud; the death of Shroud scholar Fr Francis Filas who made world headlines with his coin theories; Whanger's claim to have discovered another phylactery on the arm of the Shroud image; a New Zealand scientist's suggestion that earthquake activity might have caused the image formation; the publication of new STURP and BSTS proposals for a new round of tests on the cloth; the Brooks Photographic Exhibit's tour of New Zealand; the celebration of Fr Peter Rinaldi's golden jubilee as a priest.

For my own part there were personal highlights such as wandering in the Jordanian Desert; seeing Sr Damian's first experiment before anyone else; becoming one of the few to have seen the Lier copy of the Shroud attributed to Dürer; meeting many more Shroud scholars throughout the world; attending another meeting of the Board of ASSIST in New York; taking the Brooks Exhibit to New Zealand and dealing with its attendant joys and problems; visit Brooks University again and receiving an Honorary Degree there; and so on.

I still indulge in the reflection at the end of every year that the first issue of SHROUD NEWS in September 1980 could not have foreseen the present state of affairs having reached Issue 32 and an international circulation and the vast number of Shroud friends it has generated.

Runciman Press plans the publication of a new book I have written on some very early paintings of Christ and their possible connection with Shroud Studies. The draft of this work is presently being commented upon by several Shroud scholars in various countries and should be released during 1986. Runciman also plans to produce some monographs, too long for SHROUD NEWS, but which will be of interest to the Shroud circle.

The Brooks Photographic Exhibit will be going to Hong Kong in March where all arrangements are well in hand for the people of that country to see the remarkable data from the scientific study of 1978. There is a possibility that the great Shroud writer Ian Wilson will visit Australia in 1986.

In this issue we reprint an article published in June 1934 in THE SIGN by the young Peter Rinaldi. It is amazing to read of his grasp, 52 years ago, of the facts about the Shroud which have changed little in the light of immense further scientific and scholarly study.

Happy Christmas and a Joyful New Year.

REX MORGAN

RARE SHOWING OF THE LIER SHROUD COPY

As SHROUD NEWS readers are aware the 1516 copy of the Shroud kept in Lier, Belgium, was displayed for the visit of Rex Morgan in August 1985. The following article was published in the ANTWERP GAZETTE. We are indebted to Mr KIM HOEKMAN of Sydney for translating it from the Flemish.

"COPY OF THE TURIN SHROUD IN LIER"

"At five o'clock the bells of St Gummarus Church in Lier ring which reminds Mr Van Haelst of his engagement: 'Don't be late, otherwise you'll stand in front of a locked door. The warder must open the Sacristy where the shroud is kept.'

"The 'Shroud of Lier', as Mr Van Haelst calls it, is a copy of the famous Shroud of Turin, in which the body of Christ is said to have been wrapped. An imprint of the back and front of the body is found on the cloth, as well as blood spots, nail marks and the crown of thorns. For ages the Shroud has been honoured as a religious relic. In 1898 there was some surprise when a negative photo showed up a human figure and for almost a hundred years specialists have made minute investigations on the Shroud to determine its authenticity. Can the copy in Lier contribute to this investigation?

"That question keeps all the specialists congregated at the St Gummarus Church busy, even before the clock strikes five. It's an unusual group: one of them, Mr Van Haelst from Antwerp who, besides his work in a chemical company, is writing a book about the Shroud of Turin; Mr Jef Leysen, a master printer from Mechelen, who already has books in print on this subject; Baron Van der Straten-Waillet, former ambassador, who since seeing the Shroud has embarked on documenting this phenomenon, and Mr Rex Morgan who has already written two books and, for his third, has come from Australia to Lier to see the copy which according to him is of great historical significance.

"It is not the first time that this native Englishman has visited the city. He is a world traveller in search of evidence about the Shroud. For this reason he was standing in front of the church several years ago but it was closed then and he could not see what was for him a very important item. The museum-piece remains closed for experts and the public, except for the odd occasion, during the Carnival of St Gummarus but, of course, Mr Morgan had no knowledge of such Flemish traditions.

Rare Showing of the Lier Shroud Copy (contd)

"Through the intervention of his Flemish friend he could now view and photograph the shroud copy. It was neatly hung in the Sacristy. The copy is much smaller than one might expect, about a third of the size of the Shroud of Turin.

"The drawing has a darker tint and is less fuzzy. The painter made a few corrections; therefore the legs are crossed in the opposite direction. The work originated in the year 1516. In that year it was commissioned to the Flemish painter Bernard van Orlay by Margaret of Austria. It was completed in 1521 (according to receipts).

In the same year the German painter Albrecht Dürer who then lived in Antwerp ordered a wooden cylinder to store such a cloth. Coincidence? Mr Van Haelst claims that the copy was actually the work of Dürer. There are a number of supporting indications for this. There is the text in a Nurnberg dialect. The drawing of the head is like other Christ heads by Dürer. It is an eighth of the total body length and is probably made with the famous 'portrait-machine' of Dürer's. This would explain why the shroud is a third of the size of the Shroud of Turin and why some points come together in perfect symmetry.

"Mr Morgan pointed out that the copy dates back before the fire in 1532 in the Chambéry Chapel which, according to Mr Morgan, makes the shroud of Lier very interesting. The Shroud of Turin shows rust-brown stains and the shroud of Lier red ones. This would indicate that the painter saw bloodstains on the Shroud which was kept at Chambéry at the time and that the rust-brown spots were not burn marks, according to Mr Morgan. The shroud of Lier will undoubtedly have a place in his third book which will be published next year.

"But for those who are interested in the Shroud of Turin - they will not have to wait that long. The work of Mr Van Haelst will be published this winter by publishers De Vlijt in Antwerp. It will contain revealing pictures and the whole story of the Shroud of Turin and of the copy at Lier.

"Mr Van Haelst also tells us how the copy came to be in Lier. One reads that Margaret of Austria gave the copy to her friend Antoine de Lalaing. This Count had great admiration for the Shroud. He, in turn, gave the copy to the convent of Nazareth just outside Lier. Mr Van Haelst deduced this fact from the archives of the notary

Rare Showing of the Lier Shroud Copy (contd)

"Berckmans of Lier from the 17th century where the writer could not resist the following anecdotes: I can remember reading that in the Guezen time (1580 to 1582) when the cloister of Nazareth was threatened by the hordes they hid the copy behind the altar and returned to face the enemy who turned and fled, leaving the cloister in peace.

"Also an inventory from 1652 tells of the shroud copy being used to drive away the soldiers from the cloister but of more importance it also mentions `A Dürer' as its painter.

"When the cloister was closed in the last century the shroud copy finally came to be in the Church of Saint Gummarus in Lier where it is still to be found. Mr Van Haelst finds it a shame that the painting is not shown publicly more often since it is such a rare item which should be exhibited."

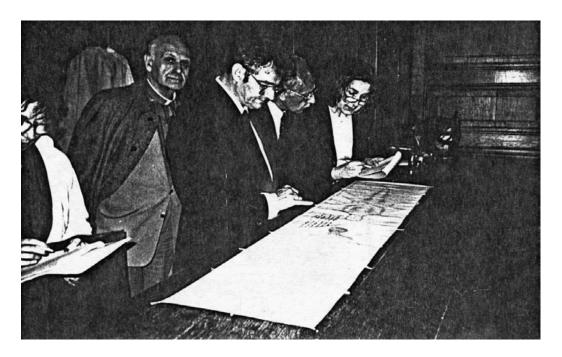
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OUTSIDE THE CHURCH OF ST GUMMARUS, LIER, (Left to right): REX MORGAN; Mrs LEYDEN (scholar); Antwerp journalist; Mr REMI VAN HAELST (scholar); then 2nd from right Mr JOSEF LEYSEN (Shroud author); Baron F.H.VAN DER STRATTEN-WAILLET



THE RARELY SEEN COPY OF THE HOLY SHROUD AT LIER, BELGIUM. EXECUTED IN 1516 AND ATTRIBUTED TO DÜRER.



AT ST GUMMARUS CHURCH, LIER, SINDONOLOGISTS FROM BELGIUM HAD A RARE OPPORTUNITY TO SEE THE COPY DURING A DISPLAY ARRANGED FOR REX MORGAN. L to R: A French visiting priest; REMI VAN HAELST: BARON F.H. VAN DER STRATTEN-WAILLET; Mrs LEYDEN

RADIOCARBON DATING CONFERENCE, TRONDHEIM, NORWAY

The 12th International Radio Carbon Dating Conference was held in June 1985 at the Norwegian Institute of Technology in Trondheim. Numerous highly technical papers were presented and some reference was made to using newly developed techniques for dating the Shroud of Turin. At least two Shroud researchers, Dr Robert Dinegar and Fr Kim Dreisbach, both of the United States were present.

SHROUD NEWS has received information from the paper on the work of Richard Burleigh, Morven Leese and Michael Tite of the British Museum Research Laboratory and presented to the conference by Dr Sheridan Bowman. The information was supplied to us by Fr Kim Dreisbach of the Atlanta Center for Shroud Studies. Dr Patricia Euland of the Norwegian Institute also arranged for us to receive correspondence and comment from Dr G. W. Pearson of the Radiocarbon Research Unit of The Queen's University of Belfast, Northern Ireland.

The British report of the new technology embodied the results of tests performed by six laboratories with the capacity to date small samples. Four of the laboratories used accelerators and two used small gas counters. The samples used were of textiles from Ancient Egypt and Peru with the British Museum laboratory acting as independent co-ordinator. The intercomparison of normal practices demonstrated that a coherent series of results can be obtained when several laboratories undertake blindfold measurements. It was pointed out, however, that the occurrence of outliers emphasised the continuing need for the dating of unusually important or controversial samples to be undertaken by a group of laboratories.

Burleigh et al reported in part:

"The advent of successful techniques of radiocarbon dating using small samples has made possible, among many other applications, the direct dating of highly valuable or unique objects for which the use of conventional radiocarbon techniques would be too destructive. In particular the dating of the Shroud of Turin would now be possible in principle although it is generally agreed that any such measurement ought not to be undertaken by a single laboratory, or even by the use of one technique alone. Such an objective apart, there is an intrinsic scientific need to establish in a controlled way the variation among laboratories using small sample techniques, when the same, known-age, samples are measured blindfold.

Radiocarbon Dating Conference, Trondheim, Norway (contd)

"With this in view (and with particular relevance to any proposal for dating the Turin Shroud) an intercomparison was planned in which two samples of textile of different age would be sent to four accelerator and two small-counter laboratories by an independent laboratory whose role would also be to collate and report on the results, anonymity of the individual results being maintained. The British Museum was chosen to perform this task on the basis of impartiality, experience in radiocarbon dating, and ready access to the suitable materials. The six radiocarbon laboratories taking part were Arizona, Bern (using the Zurich facility), Brookhaven, Harwell, Oxford and Rochester, of which Brookhaven and Harwell were the two small counter laboratories. Two samples each weighing approximately 100 milligrams, one from Ancient Egypt (linen, 1st Dynasty, circa 3000 BC) and one from Peru (cotton, Chimu style, circa 1200 AD), labelled respectively Sample 1 and Sample 2, were sent to each of these laboratories in May 1983. The provenance of each sample stated, but their historical ages were not disclosed. A time limit was set for return of the results by 31 December 1983 although later this was extended to 31 July 1984. First results received for Sample 2 suggested that the material was of much more recent date that expected and by agreement with all the participating laboratories a third sample (Sample 3: cotton, Peruvian, Late Intermediate Period, circa AD 1000 - 1400) was issued under the same conditions as previously to replace Sample 2.

"The Egyptian sample, originally from Tarkhan, came from the Petrie Collection at University College, London and the Peruvian samples came from the collection of the Museum of Mankind (Department of Ethnography, The British Museum). These materials were chosen for their homogeneity, and typical state of preservation, as well as their respective historical ages, and the individual samples were cut from the same area of each textile, away from selvedges or designs.

"Overall there is good agreement between the results obtained and the expected historical dating of samples, in particular as far as Samples 1 and 3 are concerned. There do not appear to be differences between accelerator and small-counter techniques. Most importantly perhaps, this intercomparison has shown that a coherent series of results can be obtained when several laboratories undertake separate blindfold measurements of the same sample. As expected there are no

Radiocarbon Dating Conference, Trondheim, Norway (contd)

"special difficulties in dating textiles by radiocarbon using small sample techniques, as the concordance of the calibrated radiocarbon and historical dates for two textiles separated in time by nearly 4000 years clearly shows. Finally, the distribution of the results, containing as it does a number of outliers, lends added emphasis to the need for the dating of any important relic such as the Shroud of Turin to be shared by several laboratories simultaneously, if the results are t- have maximum credibility. Possibly also, as a further check, exchange of pretreated samples by these laboratories might be desirable."

Quoting from Dr G. W. Pearson's letter:

"It is worthwhile stating that some 4,500 years of my calibration has been compared by Stuiver (Seattle), and both sets have a mean difference of less than 1 year.

"I have some reservations regarding the accuracy of C14 measurement in very small samples since I have found many variables which affect the accuracy of very much larger samples and I suggest that measuring laboratories are selected with great care before such an important scientific evaluation is embarked upon, otherwise more ambiguity may result."

Dreisbach sums up by saying:

"The technology now exists to date the Shroud accurately within a 1% margin of error. In short, the scientists can be more accurate with a 2,000 year old piece of linen than with the 5,000 year old piece of Egyptian funerary cloth simply because there is more C14 in the former because it is younger. The crucial factor today is not the lack of technology but rather the lack of a sample."

THE ROMAN CENTRE

We are advised that the study group based on Mgr Ricci's Centre for Sindonology at Rome has been disbanded but has re-formed under the initiative of Prof Emanuela Marinelli, Ilona Farkas, Prof Zaninotto, Dr Malantrucco, Sig Masini and others. The group has established a newsletter COLLEGAMENTO PRO SINDONE.

THE HOLY SHROUD (WRITTEN IN 1933 by Father PETER RINALDI)

The publicity given to the Holy Shroud during its recent public exposition at Turin did all but create definite ideas about this venerable relic in the minds of Catholics at large. Beyond the vague notion of a singularly precious relic of Christ's Passion and the vision of fervent multitudes, the Press could present us with nothing better than a few unimportant details on the eventful exposition.

Yet things both new and soul stirring can be recounted of the Holy Shroud of Turin. This holy relic, which the Church has treasured throughout the centuries, lies no longer unknown in its triple silver case amid the lofty splendors of the "Sainte Chapelle" at Turin. The meaning of its mysterious signs, which the faith of generations had divined but not understood, science has now definitely and unmistakably disclosed. In a language which is both vivid and impressive the Holy Shroud tells the story of the Passion and Death of Christ. It is no wonder that the Church should call on her faithful to read about and meditate on this unique version of Calvary's Divine drama during the Holy Year commemorating the nineteenth centenary of our Redemption. Thus it was that the extraordinary exposition of the Holy Shroud drew countless pilgrims to Turin.

Eagerly and reverently they gazed at the double imprint of a human body dimly outlined on a wide linen which the ravages of time and fire have considerably damaged. The vision of that first gruesome Good Friday must have dawned on their minds in all its tragic reality. And what feelings have entered their hearts but the feelings of those few faithful ones who cared for the body of their beloved Master the night of the Passover nineteen centuries ago?

When, on May 3, 1931, the Holy Shroud was once more exposed to the veneration of the faithful, doubt was rather widespread as to the authenticity of the relic. Thirty-three years had passed since it had last been exhibited. If known at all, the Turin Shroud was known more as an object of polemics than of veneration. Even now, on the morrow of a new and extraordinary exposition, the Holy Shroud is but little known in the Catholic world.

There are, no doubt, many who will be glad to know how far this claim-that we have the actual Burial Sheet of Christ - has been confirmed by the examinations that have recently taken place. A detailed description of the Shroud will help our readers to a thorough

comprehension of the subject.

The Holy Shroud is a seamless linen cloth woven in the ancient Damascus patterns, 4.77 yd long and 1.20 yd wide, showing a number of stains or marks which differ in their origin and significance. Over two black lines running the length of the cloth parallel to the sides, eight large burns are strikingly noticeable. These are the signs left by the fire which threatened to destroy the relic at Chambéry (Savoy) in 1532. Prompt intervention saved the Shroud from destruction, but not from damage. The fire had singed a corner of the carefully folded relic, the scorching reproducing itself to the extent of the entire length of the cloth. The mended portions are the work of the Chambéry nuns, who used altar linen in repairing the precious cloth.

These and other spots divert considerably the attention of the onlooker from the two dim images (one frontal and the other dorsal, placed head to head) of a human body in natural size outlined in the center of the linen. Even to the casual onlooker this mysterious figure reveals itself with the unmistakable traits of the Crucified One. But what is the true nature of this double image or imprint? Science was confronted with this problem for the first time during the exposition of the relic in 1898. The researches to which eminent scientists applied themselves and in which the camera, the microscope and the laboratory proved of the utmost usefulness, have led to discoveries so astonishing that they leave no longer any room for doubt about the authenticity of this famous relic.

It is a curious paradox that whereas eminent scientists (some of whom, like M. Yves Delage, are not even Christian believers) are willing to accept the Shroud as authentic on purely scientific grounds, not a few learned Catholics have opposed this view wholeheartedly, basing their opposition solely on historical grounds. The outcome of the violent polemics that ensued was that those who had not directly examined the relic very rashly concluded that the scientific evidences gathered in 1898 were all too fragile to withstand the overwhelming weight of historical objections. To them the images upon the Shroud were merely paintings executed in the middle of the fourteenth century.

The difficulty with the historian of the Shroud is apparently very serious. His efforts to reconstruct the chain of events that links the Turin Shroud with Christ's burial have literally come to nothing.

The chronological data at his service are all too scarce and often even doubtful. The few documents that directly bear on the subject would seem to discourage any serious attempt to prove the Shroud's authenticity on merely historical grounds. Besides, it must be stated, other "shrouds" are known to have existed.

These objections, which the opponents of the authenticity advanced with so much certainty, face to face with the more recent examinations of the relic, have broken down irrevocably. In archeology when an object can supply its own authentication it is of small consequence what may have been its history. Now the evidences gathered from the objective examination of the Turin Shroud are more than sufficient to warrant its claim to authenticity. This explains why opposing scarce and doubtful literary documents to scientific evidences of the highest import has become, in the case of the Holy Shroud, a rather discomforting task.

Doctor Arthur S. Barnes who, to an extensive knowledge of the Shroud's literature, joins the experience of a personal examination of the Relic, thus sums up the scientific evidences gathered in 1898 and fully confirmed during the more recent expositions:

"There are four reasons, each of which could be decisive by itself, and which, taken together, make any further suggestion of painting quite inadmissible. They are as follows:

- "1. The process of painting on a fabric involves the deposit of solid particles of coloring matter upon the threads, so that these latter become partially or entirely hidden. But in the case of the Shroud every thread is visible, and no trace of solid extraneous matter can be detected even by microscopic examination. The threads themselves are stained more or less throughout, so that the same figures, fainter in coloring but otherwise identical, appear on the other side. Not thus was any human painting done in the fourteenth century, or indeed at any other time.
- "2. Human work, however minute, necessarily shows outline and shading. It may be so fine as completely to delude the unaided eye, but its nature at once becomes manifest when it is put under the microscope. But these figures have no outline and no trace of shading. The coloring becomes more or less intense by quite imperceptible degrees. The edges fade away into the general fabric so that it is impossible to say where the tint begins and where it ends. That effect is characteristic

of natural processes; it is quite unattainable by human effort, at any rate if unaided by any elaborate mechanical device.

- "3. In the fourteenth century in France anatomy was not understood, and nothing was known of the circulation of the blood. But here the anatomical detail and proportion is exact, the behaviour of blood flowing from a wound is true to nature, and the contrast between living blood and dead blood is duly preserved. Even the characteristic way in which a clot of blood dries, the coloring matter thicker on the circumference than in the center, is truly represented on the Shroud, though it takes the microscope to reveal it. But the realism of the fourteenth century was not of this kind; science had not attained to such details of knowledge, nor did men do work that only the microscope could test; the microscope itself had not been invented.
- "4. The fourth reason carries conviction to the mind even more readily than those three already given. It is that the figures upon the Shroud are shown reversed in light and shade, something after the manner of a photographed negative. If they are photographed they produce upon the plate a positive picture, with light and shade more as we are accustomed to see it. Even the expression upon the face is perfect. But no human being, even now, could paint in this way, not even if he were an expert retoucher of photographs. Such a one might be able to produce a passable representation of a human body in negative, but to preserve so delicate a thing as the expression on a face whilst thus reversing the light and shade is quite beyond human skill. If that is so even today, when photography has made us familiar with the phenomena of inverted light and shade, how much was it so in the fourteenth century, when the very idea had not yet been thought of. Nor, even if it had been possible, could there be any conceivable motive which would have led a painter to work in this way, and make his work so hard to understand.

"These four considerations are sufficient to put completely out of court the theory that the Shroud is nothing but a medieval painting. It should never be heard of again."

The double imprint upon the Shroud has, then, all the characteristics of a photographic negative (light and shade reversed, inverted positions, etc) so that if photographed it produces on the plate the positive picture of a man exact in every detail, proportioned, artistically beautiful and endowed with a marvellous expression.

Through photography we have the surest identification of this mysterious image and the irrefutable proof of the Shroud's authenticity.

The magnificent photographs, taken in 1931 by competent Signor Enrie of Turin and issued with ecclesiastical authority, have once more disclosed the astonishing characters of the figures of the Shroud.

The stain images of the linen become on the photographic negative (plate) a perfect portrait of a dead body, and evidently enough of the body of a man who has suffered crucifixion after a cruel scourging; who has been crowned with thorns and whose side has been pierced with a lance. The face which on the Shroud is quite meaningless, reversed as it is in light and shade, takes on the photographic negative the wondrous expression which has excited the admiration of countless artists. The wound which is to be seen in the left wrist (the right hand is covered over by the left), while against all pictorial traditions, is in perfect harmony with anatomical requisites. The rivulets of blood visible on both forearms would imply that the arms of the Crucified One were raised above the head. The arms had, therefore, to support much of the weight of the body. The long nail, driven through the lower part of the palm, would have to be slanted downwards that it might hold the better and not tear through the flesh. The wound on the back of the hand would naturally come out on the wrist.

The wounds of the feet are strikingly noticeable on the back image, part of the linen having been folded back from the heels so that it lay along the bloodstained soles.

The wound of the side is clearly situated on the right (in proximity of the mended portion of the linen). The flowing of the blood is true to nature. Doctor P. Barbet of Paris can infer the trail of the lance from the position of the wound. "It penetrated between the fifth and sixth rib, bored through the right lung and pierced the right auricle of the heart."

The scourge has left traces of its gruesome work over the entire body; yet the bruises are particularly numerous and distinct on the dorsal region. Their shape, number (about 80) and distribution (two by two) enable us to infer that the condemned was inflicted the forty legal strokes and that the two whip lashes were provided with a metal strip. But the eye is irresistibly drawn to the face of this mysterious

figure. It is a true photographic portrait because it has resulted from a negative (the stained image of the Shroud). The features are as impressive as they are definite: the white showing bloodmarks on the forehead tell of the crown of thorns; the long Semitic nose shows a pronounced tumefaction; the right cheek is swollen; the lower lip slightly protruding; the hair stiffened by the sweat and the trickling blood.

Yet neither the insults of the mob nor the agony of an excruciating death has altered the calm, serene, majestic expression of this incomparable countenance. One can only cry out with Professor Yves Delage, non-Catholic and non-Christian as he was, "Who but the Christ could impress this image on the Shroud?"

Some there are, even among the more learned admirers of the Holy Shroud, who would not entirely eliminate the supernatural factor in dealing with this relic. They see something more than the merely ordinary course of nature in the way with which God was pleased to leave to His Church so striking a memorial of the Passion of His Son. The scientist, however, believes himself to have reached a very definite conclusion as to the origin of the Shroud's images. Whatever providential guiding there may have been, their origin, he holds, was natural.

Clearly, these images are not the work of an artist; consequently they can only have been caused by some influence proceeding from an actual body which was laid upon one half of the sheet and then covered with the remaining portion. But under what circumstances can a dead body produce upon the linen which surrounds it definite images of itself such as we see upon the Shroud? Two are the requisites determined by laboratory experiments: first a coloring substance on the linen, which being thus made susceptible of impression, would act much like the sensitized plate in the camera; second, a fluid emanated from the body which determining a reaction with the coloring substances causes indelible stains to be formed on the linen. This fluid is evidently a gas since it acts at a distance and by osmosis through whatever linen cloths that might separate the sheet from direct contact with the skin. Furthermore it must draw its origin from the blood. The stain images of the Shroud show that the emanation has been present in greater activity where the flesh was bruised and most of all in the blood itself.

Now physiology points to urea, present both in the clotted blood and in the sweat, as a substance which yields first carbonated ammonia and then ammoniacal gases. Experiments have shown that alkaline substances, such as ammonia, react with a principle of the aloe, forming a red-brown colored and coloring substance.

It was following these considerations and the Gospel narratives that Paul Vignon, Professor of Biology in the Institut Catholique of Paris, framed his famous theory of "contact" experimented and accepted as the most probable explanation of the Shroud's images by eminent professors of the Sorbonne University.

The body of the Redeemer was given a hurried and temporary burial. We insist on this fact because, while it answers to truth, it is of capital importance to the theory.

"The sabbath drew on" (Luke 23,54) and the usual ceremonies had to be postponed to the first day after the hallowed season of rest. The fact that the women "returning prepared spices and ointments" (Luke 23,56) implies that the body had not been anointed at all. St John says that "they bound it in linen cloths with spices, as the manner of the Jews is to bury." (John 19,40.) He does not say that they went through all the operations after the manner of the Jews. It is rather arbitrary, then, to infer from that text that the body was washed, anointed and wrapt with the long linen bands. What would the women come to the tomb for early on Sunday morning?

Still unprepared for the definite burial, the Body of the Savior was laid upon one half of a "clean linen cloth" and then covered with the other half. This linen, purchased by Joseph of Arimathea on the spur of the moment (Mark 15,46), had been profusely spread with the spices (a compound of myrrh and aloes ground and mixed together) provided by Nicodemus (John 19,39). It is quite certain that some smaller linens were used besides the wide sheet. The hands, reverently composed together, were bound with a strip of cloth. The napkin referred to by St John (John 20,7) was probably put about the head to hold the chin into position. A cloth was quite certainly placed about the loins where the hands rested.

Joseph, after having thus "wrapped the body in the clean linen cloth laid it in his own new monument" (Matt. 27,60); "there," adds St John, "because of the parasceve of the Jews, because the sepulchre was nigh at hand." It was, then, but a temporary deposition they provided for

the body of their beloved Master, and this in view of the definite burial they would give it soon after the hallowed repose of the Great Paschal Sabbath.

The Body which the Shroud enveloped was exceptionally fit to produce the amount of ammonia necessary for the reaction. An agony of sorrow and of dismay had drawn from its pores a heavy perspiration of blood, particles of which remained hidden among the channels of the sweat glands. Then, the scourging, the crowning with thorns, the tragic journey up Calvary, the crucifixion, the violent death after hours of untold sufferings. These were the determining causes of an abundant emanation of ammoniacal gases which, developing from the dissolving urea, reacted with the aloe on the Shroud.

The ammoniacal vapours did not equally react on the different parts of the sheet. The linen was stained through and through; very strongly at those points where there had been actual contact, less intensely precisely in proportion to the distance which separated that particular portion of the Body from the surface of the sheet. The blood and the bruises acted most strongly of all, and made darker and redder stains. The images thus formed present the appearance of a photographic negative, with light and shade reversed from the effect ordinarily produced upon our eyes.

As to the probability of this theory, which still enjoys the favor of many learned admirers of the Turin Relic, we will observe with Doctor Barnes that to reproduce the conditions of the crucifixion is obviously impossible. Once it is granted that the images like those on the Shroud may conceivably have been caused by slow chemical action of this kind, there is little to be gained by further experiment. But it will be well to note that all the four points mentioned before in order to prove that in the case of the Shroud we are not dealing with any human production, are precisely those which would certainly be present in any such work of nature.

Does the theory of contact exclude the supernatural factor?

When we think of the unusual process that has caused the images on the Shroud and consider all the circumstances that were necessary for their production, we cannot but admire the Providence of God Who was pleased to leave to the Church and to the world the material document of the Passion and Death of Christ. And if by a new and no less admirable trait of His Providence, it has pleased Him to reveal to us

the figure of the suffering God-Man, it is doubtlessly in order to call us to a greater and deeper appreciation of His love for us. "He hath loved us, and hath delivered himself for us." (Eph. 5,2.)

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TO THE EDITOR

I have on hand a book: MOTHER MARY'S MEMOIRS. May I quote p 117:

"Well do I remember Holy Thursday! After the disciples and the Master had finished the 'Last Supper' and had gone to Gethsemane, the other ladies and I came and gathered together the linen cloth which I had woven and folded it carefully knowing in myself that within a day that cloth would enfold the body of My yet vital, shining and beautiful Son! In a napkin We carefully wrapped 'the Cup' and gave it to Joseph of Arimathea for safe keeping. That Cup was to travel far...."

And on p 124 she is talking of the power of the life essence:

"A constant flowing stream of electrons ... flows into your heart with such rapidity that there is no outer means by which it can be photographed. However in the near future, there is coming a much greater sensitivity in the photographic world and many of the magnificent things of which We have spoken will be recorded and confirmed by the sight of men."

I had not taken note of these mentions in her book until I saw the Shroud photographs and read your book ... it all fits in and we are able now to realize the tremendous flow of light that must have revivified the body and performed the "miracle" of resurrection and later public ascension.

JENNY WILSON, COMO, W.A.

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Thank you for your efforts in continuing to produce SHROUD NEWS which I have found to be an excellent digest of developments in Shroud Research. We here in Australia are indeed fortunate to have someone like yourself to wade through the mass of material being produced on this subject and present us with the "highlights" in a clear and concise form. I am sure all SHROUD NEWS subscribers would share my thoughts on your efforts.

REV FR ALEXANDER MOROZOW, RUSSIAN ORTHODOX CHURCH, CANBERRA

CARBON DATING BREAKTHROUGH CLAIMED IN NEW ZEALAND

A recent press article in the NEW ZEALAND TIMES reports that New Zealand scientists have developed a method of dating historical objects without destroying them with a six million volt particle accelerator at Wellington's Institute of Nuclear Sciences. The story claims: "The new process will also provide the long-awaited dating of the famous Shroud of Turin, claimed by some to bear the image of Jesus Christ's crucified body.

"Like many valuable artefacts, the shroud has never been carbon dated because, under present methods, a ten gram chunk of the object has to be destroyed.

"The new carbon dating technique uses a one milligram speck and can date back to 50,000 years with 99 per cent accuracy.

"Earlier this year, Shroud of Turin guardians announced a small slice of the cloth is to be sacrificed to check its age using the new technique.

"And scientists involved in the Wellington project - the only one of its type in the southern hemisphere - believe part of the shroud may be analysed in New Zealand.

"If our facilities were going well and giving consistent results at the time, it could be so,' says institute director, Dr Bernie O'Brien.

"Testing will determine whether the shroud dates from biblical times or is a clever medieval fake. That would be a very important piece of scientific evidence in favour of it belonging to Jesus or not belonging to Jesus,' says Dr Foss Leach, an anthropologist at Otago University."

Leaving aside the amazing suppositions in the above, if it is accurately reported, one would hope that New Zealand scientists could be involved in such a dating project when one comes to pass if they have the expertise referred to.

SHROUD SPECTRUM INTERNATIONAL

A number of Australian readers have subscribed to SHROUD SPECTRUM, perhaps the best quality Shroud magazine available. Enquiries should be addressed to:

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SHROUD NEWS

SHROUD NEWS began in 1980 when Rex Morgan, author of PERPETUAL MIRACLE-SECRETS OF THE HOLY SHROUD OF TURIN started putting together a few notes about current developments in sindonology (the study of the Shroud of Turin) for a small circle of interested people in Australia. He didn't expect it to go beyond a few issues.

The bulletin now reaches subscribers all over the world and because of its relatively simple method of production it can be written and produced and the information disseminated more quickly than most news-sheets of a similar kind. It contains information, news, articles and illustrations gathered from sources of Shroud study worldwide through Rex Morgan's extensive personal connections with what has been described as the "Shroud Crowd".

Morgan is a frequent overseas traveller and thus has the opportunity to keep abreast of latest developments in Shroud study and research. He was present at the world media preview of the Shroud itself in August 1978 in Turin, Italy and has since met with numerous Shroud researchers in many countries. His quest for information about the Shroud has become, as he describes it, a "passionate hobby" and he has since written the best-selling SHROUD GUIDE (December 1983) and is working on another major book about the Shroud. He is currently Honorary Director of the Brooks Institute Photographic Exhibition on the Shroud which is touring Australia, New Zealand and parts of the Far East. Morgan has been appointed to the Board of Directors of the USA based Association of Scientists and Scholars International for the Shroud of Turin (ASSIST).

Our list of SHROUD NEWS subscribers continues to increase. We request a subscription in Australia of \$6 for six issues posted. SHROUD NEWS comes out approximately 6 times per year. USA subscription for 6 issues is \$US 6 (posted surface mail) or \$US 12 (posted airmail). Postage to other countries varies. <u>All</u> back issues are available at \$1 (US or AUS) each plus postage charges.

Please encourage those of your acquaintance to take out their own subscription. The more we have the more we can improve the bulletin.

All information and opinion published in this newsletter is given in good faith. It is edited (and mainly written) by Rex Morgan and published by

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