EDITORIAL

As issue number 3 of SHROUD NEWS goes to print the overall situation with the study of the Holy Shroud becomes more and more exciting and interesting. We have devoted the major part of this issue to a review and synopsis of the very fascinating study by Father FRANCIS L. FILAS of Loyola University, whose identification of one of the coins over the eye of the man in the Shroud seems to be a significant piece of new evidence for authenticity.

News from America

I have had a long personal letter and greetings, not to mention some interesting comment and information, from the President of the Holy Shroud Guild in New York, Father ADAM J. OTTERBEIN, who with such world-renowned experts as Rinaldi is at the forefront of study and dissemination of Shroud information, and has been for decades.

I have also received more material by way of scientific reports in two American journals. These, together with the increasing pile of detailed reporting on my desk, will have to wait a while for condensation and report to readers of SHROUD NEWS. Suffice it to say that the more one reads from the scientists, the stronger the case for authenticity becomes.

McCrone controversy grows

Father Filas has issued a strong repudiation of the Walter McCrone statements. A summary of his London lecture was published in our last issue and many of the comments by Filas and Otterbein coincide with my interpretation of the London lecture. It seems that Dr McCrone has changed his position several times in relation to his studies and there seems no doubt at all that he is, on the one hand saying that his personal belief is that there is artist's pigment on the image but, on the other hand, has no proof whatever that the basic yellow image was caused by application to the cloth. Indeed,
Editorial (continued)

many other scientists, to be reported in this newsletter later, disagree with McCrone that even his conclusions about the painting of an enhanced image at some time in the middle ages cannot be scientifically substantiated.

Real blood on the Shroud

Another fascinating matter is that in direct opposition to McCrone's statement (reported in SHROUD NEWS No 2) that 'there is no chance at all of there being real blood on the cloth' (from tape of London lecture 11th September 1980) Ray Rogers as well as Heller and Adler (reports yet to be published) have identified the presence of blood in the apparent bloodstained areas of the Shroud.

Cloths from the tomb

Amongst new areas of interest is that examination of the strip of cloth six inches wide, added to the entire length of the Shroud at some time in the past has revealed that it is very similar to the main piece and bears similar markings. The speculation has been put forward in the Spring 1980 edition of the American journal BIBLICAL ARCHAEOLOGIST, that this strip might have been the original 'sudarium' or head-cloth from Christ's burial. We shall publish an article on these matters in a future issue which will also touch upon the remarkable research of Dr JOHN ROBINSON on the etymology of the gospels in relation to descriptions of the grave cloths. (This area is referred to briefly in PERPETUAL MIRACLE)

Scientific reports

Another important piece of information to come from Father Otterbein concerns the timing of scientific reports. There is occasional disquiet amongst Shroud followers who are thirsting for information from the 1978 Congress (either to prove or disprove authenticity) and sometimes it seems that there might be some 'conspiracy of silence' on the results. Otterbein reports that in late October this year twenty of the scientists from the project met to discuss a draft progress report. It is hoped that this will be published in about three months. The scientists want this done in scientific journals so that its scientific credibility is immediately established. The difficulty at the moment is the length and scope of the material. SHROUD NEWS hopes that this can be accomplished as soon as possible.

REX MORGAN
IDENTIFICATION OF COIN ON THE HOLY SHROUD

In June 1980 Revd Father FRANCIS L. FILAS, SJ, Professor of Theology at Loyola University, Chicago, USA, announced that he had successfully identified one of the coins over the eyes of the man in the Holy Shroud of Turin. The coins were first discovered by American N.A.S.A., scientists in the mid-seventies studying advanced three-dimensional photographs of the Shroud.

Space Academy Report

For unfamiliar readers we report that the discovery of the coins, or button-like objects was made a little before 1977 when it was reported by Drs JOHN P. JACKSON and ERIC JUMPER, both United States Air Force Captains at the Space Academy and BILL MOTTERN, an image enhancement specialist from Sandia Laboratory. Their report was made to the 1977 United States Conference of Research on the Shroud of Turin held at Albuquerque, New Mexico, on 23rd and 24th March of that year.

Their work had covered the construction of a three-dimensional image of the man in the Shroud through the measurement of cloth-body distances, image intensity and the processing of their data through a VP8 Image Analyser. In the course of their work they proved that the source of the formation of the image could not have been direct contact by the body, nor direct application by any other means, according to their findings of the correlation of image intensity measurement. This, incidentally, has special relevance to our articles in SHROUD NEWS issues 1 and 2 about the misinformed press stories following Dr Walter McCrone's suggestions of artists' pigment being present on the cloth. These researchers had already proved in 1977 that the original image could not have been so produced.

3-D Pictures

Of more specific relevance to this article is the next step taken by Jackson, Jumper and Mottern. The VP8 Image Analyser is a highly developed scientific tool into which is fed a two-dimensional photograph, usually of the surface of a distant stellar body. The nature of the image intensity of such photographs allows the machine to throw up on a television screen a three-dimensional image of
whatever is on the two-dimensional photograph. Only photographs taken at such astronomical distances can be so analysed by the device. Ordinary photographs, for example of people, when fed into it, show only a distorted three-dimensional picture. When they placed a photo of the Shroud image in the analyser it threw up a perfect, undistorted three-dimensional picture of the man in the Shroud which places on record yet another "miraculous" property of the Holy Shroud.

More than this, it enabled the researchers to identify features of the man hitherto undiscovered. For example the hair on the frontal image stands out in natural relief but that on the back image appears "compressed against the head, as it would for a reclining body on a hard surface" (Proceedings of the 1977 United States Conference of Research on the Shroud of Turin). SHROUD NEWS will discuss other details of the work of these researchers in a future article.

The "coins" appear

The most important one to consider at the moment is that when studying the three-dimensional image of the face they saw, over each eye, small round objects resembling buttons. The researchers carefully consider and reject, by scientific method, every possible cause of these images other than the existence of solid objects placed on the eyes and conclude, as is now well known, that they are, in fact, solid objects like discs. Jackson and Jumper then realised that it was a Jewish burial custom to place small coins over the eyes of the dead. They conjectured that the objects they had found were coins which would be consistent with the burial custom, since both were about the same size. This would also have been consistent with the capability of wealthy Joseph of Arimathea who was, according to the scriptural account, responsible for the entombment and associated procedures of the body of Christ.

Jackson and Jumper said at Albuquerque that if further enhancement photography could be done and comparisons of the results achieved were compared with recorded coins of the time, the button-like objects could be proved to be coins and if any of their markings could be identified they would prove the date of the Shroud image.
Historical Advice

IAN WILSON, author of THE TURIN SHROUD, one of the foremost historical researchers of the Shroud had suggested that there were several Judaean bronze "lepton" coins of about the same size as the coin images. Indeed, the size seemed to correlate well with the lepton of the very years 30 or 31 of Pontius Pilate. Wilson had suggested to Jackson and Jumper that a lepton was also an acceptable temple offering for an orthodox Jew to use. He would very likely have used them for the burial custom.

We are at present unaware of any further research on this aspect of the image carried out by Jackson and Jumper since all tests and work done since 1978 are the subject of an agreed silence until all scientific reports are ready to be released. As SHROUD NEWS readers know some of these are now being published in late 1980.

However let us return to Dr Filas and June 1980. A few scant press reports on this side of the world announced early in July that Filas had identified the coins. Again it is significant that the only major press story of the announcement came to this author's attention, not from any of the Australian press, but from the Japan Times, a Tokyo English-language newspaper.

Shortly afterwards, Rex Morgan obtained direct from Filas a copy of his paper entitled THE DATING OF THE SHROUD OF TURIN FROM COINS OF PONTIUS PILATE. (Details of obtaining this paper from Father Filas or from the British Society for the Turin Shroud are given elsewhere in this issue).

Filas begins work

Father Filas concerns himself in his paper with examination of the Shroud image, in the negative photo, and in particular the area of the right eye. In August 1979 Filas photographed and enlargement which had itself been made from a second-generation sepia print from Enrie's original 1931 plates. Filas immediately noticed what appeared to be a design over the right eye. In collaboration with Michael Marx, a Chicago numismatist, they studied the enlargement together. They were able to distinguish the letters U C A I on the coin, together with the curve of an astrologer's staff, which is
called a "lituus". Having consulted the catalogue of all Pontius Pilate coins in the British
Museum and Madden's History of Jewish Coinage and of Money in the Old and New
Testament they came to the conclusion that they had discovered the identification of marks
on the Shroud which showed that coins used over the eyes of the man were not only those
minted during the ten-year reign of Pontius Pilate but they could be narrowed to the period 29
to 32 A.D.

Of Tiberius Caesar

Filas and Marx then obtained from BILL YARBOROUGH, a numismatist of Atlanta,
Georgia, and JOHN AIELLO, actual examples of Pilate coins similar to those described and
illustrated in Madden. The letters U C A I match the position on one of the two types of Pilate
coins which bear the shortened form of the inscription TIBERIOUKAICAROC, the Greek
for "of Tiberius Caesar". Filas argues that the substitution of a "C" for a "K" correlates with
numismatic evidence that many of the coins of this period were crudely fashioned and often
show mis-spellings. There is the additional evidence that the pronunciation of CAESAR in
Latin and KAISAROS in Greek were identical for the hard "K" sound.

Filas Identification

Before dealing with Filas's interesting mathematical computations of chance in this case we
reproduce a whole section from his paper which describes his precise argument for
identification. Father Filas has given Rex Morgan express personal permission to reproduce
this information.

"The photograph under examination can be a second through fifth generation copy of the
1931 Enrie photographic negative of the face on the cloth. I have enlarged the area that is
roughly identifiable as the right eye all the way to projection on a movie screen twelve feet
wide, to confirm conclusions suggested by smaller enlargements. The copies I have used are
made from printed, published Enrie photographs brought about by means of a plate, usually
using a screen. Meanwhile, for more exact identification I enlarged a Pontius Pilate coin to
equal proportions. In this case the coin happens to have borne the date of the year LIH (Iota,
value = 10; Eta, value = 8), equivalent to the year 18 of Tiberius, which is 31 A.D. according
to Madden and 32 A.D. according to Avi-Yonah."
"The photograph from the Shroud shows a form that looks like a shepherd's staff. From 9:30 to 11:30 o'clock on the outside of the crook there are discernible the letters "UCAI", angling according to the curve of the crook. These letters are about 1½ millimetres high; more accurate measurement cannot be claimed objectively. The staff is 11 to 12 millimetres from its base to the top of its curve.

"Comparing this to the parallel enlargement of the Pilate coin, one finds that the coin's staff is equally 11 to 12 millimetres high. In this one accidental case, two or three letters can be made out, the others having been eaten away by long centuries of burial. These letters are about 1 to 2 millimetres high. In both the case of the Shroud photograph and in part, the coin, and in addition, in the sketch of Madden (Coin #14), the "UCAI" or "UKAI" are in the 9:30 to 11:30 o'clock quadrant. As listed in Madden, the British Museum catalog, and several other small coin collections consulted, all Pilate coins after 29 or 30 A.D. (depending on the dating of Madden or Avi-Yonah) carry the lituus (astrologer's staff) prominently on their obverse. This is likewise on the Shroud photograph.

"The approximate outlines of the Pilate coin can be paralleled' and compared quite closely (15 millimetres in vertical dimension) when the two enlargements of the coin and the Shroud imprints are placed side by side. (Cf. the sketch-diagram for tracing the motifs to be compared.) Also, the Pilate coin illustrated happens by chance to be an example of the rougher, more crude style (compare Madden's #14 with his #15 and #16). Strikingly similar on both the Shroud photograph and the Pilate coin is a straight clip-line at the rim running from 1:30 to 3:30 o'clock. This suggests that the hypothetical coin on the Shroud does not represent the more elegant, well-curved Pilate coins that also carry more graceful examples of the lituus.

"To sum up, there exists a combination of size, position, angular rotation, relative mutual proportion, accuracy of duplication (with the exception of a "C" on the Shroud where a "K" is on Pilate coins we possess), and parity (i.e., turned in the proper direction). This combination concerns at least six motifs: a lituus or astrologer's staff, four letters, "UCAI", and a clipped coin margin. The reasonable explanation would seem to be that a common source, extrinsic to the Shroud, made the imprints, namely, a Pontius Pilate coin, clipped, with the staff on its obverse, surrounded with the letters "IOUCAI ...."
HISTORY

OF

JEWS

AND OF

JEWISH COINAGE,

AND OF

Money in the Old and New Testament,

by

FREDERICK W. MADDEN, M.R.I.A.

Assistant in the Department of Coins and Medals, British Museum, and
Honorary Secretary of the Numismatic Society of London.

PROLOGOMENON

BY

MICHAEL AVLYONAH

WITH 244 WOODCUTS, AND A PLATE OF ALPHABETS.

BY

F. W. FAIRHOLT, F.S.A.

(These pages come from a still authoritative book first published in 1864. They represent non-copyright material now in the public domain. Ktav published an augmented publication in 1967.)

KTAV PUBLISHING HOUSE, INC.

NEW YORK

Rev. L. 15 (year 16 = A.D. 29), written within a wreath. (De Saulcy, pl. IX, no. 5.)

15. Obv. Same legend and type as no. 14.
Rev. L. 17 (year 17 = A.D. 30), written within a wreath. (De Saulcy, pl. IX, no. 6.)

Rev. L. 19 (year 18 = A.D. 31), written within a wreath. (De Saulcy, pl. IX, no. 7.)

...\n
**NOTE THAT IN THIS TRACING**

...\n
**MADONNA**

1. This tracing would appear to make the hypothetical coin of the shroud resemble the actual coin traced at the left as well as no. 14 in Madden, dated to either 29 or 30 A.D.

2. All three coins (the hypothetical one above, no. 14 in Madden, and the actual coin at the left) appear to share the style of base coins and less elegant papal papal patina coins.

3. Both the coin at the left and the traced hypothetical coin above would exhibit to life-size exhibit a lira about 12 mm. from bottom of start to top of coin.
See For Yourself

Filas further demonstrates that these details can be seen on many reproductions of the photographs of the face on the Shroud. He cites seven examples of reproductions in various available books. We suggest that the two most likely to be in the possession of SHROUD NEWS readers are:

a. The back dust jacket of Wilson's THE SHROUD OF TURIN (Doubleday 1978) on which Filas claims can be seen the Lituus and the location of the letters

b. The National Geographic article, June 1980, page 753. The photograph by Vernon Miller (Shroud of Turin Research Project) shows the Lituus and the Al clearly. Filas explains the askew nature of the letters UC as caused by a tiny loose fold in the cloth at the time of the photograph taken in 1978. (This compares with the tautness achieved by Enrie in 1931 who is believed to have used tacks to hold the cloth in place for his work.)

Filas examines the criticism that contrast photography and generation photographs (photos of photos, and photos of photos of photos) can tend to create images which were not there in the original and screen-printing processes through their dots can do the same things. However he quotes a photographic authority, ARCHIE LIEBERMAN, as saying, "Repeated contrast photography suppresses faint characteristics and accentuates strong ones."

Mathematical probabilities

In an extensive mathematical proof Filas points out that the chances of the marks he has discovered being a random occurrence are 1 in $6.2273 \times 10^{42}$, that is to say, one chance in six followed by 42 noughts, a number beyond normal comprehension:

$6,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000$

In answering the criticism of chance markings in the weave of the cloth appearing to be intelligible letters Filas points out that nowhere else on the whole area of the shroud image does this occur.
Quoting again from his paper:

"For readers with a less mathematical bent, consider that at the time of Pontius Pilate, there were 24 and perhaps even 26 letters in the Greek alphabet. (The archaic stigma survived in datings on the Pilate coin; hence, the archaic digamma might be considered to have existed as well.)

"To have one letter appear by chance from the Greek alphabet would thus amount to one chance in 24 or 26. To have four letters so appear would amount to one chance in eight million, if the "UCAI" order were required. Then these four letters would have to be found accidentally at the tiny location in the right-eye area, angling properly, huddling along the curve of the lituus, which itself would have to appear by accident over the right eye, and the crook of the lituus would have to be turned properly to the right. Meanwhile, all the dimensions of the letters and of the lituus would have to fit the dimensions of such markings on actual coins of Pontius Pilate.

"When one recalls that the area of the Shroud can be approximated at five million square millimeters and the coin area of the right eye is about 175 square millimeters (27,000 times smaller), the chances for the letters to appear here by accident stagger and bewilder any attempt to imagine them."

Filas's Contribution

This new theory and discovery of Father Filas does much for the proof of authenticity of the Shroud. It dates the coins in the image to the precise time of the historically accepted death of Christ. It adds considerably to the situation in which no forger could at any time have created an image containing this information.

Readers of SHROUD NEWS can obtain information about the work of Father Filas by writing to him: Rev Francis L. Filas, SJ, Loyola University, 6525 North Sheridan Road, Chicago, Illinois 60626

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FILAS REACTS TO McCRONE

Father Francis J. Filas has issued a personal reaction to the statement attributed to Dr Walter McCrone in September. He is surprised that Dr McCrone's claim should receive any credence when he has spoken as a scientist with objective proof of 'fraudulence' in such unscientific terms as 'I feel' but 'cannot prove' etc.

Professor Filas asks how any scientist could say that he knows a Carbon-dating test could reveal a date as accurate as the year 1436. 'Dr McCrone is acknowledged nationally as an expert in the science of micro-measurement,' said Filas, 'His expertise is nil in the area of artistic history. In his quoted judgement that the Shroud reflects art of 1436, he contradicts the judgement of dozens of artistic experts of international repute, made within the past sixty years, to the effect that the Shroud of Turin has, if anything, influenced the art form of Byzantine icons, and thereby, the typical portraits of Jesus in the Western world.'

Filas has also said that McCrone has blithely passed by all the positive evidence for the authenticity of the Shroud, particularly the fact that it contains the characteristics of a photographic negative, to the present acknowledged as incapable of forgery even by modern technical photographic methods. (Compare SHROUD NEWS No 2 report of McCrone's explanation of his finger-painting).

McCrone has also ignored the findings of pathologists, textile experts, palynologists, the coin identification and the fact that iron oxide is one of the commonest contaminants present in the world.

Filas sums up by saying: 'I consider that Dr McCrone's negative verdict should be styled an infinitesimal straw directed to uproot the mountain of evidence that the Shroud of Turin is not a painted artifact. In response to Dr McCrone's later statement that he merely wished to state that he found evidence of artist's pigment on the cloth, and that this could be interpreted merely as evidence of a later artist's touching up of an originally authentic burial cloth, he should make a complete retraction to the press, in the hopes of undoing some of the damage that the first report of his words has done locally, nationally and internationally.'

* * * * * * *
THE FUTURE OF SHROUD NEWS

There now seems little doubt that we shall have enough information on a continuing basis to keep SHROUD NEWS going. Initially we suggested that subscribers pay for the first four issues. In the next one, Number 4, to issue in December, you will be invited to subscribe again since Rex Morgan’s own interest in compiling more SHROUD NEWS has only increased in the three months of its existence with the encouragement given him.

SUBSCRIPTION LIST

Please don’t lend your copy but encourage your friends to take out a subscription. As the list grows so we can hope for bigger and better produced issues. Please fill in the enclosed subscription form.

Your own article or comment will be of interest to other readers -- please send it in.

FUTURE ISSUES

* Information about the Shroud for new readers
* Comment on latest scientific reports from USA
* Discussion of blood and DNA possibilities
* Technical problems at the 1978 Exposition
* Sydney artist John West’s Shroud experience
* The actual grave cloths of Christ
* Your own article?

PUBLICATION

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