

RECENTLY PUBLISHED

La Sindone: Scienza e Fede (The Shroud: Science and Faith), Acts of the II National Congress of Sindonology. Edited by LAMBERTO COPPINI and FRANCESCO CAVAZZUTI. pub. by CLUEB (via Marsala 24, 40126 Bologna, Italy) 1983. Price outside Italy (includes postage): Lire 28,000.

As the Bologna Congress was held in Nov. 1981, it seemed a very long time before the Acts were published. However, the editors were not so much concerned with time as they were with accuracy in the preparation of the texts of 44 scholars; and we can be grateful to them for their pains.

This is a volume of 482 pages; excellent reproductions, some in black & white, and many in color. The jacket is a stunning wraparound of an enlarged photo, made by Aurelio Ghio in 1978, of a portion of the Shroud fabric, showing a burn and patch area. Ghio has contributed an article giving the photographic technical information; four other photos in color are reproduced.

Fifty reports are divided into five sections: theology and exegetics; history and art; medicine; science and technology; and lastly a panoramic view of the STURP Symposium held at New London in Oct. 1981.

This last article, of some twenty pages, is presented in its entirety in French, Italian, and an excellent English translation. While every report in the book is followed by a Summary in English (sometimes long, sometimes very short), the translations are only rarely good. Too many are completely incomprehensible and will be of little help in understanding the original text. This is the only criticism one can make about this book.

Between the dates of the Congress and the publication of the Acts, some of the material has been published in *Sindon* and elsewhere. *Spectrum* was honored by the Introductory Speech of Fr. Charles Foley (*Spectrum* #2); the Edessa Image article by Luigi Fossati, SDB (*Spectrum* #3) and Prof. Baima Bollone's on the determination of the blood group (*Spectrum* #6).

Other speakers whose work is familiar were Dr. Prof. Bulst, SJ; Dr. Rodante; Prof. Tamburelli; and Dr. Max Frei, who was President of the Congress.

But much of the information refers to research which is new on this side of the Atlantic. To name but a few of particular interest, to me at least, were the following: "The Visible Signs of the Passage of Jesus in History", by Mauro Laconi; "Relics and Images", by Serafino Zardoni; "Analysis of the Deformations of the Shroud Fabric", in which Nicola Scarpelli calculates an increase of 10% in the length of the Cloth; Baima Bollone's "The Presence of Myrrh, Aloes and Blood on the Shroud", accompanied by color photos of Shroud fibres sprinkled with particles of the aspect of aloes and myrrh; and

"Sindonic Traces in Byzantine-Russian Art", by Piero Cazzola and Maria Delfina Fusina. Alessandro Cacciani discusses the importance of computer analysis, and shows, by means of the Laplace process that the image on the Shroud is formed of many distinct and homogenous spots—of blood. Many researchers, in particular Dr. Rodante, have always insisted on the importance of haematidrosis in the image-forming process.

I regret that space will not permit a more complete review of this volume, which will take its place alongside the Acts of the Congresses of 1939, 1950 and 1978, but I would like to refer the reader to Fr. Foley's report on the Bologna Congress, in *Spectrum* #2, March 1982.

Sindon #32 (Dec. 1981), like its predecessors, is replete with articles and news of primary interest. One of the articles, "Gesù Cristo è l'Uomo della Sindone", by Prof. Tino Zeuli, is presented in this issue of *Spectrum*.

In English is a particularly good article by Rev. Francis Filas, SJ, entitled, not surprisingly, "The Identification of Pilate Coins on the Shroud". Some of the seven accompanying photos are new to many who have been following Fr. Filas' research.

The Veronica problem is examined from texts of medieval literature by Massimo Centini, while Antonio Dessy, in an article of 41 pages, probes the legal details of the Trial of Jesus before the Sanhedrin and before Pilate.

With his customary brevity, Baima Bollone takes two pages to report on the presence and significance of iron in the bloodstains of the Shroud, revealed by X-ray microspectrometer and the scanning electron microscope.

A logical and credible hypothesis in regard to that puzzling "lateral strip" is proposed by Rev. Louis Duparc, OP. He suggests that the Shroud was about 9 cm. wider than the funeral bench, and that consequently it hung over the edge or, alternatively, was folded up against the inner wall of the sepulchre. The body was then placed in the middle of the funeral bench, which place was not the middle of the Shroud. Later, then, to center the image, the "lateral strip" was added. Fr. Duparc notes that the width of the Shroud, not counting the added side-strip, is 101 cm.; the side-strip (which would be equal to the width of the overhang) measures 9 cm. The traditional funeral stone in the Holy Sepulchre has been measured at 91.8 cm.

Other contributors were Dr. Angiolo Battaglini, Rev. Jean Pirot and Tarquinio Ladu.

ROBERT M. HARALICK: *Analysis of Digital Images of the Shroud of Turin*. 60 pgs; 5 pgs. of References; 30 full-page photos in black and white. A donation of \$10 would be gratefully accepted; this figure represents the raw cost of the publication. Airmail outside the USA: \$11.50.

Dr. Haralick, Director of the Spatial Data Analysis Laboratory of the Virginia Polytechnic Institute and State University (Blacksburg, VA 24061), states that he undertook this study to determine whether digital image enhancement and processing could: 1) provide further evidence to help corroborate the specific assertions of some researchers and 2), "to make more visible those patterns which might be just below the threshold of immediate visibility on ordinary photographic prints."

That the second objective was attained is shown in the reproductions of the digital enhancements made from the Shroud photographs of Giuseppe Enrie and a 1978 photo by STURP member Vernon Miller. Dr. Haralick concentrates his work on the area of the right eye (to discover more evidence in corroboration of the presence of a Pilate lepton, as proposed by Fr. Francis Filas); on the 3-dimensional aspect (as shown by Tamburelli, Jackson and Jumper and others); and the resemblance of the VIth century Mt. Sinai icon and a coin of Justinian to the Shroud face (in correspondence to the work done by Drs. Alan and Mary Whanger of Duke University). Each set of photos is preceded by a short summary of the work of previous researchers in each instance, and by the technical information in regard to the corresponding photos.

By far the longest and most detailed section concerns the question of the presence of a Pilate lepton on the right eye. The section on 3D shows surface plots and surface illuminations of the frontal image; and the Mt. Sinai icon and the Justinian coin are explored by digitization and the results compared to the Shroud face.

In his conclusion, Dr. Haralick suggests further work which would involve an edge image of the Pilate lepton, as this might help to confirm its correspondence to the weave-broken patterns on the right eye.

Section 7, however, "An Exploratory Analysis", has left me perplexed. Dr. Haralick points to "a dark band which seems to continue from the forehead and just over the eyes all around the back of the head [and another band just above it on the back]... "Could these two bands be the chinband wrapped around the top of the head?"

Dr. Haralick connects this "dark band" with a "white rectangular area on the forehead" and asks: "Does this band and rectangular area correspond to anything?" One feels that he wants us to conclude that on this area there was a phylactery; a suggestion which makes archaeologists shudder.

The Author calls attention to a "dark rectangle" between the waist and the knees; a rectangle of a geometric regularity usually achieved with the aid of a ruler. A "modesty cloth" is here implied. One corner of this rectangle "cuts" the fifth finger of the right hand, that is, it hides a portion of the finger. This concealment of a tiny bit of the finger is not consistent with the very obvious fact that the image of the legs and abdomen, presumably covered by the cloth, not only are not concealed, like the bit of finger, but the intensity of the marks is constant "under" and outside the "rectangle": which precludes the

presence of any cloth interposed between the body and the Shroud. What then is the significance of the Author's emphasis on the nick in the finger?

Dr. Haralick has presented his work in a clear and objective manner. His experiments certainly demonstrate the value and further potential of digital analysis in Shroud research. His interpretations of his results are offered only as tentative suggestions. Other interpretations are always possible, and Dr. Haralick concludes saying that perhaps archeologists and Shroud scholars will be able to say whether the patterns described in this section are real, and if they are, these experts may be able to suggest reasonable interpretations.

The Report can be obtained from:

Dr. Robert M. Haralick, Director
Spatial Data Analysis Laboratory
Virginia Polytechnic Institute
and State University
Blacksburg, VA 24061

Rev. Francis L. Filas, S.J.
Loyola University of Chicago
6525 N. Sheridan Road
Chicago, IL 60626

A digitized tape of Dr. Haralick's Report is available from him for \$200.

REX MORGAN: *Shroud Guide*. The Runciman Press, Box 86 P.O., Manly 2095 Australia.

This large format album appears in conjunction with the Brooks Photographic Exhibit which Rex Morgan has brought to Australia. The cover is a 1978 color photo of the frontal image of the Shroud by Vernon Miller, computer enhanced at the Pasadena Jet Propulsion Laboratory. The Guide is intended as a brief introduction to the scientific and intellectual understanding of the Shroud. Each left-hand page is given to reproductions, many of them in color. On the right-hand page, a few short paragraphs, quite enough for a "guide", explain the facing pictures.

It is no easy task to select the subjects to be presented, nor to condense the information into such short form. Still, one might have wished for more vigilance, for a few factual inaccuracies have not been caught (one example: "an Italian scientist De Salvo ..." John DeSalvo is American).

The thrust of the *Guide* is to excite interest in persons who might otherwise have paid no heed to the fascinating object which is the Shroud, and in this sense the Author has again proved his zeal. In "popularizing" the Shroud, Rex Morgan has been indefatigable on all fronts, with his *Shroud News*, his lectures, his globe-trotting to meet with sindonologists, and now the Brooks Exhibit.

I would like to take this opportunity to correct a common spelling error. One so frequently sees "Secundo Pia" that one is inclined to excuse anyone who puts a "u" where there should be an "o". Secundo Pia deserves our consideration in this respect.

D.C.