

RECENTLY PUBLISHED

La Sindone: Indagini scientifiche; edited by Sebastiano Rodante. (Acts of the IV National Congress of Shroud Studies, Siracusa, Italy, 17-18 October 1987) Edizioni Paoline, Milano, 1988. 442 pages, illus. b. & w., color. Lire 40,000.

When one receives a book of this quality, one wants to scatter compliments all around, from the publisher to the proof-readers, from pressmen to strippers, not forgetting authors and photographers! Behind the concerted action, one discerns the perspicuity, the logic and sensitivity of a director who is a scientist turned editor.

With slight variations, reports are grouped as customarily in Congressional Acts, under Medicine; Science and Technology; Archeology, Art, Psychology; Exegesis and Theology. All the papers are new, reflecting continuing research and advances made on data from previous Congresses. There is a refreshing lack of grand hypotheses, boomerang conjectures and the like. Scientists communicate minutely detailed descriptions of their recent experiments leading to conclusions they are presenting for consideration.

The summary of each article is translated into English—into good English, correct as language and complete as summary. Illustrations, many in color, are placed at the end of each article, for the reader a far easier arrangement than having them all together in the center or at the end of the book. Of those accompanying Lamberto Coppini's article, "Wounds from pointed instruments and the lance thrust", two technically perfect photographs show us a truth from which we would rather turn our eyes.

In one, a wooden nail of the same dimensions as the iron nails Romans used in crucifixions was driven through the carpus of a cadaver. The picture shows us the horizontal section of the hand and wrist bones and the "nail" after they were sawn through. One sees that the "nail" has easily penetrated the Space of Destot without damage to the surrounding bones.

Prof. Coppini's other unpleasant reminder, in six steps illustrates the surgical opening of a (cadaver's) chest. That the sternum and anterior section of the ribs would not obstruct our view of the heart, they were neatly removed and laid to one side.

These are sober lessons, a far scream from sentimentality.

In fact, this is probably the soberest book of Acts since 1950. It would be tempting to mention every participant and his work, had we the space.

Thirteen pages report some of the more compelling questions

from the audience and the answers from the experts. Also interesting is the background report on the organization of the Siracusa Congress. Other features (Messages, the archeology excursion for members, etc.) complete this valuable volume.

It was decided that the V National Congress would be held in Cagliari (Sardegna) in 1990.

DANIEL C. SCAVONE: *The Shroud of Turin*, in series "Great Mysteries: Opposing Viewpoints." Greenhaven Press, Inc., San Diego, 1989. 112 pp., 75 illus., bibliography, chronology, index.

This well-organized, well-balanced history of the Shroud of Turin is meant to serve as a classroom supplementary text with an interest level from grades 4-12 and a reading level focused on grades 6-9. It is in a series of books by Greenhaven Press intended to offer young readers the "opportunity to explore some of the many mysteries that both trouble and intrigue us." This volume, written by Daniel C. Scavone, professor of history at the University of Southern Indiana, succeeds admirably in providing the historical and scientific details and theories surrounding the mystery of the Shroud, as well as in telling a good story.

The book is carefully designed to stimulate independent thought. Nearly every page has a supporting photo or explanatory diagram, giving a primary-source feel to the book, and enlisting the reader as a scientist-detective. Quotations from scholars with differing viewpoints are placed next to each other in the margins, providing an ongoing dialogue. A graduate student usually presents a skeptical viewpoint, opening the discussion to all who search. Sections at the back of the book entitled Books for Further Exploration, Periodicals, Additional Bibliography, and For Ongoing Developments (citing among others *Shroud Spectrum International*) invite the reader to pursue this search outside the limits of the text.

What makes this book so engaging, however, is the care and respect with which it comes to terms with a child's need to wonder. In About the Author, Dr. Scavone relates how he "first became interested in the Shroud of Turin as a child when he watched Good Friday television specials about it" and how as an adult he "still finds the Shroud one of the most astonishing mysteries of our time." This attractive book captures well the wondering child at the heart of the reasoned scholar.

The Epilogue covers the recent Carbon 14 testing of the Shroud, and in its straightforward presentation of the unanswered questions and scientific concerns with the validity of the tests, reveals that their results did not end the mystery, but have "added one more piece to the great puzzle of the Shroud of Turin."

DAVID PAUL CHRISTMAN

J.-M. CLERCQ and D. TASSOT: *Le Linceul de Turin face au C14*, O.E.I.L., Paris, December 1988. 90 pages. 50 francs.

On the cover of this book, between the title and a finely-detailed black and white reproduction of the Holy Face, there is also a subtitle (I translate): "Scientific and critical analysis of the dating by carbon 14". The aim of the book is to counteract immediately the impression that the C14 tests have proved the Shroud to be a medieval artifact.

The reader will see first of all, on the flyleaf in big capital letters: LE LINCEUL DE TURIN N'EST PAS UN FAUX (The Shroud of Turin is not a fake). Dominating the title page, large boldface type states again emphatically, **Le Linceul de Turin n'est pas un faux**. The same declamatory assertion serves as title to the Preface. The keynote has been established.

The material is presented in three distinct sections. Part I discusses the science of carbon 14, its limits in dating and the reasons for a cautious confidence; then how this information applies to the Turin Shroud. This section, written by Dominique Tassot, civil mining engineer, includes a 1983 publication by Dr. Michael Winter, geochronologist, who counts out many aberrant dates obtained by the C14 dating method. Of importance to us is the fact that water does not contain the same level of C14 as the atmosphere; some waters sometimes have a higher level, in others the level is poor. We think of the retting process, in which the linen fabric was submerged in a stream for several months; and in 1532, the water thrown onto the Shroud inside the silver chest; and wonder how the radiocarbon level of the fibers could have been affected.

In Part II, "The Shroud of Turin is not a simple venerable icon", Jean-Maurice Clercq withers this pusillanimous notion in a series of questions. If it is an icon, he asks, "We would like for someone to explain...", for example, how this cloth can be medieval when it contains traces of cotton which did not then exist in Europe; and how it was woven on a particular type of loom used in the Middle East only between circa 100 B.C. and A.D. 200. And finally, "We would like for someone to explain why this Shroud, dated between 1260 and 1390, already existed earlier?" The reference, of course, is to Robert de Clari in 1204 and the snippings that Baudouin II gave to King Saint Louis in 1247.

For Part III, "The Authenticity of the Holy Shroud in the Light of Science", Tassot takes up the pen again to demonstrate authenticity in four areas: the fabric, the image, the blood, the wounds. There are some 20 pages of scientific facts grouped under these headings. Tassot is concise: the accumulation of data reads almost like a list. Presented this way, even a seasoned sindonologist could not help but be impressed—nay, astounded—by the evidence we have that converges unequivocally to one single conclusion: that is,

the impossibility that the Shroud could have been made by the hand of man.

Having described how the image is composed of a yellowish coloration on the tip-edge of some fibrils, Tassot remarks: "As for the way in which [the coloration] selectively affected the tiptop of certain fibrils, of some ten microns in diameter, to produce an optical effect visible only at a distance of six feet or more, the least one can say is that it is beyond our understanding and, *a fortiori*, our technology."

I was struck by the fact that there are no pictures in this book. The Holy Face is frequently invoked, but the text had no need for illustrations. The authors have mounted a frontal attack on a reader's thinking processes by presenting the evidence for authenticity acquired since 1898 on the one hand, and on the other the limits and untrustworthiness of the C14 dating method.

Indeed, "It was a show of inordinate presumption to affirm that a simple chemical analysis could refute the authenticity of such a Face".

P. DAMON, D. DONAHUE, B. GORE, A. HATHEWAY, A. JUN, T. LINICK, P. SERCEL, L. TOOLIN, C. BRONK, E. HALL, R. HEDGES, R. HOUSLEY, I. LAW, C. PERRY, G. BONANI, S. TRUMBORE, W. WOELFLI, J. AMBERS, S. BOWMAN, M. LEESE & M. TITE: "Radiocarbon dating of the Shroud of Turin", *Nature*, Vol. 337, 16 Feb. 1989, pp. 611-614 (15 references on p. 615).

This is the official report composed by the three laboratories, Arizona, Oxford and Zurich and the British Museum.

Nature is a British scientific review for and by scientists: this scientific article is by and for scientists. If a sindonologist was expecting to find any answers to the many questions ensuing from the recent experiment, he will be disappointed.

A brief background sketch of the Shroud is followed by the description of the removal of samples from the fabric on 21 April 1988, and of the three control samples: a whole piece of linen from a Nubian tomb, dated XIth-XIIth centuries; a whole piece of Egyptian mummy linen, dated between 100 B.C.-A.D.75; and "threads removed from the cope of St. Louis d'Anjou ... dated at c. 1290-1310".

The different operations and products employed by each laboratory for cleaning the samples and a summary of the test runs constitute the technical details. The measurement results were sent to the British Museum Research Laboratory for statistical analysis; results and analysis were forwarded to Prof. Bray of Turin's Metrology Institute for his comments.

The conclusion reached was, as everybody knows, that the Shroud dates from 1260-1390 and therefore is medieval.

It is stated that the "distinctive three-to-one herringbone weave of the Shroud could not be matched in the controls". The Egyptian pieces were certainly basket weave and *Nature* reports that from the cope there were only threads. So the Shroud sample alone was herringbone. Could not a piece have been sacrificed from one of the several modern fabric replicas of hand-spun linen hand-woven on an upright loom for a control sample?

This is undoubtedly an excellently composed article for readers to whom *Nature* brings information on current scientific research. The sindonologist will add it to his collection and continue his quest.

There has been puzzlement about a letter (Correspondence, p. 594) from Thomas J. Phillips, High Energy Physics Laboratory, Harvard University. "Who is Thomas Phillips?" I have been asked, as earlier in this affair, "Who is Richard Lockett?" No matter. Phillips postulates that the C14 content of the Shroud could have been altered by neutron irradiation at the moment of the resurrection. *Nature* did us a favor by printing this letter, for it drew from Dr. Robert Hedges an attentive evaluation that scientifically demolishes this too-prevalent, easy-out hypothesis. As Georges Salet remarked (see "A Sampling of Reactions"): "Would God have laid a trap for us, increasing the quantity of C14 up to the exact amount necessary to date the Shroud to the precise period determined by opponents to authenticity?"

La Contre-Réforme Catholique au XX^e siècle, Special Issue, Christmas 1988, 50 pp., illus. Edited by the Abbot Georges de Nantes.

"The Scientific Rehabilitation of the Holy Shroud of Turin" responds to the C14 dating by publishing conferences given in Paris on November 27 by Dr. Pierre Mérat and Brother Bruno Bonnet-Eymard. In his Introduction, the Abbot de Nantes looks hard at the dating results: maximum of probability, between 1210 and 1440; maximum of precision, 1260-1390. Astounding concordance with history! 1210, right after the Fourth Crusade, when relics flooded Europe; 1440, just before the Shroud passed to the House of Savoy in 1453! Then, 1390 rubs against 1389, the year the Shroud is first documented—and precisely in a denunciation! Pierre d'Arcis claims the Shroud "disappeared" (see *Spectrum* 28/29, p. 31) about 34 years earlier, 1355; granting some 20 years for the fabrication and publicity promotion brings us to 1325, which the Abbot calculates to be the mathematical average of the coordination of the three laboratory results. It is all too good to be true!

Follows "The Oriental Prehistory of the Relic" by Bro. Bruno Bonnet-Eymard, 8 pages of the usual information, with some color reproductions of Veronica Veils, coins of Pontius Pilate, etc.

Dr. Mérat, orthopedic surgeon, in "Critical Study: Anatomy and

Physiology of the Shroud", reports on the wounds seen on the image. In Part III, Frere Bruno discourses on "The Physics and Chemistry of the Holy Shroud", and here we find excellent full-page sepia reproductions of the frontal and dorsal images.

Part IV, 17 pages, entitled "The Carbon 14 Affair", turns frequently to the expertise of Georges Salet, graduate of the Ecole Polytechnique and "rigorous mathematician", also citing Salet's article in *de Rome et d'Ailleurs* #91. Here too, the Abbot and the Frere find many coincidences too good to be true.

However, it is in the section "A Clandestine Sample: the Cope of Saint Louis d'Anjou (1274-1297)" that we see (p. 40) a photo of Willy Wölfli seated at his desk on which stand three little steel cylinders, one containing the Shroud sample, the other two with Egyptian control samples; and beside them a small square envelope in which is the sample from the cope of St. Louis d'Anjou; it is of linen, herringbone, ivory with age, and late XIIIth century; a sample specifically requested by Dr. Tite. The story of this sample and why it is in an envelope instead of a steel cylinder is hair-raising if true. And to paraphrase the Abbot's reiterated irony "Too good to be true", we hope that this account, because it is so evil, is not true.

An English version of this paper is available from: La Conte-Réforme Catholique, F-10260, Saint-Parres-les-Vaudes, France. Price for this single issue is not given.

D.C.

JOSEPH MARINO, O.S.B., "The Shroud of Turin and the Carbon 14 Controversy", *Fidelity*, vol. 8, #3, February 1989, pp. 36-45.

For several years, Brother Joseph Marino has published his *Source Sheet* advising us of Shroud publications worldwide, and the extent of his resources and contacts is evident in this article. Bro. Joseph sets forth a thorough review of the possible problems associated with the Carbon 14 test of the Shroud of Turin, first showing us the possible sources of contamination found at or near the location where the sample was taken. This consists of starch, known to be on the Raes sample; unknown contamination from the water stain at this location as revealed by the UV fluorescent photos; unknown contamination from the sidestrip; steam contamination at the time of the fire of 1532. He mentions the concern that the sample was taken from a repaired corner. Especially revealing is a statement by Professor Giovanni Riggi, who removed the sample from the Shroud, that threads of different origins were immediately next to the sample.

Bro. Joseph points out that one sample from a highly questionable area of the cloth was taken and cut into three pieces, resulting in three readings of the same sample; and that a strict scientific

protocol was not followed. Individually as well as collectively, the problems encountered could make the cloth appear to be younger.

Bro. Joseph concludes that the C14 test should be performed again under a peer-reviewed protocol with the strictest of scientific conditions. While it is too early to tell if any or all of the problems mentioned in this article affected the outcome of the C14 test, this is an excellent and comprehensive overview of the problems associated with the Carbon 14 test of the Shroud of Turin.

MARK ANTONACCI

ALSO RECEIVED:

At long last, a Bolletino from the Centro Internazionale di Sindonologia. It is dated December 1988 but instead of being numbered "Numero Uno" it is "Numero Unico", and entitled: "The Shroud: What is its future?" The Cardinal Archbishop's announcement is followed by Pierluigi Baima Bollone's reasons for saying, "A Fake? I don't go along with that"; Bruno Barberis' comments under "The Mystery remains, in fact it is heightened"; and Giuseppe Ghiberti's "Continuing Testimony".

But the news is in an official communiqué from the Centro. This (as well as the Cardinal's press release) is presented in English and Italian. We are told that the Centro held a meeting on 5 November 1988, at which new research programs were proposed, including biochemical tests, historical studies, etc. Alternative dating methods were considered.

Realizing the "absolute necessity of developing an extensive multidisciplinary research", it was decided to compile a systematic interdisciplinary research program. Let us hope that "interdisciplinary" will be also "international". Referring to the remark of Antoine Lalaing in 1503 that the Shroud passed unscathed the trials of being boiled in oil, tossed in fire and washed in laundry soap, Point 3 of the Proposal suggests experiments to determine the effect that boiling linen in oil could have on a C14 date. Reporting on this meeting, Mirella Pennisi in *30 Days* (see "Reactions") gives some details of the discussion. An Egyptian cloth was to be carbon dated, then boiled in oil and carbon dated again to determine the difference, if any. Even though everyone is half-certain that Lalaing's comments were merely the enthusiastic marvel-tales recounted at the time of the exposition, particularly since Lalaing does not say he himself witnessed these pre-radiocarbon "proofs".

Scientists of STURP have tested Shroud threads and found no trace of oil, so the results of the Italian experiment will be interesting. It was also decided that *Sindon* would resume shortly. Those who wish to receive this journal should write to:

Dott. Bruno Barberis
Centro Internazionale di Sindonologia
via San Domenico 28, 10122 Torino, Italy

Das Grosse Bibellexikon (see *Spectrum* 26, p.28) has published Vol. II, H-O. Under K we find Kreuz/Kreuzigung. Prof. Rainer Riesner, Doctor of Theology at Tübingen University, with classical thoroughness discusses the archeological aspects of Cross/Crucifixion, reducing to something over 2000 words a study extending from ancient times to the latest (1988) treatments of the subject. It should be an invaluable reference source for individual study.

Riesner mentions what many writers today—and Pilate yesterday—seem to overlook; the fact that the flogging Jesus suffered was in itself severe enough to cause death; no wonder, then, that he could not carry the patibulum all the way to Calvary.

Readers of *Time* magazine may have noticed that Prof. Riesner was interviewed (*Time*, 15 Aug. 1988, p. 38) concerning the recent controversy over Martin Scorsese's film, *The Last Temptation of Christ*. Whatever the Professor may have expounded, two words were all the mag retained.

However, *Gottes Betendes Volk* (God's Praying People, Journal of the Rosary-Reconciliation Crusade) Vol. 1, #153, 1988, gave Riesner all the space he needed to tell about "Golgotha in the Light of Modern Research", with pictures by the author and a diagram of the route and monuments from Herod's palace to the Tomb.

It goes without saying that whole issues of Shroud periodicals (*Emeroteca*, *Collegamento*, *Shroud News*) extensively covered the news of the medieval date, all offering opinions, criticisms and explanations, often in contradiction to the information of another writer. Ian Wilson, in a very emphatic editorial (*British Society of the Turin Shroud Newsletter*, Oct.–Nov. 1988), furnishes also some intriguing excerpts from David Sox's book, *The Shroud Unmasked: Uncovering the Greatest Forgery of All Time*.

From this murky bombast, it is refreshing to turn to The 50th Issue of *Shroud News*, December 1988. Rex Morgan wrote his first issue in September 1980 and has faithfully kept the paper coming, and improving, ever since. Easily, 67 pages were filled with encomia from readers around the world. As is only right, the jubilee issue is dedicated to the man who has celebrated his jubilee in the cause of the Shroud: Father Peter M. Rinaldi, S.D.B., whose congratulatory letter is the first of dozens. The whole issue was good reading and a reunion of sorts with many friends in sindonology.

It was a delightful surprise to see the top of *Spectrum's* cover, including the Vexilla Regis reproduced beneath our few words extending warm greetings and best wishes to the gallant paper from Down Under. Let us take this occasion to reiterate those sentiments.