
The Shroud of Turin: Methods and Perspectives

Gianfranco Berbenni, former Director of the Centro Romano di Sindonology, professor of Church History at the Pontifical Antonian University in Rome. Via Pomponia Grecina 31 - 00145 Rome, tel. (+39 6) 5135467, fax 5124301.

ABSTRACT
A year after the death of Mons. Giulio Ricci (¶ 6 February 1995) the article intends to summarise the current state of the “Shroud question” and, based on twenty years’ scientific experience, to point out some opportunities for further study.

The author intends to re-examine various hypotheses - that of a photographic negative, of an image caused by ‘unknown’ energy - that might well be located on the outer limits of the extraordinary and attempt to lead them back to verifiable explanations. The return to scientific examination of the sacred Cloth should take into account the entire “Proposal” which the STRP presented to the Custodian of the Shroud back in 1984.

0. Introduction
The present study is dedicated to the memory of Mons. Giulio Ricci (¶6 February 1995), ardent student and acknowledged scholar of the Holy Shroud, founder of the Rome Centre of Sindology (1975) and of the Catechists of the Passion (1976).

Twenty years of familiarity with the themes and questions regarding the Shroud of Turin and the theological arguments of Easter induce us, almost as a moral obligation, to draw up a balance sheet in this field. Our goal is to invite scholars and organisations to make use of increasingly painstaking methodology and to join in a constructive dialogue. For this reason we approach the sindonic and sindonological world, indicating possible areas of research.

0.1. Thematic process
Our contribution will be divided into two parts: in the first we will discuss the various sectors of scientific research, starting from historical science and arriving at the theological sciences after touching on medicine and physics. In the second part we will briefly illustrate the main areas of the “Shroud question”. The incompleteness of the data and documentation is determined by our goal: to offer the reader a brief perspective on the dilemmas of the study.

---

1 The author, of the Order of the Capuchin Friars Minor (ofm cap) was born in 1950. After university studies at the Pontifical Gregorian University of Rome, he taught Church History at the Pontifical Antonian University (Rome) and worked with the national Secretariat of the Italian Capuchin Friars Minor. Particular attention for the sake of rigor, is given to micro-textual linguistic analysis, to the application, on marginal territory and the minor historic Centres, of high technology. His ultimate aim is cultural and historic-artistic renewal and the promotion of production activities in small craft firms and micro-industry (Strategic Project “Culture of the Regional Civilisations”). His works include: Il Francescanesimo. Linee per un programma formativo, Bologna, EDB, 1995.

2 For clarity of interpretation, the adjectives ‘sindonic’ and “sindonological” will be used, respectively, to designate the data directly linked to the Turin fabric (sindonic) and the interpretations of the same by single researchers or “schools” (sindonological).
0.2. Method of evaluation

For our work we have assumed as acquired knowledge the basic information of the Shroud of Turin: what it is made of, the elements that emerge from an initial historical and forensic medical survey. At the end we will suggest reading the contribution of Baima Bollone, Rodante and Riggi di Numana.\(^3\)

The complexity and vastness of sindonic data and, in a quantitatively obvious manner, of sindological data,\(^4\) requires that we give precedence to the following indications:

- the danger of “evaluative acceleration” must be kept under control: the more important the Shroud is for scientific and theological research, the more scholars must control their ‘emotions’, knowing full well that “the Shroud is quite capable of defending itself”;
- the amount of analysis and interpretation is not necessarily in and of itself a factor of reliability. One incontrovertible fact is enough to set off a crisis in thousands of hypotheses;\(^5\)
- before embarking on the adventure of numerous variations of secondary sindonological interpretations and studying the details of the holy Turinese Linen, we must begin with the evidence and simplicity of many fundamental facts.

We should also keep in mind that while science has reached far as of today, the horizon of future research is even wider. This scientific exploration of the Shroud basically requires an open mind, an attitude that avoids excessive simplification, both for and against the Shroud.

Even today, the studies carried out on the holy Cloth have been so numerous that it is inadvisable to waste precious energy in dispute and negative conflict at any level.\(^6\)

---


\(^4\) The problem of the organisers of the 2nd International conference (1978) and the various national conferences is the selection of the many presumed experts, more fans of the esoteric that of humble science. A defect in the publication of the “Proceedings” was the amount of material chosen: the reader is in fact faced with “ponderous” texts, but if the papers had been chosen for their acceptability in the realm of “serious” research, the quantity would have been greatly reduced.

\(^5\) For example, in the case of the interpretations of the surface impression on the sindonic cloth in the second half of the 1970s: a photo of the hidden side of the holy Turinese Linen taken with optic fibers by the STRO in 1978 was enough to defeat many articles, short and long, or books of “science-fiction” and those that “slip dangerously into the inexplicable”.

\(^6\) As we will see, most current and recent problems on the Shroud (from the 1970s onwards) arose from excessive involvement on both sides, pro and contra. In our option here to limit ourselves to “panoramic” evaluations, we need to keep in mind that adequate control of “all” the information regarding the Shroud will only be possible after a decade of computerised data collection and on-line access of the largest data banks. The work is vast and costly. At the time of the enthusiastic feelings that proceeded the shock of the C14, an American multinational firm, well known in the soft drink...
1. The pathways of science

The Turin Shroud had two periods of history when science paid it particular attention: that following the Council of Trent, from the mid 16th century to the mid 17th century, and the 20th century.

Catholic sensitivity towards controversy, sharpened by Reformation criticism of the cult of relics, has produced contributions of analytic and critical value. Here we need only recall the classic contributions of Jean-Jacques CHIFFLET, *De Linteis sepulchralibus Christi servatoris. Crisi historica* (Antwerp 1624, 240 pp.) and *Hiérothonie de Jésus Christ*, (Paris, 1631).\(^7\)

The Turin Shroud’s genuinely scientific century extends from the end of the 19th century to today. The century began with application of the photographic technique in 1898 and culminated in the decade 1972-1982 with the research of Max Frei Sulzer and the American STRP. For the celebration in 1998 of both the five hundredth anniversary of the consecration of the cathedral and the hundredth anniversary of the first photograph of the Shroud, Giovanni Cardinal Saldraini officially announced the display of the Shroud.\(^8\)

In our sindonic and sindonological overview we will briefly discuss\(^9\) the research carried out over recent decades, indicating the most significant contributions and suggesting sectors and methods for further study.


The first photos, taken by Secondo Pia, an attorney, in 1898\(^10\) left an imprint on sindonic research that has lasted up to the present. The excitement aroused by observing the shape and expression of the face and body of the tortured Man of the Shroud not only gave new impetus to the observations made, particularly by medical experts. It also was the beginning of linguistic excess. Indeed, even today, the “negative” effect of the sindonic impression is defined as “extraordinary” and bordering on the miraculous, and this was before photography revealed the features. The writer believes that great calm and rigor are needed sector, had approved financing for that service. As of today (1996) work is starting on the Internet on documentation that is partially available (in the United States).


\(^8\) The first press release, dated 5 September 1995, began with the words: “With the full consent of Holy Father John Paul II, as part of the pastoral events being planned for the Holy Year of 2000, we have the joy of announcing that there will be two solemn displays of the Holy Shroud in the Easter seasons of 1998 and 2000. The reasons that suggested these dates were, for 1988, the five hundredth anniversary of the consecration of the cathedral of Turin. It is here where the Holy Linen, which vividly depicts the mystery of the suffering of our sweet Saviour, is preserved. Furthermore, it is the hundredth anniversary of the display in 1898 when the first photograph was taken, thus making a crucial contribution to the beginning of scientific research on the Shroud and distinguishing our century from previous ones. The repetition of the display during the Jubilee year offers a particular occasion to sanctify the Jubilee with a penitential pilgrimage towards an exceptionally suggestive sign of the Passion of our Lord. In both cases, while parallel historic and scientific initiatives will be taking place, we want to elevate the pastoral value of the display: indeed, that is where the Church’s attention is turned.”

\(^9\) The reader may find more exhaustive documentation available during the biennial of sindonology including the curriculum of the institute of religious sciences Mater Ecclesiae at the Pontificia Università Lateranense.

in acknowledging how the variations in shade between grey-white and grey-black (in the case of negatives or impressions of black and white photographs, respectively) correspond to the more or less intense presence of material impression on the fabric. Therefore the phenomenon is a simple, normal one, although of the new type “magnetic negative” produced during the 1988 study. More poignant is the “majestic beauty” of the tortured One’s face and the “legibility of the sindonic data in the photographic negative beginning, for example, with the folds.

The 1931 photos by Enrie offer us such intensity and clearness of contrast as to make them irreplaceable for studies of the Shroud even today. The 1:1 glass plate photos by Giuseppe Caselle are also very interesting.

The photos taken by Judica Cordiglia in 1969 and by Ghio in 1972 have given new stimulus to research. We should also briefly mention the great interest of the ultra-violet (UV) and the rare infrared photos. Interesting to note are the values of the comparison between the ultraviolet data for 1978 (STRP) and that for 1969, generally ignored by the experts. Professor Ghio, called to appear with Max Frei at the authentication session held on

---

11 Riggi of Numana speaks of “magnetic negative” referring to the video tape with the possibility of immediate vision and “negative” registration without the process of data “inversion”. The presumed difficulty of these concepts is easily overcome with a few minutes of “direct observation” of the photographic and videographic phenomena or, in any even more elementary form, with sindonic photographs in negative or in transparency.

12 Mons. Giulio Ricci often repeated that, quite probably, the disturbance present in the 1898 photo might indicate the presence of greater quantities of dust on the surface. For this reason, the first photographs will also be of interest in the future.

13 See Enrie G., La Santa Sindone rivelata dalla Fotografia. Raccolta delle ultime fotografie ufficiali della Santa Sindone con spiegazioni, dati tecnici, commenti, discussione e saggio di notizie storiche, Turin, 1933. At the time, Giuseppe Enrie (1886-1961) was owner of one of Turin’s most advanced photographic studios. Former editor-in-chief of the review “Vita fotografica Italiana”, he published a certain number of pamphlets on photographic technique including Io vi insegno la fotografia, 1934 and Il Miracolo della fotografia, 1959.

14 The extremely clear definition of the 1:1 photos allowed Mons. Ricci to make a reliable analysis of the direction of the haematic discharges from the left and right wrist joints, thus arriving at a reconstruction of the movements on the cross.


16 The Wood light or ultraviolet photos reveal traces of sedimented material on the fabric that are not visible in normal light. For this reason, both Mons. Ricci, in his analysis of metrology and anatomic pathology (1980) and Don Lynn of the JPL of Pasadena (1976-1977) offer sound bases for the progress of investigations. Here we should noted that the
4 October 1973, created some splendid macrophotographs. Even today, these can be used in conjunction with the macrophotographs by Samuel Pellicori (1978) and Riggi-Faia (1988).

The scientific photos taken by the American STRP team in 1981 particularly those by Vernon Miller of the Special Institute of Photographic Technique, Santa Barbara, California, are certainly a first step in scientific recording of the colorimetric data.\(^1\)

The photos taken in April 1988 are an almost unknown treasure, “blocked” by the understandable, even if censurable blameworthy that was profoundly present during the years 1985-1995.\(^2\)

There are at least seven photographic archives containing numerous data: the Pia archive, the Enrie archive, the Judica Cordiglia archive, the Ghio archive, the Mons. Ricci archive, the Miller-STRP archive and the Rigg-STRP archive.\(^3\) It is our hope that this wealth of knowledge will finally be evaluated, preserved in a scientific environment and studied carefully.\(^4\) What is needed now is an evaluation for the photographic sector. There is unanimous agreement as to the great importance that the negative photos have had over the last century from a scientific point of view. Ours however is an invitation to downplay the only apparently extraordinary nature of the sindonic impression as a “photographic negative”.\(^5\)

1.2. The historic sciences

From Ulysse Chevalier to Victor Saxer, the constant doubt of historians of recognised international fame has accompanied the “Shroud question”.\(^6\) While the results of raw computer technique of “pseudo-colour” is only an expedient of interpretation to facilitate reading of data. We need to be very careful when looking at these photos in order to avoid confusing the same “degree” in the “grey scale”, certainly of a haematic nature, with other similar “degrees” that are completely extraneous to the area of the impression.

\(^7\) Albeit in a more insignificant manner, our Centro Romano di Sindonologia also took part in the photographic sessions. The results have yet to be published. For a discussion of scientific colorimetry that goes beyond approximate declaration on the “color of the Shroud”, see ARTOM M., SOARDO P., *Caratteristiche fotometriche e colorimetriche della S. Sindone, in La Sindone, Scienza e Fede, Atti del II Convegno Nazionale di Sindonologia*, Bologna, 27-29 November 1981, edited by COPPINI L. and CAVAZZUTI F., Bologna 1983, pp. 321-329. See also ARTOM M., SOARDO P., *L’Illuminazione della S. Sindone durante l’ostensione del 1978*, in *ibidem*, pp. 331-335. For our part, there is a project for objective colorimetric management (“Controlled color management” project).

\(^8\) Aside from the video documentation available in the Ricci archive, still unknown and underestimated today and difficult to gain access to because of the overbearing attitude of some petitioners, we should point out that, even today, most critics of the operations of 21 April 1981 do not even know the simple series of events that, from 4:30 a.m. to 7:30 p.m. of 21 April 1988, marked the day of the samples taken of small fragments of fabric of the Holy Shroud.

\(^9\) The problem of how to manage these archives is becoming an urgent problem. The Holy See and the international scientific community should, in my opinion, take some constructive action. The archive belonging to Mons. Ricci recently became property of the dioceses of Rome and it is currently being restructured with the aim of consultation.

\(^10\) The foundation of many theories, such as that of Father Filas regarding the coin on His eyes and of Marastoni regarding the inscriptions that can be identified on the holy Face - not to mention thousands of other fantastic contributions in this field - is very weak: they generally only refer to a “source” of photographic data. Our advice is to compare the data in the various photographic archives as much as possible. Only after that has been done, and direct verification in the sindonic fabric of the residual presence of corresponding physical-chemical elements in the areas concerned has been made, can conclusions be reached as to whether or not those hypotheses are acceptable.

\(^11\) Even today, careful analysis of the mixture “effect of extraordinary legibility / extraordinary phenomenon” is the basis of the entire sindonological debate. The origin of the intricate problem of the so-called “stain / image”, “origin of the print of the body of the Man of the Shroud” (with the problem of the orthogonal projection of some anatomical data that would be distant from the linen spread over the body) lies in this “simply” photographic sector.

diocarbon analysis need not “close the debate” on the Shroud “on principle” they did corroborate the hypothesis of these scholars regarding the Turinese Linen’s medieval origins. To the contrary of this view, the fact is that most of the scientific and historical data on the Shroud has yet to be collected and analysed.

Progress in archaeology has shed a great deal of light on Paleo-Christian traces in the Near East.23 The vast reserves of documents of archive-biological science and museum science require instruments and methods appropriate to the collection and analysis of an enormous quantity of data related to the Passion of Christ and, in any event, related to the practice of capital punishment, torture and burial in antiquity. Finally, we should not forget, as an example of an applied field, the world of artistic representation (painting, sculpture, and so on) which, from Vignon to Pfeiffer, place the pictorial theme of the cross and the portrait of Christ at the centre of their work.24 Serious historical methodology invites all those who approach the past to be constantly prudent and open-minded. Hasty conclusions and apodictic declarations are far removed from dignified research.25

1.3 The Medical Sciences

After the 1930s, the contribution of pathology and legal medicine reached its peak in the two decades between 1950-1970.26 The pioneer research of G. Judica Cordiglia, P. Barbet and Hyneck favoured the passage to a “second generation” of scholars of legal medicine and anatomy. Among them, aside from S. Rodante and P. Baima Bollone, recognition is due the primary role played by Prof. Lamberto Coppini.27

Along with his unwavering “sindonological” position, recognition must be given to Mons. Ricci’s analytical work: his contribution in the field of anatomical metrology and the
resultant axonometric reconstruction and final pictorial and sculptural synthesis\textsuperscript{28} remains one of the most interesting pages of 20th century sindology.

1.3.1. Anatomic metrology

Paradoxically, the first examination of the holy funeral fabric was, for many, unexpected: a scientific study must take into account the entire Shroud, not only the front part or, even less, the Holy Face. From this simple and almost prosaic behaviour comes the choice for an accurate analysis of measurements that do not fit into an anatomical framework. For the sake of clarity we suggest proceeding from the most obvious: 1. the collation between the tibias of the front and back impression;\textsuperscript{29} 2. comparative measurements of the forearm and the shoulder area; 3. collation of the phalanges of the left and right hands; 4. the “out of line” trail of many haematic flows, from the forearms to the feet and so on. With further facilitation in the analysis of UV photographs and electronically processed photos, both those already available in the above-mentioned archives and those that can be programmed with new recording methods,\textsuperscript{30} we predict that most of Mons. Ricci’s intuitions and proofs will become fundamental for sindonology.

1.3.2. Haematological data

Understandably, the haematological analysis carried out is of very great importance. With the scientific research carried out by STRP, the international scientific community has become firmly convinced of the authenticity and antiquity of the blood of the “tortured one” of the Shroud of Turin.\textsuperscript{31} Aside from promoting an organic co-ordination between researchers and guardians of the Shroud, recent studies of the DNA, human and very ancient, are very useful for summing up the haematological studies made.\textsuperscript{32} Experiments on the fibrinolitic processes were of great importance in explaining the trace of the haematic impressions.\textsuperscript{33}

\textsuperscript{28} Many scholars of the Shroud hold Ricci’s studies to be “outlandish”. In order to avoid hasty judgements, we invite this type of reader to review Ricci’s investigations, checking on a full-scale reproduction and directly verifying measures and hypotheses. I believe that the unanimous conclusion will echo that of Prof. Enrico Medi who, in 1969, corroborated the measurements Mons. Ricci included in his publications. The fact still remains that, at present, Ricci’s research has a double handicap: it is written in Italian (at least the sections with the best descriptions) and it has not been “reviewed” for publication in international scientific journals.

\textsuperscript{29} No one who has paid even an iota of reasonable attention to the facts can explain the deformity seen in metric differences that, in this case, even reach 15 cm. The end of all the studies will lead to recognition of the admirable, logical convergence of many apparent contradictions.

\textsuperscript{30} As foreseen in 1984, the use of high definition video cameras, both in colour (2032 x 2044 x 12 bit pixel) and black and white (410,000 pixel), with automatic recording and the maximum of distance accuracy will be of great use (see MicroLab DCRM project).

\textsuperscript{31} The studies of Heller and Adler are magnificently illustrated in their work \textit{A Chemical Investigation of the Shroud of Turin}, in \textit{Canadian Society for Forensic Science Journal} (1981) 81-103. Later, between 1982 and 1985, Heller further perfected research on blood with the study on bilirubin, an indicator of serious trauma in the tortured one. The haematological studies of Pierluigi Baima Pallone, important for the immunochemical sector are listed by the same author in note 1, in the work \textit{Sindone o no}, Turin, SEI, 1990, pp. 194-195.

\textsuperscript{32} The recent debate regarding non-recognition of sindonic material at the disposal of the University of Texas in San Antonio (Mattingly’s studies on the presence of microfungi and Tryon’s on DNA) are indicative of the road to be taken in the direction of profitable coordination between researchers and the Guardians of the Shroud.

\textsuperscript{33} The experiments of Dr. Sebastiano Rodante are of certain interest, particularly concerning verification of the softening process of dried blood. The phenomenon allowed not only the wide spread trace on the line but, in the presence of large amounts of blood, as in the areas of the wounds (hands, feet, forehead etc.) the substance completely imbued the sindonic fibres and is visible on the back, as was documented in 1978 by direct observation of the side seam- rents and the optic fibre observations in the section free of the back stiches done by the Poor Clares of Chambéry in 1534. A description of the experiments can be found in \textit{RODANTE Sebastiano, Le realtà della Sindone nelle riflessioni di un medi-}
1.3.3. Physical causes of death: haematopericardium and/or asphyxia

Doctors have sindonic evidence leading to the formulation of various theories on the cause of the death of the Man of the Shroud: high rigidity of the fascia, quite clear in the front pectoral area, and the famous emission of “post-mortum” blood from the rib wound, with separation of the serous and corpuscle parts. A “Solomon-like” solution would suggest letting the hypothesis of the physical cause of the death of the Man of the Shroud to coexist. But in many of these disputes it would be better to hope that the Shroud researchers themselves would be the ones to “coexist-in-the-scientific-discussion”.

1.3.4. The Sudarium of Oviedo

The connection between the Shroud of Turin and the Sudarium of Oviedo, which Ricci acknowledged at a morphological level in the 1960s, has obtained haematological confirmation. Aside from the strictly scientific interest, the studies of the “Sagradum Rostrum” open up the vast, delicate sector of research in the “relics of the Passion”.

1.4. The physical sciences

Palynology and the Shroud started converging through the appraisal done by Max Frei Sulzer in October 1973. This had the merit of giving rise to a period of intense scientific activity and an avid interest by people from countries all over the world. Today, opinions on palynological science have to overcome a certain static opposition: one group continues to defend its utter reliability while another demands statistical evaluation on a complete workup of palynological data.

Even the contribution of STRP (Shroud of Turin Research Project), with all sindonic and sindonological material, must be analysed with care. We can contemplate the departure and arrival points (the latter at the level of interpretation) in the Proceedings of the “Albuquerque congress”. Indeed, there we find not only the group of those who have opposed
the authenticity of the Shroud (McCrone, Sox), but also two opinions on the formation of the sindonic image: Ricci, with his hypothesis of natural formation, and Jackson with his of orthogonality and distance. Here we will draw a synthetic picture of the complexities of interpretation. 

a) Regarding the three-dimensional image: it has an unequivocal value in excluding the pictorial hypothesis while, on the other hand, other interpretative embellishments are imprudent. 

b) Regarding the formation of the impression: we feel that there is urgent need for realisation of one of the 26 blocks of the “Formal Proposal 1984”, in other words to verify the degree of depth of penetration of the so-called “image” in the entire portion of the sindonic fabric affected by the body impression. Without this series of real data, there is a risk that the STRP hypothesis on the superficiality of the image and our simpler theory of a “contact” body image be compared without any concrete points of reference.

But ultimately the value of the STRP Research is of a methodological nature: the group’s studies were published in referenced reviews. Their excellent decision will always be followed in the future by those dedicated to scientific research on the Shroud.

---

39 The colour applied by brush, spatula or another tools would appear on a computer image as homogeneous linear peaks. The Shroud show traces of “fading into nothingness”. By “embellishments” we mean the rumours on participation by NASA and on the extraordinary nature of the phenomenon of VP-8 three-dimensionality.

40 Ricci made some practically useless attempts to personally convince his friend Jackson of the need to take into account many methodological aspects dissimilar from normal anatomy. Although more exciting, the theory of unknown energy that produced the image introduces dangerous elements of an unverifiable scientific nature in sindonic science, a juicy prey for esoteric, exacerbated approaches. The more detailed explanation of Jackson’s hypothesis was given by the author himself in a paper delivered in Milan in 1990, Is the Image of the Holy Shroud Due to a Process Heretofore Unknown to Man?, typewritten manuscript in English, pp. 34, including figures (Italian trans. by Ing. Brunati).

Finally, the period from 1984, the year of the presentation of the “Formal Proposal for Performing Scientific Research on the Shroud of Turin”, to 1988, when the first radiocarbon dating took place, should not be overlooked. If any sort of widespread reprimand needs to be made to all, scientists and authorities, supporters of the Shroud and its enemies alike, it is the fact that of the 26 blocks of study envisaged, only C14 dating was extrapolated.\footnote{The project was presented to the Archbishop of Turin, Anastasio Cardinal Ballestrero, Pontifical Custodian of the Sacred Relic, on 10 October 1984. Its importance is so great and it will influence the next decade so profoundly that it is useful for our reader to know, albeit generically, the scope of analytical instruments: laser irradiation, reconstruction of the chronology of the blood stains, collection of various material, tests for preservation, radio carbon (C14) dating, legal medicine, infrared (fluorescence), radioisotopes, color photographic blow-ups, video documentation, microbiology (iron oxide), microbiological analysis; microflora and microfauna, microparticle in the foot area, electronic processing of on site data, low energy radiography, scientific photography, buring experiments, UV-IR spectroscopy, X-ray diffraction, X-ray fluorescence.} This writer holds that in order to overcome the present status quo, science applied to the Shroud needs to resume the direction of research that STRP proposed in 1984. Obviously, this needs to be integrated with the modern development of advanced technology and should be promoted in a climate of greater “methodological” understanding among the various “schools” or “interpretative lines”, both among scientists and scholars of the Shroud.

1.5. The Theological Sciences

Due to the hostility of many historians over a number of decades and the diffidence of some sectors of theology, theological and pastoral studies of the Shroud have still not had the space they deserve.\footnote{The objective of Mons. Ricci’s efforts in sindonology during of the second part of his life, from 1975 to 1995, was the pastoral dimension, the spiritual formation and the ecclesiastical communion of the “Shroud question”.} While the following lines may seem somewhat hermetic we will not abandon our decision to be synthetic.

1.5.1. Epistemology and the relationship between dogma and historical testimony.

It should be a fact of elementary evidence for all, that the great events of redemption or truths of faith are not to be placed on the same level as historical testimony.\footnote{The creation of the world directly by God, the One and Trinity, or the sacrament/mystery of the Eucarist, for example, cannot be treated with the same archaeological methodology used to analyse the rock that closed the entrance to the Holy Sepulchre, nor can the scientific value of the existence of Pontius Pilate hold the greater vital import of the real existence of the Holy Spirit. In the same way, scientific research on the Shroud has charateristics that do not touch the contrast, the exact oppostie of Ricci’s highly verifiable anthropometric reading} The object-
tion of many people for whom “the Gospels, the Eucharist and service to the poor” are enough, is self-evident.45

1.5.2. The structures of Christology.

We find another important sector for contacts between theology and the Shroud in the need to be faithful to the two main assertions of Christology: Jesus of Nazareth is true and perfect God and true and perfect man. In the affirmations on His divinity and humanity we will extend our approach to the use of the classical linguistic model of “communicatio idiomatum” or “distinction and exchange of properties”.

1.5.3. Exegesis and its methods

Many supporters or detractors of the Shroud will have to commit themselves to an in-depth scientific study of the Biblical text.46 That way they will first of all avoid generalisations or platitudes that do not belong to the wisdom of God. Secondly, they will have a greater admiration of the divine choice for the multiplicity of the languages in the unity of faith, they will consider the textual stratification (style or citations) as exemplary respect for the traditio of those who preceded us.

1.5.4. The Theology of Easter

An in-depth study of Easter and of the liturgical treasures of Pesach/Kippur allows a student of the Shroud to orient himself in the historic and ritual complexity of the Jewish, Christian and Moslem religions and the Judeo-Christian, ethnic-Christian, Augustinian, anthropocentric Church currents, grasping their specific nature and attributing them their full worth.

1.5.5. Liturgy and Sacraments

The commemorative structure allows a bridge of logic and experience to be built between the past and the present, between the inner world and the community encounter, between the ecclesiastic life and the itinerary through the world. The Shroud has left traces in the liturgical tradition and, for this reason, is a signpost along a formative road toward the true and definitive “Promised Land” that is God, everything in all.

1.5.6. The implications in spirituality and the mystical life

Careful study of sindonology means encountering and evaluating the phenomenology of the spiritual life and the mystical life, avoiding extremist positions. The growth of discernment of authentic Christian spirit leads to an appreciation of the constructive choices of Paul of Tarsus (1st century), Cornelius (3rd century), Ambrose (4th century) and all the other substance of the mystery of Christ and the Church: at the same time, a greater historical understanding of the Land of Palestine and the archaeological traces left by Jesus are confirmation of His true and perfect humanity.

45 A core of truth contained in this dispute is found in the reaction to excessive involvement by some supporters of the Shroud.
ers who have followed Christ in the “completion of all justice” (adaptation to the customs of a people in a determined historical era).

1.5.8. The Shroud and the Life of the Church

In 20th century civilisation, increasingly associated with “images”, the Shroud possesses a high value as an “icon”47. It has an acknowledged, eloquent relationship with the experience of suffering and with the world of scientific research: there will be numerous opportunities for it to be attentively used at a pastoral level.

2. On the key questions of sindonology

From the STRP methodology, we can take the concept of subdividing the entire group of great questions that science addresses through this holy relic into four areas.

2.1. Authenticity

The task scientific research faces in the upcoming years is to approach and definitively solve the problem of the authenticity of the Shroud of Turin. The 1988 radiocarbon tests are a first application of dating methods on ancient objects.48

2.2 The Impression: image and stains

The STRP dichotomy between “image” (homogeneous surface impression) and blood stains (imbued in the fabric) is, in our opinion, a problem that does not exist. In any event, one of the first future tests to be made on the Shroud (already included in the 1984 “Formal Proposal”) is the definitive scanning of the degree of penetration of the so-called “image” over the entire sindonic fabric area bearing signs of the body of the tormented person.

2.3. Hermeneutics

In this sector we need to make great efforts: a) to preserve all book and journalistic production on the Shroud, even if often scientifically unacceptable; b) to make data banks suitable for consultation (with the greatest possible “numeric” control of data, in high definition, in black & white and colour; c) to distinguish and unite the levels of hermeneutics: physical-chemical, historical, theological.


48 The controversial, conflictual operation of the C14 teaches us much for the future a) aside from the four types of sample fabric used in 1988, other relics should also be examined (another four similar fragments but subjected to the oven effect of the 1532 fire, a fragment of the support fabric known as Holland cloth); b) the procedures of analysis must respect the formalities of the relationship between laboratory and customer, avoiding unjustified leaks of information; c) the Owner and the Custodian should document the session of analysis and testing available as soon as possible, along with the customary certified declarations, thus avoiding the regrettable, suffered solitude in which the 1988 survey team found itself, left at the mercy of inexact news reports that often spilled over into lies and slander; d) other studies of archaeological dating should be studied and realised at the same time as any upcoming series of tests.
2.4. Preservation

An in-depth study of the STRP research will avoid useless alarmist attitudes (the loss of the impression from the sindonic fabric) and instead will activate urgent types of intervention, such as spread out storage of the fabric in order to avoid the increasingly invasive, permanent folds, provoked by the traditional rolling up every time the Shroud is once again deposited in its reliquary after display or analysis.

Conclusion

At the end of our brief journey of evaluation in the “world of the Shroud” we have a sensation of real fatigue, both retrospective and anticipatory. The Shroud’s recent history is complex and full of conflict and there is still a long road to travel; the scientific applications to be used hopefully in future research are many. We are left however with a trusting, real conviction that the Shroud - a document of great scientific value and singular theological-pastoral moment - is authentic.