A 1637 miniature depicting the infant Duke of Savoy, Francesco Giacinto, venerating the Holy Shroud.
(from the collection of HM King Umberto II exhibited in Turin during 1998)
EDITORIAL

1999 may be a year early to start talking of anniversaries but I have just realised that Shroud News began in the calendar year 1980 and so 1999 is the twentieth calendar year of its existence. The twentieth anniversary year will be next year and 2000 also marks another Holy Year for the Catholic Church and the end of the second millennium, not, as many people still misguidedly seem to think, the beginning of the third millennium; that does not happen until 2001.

Over all these years the study of the Shroud of Turin has continued no matter what the difficulties have been. After 1978 when three million saw the Shroud for the first time in most cases, knowledge of it spread throughout the world rapidly. During the eighties I showed the Brooks Photographic Exhibition to more than 700,000 viewers in several countries. Hundreds more books have now been written about the Shroud.

The 1988 carbon test, obviously flawed, took place but no-one can yet explain how it was flawed (just as no-one can explain the image formation process even after all these years). This led to the world media thankfully dropping the Shroud from its agenda for several years but, just as I predicted at the time, it came back into prominence as the new generation (about a five-year turnaround) of media writers who had never heard of it started writing (often silly) pieces about it in their wide-eyed innocence. Then the announcement of the exposition of 1998 regenerated worldwide interest as even the media began to understand that there just might be the chance that the Shroud not only dates back to the time of Christ but could be His burial shroud. And the skeptics have been remarkably silent during the past few years for the same reason.

One prediction I cautiously made was wrong. I expected far more people that the something over two million to see the Shroud in 1998. Perhaps the main reason for this was the physical impossibility of putting more than that through the exhibition in the number of hours it was open.

You will notice a new banner for Shroud News once again designed by Fr John Conliss of Japan to whom we are very grateful.

And now we can look forward to another viewing of the Shroud itself in the year 2000. The dates have been confirmed as Saturday 26 August to Sunday 22 October 2000. No-one knows when the next opportunity will occur to see this incredible piece of history which continues to fascinate so many of us.

REX MORGAN
ON THE ORIGIN OF THE HAIR IMAGE ON THE SHROUD

- Professor Dr Eberhard Lindner, Germany

The image of the hair seems to be one of the most enigmatic traces in the Shroud, because it is hanging down from the apex, in spite of the horizontal position of the corpse in the grave, i.e. uninfluenced by gravity. I can give a convincing explanation for this enigma in my article.

The grave of Jerusalem was a trough grave as described, in the year 670, by bishop ARCULPH [1], illustrated in fig. 1. According to the Gospel of St. John (John 19:39-40), JOSEPH OF ARIMATHEA and NICODEMUS "brought a mixture of myrrh and aloe, about a hundred pound weight. Then took they the body of Jesus, and wound it in linen clothes with the spices, as the manner of the Jews is to bury". Not having got enough time, because of the beginning of the Sabbath, they deposed, surely, these herbs inside the trough grave, in the free places right and left beside the corpse, above all beside the head, i.e. the most appreciate part of the corpse of Jesus, where there is also the greatest space to put down these herbs. Perhaps, the shoulders have been covered partly by these herbs; therefore, they are not visible in the traces of the Shroud. Then, one must have posed, lovingly, the frontal parts of the hair over these herbs, so that the face of Jesus was surrounded by the hair, just in that position which they knew from his appearance in life. In this manner, the frontal parts of the hair came to lie horizontally, near to the Shroud; therefore, they could imprint in it the well-known traces. Fig. 2 can show these facts by means of a model, made on the scale of 1:5: the grave according to the descriptions of ARCULPH, the corpse after the image in the Shroud, the linen imitated by a very fine silk (only about one fifth of the square metre weight of the Shroud's material, but it was hardly possible to fold this silk material corresponding to the original Shroud).

Several times [2], I have published a theory of the origin of the body image, which says that the corpse of Jesus Christ disappeared into nothingness, so that the message of Resurrection could spread out in Jerusalem. At the beginning of this annihilation process only the protons of a restricted number of atoms on the surface of the corpse disappeared from existence leaving behind the electrons and the neutrons. The electrons (radiating parallel against the Shroud) caused the clear body image. The remaining neutrons are responsible for the isotope shifting from C13 to C14, feigning a younger radiocarbon age of the linen. This theory has been proved, already today, by the following evidence in the Shroud:
ON THE ORIGIN OF THE HAIR IMAGE ON THE SHROUD (cont'd)

1. the clear and undistorted three dimensional body image,
2. the chemical nature of the body image (i. e. conjugated double bonds and carbonyl groups),
3. the absence of these traces underneath other fibres and the blood stains,
4. the traces of the hair, caused by an electron radiation (indicating also the simultaneous appearance of neutrons and electrons),
5. the traces of coins on the eyelids, caused by an electrical spark discharge,
6. the abnormal radiocarbon results in 1988, which reveal, with a probability of nearly 96%, a non-homogeneity of the radiocarbon age of the linen.

A very difficult problem is cited under point 4, i. e. the very clear traces of the hair, produced by electron radiation. My theory says that, instead of the hair, only thermal [3] neutrons and electrons remained. The following three different explanations (a, b, c) may be responsible for the very clear hair image in the Shroud.

a) "Weak interaction" between electrons and neutrons
In a preliminary consideration, one could suppose that directed parallel electron radiation (which formed the traces of hair) occurred by the principle of recoil, because the mass of the electrons is about 1/2000 fold less than the mass of remaining neutrons, so that the electrons could push themselves off from the neutrons to radiate against the Shroud. But in account of the nature of the neutrons this problem is more complicated, as explained by the following reflections. Neutrons consist of three "quarks", which can be regarded to be like internal points of the neutrons, as the nuclei are only tiny parts in the atoms. Therefore, electrons can also fly through the neutrons, because only a "weak interaction" exists between them. As a consequence, one can argue that several orders of magnitude greater quantities of electrons than on the other spots of the corpse are necessary to produce an image of the hair in the Shroud. Calculations can show that these circumstances were really present in the grave of Jerusalem. This will now be explained in more detail.

The results of the radiocarbon analyses of 1988 allow calculation of the neutron flux on the spots where the samples were taken off, as I have published [4]. This flux must be at least about $10^{16}$ neutrons per square cm, liberated in a single moment. One can also calculate from these results, according to my theory, the amount of electron radiation: it must be, as a consequence of the elements in human skin [5], in the same order of magnitude as the neutron flux density, i. e. also about $10^{16}$ electrons per cm². These particles could be liberated from a layer of only about one nanometer thickness. A single hair, however, has a thickness of about 100 micrometers. All the protons in the hair must have disappeared, so that the hair not "stand on end", due to an electrical charge. Therefore, about 5 orders of magnitude greater amounts of electrons (and neutrons) must be liberated on the spots of the hair than on the surface of the corpse. These calculations were made under the assumption that the edge of the Shroud analysed in 1988 was still inside the trough (see fig. 5), which can be concluded from the position of the linen around the feet (see fig. 3) and the blood stains beside the traces of the feet (see fig. 4).

If the edge of the Shroud, analysed in 1988, was still inside the trough (fig. 5), the Shroud was irradiated on this spot with direct neutrons (i. e. which came directly from the surface of the corpse), in addition to neutrons reflected by the stone of the grave. In note [6] are some remarks for the case that the edge analysed in 1988 was outside of the trough, but also then the amount of electrons and neutrons must have been high enough to produce the image of the hair, in spite of only their "weak interaction".

b) A directed radiation against the Shroud as a consequence of the electrical charge
A second effect can be responsible for a directed electron radiation against the Shroud. On the places of the hair very great quantities of electrons were liberated. Certainly, they must (on account of the great electrical charge) scatter in all directions, but only those electrons which are accelerated perpendicular to the Shroud could reach the Shroud, on account of the very short distance, without being absorbed too much by the air. The radiation in all other directions, however, could not reach the Shroud and form double bonds in the cellulose molecules.
c) Particularities of the events in the grave of Jerusalem
The third explanation concerns the assumed singularity itself. It may be possible that only the upper parts of the hair (being near the Shroud) were submitted to the above mentioned events, so that they could "imprint" the traces of the hair in the Shroud. Perhaps all these three effects (a-c) could be involved to form the hair image in the Shroud.

Additional remarks
The model of fig. 5 can also show the reason that an undistorted image of the corpse was imprinted in the Shroud. The linen was deposed on the bottom of the trough, afterwards one must have put the corpse and the herbs in it, and finally covered the corpse with the frontal part of the Shroud. The borders of the Shroud (except in the region of the feet) were lain over the sides of the grave, so that the Shroud was "hanging down" a bit to the corpse. The original breadth of the Shroud was assumed to be about 120 cm, the dorsal parts of the feet were supposed to be in the middle. But, transporting the corpse over the wall of the trough, the Shroud was moved a bit in direction of the trough; this may be the reason that the dorsal image of the feet seem to decline to one side. After the Resurrection the image of the corpse was not in the middle of the Shroud. To center it, one must have eliminated a part of the linen on the larger side, and afterwards sewed on the "side strip" (see fig. 7). As a whole, this reconstruction can explain the clear, undistorted image, including the exact position of the hair, and furthermore, the lop-sided position of the feet traces in the dorsal image.

Possibilities to examine my explanations
I think that (because of the direct connection between the origin of the electrons and the neutrons) my explanations can be proved exactly by new radiocarbon analyses on the borders of the holes burnt during the fire in 1532. Only small stripes of the linen are necessary for this purpose (see fig. 6). I have proposed such analyses to the Holy See and to Cardinal SALDARINI, furthermore, I have published it in [7].

Analyses with such tiny samples can only be done with an accelerated mass spectrometer, as used in 1988. One can be sure, that these analyses are of great validity, in spite of some accusations which were made against this analytical method, because of the unexpected results of the analyses in 1988. We can assume that the earlier analyses were carried out exactly evidence: the systematic divergence of the results between the laboratories) and that the material of the Shroud was really analysed (evidence: photos of the samples taken in
ON THE ORIGIN OF THE HAIR IMAGE ON THE SHROUD  (cont’d)

Turin on the one hand, and in the three laboratories on the other), as I have published this several times [8]. The systematic differences of the analysed radiocarbon age between the results of the three institutes indicate (already today with a probability of 95.7%) a non-homogeneity of the radiocarbon age [9]! The calculated values of the supposed radiocarbon content (on the border of the burnt spots) are shown in fig. 7. My theory can be proved by new radiocarbon analyses. Therefore, the only one who should fear new radiocarbon analyses is I myself, because this is the "litmus-test" for my theory. But I do not fear them, because already today my theory can be confirmed by many pieces of evidence.

Final reflections

It is already ten years ago that I published my theory of the origin of the body image and the abnormal radiocarbon analyses made in 1988. But it is really amazing that in spite of much evidence and in spite of accordance with natural laws and experimental simulations, my plausible and non-contradictory explanations were scarcely cited in recent publications and have not found any remarkable consideration among the scientifically orientated researchers of the Shroud. I can understand very well that the results of 1988 (medieval age) have shocked the Shroud experts, but in the history of science it often happened that new analyses have brought unexpected results which contradicted previous ideas. Supposing that the former results, but also the contradictory new ones are correct, and searching for the origin of these contradictions, one can come to totally new discoveries. I would like to give only one well known example: radiation of "black bodies" contradicted the well known laws of energy and this led MAX PLANCK to the "quantum theory" which changed our view of physics. The contradictions could be eliminated so that the two at first incompatible phenomena could be combined on a higher level. Therefore, it is not very helpful for finding the truth to renew again and again all the known accusations against the radiocarbon method or the scientists who have employed it. To solve the great enigmas of the Shroud, in my mind, it would be better to keep to the advice of the famous KONRAD LORENZ [10] "to throw everyday over board, to speak like early morning exercises, a favoured hypothesis; this can be painful, but a youth preserving healthy gymnastic exercise ".

Several Shroud researchers have made many investigations to produce an image like that of the Shroud. But I think that the singularity of the Resurrection cannot be imitated. I would conclude with great certainty, that a scientist with all of our century's technology and with all the knowledge which we have from the Turin Shroud cannot duplicate the body image of the Turin Shroud with all its details. It was argued that I use a singularity beyond all natural laws to explain the traces in the Shroud. But one should remember that the Resurrection of Jesus Christ was a singularity! Today, it is only possible to confirm this event by new radiocarbon analyses, e.g. on the suggested spots. All those who deny this, only delay or hinder the Holy See to allow new radiocarbon analyses, and therefore, to discover the truth!

Fig. 5 The provisional wrapping in of the corpse with the Shroud in the trough grave. Because of the blood stains around the feet (see fig. 3 and 4), one can assume that the edge analysed in 1988 was still inside the trough and irradiated with direct neutrons.
"Ceterum censeo" (Anyway I am of the opinion): the Shroud of Jesus Christ is of great importance for Christianity. It serves as the "Scientific Gospel" to renew Christian faith in the Resurrection and the Deity of Jesus Christ, which has been lost whilst the biblical view of the world was replaced by the cosmic one. The "Resurrection" of Jesus Christ could have happened also without the described reactions on the surface of the...
corpse which have caused the image of the body and the hair, feigning a younger radiocarbon age of the linen. Therefore, these peculiarities must be of great importance for our century. Perhaps God was written these traces in the Shroud in His wisdom looking ahead to give the Christian people effective help to renew the faith in Resurrection. In my well-founded [11] opinion, it is not possible to overcome the desolate state of the Church without this "Scientific Gospel" which God has "written" in the material of the Shroud of Jesus Christ.

Fig. 6 Samples of the Shroud proposed for new radiocarbon analyses

Fig. 6 shows the original size of the samples to be taken from the borders of the burnt holes in 1532. The numbers of the samples correspond to those marked in fig. 7. Each sample is sufficient for a double analysis (two parallel analyses), taking into account the extreme losses during the cleaning operations because of the light scorching by the former fire. But the Zurich "Institut fur Mittelenergiephysik" has made same investigations which can prove that by such scorching no isotope shifting occurs.

Notes


English, e.g.: 1. "La Datatione della Sindone" (Atti del Congresso di Cagliari, 1990), p. 149-166.

2. Collegamento pro Sindone, Roma, Jan./Febr. 91, p. 29-47; March/Apr. 91, p. 25-37.

[3] One must conclude that by this annihilation process of the protons, all the energetic levels of the remaining elementary particles which they have had in the atoms also have sunk into nothingness.

[4] see: [2], English: no. 1; Italian: no. 1, 2 and 3.

[5] The main components of human skin are: ca. 80% protein, 20 % water; the relationship of neutrons to electrons are ca. 6.5: 7.0, i. e. nearly 1:1, taking into account the content of the chemical elements of these components with their elementary particles.

[6] If the part of the Shroud (which was analysed in 1988) was already outside of the trough (however, this is not very probable); these samples were irradiated only by reflected neutrons, but not by neutrons coming direct from the source; therefore, the neutron flux must have been significantly (perhaps one order of magnitude) lower than internal of the trough. If the lower neutron flux already rejuvenates the Shroud on the spots analysed in 1988 to an age of only 600-700 years, then the spots suggested for new radiocarbon analysis must even be higher than the calculated values, because the spots on the borders of the burnt spots (of the fire in 1532), however, must definitely be situated inside the trough and also irradiated with direct neutrons. My calculations were made under the supposition that the spot analysed in 1988 was still inside the trough. Therefore, the values indicated in fig. 7 represent the at least obtainable results for further radiocarbon analyses; they can confirm the singularity during the Resurrection.

[7] Published in [2]: German 3 and 4., English 2., Italian 4. and 5.

[8] Published in [2]: German 3., English 2., Italian 3., 4. and 5.


In an official document my father, on his death, bound the Holy Shroud, which had belonged to the House of Savoy for more than five centuries, to the Pope of the Holy Roman Church. My father felt real devotion for Christ's Shroud and associated its religious significance with the historical and dynastic events of our House. He had often spoken to me of this wish of his, during the long months of his illness in London, convinced that the most important relic for the Christian world could only be properly looked after by the Pope, with his spiritual authority.

Since his youth, Umberto II had formed a collection on this specific theme which was exhibited for the first time in the Historic Exhibition for the Ostension of 1931, organised with his personal patronage in the rooms of Palazzo Madama in Turin.

The fact that my father had been one of the authors of the 1931 Ostension, in marrying my mother, Maria Jose of Belgium, and thus had personally experienced that extraordinary event in which religiousness, devotion and the dynastic celebration of our House were all interwoven for a final time, remained among his most beautiful and important memories. He loved to go and venerate the Relic in the chapel in Palazzo Reale and in Turin Cathedral as often as he could.

His destiny of devotion and religious spirituality for the Passion of Christ, which the Shroud bears witness to, led my father to enrich his collection with every type of Shroud iconography, through historic and artistic research over the years. He also collected every iconographic witness of the House of Savoy with great patience and constancy throughout his whole life. Many engravings joined the collection in this way, which was also enriched over the years by gifts from relatives and faithful friends.

In 1931 a book commemorating our history was published in Turin which also included a chapter where my father's collection was widely illustrated for the first time. In the exhibition this "Corpus" was placed in a special room and presented to the public as "H.R.H. the Prince of Piedmont's Collection". That was the first time my father had wanted to appear publicly as a collector.

On other occasions I have recalled those tragic events which unfortunately totally destroyed his collection of engravings and lithographs during the bombing of Montecassino Abbey in 1943: they had been placed provisionally because it had been considered a safe place. Fate, however, spared the beautiful and very important parchment, painted by Carlo Conti, representing the Ostension in 1663 for Carlo Emmanuele II's marriage to Francesca D'Orleans. This had been left at the Quirinale, together with some books and a few other object, and they were the only things to survive. These, with a few other things from my father's pre-war collection, accompanied him into exile in Portugal in June 1946. The beautiful, illuminated parchment by Carlo Conti was exhibited in the library of Villa Italia in Cascas.

He told me many times that the saving of that single fragment from his collection had stimulated him to begin his historical research again, to which he devoted the thirty-seven years of his exile, visiting the booksellers and antique dealers of half Europe in his search for images connected to the House of Savoy.
A wood engraving of the Holy Shroud. This devotional image was printed with a prayer. It is an indulgence for the liberation of a soul from Purgatory. The indulgence was granted by Pope Clement VIII in 1631 (the same year of the printing) at the request of Duchess Caterina of Austria, wife of Duke Carlo Emanuele I of Savoy. (The Savoy Collection)
UMBERTO II COLLECTOR  (cont'd)

In the months following his departure for Portugal, my father also managed to recuperate ninety photograph albums, in folio and bound in blue cloth; each was dedicated to a precise person of the dynasty. He had put them together when he was young and they made up an extremely rich collection of historical-photographic references which my father then used to compile a complete chronological iconography of the family. Some of these volumes also show the Savoy royal palaces, today decreed as world patrimony by UNESCO, where the so-called "minor arts" are also documented. Another of these albums contains hundreds of photographs of the Holy Shroud: they are images of the various representations of the cult which developed throughout Europe over almost seven centuries.

As we know, Umberto II was a meticulous collector, attentive to the smallest details. Every photograph collected by him is provided with an accurate explanation written in his own hand in pencil on the back. As regards the iconographic collection of the Holy Shroud my father wanted to form a "Corpus" according to subject rarity and value of the edition, identical to his collection of engravings presented in Turin in 1931. If we compare that exhibition with today's, through the available publications, we can undoubtedly affirm that "Umberto II, collector" more than succeeded in rebuilding the collection lost at Montecassino. It was certainly not an easy task; the huge amount of correspondence with booksellers and antique dealers throughout the world for forty years bears witness to this.

With infinite gratitude I owe my passion for history and art history to my father. When I attended the Louvre school in Paris in 1964 he immediately asked me to help him select numerous engravings and in those years I was able to study most of the material he had collected. We often examined the files of the Holy Shroud "Corpus" together and he would talk about each one as we looked at it, telling historical stories and anecdotes which I still remember well.

My father enjoyed setting the dynasty of the Christian King Abgar of Edessa, who reigned at the beginning of our era in an area approximating to that of Syria today, alongside ours, in that both had for centuries been jealous guardians of Christ's winding-sheet. Both were rulers of small mountain states which did everything possible to remain neutral in spite of the threatening presences of bordering powers. He told me of the "great feast" at Vercelli in 1553, at the time of Emanuele Filiberto's father, Duke Carlo III, with a wealth of details that quite surprised me. On that occasion the Holy Shroud was saved from attempted burglary by the French troops, ordered by Marshal di Brissac. The soldiers had entered the town, then the temporary capital of the Duchy of Savoy, and after having fired on everything abandoned themselves to an orgy of looting and plundering. The French knew that the Shroud was hidden in the Cathedral and wanted to get it for themselves at all costs because the kings of France had always envied the Dukes of Savoy their valuable relic. But thanks to the intrepid spirit of a Savoyard priest, Giovanni Antonio Costa, the sacred sheet was saved. The canon invited the French to dinner and hid the relic under his fur cloak. The officers ate and drank to oblivion, forgetting about the Shroud, and fell asleep. The next morning they almost let themselves be taken by the Imperial troops, sent by Charles V to help his brother-in-law, the Duke of Savoy. My father knew every detail of all these events and the adventures our family got involved in to keep custody of Christ's winding-sheet and he loved to narrate them.

Ironically it was another "great dinner" last year that nearly destroyed the Holy Relic forever. I am relieved that my father did not see Guarini's chapel in flames. Dramatic and anxious moments were to pass before the fate of the Shroud was known; that Relic so venerated by my father during his life and whose destiny occupied him right up to his very last moments.
THE BARRIE SCHWORTZ WEBSITE

Barrie Schwortz of Los Angeles, USA, has developed probably the most important Shroud website available. He writes, late in 1998:

'It has been almost one year since I sent out my last e-mail communication to my mailing list. In that time major events have occurred in the world of the Shroud. This year alone, more than 25 books were released worldwide on the subject of the Shroud. The Shroud was publicly exhibited for eight weeks and a major international Shroud Symposium was held in Turin that attracted sindonologists from around the world.

The Shroud of Turin Website has also experienced major growth this year. Our counter has logged more than 235,000 visitors representing 125 different countries, although my web site service provider assures me that figure only represents 35% of the actual visitors to the website. It seems that many repeat visitors bookmark the "Late Breaking Website News" page or the "Main Menu" and enter the website on those pages, bypassing the counter that is on the "Home" page (www.shroud.com)

This year we associated with Amazon.com and now receive a small commission when visitors enter and make purchases at Amazon.com via the "Shroud of Turin Website Store" (https://www.shroud.com/obtain.htm). The new "Website Store" has been greatly expanded and now accepts credit cards for purchases of items that we make available directly via the website. These include 8" x 10" Color and Black and White photographic prints, 35mm slides and 8.5" x 11" Original Digital Prints.

The most recent update (October 26, 1998) features "An overview of American Sindonology" with reports on various Shroud groups and their current activities. It also includes the addition of two scientific papers presented at the recent 1998 Turin Symposium (June 1998) and many new links to new or updated Shroud-related websites. The "Shroud History" page (https://www.shroud.com/history.htm) has been expanded to include a much more detailed chronology of the 20th century and now provides a much closer look at the events in the 20th century that are sure to become significant moments in the Shroud's history.

This new update also includes information on the Limited Edition Shroud Print I am about to offer via the "Website Store". This will mark the first time in the 20 years since I took the photographs of the Shroud, that a signed, limited edition art print of any of my images has ever been made available. Only 250 signed prints will ever be made.
BARRIE SCHWORTZ WEBSITE (cont'd)

If you haven't looked at the website lately, I urge you to take a look when you have a few minutes. The best place to start if you haven't visited in a while is the "Late Breaking Website News" page (https://www.shroud.com/latebrak.htm). It contains a complete chronological history of those items added to the site in recent months and provides you with the best way to see "what's new" since your last visit.

There are many new items planned for the website in the future, including a new Shroud "Speakers Bureau", more features on individual Shroud organizations and continuing updates on the planned Exhibition in the year 2000, so be sure to check the site from time to time to get the latest information.

I also wish to thank all of you for your letters of encouragement and support. Although I am unable to answer every e-mail I receive, they are always welcome. Your feedback and participation is the heart of the success of the Shroud of Turin Website and is truly appreciated. Thank you!

Barrie Schwortz, Shroud of Turin Website

Barrie Schwortz, an original member of the 1978 STURP team which made the most exhaustive scientific examination of the Shroud ever allowed. Schwortz and Vernon Miller took all the official photographs of the Shroud in 1978. Many of them have appeared, and continue to appear, as the classic illustrations of the Shroud and the scientific work done on it.
SHROUD CHRONOLOGY 1511 to 1694

This excellent chronology was compiled by Ian Wilson and first published in the British Society, for the Turin Shroud Newsletter No 44

1511 Private showing of the Shroud for Anne of Brittany, Queen of France, and for Francesco of Aragon.

1513 Death at Chambéry of Marguerite's of Austria's mother-in-law dowager duchess Claude. She is buried behind the high altar of the Sainte Chapelle, Chambéry, immediately facing the repository containing the Shroud.

1516 King Francis I of France journeys from Lyon to Chambéry to venerate the Shroud after his victory at Marignac. A copy of the Shroud preserved in the Church of St. Gommaire, Lierre, Belgium is dated to this year.

1518 The Shroud is exhibited from castle walls at Chambéry in honour of the Cardinal of Aragon.

1521 Duke Charles III of Savoy marries Beatrice, daughter of King Emanuel of Portugal in this year, and they make a pilgrimage from Vercelli to Chambéry to venerate the Shroud. The Shroud is exhibited at Chambéry for benefit of Dom Edme, abbot of Clairvaux. Carried by three bishops, it is shown on the castle walls, and then for privileged observers hung over the high altar of the Sainte Chapelle, Chambéry.

1525 A notice 'Pour scavoir' posted in the Lirey church in this year gives a lengthy though not overly accurate account of the Shroud's history. This notes as still extant in the Lirey church 'the big strong armoires where the Holy Shroud was housed and carefully guarded'.

1530 Death of Shroud devotee Margaret of Austria, who commissioned the silver casket made for the Shroud in 1509.

1532 4 December. Fire breaks out in the Sainte Chapelle, Chambéry, seriously damaging all its furnishings and fittings. Because where the Shroud is kept is protected by four locks, Canon Philibert Lambert and two Franciscans summon the help of a blacksmith to prise open the grille. By the time they succeed, Margaret of Austria's casket has been melted beyond repair by the intense heat. But the Shroud folded inside is preserved except for having been scorched and holed by a drop of molten silver that fell on one corner.

1534 15 April Cardinal Louis de Gorrevod holds canonical investigation at
SHROUD NEWS No 112 (February 1999) 15

SHROUD CHRONOLOGY 1511 to 1694 (Wilson)

Chambéry at which three bishops and ten noblemen testify to the cloth before them being the same as that they knew before the fire. According to the Cardinal 'It is the same sheet as we ourselves before the fire have many times held in our hands, seen, touched and shown to the people' 16 April. 8 am The Shroud is solemnly carried to the convent of the Poor Clare Nuns at Chambéry. There the nuns repair the Shroud, sewing it onto a backing cloth, and sewing patches over the unsightliest of the damage. As described by the Reverend Mother Abbess 'After dinner, the embroiderer brought the wooden frame to stretch the Holland cloth on which the Holy Shroud was to be placed. After two hours the cloth was fixed on the loom and we laid out the precious Holy Shroud upon it, and basted all around... The blood drops appear as large as marjoram leaves... on looking through the underside of the Shroud, when it was stretched on the Holland cloth or on the loom; we saw the wounds as if we had looked through a glass.' These repairs are completed on 2 May. Covered in cloth of gold, the Shroud is returned to the Savoys' castle in Chambéry.

1535 Savoy is invaded by French troops. Calvin promulgates Protestant doctrines in the Aosta valley. Charles III and his family abandon Chambéry. The Shroud is taken to Piedmont, passing through the Lanzo valley via Bessans, Avcrolcs, Ceres, and Lanzo.

4 May. The Shroud is exhibited in Turin

1536 7 May. The Shroud is exhibited in Milan. Indicative of the rumours that it had been destroyed in the fire, Rabelais' Gargantua published in France in this year includes a scene in which soldiers sacking a monastery vineyard call upon various saints and relics when attacked with a processional cross by one 'Frère Jean': 'Some made a vow to St. James, others to the Holy Shroud of Chambéry, but it caught fire three months later so that not a single scrap (brin) could be saved; others to Cadouin...'

1537 The Shroud is taken for safety to Vercelli because of the French invasions.

29 March. The Shroud is exhibited from the tower of Bellanda, Nice 1540 The Shroud is at Aosta.

1541 The Shroud is once again at Vercelli, where it will stay for the next twenty years.

1559 Following the treaty of Chateau Chambrésis in this year, Duke Emanuel
SHROUD CHRONOLOGY 1511 to 1694 (Wilson)

Philibert is able to take possession of his territories, and marries Marguerite de Valois in this same year. Neither are young - he is thirty-two, she thirty-seven. A miniature in Duchess Marguerite's prayer book (see right), thought to have been painted on the occasion of this marriage, shows the Shroud held up by three bishops. This exhibits the so-called poker-holes, but not the damage sustained as a result of the fire of 1532. Dorsally the body of Jesus is shown naked (though frontally there is an indication of a loincloth), the last such Shroud depiction before the prudish policies of the Counter-Reformation Pope Paul IV, which caused the covering up of the nudities in Michelangelo's Last Judgment (1559-60), came into effect.

1561 Early June. The Shroud is brought back to Chambéry, and deposited in the Church of St. Mary the Egyptian, in the Franciscan convent 15 and 17 August. Showings of the Shroud from the walls of the city and in the piazza of the castello.

1563 Duke Emmanuel-Philibert (1528-80) definitively fixes Turin as the capital of his dominions, thereby relegating Chambéry to the outskirts.

1568 June. The Shroud copies of Guadalupe (in the Spanish archdiocese of Toledo) and Navarrete (in the diocese of Logroño) are made in this year. The Italian inscription on the Guadalupe example reads: 'At the request of Signor Francesco Ibarra this picture was made as closely as possible to the precious relic which reposes in the Holy Chapel of the
SHROUD NEWS No 112 (February 1999)  

SHROUD CHRONOLOGY 1511 to 1694 (Wilson)

Castle of Chambéry, and was laid upon it in June 1568.' The Navarrete copy's inscription is almost identical, but in favour of Signor Diego Gonzales.

1571 Commissioning of two copies by Pope Pius V in this year, one of these now identifiable as the copy of Alcoy, Archdiocese of Valencia, Spain. This particular example was given by Pope Pius V to Don Juan of Austria, who gave it to the Holy Sepulchre Convent in Alcoy in 1574.

1578 The saintly Cardinal Charles Borromeo (1538-1584) decides to journey on foot from Milan to Chambéry to give thanks to the Shroud following release of Milan from the plague. To save Borromeo the rigours of a journey across the Alps Duke Emanuel Philibert orders the cloth to be brought from Chambéry.

14 September. The Shroud arrives in Turin, heralded by a gun salute from the local artillery. It is first laid up in old S. Lorenzo.

10 October (Friday). Private showing of the Shroud for Charles Borromeo and his companions. Upon removal of its black silk coverlet, the cloth is shown stretched out on a large table.

12 October (Sunday) The Shroud is carried in procession from the Cathedral to the Piazza del Castello where, with Borromeo, Vercelli's cardinal, the archbishops of Turin and Savoy, and six other bishops officiating, it is shown on a large platform before a crowd estimated at forty thousand.

14 October. After forty hours devotions, a second procession brings the Shroud to the piazza for a second showing.

15 October Second private showing of the Shroud for the close circle of Charles Borromeo. Cusano describes the Shroud as 'testimony to its own authenticity'

A special print, also a medal showing Duke Emanuel Philibert on one side, with on the other side the Shroud depicted being held aloft by a kneeling angel, commemorate the Shroud events of this year.

1582 13, 14 & 15 June. Showings of the Shroud on the occasion of a fresh pilgrimage by Cardinal Charles Borromeo to Turin, with Cardinal Gabriel Paleotto as another of the officiants. These showings are recorded on a rare print preserved in the Ufficio Manoscritti c Rani of Turin's Biblioteca Civica.

1587 A tempietto standing on four tall columns, is erected in the Turin Cathedral presbytery as a housing for the Shroud
SHROUD NEWS No 112 (February 1999)

SHROUD CHRONOLOGY 1511 to 1694 (Wilson)

1598  Publication of Alfonso Paleotto's *Explicatone del Sacro Lenzuolo ove fu involto il Signore*.

1604  4 May. Showing of the Shroud in the presence of Duke Charles Emmanuel I and his Court.

1606  14 February. Private showing of the Shroud to Silvestro da Assisi-Bini, father general of the Capuchin order, an offshoot of the Franciscans 9 May. Public showing of the Shroud, the crowd swelled by 40,000 foreigners who had come to Turin to see it.

1607  Reference in the State building accounts in Turin's Archivio di Stato to four columns in black marble being supplied by a stone cutter 'in conformity with the design of Count Carlo di Castellamonte for the Chapel of the Holy Shroud'. This is the first indication of an intention to construct a special chapel for the Shroud in Turin.

1608  The thirtieth anniversary of the Shroud's arrival in Turin. A print issued to mark the occasion is preserved in London's British Museum.

1620  The Shroud is shown in the castle piazza to mark the marriage of Duke Victor Amadeus with Christine of France.

1623  May. A copy of the Shroud is made for the church in Logroño, northern Spain. Latin documents in the Cathedral, written May 4, 5 and 12 of this year, describe the copy as having been put in contact with the original.

1624  Exposition of the Shroud. Maria Maddalena, Grand Duchess of Austria, asks for copy to be made. She gives it to the Dominican nuns of Rome. Three hundred years later this will go to Summit, New Jersey.

1633  16 June. Public showing of the Shroud in the Castle Piazza Turin.

1634  Copy of the Shroud is made for Moncalieri in the Archdiocese of Turin 1635 4 May Public showing of the Shroud in the Castle Piazza

1638  Duke Charles Emanuel I is succeeded by his son Charles Emanuel II. Private showing of the Shroud at Turin for St. Jeanne Françoise de Chantal, founder of the Order of the Visitation.

1640  The Shroud exhibited as an expression of thanks for the release of Turin from plague. A painted copy of the Shroud preserved at the Castillo de Garcimuñoz was 'extractum ex originali' at this time.

1642  Solemn showing of the Shroud to mark the conclusion of peace between the princes of Savoy, in the presence of Christine of France, Duchess of Savoy, her young son Charles Emanuel II, and the princes Maurice and Thomas of Savoy.
SHROUD CHRONOLOGY 1511 to 1694 (Wilson)

1646 A copy of the Shroud in the Cathedral of St. Peter, Bologna, is dated to this year. Executed in tempera on linen cloth, this is attributed to the Princess Francesca Maria, daughter of Duke Charles Emanuel I. According to her biography 'She took delight in making faithful copies (of the Shroud) with her own hands, presenting them then to eminent personages or to pious sodalities'.

1647 On the 4 May showing this year, held in the Cathedral, some of the enormous crowd die of suffocation.

1650 9 December. Exhibition of the Shroud on the occasion of the marriage of Princess Erichetta Adelaide, sister of Duke Charles Emanuel II to the son of the Elector of Bavaria. A surviving copy, recently rediscovered in Turin, is dated to this year.

1654 A copy is made for La Cuesta, Spain, in this year.

1655 4 May, La Cuesta's parish archives state that a Carmelite priest placed their Shroud copy in contact with the original in Turin on this date.

1657 5 June. Issuing of official warrant authorizing developed plans by Swiss-Italian architect Bernardino Quadri for a Chapel of the Holy Shroud, raised high above the level of the Turin Cathedral presbytery and connected directly through to the royal apartments.

1663 May 16/17. The exposition of the Shroud normally held in the Cathedral of Turin on 4 May is delayed to coincide with the wedding of Duke Charles Emanuel II of Savoy with Francesca d'Orleans, this wedding in its turn having been postponed because of the death of the Duchess of Parma. The copy of the Shroud preserved in St. Paul's Church, Rabat, Malta was placed in contact with the Shroud at this time.

1664 Charles Emanuel II assumes personal control of Savoy upon the death of his mother, Christine of France.

1665 Showing of the Shroud in the Royal Chapel, in the presence of Archbishop Michele Beggiano, to mark the marriage of Duke Charles Emanuel II with Maria de Savoy-Nemours. 14 May. (Feast of the Ascension) The Shroud, held up by seven bishops, is shown before huge crowds.

1666 24 March. Private showing of the Shroud for Duke Maximilian of Bavaria. 4 May. Public showing conducted by the Archbishop of Turin and four bishops.

1667 4 May. Public showing, with ambassador Morosini of Venice in attendance.
SHROUD NEWS No 112 (February 1999)

SHROUD CHRONOLOGY 1511 to 1694 (Wilson)

1668  19 May. The architect Guarino Guarini is appointed ducal engineer for the construction of the Chapel of the Holy Shroud, Turin Cathedral.

1678  Copy of the Shroud is made for the church of St. Mattrice at Imperia, on the Ligurian coast between Nice and Genoa.

1694  The Shroud is formally deposited in a specially designed 'sepulchre' high up in the altar, designed by Antonio Bertola, set in the centre of Guarino Guarini's new Chapel attic Holy Shroud. For this occasion it is given a new black lining cloth by the Blessed Sebastian Valfre, who also adds patches where those of the Poor Clares were becoming inadequate.

Wilson acknowledges his indebtedness to numerous articles by Don Luigi Fossati, Dorothy Crispino and others in journals such as Sindon and Shroud Spectrum for much of the information from which this chronology has been compiled. The reference from Rabelais can be found in his Oeuvres Completes, Paris, 1962, vol I, p 110.
THE SHROUD AND THE GRAIL IN PASSION PLAYS

Remi Van Haelst, Belgium

The "unfolding" of the Mandylion in 944 in Constantinople, affected not only iconography, but also Byzantine liturgy and Western European literature. From the tantalising accounts, told by pilgrims and merchants, who did not really know much about the mysterious "Mandylion of Edessa" and the "Anna Christi", emerged the earliest accounts of the Grail and Passion plays.

There can be no doubt, that there are several similarities between the Sindon - Mandylion, early mediaeval passion plays and Grail accounts.

Of course, we have to take in account, the imagination and creativity of the mediaeval writers.

One may be certain, that in Passion plays, where the Shroud was used as a decorum, the bloody wounds were very red and quite visible.(1)

The first known author of a Grail story, written about 1190 is Chretien de Troyes. He notes the grail as the dish, in which was kept the host, in fact the corpse of Christ.

The work of Chretien de Troyes was not completed.

The most eminent Grail author Robert de Boron, wrote about 1200 his famous "Roman de l'Estoire du Grail".(2)

The Grail is here the chalice, in which Christ [fesoit son sacrement] made his sacrament, during the Last Slipper.

The Roman Emperor Titus, living on the isle of Capri, sends his servant Verinne, to invite Christ at his court, to cure his leper son Vespasian.

During the way of the Cross, [Verinne] (3) wipes off the face of Christ, with a [sydoine] napkin.

Verinne remarks on the [sydoine) napkin the imprint of a face, [semblante] resembling the face of Christ.

Joseph of Arimathea collected in the "Grail" the blood of the crucified Christ. Before Joseph is put in jail by the Jews, he hides the "Grail" in his home. Christ brought the "Grail" to Joseph.(4) Verinne brought the [sydoine] napkin to Emperor Titus, who beholds in solitude the [semblante] likeness, until his son is healed.

Forty years later, Vespasian, will set free Joseph of Arimathea.(5)

Following

In "Parsifal" (Wolfram von Eschenbach) the sister of Parsifal quests a very holy linen. After many adventures she enters in a chapel, situated in a [aitre perilleuse] dangerous graveyard.

Above the altar she sees "the holy cloth" for which she came.

The cloth was very old and spread an odour, sweeter and softer than anything else on earth.

In vain, the girl ties to get hold of the cloth, floating above the cross on the altar.(6)

Finally, Parsifal finds the "cloth trenched with blood" in the tomb of a knight.

Passion plays.

A: [Passion de Semur]

During a very hot day, Christ asks the market-woman Veronica, to lend him a [drap] sheet, to wipe off his face. When Christ gives back the [toile] cloth, Veronica cries out : [escripte y est votre face] "Here on is inscribed Your face".(7)
THE SHROUD AND THE GRAIL IN PASSION PLAYS (cont'd)

B: [Passion d'Auvergue]
Joseph of Arimathea buys a [telle] cloth. When the merchant learns the final purpose of the cloth, he refuses to get paid.

C: [Passion de Grelan].
Joseph of Arimathea buys a [telle] cloth from a market-woman for [dix 'besants' d'argent] ten pieces of silver.

D: [Livre du Passion]
Joseph of Arimathea buys the [sydoine] cloth. When the merchant learns the final purpose of the cloth, he refuses to get paid, praying heaven for the healing of his very sick mother.
When Christ was laid down on the [sydoine] shroud, the [veronique y demeure] true image remained on the shroud.

E: [Passion de St. Genevieve]
Here the Shroud is a [telle verte] a green cloth, unusable by worms.

Notes:
(1) Antoine de Lalaing (1503) and Zantfliet (1448) describes the blood to as red, as if the blood was fresh.
(2) Following Dr. D. Scavone, Robert de Boron sources are the apocryphal "Acts of Pilate", "Vindicta Salvatoris" "Cura sanitatis Tiberii" (VEth.C.). Personal note: Probably also Georges de Tours (Vth.C.)
(3) [Verinne = Veronique = Veronica].
In French and English: Veronique = prize of honour, cloth of Veronica) Probably from the Greek [phereniki] = prize of honour = Berrenice = Veronique.
(4) Probably inspired by the Acts (12:7) "Peter set free by an angel". For other authors, Christ sets free Joseph of Arimathea, imprisoned by the Jews.
(5) "Deus, ad instantiam, Veronice ymaginem tuam sudario impressam relinquere voluisti" "God, by the approximation of Veronica, You have left Your image on the napkin".
(Anonymous manuscript. Cambridge Fitzwilliam Museum)
Following Prof D. Scavone, Verinne was not the servant of Emperor Titus, but a Jewish woman who came to Rome.
(6) [ponant sindonem super altare] "Placing the Shroud above the altar".
Passion play of Fleury (now St. Benoit-sur-loire. France)
Noted by St. Ethelwood, bishop of Winchester (Xth.C.) in [Concordia Regalis Chapter "Quame Quaeritas"] "Whom do You search ?"
(7) [Cez ey un moult bel sintuaire] "A fair mould on the cloth".
Here [sintuaire] is probably a corruption of suaire and/or sydoine.
(Passion play of Arras).

FINAL NOTE:
In most of the over 400 known mediaeval Passion plays; the words [sindon], [sindonem] and [sudarium] are replaced by [linteamina].
THE SHROUD AND THE GRAIL IN PASSION PLAYS  (cont'd)

In the earliest French plays; dominates the word [telle]; but later emerges the words [sintuaire], [suaire] and [linceuil].

Note well that only in French translations of the Gospel, one uses directly the word [linceuil] shroud.

References:
"Joseph ofArimathea, the Holy Grail and the Edessa icon". Lecture by Prof. Daniel. Scavone (Shroud Symposium DELT. Nice 1997)

A commemorative lithograph on silk produced for the 1898 Exposition of the Shroud in Turin. The frame shows symbols of the Passion and the coat of arms of the Savoy family appears under the frame.

[From the collection of His late Majesty King Umberto II now part of the Fondazione Umberto II e Maria Jose di Savoia]
Shroud News began in 1980 when Rex Morgan, author of three books on the subject of the Holy Shroud (Perpetual Miracle, Shroud Guide and The Holy Shroud and the Earliest Paintings of Christ) and editor of several others, began sending a few notes about current developments in the study of the Shroud of Turin (Sindonology) for a small circle of interested people in his home country of Australia. He didn't expect it to go beyond a few issues.

Today, the bulletin, now highly acclaimed, reaches subscribers all over the world and is written, produced and disseminated more quickly than any other Shroud publication in the English language. It contains information, news, articles and illustrations gathered from sources of Shroud study worldwide through Rex Morgan's extensive network of personal connections with what has been described as the "Shroud Crowd".

Rex Morgan is a frequent traveller overseas which gives him the opportunity to keep abreast of latest developments in Shroud study and research at first hand. He was present at the world media preview of the Shroud itself in August 1978 in Turin, Italy and has met and knows numerous Shroud researchers in many countries. His quest for Shroud information became, as he described it, "a passionate hobby". He took the world famous Photographic Exhibition created by Brooks Institute, California, to Australia, New Zealand, Hong Kong, Macau, and Canada and during those tours it attracted more than 700,000 visitors. The exhibition was subsequently donated by Brooks to the non-profit making organisation, The South East Asia Research Centre for the Holy Shroud (SEARCH) of which Morgan is President. He is also a Board member of the US based Association of Scientists and Scholars International for the Shroud of Turin (ASSIST) and was a member of the scientific team which conducted environmental experiments in a Jerusalem tomb in 1986 (ESSJ). He has made a number of original contributions to Shroud research has presented major papers at international Shroud conferences has written numerous articles and has given hundreds of broadcasts and telecasts on the subject in many countries.

The list of Shroud News subscribers continues to increase internationally and it has been described many times as one of the best available. Shroud News comes out six times a year. Its production is obviously privately subsidised as we request a subscription in Australia of only $6 for six issues posted. The USA subscription is $12 (posted airmail - there is no longer any surface mail from Australia). Postage to other countries varies. ALL back issues are available for $1 (US or Aust) each plus postage. The famous 50th issue is $3 plus post. Customers should note that as it costs us $8 to negotiate each foreign cheque we request all payments be made in currency banknotes of your country or charge to Visa, Master or Amex cards.

All information and opinion in this private newsletter is published in good faith. It is edited by Rex Morgan and published by

THE RUNCIMAN PRESS, POB 86, MANLY, 2095, NSW, Australia
(24 hour Fax No: 61 - 2 - 982 9956)