

**The Shroud and the “Historical Jesus”
Challenging the Disciplinary Divide
By Simon J. Joseph, Ph.D.
© 2012**

The Shroud of Turin is virtually ignored in historical Jesus research. Why? In this paper, I will seek to provide an explanation for this curious lack of interest and examine ways in which historical Jesus research and Sindonology might complement each other. Since the 1988 radiocarbon dating test, there has been a general assumption, particularly within the scientific community, that the Shroud is of medieval origin.¹ The 1988 test results have largely been regarded as “decisive proof that the Turin Shroud is a forgery.”² Recent studies, however, indicate that those results are in need of reevaluation.³ This paper will identify a number of distinctive features of the Shroud that have yet to be explained and will correlate these features with historical Jesus research.

So why is the Shroud virtually ignored by historical Jesus scholars? The most obvious explanation for this apparent professional negligence is that most biblical scholars have concluded, no doubt as a result of the 1988 radiocarbon dating test, that the Shroud is a medieval forgery. John Dominic Crossan, for example—one of the world’s leading authorities on the historical Jesus—regards the Shroud as a “medieval relic-forgery” and wonders not whether it may be real or not, but “whether it was done from a crucified dead body or from a crucified living body. That is the rather horrible question once you accept it as a forgery.”⁴ Crossan also proposes that Jesus’ crucified body was not buried, but thrown in a common grave and eaten by dogs.⁵

The problem with this explanation, however, is that New Testament scholars were ignoring the Shroud long before the 1988 radiocarbon dating test. This is all the more puzzling in that the first photographic negative of the Shroud was produced in 1898, clearly revealing the ghostly body-image and blood stains of a crucified man. What was it about the Shroud and/or New Testament scholarship that could have justified this almost complete lack of interest and serious engagement for almost a century?⁶

Today, biblical scholars tend to ignore the Shroud since they are not trained in medicine, anatomy, spectrometry, botany, physics, ancient textiles, forensic pathology, image analysis, or art history. Biblical scholars are trained in ancient and modern research languages, historical criticism, literary criticism, and theology; they are not qualified to evaluate the research of experts in other highly specialized fields. Consequently, they prefer to withhold judgment on matters they cannot adjudicate, especially when there may be risk of professional embarrassment. This is also a question of authority: biblical scholars regard the “historical Jesus” as *their* research subject.

A third and undoubtedly the major reason why biblical scholars are not more engaged in Sindonology, is methodological constraint.⁷ Biblical studies, like all scientific fields of study, operates under the presupposition of methodological naturalism. Methodological naturalism assumes the non-existence of any supernatural or paranormal phenomena influencing historical events. Since the Enlightenment, the discipline of scientific history has emphasized objectivity, the critical use of historical sources, and a general assumption of naturalistic causation. Pre-modern approaches to writing history emphasized moral lessons, the non-critical use of sources, and a pre-critical acceptance of both natural and supernatural causative factors in historical processes. The “Quest for the

Historical Jesus” emerged during the Enlightenment as an attempt to question and challenge theological dogma and religious authority. The Gospels began to be seen as historical human products, not inerrant, “gospel truth,” and significant differences between the Jesus of the Church councils and creeds and the Jesus of history began to emerge. The Shroud of Turin, as a medieval Catholic relic displaying the image of the suffering, crucified, (and possibly resurrected) Jesus, did not seem to have very much to add to the Quest. Scientific historical method requires utilizing the *earliest* (textual) sources, since they tend to be the most reliable sources of information. In the case of the Shroud, the apparently late medieval Catholic provenance of the Shroud justified the largely Protestant enterprise of the historical Jesus quest in ignoring the Shroud in its scientific analyses of gospel sources, forms, and traditions. Today, most biblical scholars, whatever their personal faith-commitments and affiliations might be, do not rely on theological arguments—or medieval relics—to settle historical problems.

This creates special problems in Sindonological research, for while the Shroud is indeed a physical, archaeological artifact, it is also linked to faith-claims about the resurrection of Jesus. True, many New Testament scholars affirm the resurrection of Jesus; but many do not, and there is considerable debate whether the resurrection should even be regarded as an historical problem, i.e. an event in time and space. At the same time, the resurrection is intimately linked to theological claims about Jesus.

Early Christian faith revolved around a belief in Jesus’ resurrection.⁸ The resurrection provided the framework, motive, and much of the material for the composition of the Gospels, their editing, and proclamation.⁹ Yet the debate over the historicity of the resurrection illustrates how biblical scholarship is characterized by different methodological approaches, philosophical presuppositions, and theological commitments.¹⁰ Historical inquiry is governed by a naturalistic worldview that excludes God and the “miraculous.”¹¹ Yet this constraint also undermines our ability to understand a variety of phenomena not currently understood in scientific terms.¹² In any case, the scientific study of the Shroud, like the scientific study of the historical Jesus, does not *depend* on, and cannot prove, the historicity of the resurrection of Jesus.

Whose “Historical Jesus?”

The historical Jesus is not the Jesus of history. When Biblical scholars use the phrase—“the historical Jesus”—they do *not* mean the man, Jesus, who walked along the Sea of Galilee two thousand years ago. Rather, the phrase refers to Jesus *as he can be reconstructed with historical evidence*. Historians use a variety of criteria to determine what is plausible, possible, and probable evidence for the life of Jesus. Some scholars utilize a “framework of facts.”¹³ Others rely on certain sayings or deeds attributed to Jesus. Apologetically motivated scholars tend to maximize the historical correspondences between the Gospels and *their* historical Jesus. Liberal scholars tend to emphasize the differences. So the question among biblical scholars is not whether Jesus existed, but *whose* historical Jesus is the most accurate historical reconstruction?

The last twenty-five years have seen a veritable explosion of historical Jesus research.¹⁴ While many different models have been proposed—including Jesus the Galilean miracle-worker, the eschatological prophet, the “peasant Jewish Cynic,” and so

on—the most distinctive feature of this most recent Quest is an emphasis on the *Jewishness* of Jesus.¹⁵ This has resulted in more realistic appraisals of the social, political, and economic realities of life in first-century Judea than in previous periods of research.¹⁶ Biblical scholars now utilize the social sciences of far more in their work, and the Shroud can rightly be regarded as an *archaeological* artifact, a kind of “text” that can be read, analyzed, and “translated” into scientific language. Yet there continue to be questions regarding what *kind* of Jew Jesus was.¹⁷ We cannot just say that “Jesus was a Jew” and leave it at that. First-century Judaism was a diverse and internally conflicted tradition and Jesus is a complex figure.¹⁸ Nor can we simply say that Jesus was dissimilar to Judaism.¹⁹ Jesus challenged his Jewish contemporaries, but these were still *Jewish* disagreements.²⁰

This contemporary resurgence in Jesus Research coincided, in part, with the founding of the Jesus Seminar in 1985. The Jesus Seminar is infamous for their voting methods, their public profile, and, perhaps most problematically, for their rationalistic approach to Jesus. In contrast to the traditional portrait of the Churches, the Jesus Seminar sought to present to the public a “Scholars’ Jesus” without informing the public that *their* view of Jesus had little in common with other scholars’ views of Jesus. For example, according to the Jesus Seminar, which was co-founded by John Dominic Crossan, Jesus was not resurrected, was not a messianic figure, and did not perform any miracles. The severe skepticism of the Jesus Seminar is not supported by most biblical scholars.

None of the members of the Jesus Seminar deny that Jesus was crucified; they just have a hard time explaining *why*. Why would a teacher of *wisdom*, even subversive wisdom, be regarded as a threat to the state? Jesus’ crucifixion was the result of a Roman accusation of sedition: Jesus was crucified as a would-be “King of the Jews.” What this means is that a royal, i.e. a *messianic* charge lies behind his execution. The Shroud, of course, contains the image of a man who has been crucified and who apparently wore a “cap” of thorns, an unusual feature in Roman crucifixions. The Shroud, in other words, supports the Gospel accounts of Jesus being mocked and “crowned” as “king.”

But what *kind* of messianic figure was Jesus? According to many scholars, the Jewish messiah, i.e., the “anointed” king from the line of David, would overthrow Israel’s enemies, gather the lost tribes, restore the political throne, and inaugurate an age of universal peace. Jesus did not do any of these things. So was Jesus a *failed* messiah? This dissonance between Jesus and the traditional messianic portraits of a popular king has led many scholars to conclude that Jesus was not a messianic figure at all.

This leaves us with a serious problem. Jesus was executed as a would-be “King of the Jews,” but he does not seem to have intended to mount a political, let alone a military campaign against Rome. The Gospels clearly portray Jesus as the Davidic messiah, but each of the Evangelists has to work very hard to qualify Jesus’ failure to perform the expected messianic deeds and prove that he really was Israel’s messiah. Nonetheless, if there is one thing we do know about Jesus, it is that he was crucified. Similarly, the most obvious fact about the Shroud is that it contains the image of a crucified man.

One of the most interesting aspects of contemporary Jesus Research is our ability to utilize new sources from early Christianity. The Dead Sea Scrolls and the Nag Hammadi library, for example, have given scholars access to many ancient texts that are very useful in reconstructing Christian origins. This most recent phase in Jesus Research also focuses more on Jesus’ family, especially James, the “brother of Jesus,” and Mary Magdalene, who is featured in the *Gospel of Mary*. These first-century disciples of Jesus open a

window into the world of Jewish Christianity, that constituency of the Jesus movement which maintained (and combined) loyalty towards Jewish law with reverence for Jesus and who may or may not have been ethnically Jewish.²¹

Why is Jewish Christianity important? The most obvious reason is because Jesus was Jewish, his family was Jewish, and his first followers were Jewish. Yet these Jewish followers and family members, i.e., the *earliest* Christians, were marginalized by the largely non-Jewish, or Gentile, church-communities, and their traditions, gospels, records, genealogies, and family histories were lost, along with precious information about the early Jesus movement. Ultimately, Jewish Christians were declared heretics by the Church. What this means is that we have an incomplete account of the early years of the Jesus movement. The Gospels, after all, were all written between 40-70 years *after* Jesus' death. This absence in the historical record serves as a constant reminder that even though history is written by the winners, which in this case were Gentile Christians, the historical Jesus was a first-century Jew who must conform to the cultural and social contexts of first-century Judea.

Most of the ancient Jewish Christian texts, gospels, histories, and communities have disappeared, but there are enough surviving fragments preserved in the writings of the early Church Fathers that enable us to piece together a small part of the larger puzzle. One of these “lost gospels” is known as the *Gospel of the Hebrews*. We know it existed because a number of early Church Fathers quoted from it.²² The *Gospel of the Hebrews* mentions a “linen cloth” (sindonem) that *Jesus* gives to a “servant of the priest”:

Dominus autem cum dedisset sindonem servo sacerdotis,
ivit ad Iacobum et apparuit ei.

And when the Lord had given *the linen cloth* to the servant of the priest,
he went to James and appeared to him.²³

The *Gospel of the Hebrews* also tells us that Jesus' brother James, the leader of the Jerusalem community, was the first to see the risen Jesus. The *Gospel of the Hebrews* does not prove that Jesus gave the Shroud (of *Turin*) to Peter, nor does it establish the historicity of any “servant of the priest” receiving it.²⁴ But what the *Gospel of the Hebrews*—an early second-century Jewish Christian text—*does* tell us is that a “linen cloth” (sindonem) belonging to Jesus was associated with the Jerusalem community.²⁵

Most biblical scholars do not regard the *Gospel of the Hebrews* or the Shroud of Turin to be reliable data for reconstructing the historical Jesus, because the *Gospel of the Hebrews* seems to date from the second century, and the Shroud is commonly regarded as a medieval forgery. But if the Shroud of Turin could be identified as the original burial shroud of Jesus, it would revolutionize historical Jesus research. Unfortunately, biblical scholars have generally not kept up to date with Sindonological research, and recent studies indicate that a thorough reassessment of the Shroud is required. It is important, therefore, to briefly review what we now know about the Shroud.

(1) *The Shroud is not a painting.*

The most vocal proponent of the Shroud-as-painting-theory has been microscopist Walter McCrone. McCrone examined fibril samples from the Shroud and found minute traces of

both hematite (iron oxide), commonly used in the Middle Ages for red ochre, and mercuric sulphide, a constituent of vermilion paint. McCrone subsequently announced that an artist had painted the body-image by using iron oxide pigment (red iron earth pigment) with red vermilion added to the blood-mark areas suspended in a gelatin binding medium.²⁶ McCrone's critics admit that both iron oxide and mercury *have* been found, but the problem is that they are not found in sufficient quantities to form a visible image. On the other hand, iron oxide is also a component of blood and the only place where iron oxide is found on the Shroud is in the areas where blood is present.²⁷

Miniscule particles of rust (iron oxide) and mercuric sulphide can also be found in dust, particularly in churches and cathedrals with frescoed walls, ceilings and paintings. It is well known that numerous artists created replicas of the Shroud by placing their paintings directly onto the Shroud for consecration. The Shroud was also subject to fire, burned, and then doused with water in 1592. Any pigment, paint, or dye would have undergone chemical alterations as a result, yet no changes occurred in the color of the image-fibrils adjacent to the areas that were burned, nor did the water damage dissolve any pigments or make colors run. Whatever produced the image on the Shroud is insoluble in water and capable of sustaining fire and scorching.

Furthermore, no traces of paint-pigment or brush-strokes have ever been found on its surface, nor has anyone ever been able to explain how the image was made or duplicate it under controlled scientific conditions. The image, which is visible to the naked eye, was not painted on the surface of the linen. Even the highest magnifications of the Shroud reveal no particles or other solid matter that could have produced the image; each fiber appears to be separate from the next, with nothing binding it to its neighbor, which would *not* be the case if a binding agent, i.e. *paint*, had been used. The images are found only on the topmost fibrils of the linen's threads, whereas any paint, dye, pigment or liquid agent would have soaked the entire thread and matted the fibrils together. On the Shroud, each colored-image fibril is distinct from the next. The image itself is superficial while the blood-stains penetrate the cloth. It is inconceivable that any medieval artist would have been able to paint each individual image-fibril only on the topmost of the thread.²⁸

If the Shroud is a medieval forgery, then *who* created it? And *how*? No one has come forth with a scientifically satisfactory answer.²⁹ A medieval artist would have needed a thorough knowledge of "light negativity, light spectometry, microscopy, radiology, human physiology, pathology, hematology, endocrinology, forensics and archaeology" in order to create such a sophisticated image.³⁰ The Shroud-image is the result of a color-producing chemical change to particular areas of some of the cellulose fibers of the linen. This chemical change can be described as an oxidation, dehydration, and conjugation of the polysaccharide structure of the fibrils. The image is thus remarkably similar to a photographic negative, with darker and lighter tones producing details as a result of the density of the altered fibers, yet with the tones reversed.³¹

Ray Rogers has also argued that the image is a straw-yellow "discoloration" of a very thin starch layer which coated the outer fibrils, which is a by-product of how ancient linen was made. This "discoloration" is the result of a chemical change in the linen. More recently, Rogers has also argued that a "gum coating" was found on the Raes samples adjacent to the C-14 testing sample-area, but not anywhere else on the Shroud. According to Rogers, this indicates that the 1988 samples were taken from an anomalous area of the Shroud and were not representative of the entire Shroud.³²

(2) *The Shroud's image-formation process remains unknown.*

To date, scientists have been unable to explain how the image on the Shroud was created. It has long been suspected that some form of low-energy “radiation”—whether protons, alpha particles, long-wave X-rays, or ultraviolet rays—produced the image on the Shroud.³³ But whatever the mechanism was that created the image, it operated uniformly over the entire body and “encoded” the presence of different types of organic material, such as skin and hair. Furthermore, the image was formed in vertical, straight-line paths, “as if every pore and every hair of the body contained a microminiature laser.”³⁴ Yet unlike the blood areas, where blood has penetrated the fibrils and caused them to stick together, the body-image is superficial, and the individual image-threads are completely separated and unmatted. The body-image appears to have been created by the linen’s exposure to more radiation than the rest of the cloth. Furthermore, the light or radiation that created the image seems to have come directly *from the body*.³⁵ According to Rogers, the image may also have been formed by a natural mechanism in which chemicals from the body caused a “Maillard reaction,” changing the starch coating around the linen fibrils.³⁶

(3) *The Shroud contains real human blood and medically accurate bloodstains.*

An exhaustive series of tests have demonstrated the presence of genuine human blood on the Shroud.³⁷ Immunological, fluorescence, and spectrographic tests as well as Rh and ABO typing of blood antigens have confirmed that the stains are from Type AB human blood.³⁸ Furthermore, human DNA with both X and Y chromosomes are present in the samples.³⁹ The blood is from an adult human male. It also contains degraded DNA, which is characteristic of ancient DNA. Moreover, serum has been identified around blood flows on the Shroud, which indicates that blood coagulated while the man was in a vertical position.⁴⁰ Most of these blood flows occurred while the man was alive. On the other hand, post-mortem blood flows have a deeper color and a more viscous consistency.⁴¹ From the angles of the numerous flows and rivulets, forensic experts have determined that the blood flowed while the man was upright with his arms slightly raised. Many of the stains have the distinctive forensic mark of clotting with red corpuscles near the edge of the clot, and a clear yellow halo of blood serum. Some of the blood flows were venous and some arterial. Additional post-mortem blood flows have been detected running toward the heels and onto the cloth. The clots, the serum separations, the mingling of bodily fluids, and the directionality of the flows are impossible to recreate by brushing, daubing, or simply pouring human blood on the cloth. The blood is also rich in bilirubin, a bile pigment that the body produces under extreme trauma.

(4) *The Shroud exhibits features consistent with a Roman execution.*

The Shroud displays accurate anatomical and medical knowledge of crucifixion wounds unknown in the Middle Ages.⁴² Dozens of dumbbell-shaped welts and contusions indicate that the man had been repeatedly flogged with a whip of short leather thongs tipped with bits of lead, bronze, or bone which tore into flesh and muscle, an instrument identical to the ancient Roman *flagrum*. There are also numerous puncture-wounds on the

head, indicating that a *cap*, not a “crown” of thorns was placed on his head. The wound in the right chest also conforms to that which would have been produced by a thrust from a Roman lance.⁴³ Medical authorities who have studied the Shroud agree that the man died while on the cross and various indications of rigor mortis have been identified.

(5) *The Shroud may contain (Judean) pollen and calcium (limestone).*

In the 1970s, Max Frei obtained pollen samples from the Shroud.⁴⁴ A criminologist, botanist and expert in Mediterranean flora, Frei identified fifty-eight different pollen grains in his samples.⁴⁵ Sixteen of these were from plant species that do not grow in France or Italy. Frei also discovered pollen grains of seven different plants that grow among rocky hills, such as those around Jerusalem, but not in France or Italy. All of the non-European pollen species, except three, grow in Jerusalem.⁴⁶ Forty-five of the fifty-eight pollen samples identified are consistent with plants known to have existed in Jerusalem. This suggests that the Shroud originated, or had at least once been, in Jerusalem.⁴⁷ These findings have been confirmed in recent years by Avinoam Danin, a botanist at the Hebrew University of Jerusalem, Uri Baruch, a pollen specialist at the Israel Antiquities Authority, and Aharon Horowitz, Israel’s leading pollen analyst.⁴⁸

In addition, a fiber taken from the foot-area of the Shroud’s body-image was tested for calcium and was found to match the chemical composition of limestone found in Jerusalem, in particular the limestone found at the burial sites of the Church of the Holy Sepulcher and the Garden Tomb.⁴⁹ Textile experts have confirmed that the weave of the linen itself is consistent with a first-century date and there are numerous examples of even older linen having survived, especially in dryer climates like Egypt.

(6) *Evidence suggests that the Shroud is older than the fourteenth century.*

There is good reason to believe that the Shroud is older than the fourteenth-century. The Gospels themselves describe a linen cloth or “shroud” (σινδών) in which Jesus was lain.⁵⁰ Ian Wilson has also provided a cogent reconstruction of the Shroud’s whereabouts between the first and fourteenth centuries.⁵¹ Wilson argues that the Shroud, once known as the Mandylion, or Image of Edessa, was taken from Constantinople in 1204 and brought to France, where it remained hidden until its appearance in the 1350s. Wilson’s hypothesis is not without its critics,⁵² but a significant amount of medieval Christian art and iconography depicting Jesus does resemble the face of the man on the Shroud.⁵³ We must keep in mind that there were many forged relics, “shrouds,” and artistic reproductions of relics and that we have no way of verifying which particular relic was seen at any given time. We must also keep in mind that the Shroud—if it was known to have been the burial shroud of Jesus—would certainly have been carefully protected and perhaps even hidden by those who possessed it. There may even be clues to this hidden tradition in the seventh-century Greek *Acts of Thaddaeus*, where Jesus is reported to have

asked to wash himself, and a towel/cloth (τετραδιπλον) was given him, and when he had washed himself, he wiped his face with it, and his image (εικων) having been imprinted upon the linen (σινδών), he gave it to Ananias, saying ‘Give this, and take back this message, to him that sent thee: peace to thee and thy city!’

Here Jesus’s image or *εικων* is reported as miraculously appearing (during Jesus’ ministry) on a *σινδών* that is *τετράδιπλον*, i.e, a cloth “folded in four” or “folded four times.” Wilson argues that this is a description of the Shroud having been “folded” so as to display only the face of Jesus. This cloth—allegedly miraculously imprinted with the image of Jesus—was located in Edessa, a city known for its association with Thomas traditions, and that the earliest Thomas traditions seem to have originated within the Jerusalem community of James and Jesus’ family.⁵⁴ It may be that the existence of the Shroud—perhaps kept a close secret for fear of its loss, theft, or damage—precipitated the invention of the Abgar legend, i.e., the actual existence of a *τετράδιπλον/σινδών* was retrospectively projected onto Jesus’ ministry to explain the existence of the Shroud. This proposal is supported by the eighth-century John of Damascus, who claims that Jesus’ face was imprinted on a “large cloth,” the account of Evagrius Scholasticus, who reported that a miraculous image of Christ’s face was processed around the city of Edessa in 544, and the account of the Archdeacon of Constantinople in 944, Gregory Referendarius, who mentions that the “Image of Edessa” bore the “side wound” of Christ and was “not made by human hands” (*ἀχειροποίητος*).⁵⁵

In addition, the Hungarian “Pray” manuscript (or Pray Codex) in Budapest (ca. 1192) contains an illustration of the burial of Jesus which shows similarities to the Shroud of Turin. Jesus is depicted as naked, with his hands folded across his pelvis, with no visible thumbs, as in the Shroud. The burial shroud also seems to depict the Shroud’s distinctive herringbone pattern (or “ziz-zag” pattern) and the L-shaped “poker holes” which predate the 1532 fire. This may be evidence for dating the Shroud prior to the fourteenth century.⁵⁶ Furthermore, in 1211, Gervase of Tilbury writes how

The story is passed down from archives of ancient authority that the Lord prostrated himself with his entire body on whitest linen, and so by divine power there was impressed on the linen a most beautiful imprint of not only the face, but the entire body of the Lord.⁵⁷

In another manuscript dating to the early 1200s, the campaign memoirs of Robert de Clari, a French soldier who participated in the sack of Constantinople in 1204, describes his visit to the Church of St. Mary of Blachernae in 1203, claiming that this was

where there was the shroud in which Our Lord had been wrapped, which every Friday raised itself upright, so that one could see the figure of Our Lord on it.⁵⁸

The Shroud of Turin enters the historical record in the fourteenth century in a memorandum written by Pierre d’Arcis, the bishop of Troyes. In 1389, D’Arcis told Pope Clement VII that the previous bishop of Troyes claimed that an artist admitted to having “cunningly painted” the Shroud.⁵⁹ Yet d’Arcis fails to provide any information about the artist, let alone *how* the Shroud was so “cunningly painted.”⁶⁰

We cannot know for certain where the Shroud was before the mid-1300s, when it first appeared in France. It is perfectly plausible that Jesus’ burial shroud could have been collected and treasured by his earliest Jewish Christian disciples and transported—possibly in secret—by his Jewish Christian and Transjordanian followers. This “shroud” would then have left no clear record or trace in Western Christian history. In any case, it is the physical evidence of the Shroud itself—not its alleged absence in the historical

record—that should determine its standing in the scientific community as well as its relationship to the “real Jesus” of history.

(7) *The results of the 1988 radiocarbon testing are unreliable.*

The results of the 1988 test indicated that the Shroud was made between 1260 and 1390, but this contradicted much of the research conducted during the previous ten years of scientific analysis.⁶¹ Since 1988, however, the test itself has come into question.⁶²

A major problem with the 1988 test is that pre-established scientific protocols were not followed. The original protocol called for a blind test to be conducted with three different samples taken from three different locations of the Shroud to be tested by seven different labs. This would have guaranteed a range of tests to be performed on as wide a range of surface area of the Shroud as possible. Taking several different samples would have insured that the labs would arrive at reliable results. Instead, one piece of linen from one specific spot on the Shroud was divided into three smaller parts and sent to only three labs, none of which conducted a blind test. The problem with this failure to follow the original protocol is that since all three labs used the same cleaning technique, if the samples were contaminated, all three labs would have provided the same, wrong date.

Contamination is a common problem in radiocarbon dating and there have been numerous cases in which test results have been off by hundreds and even thousands of years due to both known and unknown contamination factors.⁶³ Carbon-dating tests are generally conducted under the assumption that the organic material to be dated has remained stable and its composition constant over time, but the Shroud has not been stable. In 1532, it was almost destroyed by fire and was drenched with water.⁶⁴

The most significant recent discovery is that the area of the Shroud from which the sample was taken came from a scorched area of the linen near a *medieval mending* that had also been subject to centuries of physical handling.⁶⁵ There is now compelling evidence that the sample tested was not representative of the main cloth, but contained major portions of an “invisible reweave” conducted in the sixteenth century. In 2005, American chemist Ray Rogers concluded that

the material from the radiocarbon area of the shroud is significantly different from that of the main cloth. The radiocarbon sample was thus not part of the original cloth and is invalid for determining the age of the shroud.⁶⁶

This new discovery suggests that the 1988 radiocarbon test results were scientifically accurate, but based on a test sample that was not representative of the Shroud.

Conclusion

The Shroud of Turin features an anatomically accurate imprint of the physical features of a crucified man who bears an uncanny resemblance to Jesus, both as described in the passion narratives of the Gospels and in medieval portraiture. There is no doubt that the Shroud contains real blood from an adult male wearing a cap of thorns who has been crucified, pierced with a Roman-style lance, and whipped with a Roman-style *flagrum*.⁶⁷

Jesus was a first-century Jewish teacher executed as a *messianic* figure; the Shroud preserves the image of a man crucified and *crowned* with thorns. This convergence of historical Jesus research and Sindonology not only promises to revolutionize historical Jesus research, it also requires that we re-examine our most basic assumptions about this mysterious man of the Shroud. Given the 1988 radiocarbon dating test's demonstrated unreliability, a new radiocarbon dating test is clearly in order. The scientifically established (first-century) authenticity of the Shroud would not be able to prove Jesus' divinity, virgin birth, or resurrection, but it would make significant contributions towards resolving numerous historical questions regarding Jesus' existence, physical appearance, and the general reliability of the gospel passion narratives of Jesus' death.

This re-discovery of the man, Jesus, *in and through the Shroud*, would bring us that much closer to fulfilling the goal of centuries, if not millennia, of questing for Jesus.

The "historical" Jesus, again, is not the "real" Jesus. The "historical" Jesus is an academic construct and different scholars interpret the historical data differently. The reason for this, of course, is that our primary sources—the Gospels and letters of the New Testament—are theological testaments of faith, not eyewitness accounts. Let us take, for example, John Meier's *A Marginal Jew*, a now four-volume work on the historical Jesus, to illustrate several problematic issues with this enterprise. First, it is important to note that John Meier is both a biblical scholar *and* a Catholic priest. Second, Meier, like many historians, identifies Jesus' resurrection as an event *beyond* historical reconstruction. This approach towards the central historical and theological affirmation of early Christianity is not "doing history" in the sense of trying to determine "what really happened," but rather applying methodological rationalism to the historical Jesus.⁶⁸

The Enlightenment ideal of scientific history, i.e., the claim that an historian could pursue a neutral, objective, or value-free interest in a subject has been repeatedly challenged in contemporary historiography.⁶⁹ Postmodern theory, in its emphasis on the social location, subjectivity, ideology, and interests of the inquiring subject, as well as the (re)constructed nature of the historical past, has put to rest the myth of the objective observer. After all, Fr. John Meier presumably affirms the resurrection of Jesus while maintaining that the historical Jesus was only a "marginal" Jewish prophet. The fact that Meier can hold both perspectives simultaneously signifies a methodological divide between history and theology. In other words, scientific history does not aim to reconstruct "what really happened" so much as it imposes upon history a rationalistic framework within which historical events are reconstructed. This is why Meier can reconstruct the historical Jesus while affirming conservative faith-commitments.

Meier, like most biblical scholars, does not regard the Shroud as evidence for the historical Jesus. This is not because Meier has publicly evaluated contemporary Sindonological research. Meier ignores the Shroud because an historical Jesus can be reconstructed (albeit in naturalistic terms) without the Shroud. For most historians, the question of whether the Shroud should be used as evidence for the historical Jesus can be answered with an emphatic *no*—at least until it can be definitively dated to the first-century and linked to Jesus of Nazareth. Clearly, this has not yet occurred.

History, however, deals with probability as well as certainty.⁷⁰ The discipline of history is as much an art as it is a science; consequently, as different lines of evidence converge with increasing explanatory power, hypotheses build force until they are regarded as viable theories. In this case, there are so many facts about the Shroud that

have yet to be adequately explained that it is becoming increasingly more difficult to maintain, let alone prove, that the Shroud is a medieval relic. If we examine the Shroud historically, we certainly must acknowledge its first appearance in the historical record, but we must also account for its creation and accurately describe the past event that gave rise to its image-formation and physical characteristics.

The Shroud represents the actual crucifixion of an adult human male. There are compelling parallels between the image and physical characteristics of the Shroud and the gospel accounts of Jesus' crucifixion. Methodologically speaking, a first-century dating of the Shroud—and/or its affirmation as the burial shroud of Jesus—does not require positing a “supernatural” explanation of its image. Yet the fact remains that the image of the Shroud can only be explained by positing a genuine Roman (or pseudo-Roman) crucifixion of an adult human male. Clearly, further scientific testing is in order, as there is sufficient evidence to suggest that the 1988 radiocarbon testing results are misleading and inconclusive. The physical characteristics of the Shroud are consistent with the gospel portrayals of Jesus; this suggests that we should begin to regard the Shroud not as an anomalous relic of medieval Catholicism, nor merely as potential evidence for the “historical” Jesus, but as the very key to reconstructing the “real” Jesus of history.

Notes

¹ See P. E. Damon, et al, “Radiocarbon Dating of the Shroud of Turin,” *Nature* 337/6208 (1988): 611-615. Walter C. McCrone, *Judgment Day for the Shroud of Turin* (Amherst: Prometheus Books, 1999). McCrone proposes a 1355 date, and that the image was painted with an artist's brush and “a very dilute red ochre paint” directly onto the Shroud-linen (288). See also Joe Nickell, *Inquest on the Shroud of Turin* (Buffalo: Prometheus Books, 1983).

² William Lane Craig, *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus* (SBEC 16; Lewiston: Edwin Mellen Press, 1989), 184. On the other hand, Craig admitted that “This discovery does not, it must be said, remove the mystery of the shroud; on the contrary, it deepens it.” See also Gary R. Habermas, *The Historical Jesus: Ancient Evidence for the Life of Christ* (4th ed.; 2000); “Historical Epistemology, Jesus' Resurrection, and the Shroud of Turin.” See also Ken Stevenson and Gary Habermas, *Verdict on the Shroud: Evidence for the Death and Resurrection of Jesus* (Ann Arbor: Servant Books, 1981); “The Shroud of Turin and its Significance for Biblical Studies,” *JETS* 24/1 (1981): 47-54; “The Shroud of Turin: A Rejoinder to Basinger and Basinger,” *JETS* 25.2 (1982): 219-227; Randall Basinger and David Basinger, “The Shroud of Turin and Apologetics: A Response to Gary Habermas,” *JETS* 25/2 (1982): 215-18.

³ See, for example, Ian Wilson, *The Blood and the Shroud: New Evidence That the World's Most Sacred Relic is Real* (New York: The Free Press, 1998); Mark Antonacci, *The Resurrection of the Shroud: New Scientific, Medical and Archaeological Evidence* (New York: M. Evans and Co., 2000); Leonard Garza-Valdez, *The DNA of God* (New York: Doubleday, 1999); John C. Iannone, *The Mystery of the Shroud of Turin: New Scientific Evidence* (New York: Alba House, 1998); Allan A. Mills, “Image Formation on The Shroud of Turin: the reactive oxygen intermediates hypothesis,” *Interdisciplinary Science Reviews* 20/4 (Dec. 1995): 319-326; Joseph A. Kohlbeck and Eugenia L. Nitowski, “New Evidence May Explain Image on Shroud of Turin,” *BAR* (Aug. 1986): p. 23; Kitty Little, “The Holy Shroud of Turin and the Mystery of the Resurrection,” *Christian Order* (Apr. 1994): 226; “The Formation of the Shroud's Body Image,” *British Society for the Turin Shroud Newsletter* 46 (Nov/Dec. 1997): 19-26; J. Rinaudo, “Protonic Model of Image Formation on the Shroud of Turin,” paper presented at the Third International Congress on the Shroud of Turin, Turin, Italy, June 5-7, 1998; “A Sign for Our Times,” *Shroud Sources Newsletter* (May/June 1996):

2-4. See also M. Moroni, F. Barbesino and M. Bettinelli, "Verification of a Hypothesis of Radiocarbon Rejuvenation," paper presented at the Third International Congress on the Shroud of Turin, Turin, Italy, June 5-7, 1998; M. Moroni, F. Barbesino and M. Bettinelli, "Possible Rejuvenation Modalities of the Radiocarbon Age of the Shroud of Turin," paper presented at the Shroud of Turin International Research Conference, Richmond, VA, June 18-20, 1999; Giulio Fanti and Roberto Maggiolo, "The double superficiality of the frontal image of the Turin Shroud," *Journal of Optics A: Pure and Applied Optics* 6 (June 2004): 491-503.

⁴ John Dominic Crossan, <http://www.beliefnet.com/Faiths/Christianity/2000/07/Your-Questions-To-John-Dominic-Crossan.aspx> [accessed December 31, 2011]. Crossan asks the rhetorical question that, even if the Shroud were authentic, and the last chapters of the Gospels were historically accurate, "Wouldn't the Shroud of Turin make those events understandable as exaltation, rather than resurrection? Exaltation means that Jesus (like Enoch, Moses, Elijah, etc.) was taken up to God as a special act of divine graciousness because of who he was. Resurrection is an apocalyptic concept which means not the destructive end of the material earth, but the transformative end of this unjust world. Christian faith in resurrection means that such a transformation began with Jesus. It also means we should be able to show that visibly and publicly to the world. Otherwise, we would have exaltation at best, but no resurrection."

⁵ Crossan, *The Historical Jesus; Jesus: A Revolutionary Biography*.

⁶ New Testament scholar Harold Attridge, Dean of Yale Divinity School, is reported to have said of the Shroud that "It could well be the burial cloth of Jesus – I wouldn't discount that possibility. . . . However this image was formed, it was formed in a way that's compatible with the ancient practice of crucifixion That's at least plausible . . . and the blood stains, for instance, are clearly not paint." http://www.cbsnews.com/8301-3445_162-57410982/controversial-new-theories-on-the-shroud-of-turin/ [accessed Sept. 20, 2012].

⁷ On historical method, see Martha Howell and Walter Prevenier, *From Reliable Sources: An Introduction to Historical Method* (Ithaca: Cornell University Press, 2001); Michael Crawford, ed., *Sources for Ancient History* (Cambridge: Cambridge University Press, 1983).

⁸ 1 Cor 15:14. Hugh Anderson, *Jesus and Christian Origins: A Commentary on Modern Viewpoints* (New York: Oxford University Press, 1964), 186.

⁹ PHEME PERKINS, "The Resurrection of Jesus of Nazareth," in *Studying the Historical Jesus: Evaluations of the State of Current Research* (eds. Bruce Chilton and Craig A. Evans; Leiden: Brill, 1994), 442.

¹⁰ The classic refutation of the possibility of miracles was made by David Hume in the eighteenth century. See David Hume, *An Enquiry concerning Human Understanding* (La Salle: Open Court Publishing, 1946), 21; Antony G.N. Flew, "Miracles and Methodology," in *Hume's Philosophy of Belief* (London: Routledge and Kegan Paul, 1961); "The Credentials of Revelation: Miracle and History," in *God and Philosophy* (New York: Dell, 1966); Gary R. Habermas and Antony G.N. Flew, *Did Jesus Rise From the Dead? The Resurrection Debate* (ed. Terry L. Miethe; New York: Harper & Row, 1987). For critiques of Hume, see C. S. Lewis, *Miracles* (New York: Macmillan, 1947); C.D. Broad, "Hume's Theory of the Credibility of Miracles," in *Human Understanding* (eds. A. Sesonske and N. Fleming; Belmont: Wadsworth, 1965), 86-98; Richard G. Swinburne, *The Concept of Miracle* (London: Macmillan, 1970); *Miracles* (London: Macmillan, 1989); David Basinger and Randall Basinger, *Philosophy and Miracle: The Contemporary Debate* (Lewiston: Edwin Mellen, 1986); Robert A. Larmer, *Water into Wine? An Investigation of the Concept of Miracle* (Kingston: McGill-Queen's University Press, 1988).

¹¹ Rudolf Bultmann, *Jesus Christ and Mythology* (New York: Scribner's, 1958), 15-16.

¹² For the resurrection as an historical problem for which evidence can be presented and competing hypotheses considered and tested, see Wolfhart Pannenberg, "The Revelation of God in Jesus of Nazareth," in *New Frontiers in Theology* (eds. James M. Robinson and John B. Cobb, Jr.; New York: Harper & Row,

1967), 128; William P. Alston, "Biblical Criticism and the Resurrection," in *The Resurrection: An Interdisciplinary Symposium on the Resurrection of Jesus* (eds. Stephen T. Davis, Daniel Kendall and Gerald O'Collins; New York: Oxford University Press, 1997), 154-55.

¹³ Sanders, *Jesus and Judaism*, 11.

¹⁴ Few professional biblical scholars claim that Jesus did not exist. N.T. Wright, *Jesus and the Victory of God* (Minneapolis: Fortress, 1996), xiv-xv, claims to have coined the term "Third Quest" to characterize the development of the eschatological prophet model, not as a catch-all term for all current study of Jesus. See Stephen Neill and Tom Wright, *The Interpretation of the New Testament 1861-1986* (2d ed.; Oxford, 1988). See also Marcus J. Borg, *Conflict, Holiness and Politics in the Teachings of Jesus* (New York: Edwin Mellen, 1984); *Jesus: A New Vision, Spirit, Culture and the Life of Discipleship* (New York: Harper San Francisco, 1987); Gerd Theissen & Annette Merz, *The Historical Jesus* (Philadelphia: Fortress, 1998); Bart D. Ehrman, *Jesus: Apocalyptic Prophet of the New Millennium* (New York: Oxford University Press, 1999); Charlotte Allen, *The Human Christ* (New York: Free Press, 1998); Mark Allan Powell, ed., *Jesus as a Figure in History* (Louisville: Westminster John Knox, 1998); Stephen J. Patterson, *The God of Jesus* (Harrisburg: Trinity International, 1999); W. Barnes Tatum, *In Quest of Jesus* (Nashville: Abingdon, 1999); Robert Funk, *Honest to Jesus: Jesus for a New Millennium* (New York: Harper San Francisco, 1996); John Dominic Crossan, *The Historical Jesus: The Life of a Mediterranean Jewish Peasant* (New York: Harper Collins, 1991); Dale C. Allison, Jr., *Jesus of Nazareth: Millenarian Prophet* (Minneapolis: Fortress, 1999); Bruce A. Chilton, *Rabbi Jesus: An Intimate Biography* (New York: Doubleday, 2000); E. P. Sanders, *Jesus and Judaism* (Philadelphia: Fortress, 1985); *The Historical Figure of Jesus* (London: Allen Lane, Penguin, 1993); Ben Witherington III, *The Jesus Quest* (Downer's Grove, Ill.: InterVarsity, 1995); J.P. Meier, "The Historical Jesus: Rethinking Some Concepts," *TS* 51 (1990): 3-24; *A Marginal Jew: Rethinking the Historical Jesus*, I, *The Roots of the Problem and the Person* (New York: Doubleday, 1991); *A Marginal Jew: Companions and Competitors*, III (New York: Doubleday, 2001); Paula Fredricksen, *Jesus of Nazareth, King of the Jews: A Jewish Life and the Emergence of Christianity* (New York: Alfred A. Knopf, 1999); Craig A. Evans, *Jesus and his Contemporaries: Comparative Studies* (Leiden: Brill, 1995); Richard A. Horsley, *Jesus and the Spiral of Violence: Popular Jewish Resistance in Roman Palestine* (San Francisco: Harper & Row, 1987); S. Freyne, *Galilee, Jesus and the Gospels: Literary Approaches and Historical Investigations* (Philadelphia: Fortress, 1988); James H. Charlesworth, *Jesus within Judaism* (ABRL; New York: Doubleday, 1988); William E. Arnal and Michel Desjardins, eds., *Whose Historical Jesus?* (SCJ 7; Waterloo: Wilfrid Laurier, 1997).

¹⁵ See Theissen and Merz, *Der historische Jesus* (Göttingen: Vandenhoeck & Ruprecht, 1996), 29; Wright, *Jesus and the Victory of God*, 119-20; Tom Holmén, "The Jewishness of Jesus in the 'Third Quest,'" in *Jesus, Mark and Q: The Teaching of Jesus and its Earliest Records* (JSNT Sup 214; Sheffield, 2001), 143-62; ed., *Jesus from Judaism to Christianity: Continuum Approaches to the Historical Jesus* (London: T & T Clark, 2007). In contrast to previous "Quests," recent research also draws from Jewish scholarship on Jesus. Joseph Klausner, *Jesus of Nazareth: His Life, Times, and Teaching* (London/New York: Macmillan, 1925; 3d ed., 1932); Joseph Salvador, *Jésus Christ et sa doctrine: histoire de la naissance de l'église, de son organization et de ses progrès pendant le premier siècle* (2 vols. Paris: A. Guyot et Scribe, 1838; 2d ed.; Paris: M. Lévy Frères, 1864-65); C. G. Montefiore, *The Synoptic Gospels: Edited with an Introduction and a Commentary* (3 vols.; London: Macmillan, 1909; 2d ed.; 2 vols. 1927; repr. New York: Ktav, 1968); Abraham Geiger, *Das Judentum und seine Geschichte in zwölf Vorlesung* (3 vols.; Breslau: Schletter, 1864; 2d ed.; 3 vols.; Breslau: Skutsch, 1865), 108-48; Hans-Joachim Schoeps, *Das Leben Jesu: Versuch einer historischen Darstellung* (Frankfurt: Eremiten, 1954); Asher Finkel, *The Pharisees and the Teacher of Nazareth* (AGSJU 4; Leiden: Brill, 1974); Shalom Ben-Chorin, *Brother Jesus: The Nazarene through Jewish Eyes* (Athens: University of Georgia, 2001); David Flusser, *Jesus in Selbstzeugnissen und Bilddokumenten* (Rowohlt's monographien; Renbek bei Hamburg: Rowohlt, 1968); Geza Vermes, *Jesus the Jew* (Philadelphia: Fortress, 1973); *Jesus and the World of Judaism* (London: SCM, 1983); *The Religion of Jesus the Jew* (London: SCM, 1993); *Jesus in His Jewish Context* (Minneapolis: Fortress, 2003).

¹⁶ Geza Vermes, *Jesus the Jew* (Philadelphia: Fortress, 1981); *The Gospel of Jesus the Jew: The Riddell Memorial Lectures Forty-Eighth Series Delivered at the University of Newcastle upon Tyne on 17, 18 and*

19 March 1981 (Newcastle upon Tyne: University of Newcastle upon Tyne, 1981); *Jesus and the World of Judaism* (Philadelphia: Fortress, 1984); *The Changing Faces of Jesus* (London: Allen Lane/Penguin, 2000); L. H. Schiffman, "The Jewishness of Jesus," in *Jews & Christians speak of Jesus* (ed. Arthur E. Zannoni; Minneapolis: Fortress, 1994), pp. 37-53; Alan F. Segal, "Jesus and First-Century Judaism," in *Jesus at 2000* (ed. Marcus J. Borg; Boulder: Westview Press/Harper Collins, 1997), 55-72; David Flusser, *Jesus* (New York: Herder and Herder, 1969); David Flusser, *Judaism and the Origins of Christianity* (New York: Adama Books, 1987); Joseph Klausner, *Jesus of Nazareth: His Life, Times and Teaching* (trans. Herbert Danby; London: Allen & Unwin, 1925). See also Daniel J. Harrington, "The Jewishness of Jesus: Facing Some Problems," *CBQ* 49 (1987): 1-13; Max Wilcox, "Jesus in the Light of his Jewish Environment," *ANRW II: Principat*, vol. 25: (eds. H. Temporini and W. Haase; Berlin/New York: Walter de Gruyter, 1982), 131-95; Donald A. Hagner, *The Jewish Reclamation of Jesus: An Analysis and Critique of Modern Jewish Study of Jesus* (Grand Rapids: Academie Books, 1984); Evans, *Jesus and his Contemporaries*; Philip S. Alexander, "Yeshu/Yeshua ben Yosef of Nazareth: Discovering the Jewish face of Jesus," in *The Birth of Jesus: Biblical and Theological Reflections* (ed. George J. Brooke; Edinburgh: T & T Clark, 2000), p. 13; B. J. Lee, *The Galilean Jewishness of Jesus: Retrieving the Jewish Origins of Christianity* (New York: Paulist, 1988); I. Zeitlin, *Jesus and the Judaism of his Time* (Cambridge: Polity, 1988); Bruce D. Chilton and C.A. Evans, eds., *Jesus in Context: Temple, Purity, and Restoration* (AGJU 39; Leiden: Brill, 1997).

¹⁷ Holmén, "The Jewishness of Jesus in the 'Third Quest,'" 156.

¹⁸ Ben Witherington III, *Jesus the Sage: The Pilgrimage of Wisdom* (Minneapolis: Fortress, 1994), 140-41: "Jesus was a much more complex figure than one sometimes imagines . . . The real challenge is to imagine a Jesus complex enough that room is made for all the dimensions of who he was, what he said, and the way he acted, as it is revealed in that material from the Gospels that is arguably authentic."

¹⁹ The "criterion of dissimilarity" posits that anomalous elements of the Jesus movement that cannot be found in mainstream Judaism or as part of the kerygma of the early church can be said to be derived from the historical Jesus. But see M. D. Hooker, "On Using the Wrong Tool," *Th* 75 (1972): 570-81; D. L. Mealand, "The Dissimilarity Test," *SJT* 31 (1978): 41-50; Sanders, *Jesus and Judaism*, 16-17, 252-55; R. T. Osborn, "The Christian Blasphemy: A Non-Jewish Jesus," in *Jews and Christians: Exploring the Past, Present, and Future* (ed. J.H. Charlesworth; New York: Crossroad, 1990), 211-38; Tom Holmén, "Doubts about Double Dissimilarity: Restructuring the Main Criterion of Jesus-of-History Research," in *Authenticating the Words of Jesus* (eds. B. D. Chilton and C. A. Evans; NTTTS 28.1; Leiden: Brill, 1999), 47-80. Wright posits that the best method is "double dissimilarity"—Jesus must both fit within Second Temple Judaism and stand out within that cultural matrix. For criticism of the traditional criteria, see *Jesus, Criteria, and the Demise of Authenticity: The 2012 Lincoln Christian University Conference* (eds. Chris Keith and Anthony Le Donne; New York: T & T Clark International, 2012),

²⁰ The Jesus Seminar has been criticized for allegedly undermining Jesus' Jewishness by portraying Jesus as a countercultural wisdom figure drawn primarily from parallels in Greco-Roman antiquity. See, for example, Luke Timothy Johnson, *The Real Jesus: The Misguided Quest for the Historical Jesus and the Truth of the Traditional Gospels* (New York: Harper San Francisco, 1996); Meier, *A Marginal Jew*; Michael J. Wilkins and James P. Moreland, eds., *Jesus under Fire* (Grand Rapids: Zondervan, 1995); Philip Jenkins, *Hidden Gospels: How the Search for Jesus Lost Its Way* (New York: Oxford University Press, 2001); Darrell L. Bock, "When the Jesus Seminar Meets Jesus under Fire: On Whose Side Does History Fall?," *Princeton Theological Review* 4 (1997): 3-8; Birger A. Pearson, "The Gospel According to the Jesus Seminar," *The Institute for Antiquity and Christianity, Occasional Papers* 35, Claremont, CA, 1996, 42, 20. See also James M. Robinson, "The History-of-Religions Taxonomy of Q: The Cynic Hypothesis," in *Gnosisforschung und Religionsgeschichte: Festschrift für Kurt Rudolph 65, Geburtstag* (eds. Holger Preißler and Hubert Seiwert; Marburg: Diagonal, 1994), 247-265; N. T. Wright, "Five Gospels But No Gospel: Jesus and the Seminar," in *Authenticating the Activities of Jesus*, (eds. B. Chilton and C. A. Evans; NTTTS 28. 2, Leiden: Brill, 1999), 83-120.

²¹ Oskar Skarsaune and Reidar Hvalvik, eds., *Jewish Believers in Jesus: The Early Centuries* (Peabody:

Hendrickson, 2007); Matt Jackson-McCabe, ed., *Jewish Christianity Reconsidered: Rethinking Ancient Groups and Texts* (Minneapolis: Fortress, 2007); Fr. Bellarmino Bagatti, *The Church from the Circumcision: History and Archaeology of the Judaeo-Christians* (trans. Fr. Eugene Hoade; O. F. M., Jerusalem: Franciscan, 1971); Jean Danielou, *The Theology of Jewish Christianity* (trans. John A. Baker, London: Darton, Longman & Todd, 1964); Martinus C. De Boer, 'The Nazoreans: Living at the Boundary of Judaism and Christianity,' in *Tolerance and Intolerance in Early Judaism and Christianity* (eds. G. N. Stanton and G. G. Stroumsa; Cambridge: Cambridge University Press, 1998), 239-62; F. J. A. Hort, *Judaistic Christianity* (London: Macmillan, 1904); Gerd Lüdemann, *Opposition to Paul in Jewish Christianity* (trans. M. Eugene Boring; Philadelphia: Fortress, 1989); R. Longenecker, *The Christology of Early Jewish Christianity: Studies in Biblical Theology* (Naperville: Allenson, 1970); F. Manns, *Essais sur le Judeo-Christianisme* (Jerusalem: Franciscan, 1977); Ray A. Pritz, *Nazarene Jewish Christianity* (Jerusalem: Magnes, 1988); Gilles Quispel, 'The Discussion of Judaic Christianity,' *VC* 22 (1968), 81-93; Hans-Joachim Schoeps, *Jewish Christianity: Factional Disputes in the Early Church* (trans. D. R. A. Hare; Fortress, 1969); *Theologie und Geschichte des Judenchristentums* (Tübingen: Mohr, 1956); Alan Segal, 'Jewish Christianity,' in *Eusebius, Christianity, and Judaism* (eds. H. W. Attridge and G. Hata; SPB 42; Leiden: Brill, 1992), 326-51; Marcel Simon, *Verus Israel: A Study of the Relations between Christians and Jews in the Roman Empire (AD 135-425)* (trans. H. McKeating; London: The Littman Library of Jewish Civilization, 1996); Georg Strecker, "On the Problem of Jewish Christianity," in *Orthodoxy and Heresy in Earliest Christianity* by Walter Bauer (2d ed; trans. Philadelphia Seminar on Christian Origins; eds. R. A. Kraft and G. Krodel; Philadelphia: Fortress, 1971), 241-85; *Das Judenchristentum in den Pseudoclementinen* (Berlin: Akademie, 1958); Joan E. Taylor, "The Phenomenon of Early Jewish-Christianity: Reality or Scholarly Invention," *VC* 44 (1990): 313-34; Peter J. Tomson and Doris Lambers-Petry, eds., *The Image of the Judaeo-Christians in Ancient Jewish and Christian Literature* (WUNT 158; Tübingen: Mohr, 2003).

²² Cyril of Jerusalem (*Discourse on Mary Theotokos* 12a; Origen, *Commentary on John* 2.12.87; Clement of Alexandria, *Stromateis* 2.9.45.5, 5.14.96.3; Jerome, *Commentary on Isaiah* 4, *Commentary on Ephesians* 3, *Commentary on Ezekiel* 6, *De Viris Illustribus* 2.

²³ Jerome, *De Viris Illustribus* 2.

²⁴ Diana Fulbright, "Did Jesus give his Shroud to 'the servant of Peter'?", a paper presented at the Proceedings of the International Workshop on the Scientific approach to the Acheiropietos Images, ENEA Frascati, Italy, 4-6 May 2010. Mario Erbetta, *Gli Apocrifi del Nuovo Testamento* (Marietti, Torino, 1975), 122, n. 4, proposes that the story in Hebrews relating the transfer of the linen cloth to the "servant of the priest" is a legendary elaboration of Matthew 27:65 ("Pilate said to them . . . you have a guard"), implying that the guard would have included a servant of the priest.

²⁵ The *Gospel of Thomas*, although sometimes held to be a second or third-century "Gnostic" text, is taken by the Jesus Seminar (and other scholars) to preserve sayings that go back to the very earliest Jesus traditions. For example, logion 12 refers explicitly to "James the Just," stating: "No matter where you are, you are to go to James the Just, for whose sake heaven and earth came into being." James, however, was murdered in 62 C. E., which strongly suggests that this saying should be dated to the first century. Some scholars also see *Thomas* as originating within Jewish Christian circles, and maintaining popularity within such circles, as well as among "heretical" groups like the Manichaeans (whose founder, Mani, may have once been a "Jewish Christian" Elchasaite). *Thomas* and *Hebrews*, like *Q*, place a heavy emphasis on Wisdom traditions, but they also exalt Jesus as the "Son." The sayings of Jesus in *Thomas* also repeatedly emphasize distinctive themes: the "kingdom," the "light," and the "image." According to *Thomas*, those who correctly interpret Jesus' sayings will not "taste death" (L. 1, 18). There are also a number of sayings which relate the seeker to the "Image" and the "Light" (L. 22, 24, 50). Many Shroud researchers have concluded that some kind of radiatory "light" generated the image on the Shroud from *within* (or *through*) the body. The *Thomas* traditions are associated with Edessa, which is where the Mandylion, the "Image of Edessa," was housed. Indeed, traditions about the "image" of God, the iconographic worship of Jesus, and *theosis*, have played a major role in Greek Orthodoxy. Eusebius, *Eccl. Hist.* 1.13.5-1.13.22), relates the Abgar legend. The first report of an actual "image" seems to have been in the Syriac *Doctrine of Addai*,

where Ananias *paints* a portrait of Jesus and brings it to Edessa. In 600 C. E., Evagrius Scholasticus (*Ecccl. Hist.*) notes that a portrait of Christ (θεότευκτος) came to Edessa's aid in 544 C. E. The image was then moved to Constantinople in the tenth century, disappearing in 1204. Ian Wilson refers to documents in the Vatican and the University of Leiden which seem to suggest the presence of another image at Edessa. Gino Zaninotto's discovery of Codex Vossianus Latinus Q 69 also seems to contain an eighth century C. E. account of an imprint of Christ's *whole* body left on a canvas in a church in Edessa. See Pietro Savio, *Richerche storiche sulla Santa Sindone* (Turin, 1957).

²⁶ McCrone, *Judgment Day for the Shroud of Turin*.

²⁷ Yet even if the discovery of iron oxide is not attributed to the blood on the Shroud, it would also have been a by-product of retting flax in iron-rich water in the production of linen.

²⁸ Scientists also discovered that three-dimensional data had been "encoded" into the image on the Shroud, meaning that precise measurements of the body could be calculated. The three-dimensionality of the body image was revealed in 1976 when scientists examined a photograph of the Shroud with a VP-8 Image Analyzer. This machine utilizes depth-perception and interprets radar-type data. See Peter M. Schumacher, "Photogrammetric Responses From the Shroud of Turin," paper presented at the 1999 Richmond Conference; www.shroud.com/pdfs/schumchr.pdf. According to Schumacher, the inventor of the VP-8 Image Analyzer, the Shroud contains "a three dimensional response unlike any other image" and "it is most unlikely that the Shroud of Turin is a work of fabrication, or 'trickery,' or 'forgery,' of any type. No method, no style, and no artistic skills, are known to exist, that can produce images that will induce the same photographic and photogrammetric results as the Shroud image induces."

²⁹ One of the more recent proposals is that the image may have been produced by the release of a gas molecule, singlet oxygen, similar to that released by plants pressed in between the pages of a book. See Allan A. Mills, "Image Formation on The Shroud of Turin: the reactive oxygen intermediates hypothesis," *Interdisciplinary Science Reviews* 20/4 (Dec. 1995): 319-326. See also Emily A. Craig and Randall R. Bresee, "Image Formation and the Shroud of Turin," *Journal of Imaging Science and Technology* 38/1 (1994): 59-67; www.shroud.com/pdfs/craig.pdf. According to Craig and Bresee, a "carbon dust dating technique" can explain the Shroud image being "painted" by a medieval artist with no visible brush strokes. However, this hypothesis is undermined by the fact that no observed microscopic, chemical or spectroscopic evidence exists for the presence of their required dry powder. Furthermore, they do not deal with the blood image problem nor the chemical changes in the cellulose of the linen.

³⁰ Antonacci, *The Resurrection of the Shroud*, p. 8.

³¹ See Isabel Piczek, "Why the Shroud of Turin Could Not Have Been the Work of a 'Clever Artist,'" private publication, Los Angeles, 1989; "Is The Shroud of Turin a Painting?," <http://www.shroud.com/piczek.htm> [accessed December 26, 2011]. See also Antonacci, *The Resurrection of the Shroud*, 47-59. Luigi Gariascelli, "Life-size Reproduction of the Shroud of Turin and its Image," *Journal of Imaging Science and Technology* 54/4 (July/August 2010): 040301- (14), claims that "a simple technique" can explain how the image "could have originated from the work of a medieval artist." He simply suggests, as have several others, that the image was produced by red ochre (iron oxide). But there is simply not *enough* iron oxide on the Shroud to be visible without a microscope. See Petrus Soons, "Petrus Soons Responds to Garlaschelli," paper presented at the Ohio Shroud Conference, August 2008, <http://www.shroud.com/pdfs/soonsresponse.pdf> [accessed December 26, 2011].

³² See Ray Rogers, "Pyrolysis/Mass Spectrometry Applied to the Shroud of Turin"; www.shroud.com/pdfs/rogers4.pdf.

³³ Wilson, *The Blood and the Shroud*, 5. The STURP scientists concluded that "it was some physical force that had in effect 'flashed' itself onto the cloth in a very precisely controlled manner." See August D. Accetta, Kenneth Lyons and John Jackson, "Nuclear Medicine and Its Relevance to the Shroud of Turin," a paper presented at the Sindone 2000 Shroud Conference, Orvieto, Italy, August, 2000;

www.shroud.com/pdfs/accett2.pdf. According to Accetta, the “radiation (or) . . . the nuclear medicine model is the best currently available to aid in our understanding of the Shroud image . . . resulted from an organized emission and/or organized collection of radiation from the body and/or cloth respectively.”

³⁴ John Heller, quoted in W. McDonald, “Science and the Shroud,” *The World and I* (Oct. 1986): 420-428, 426.

³⁵ Antonacci, *The Resurrection of the Shroud*, p. 214: “the fact that both the frontal and dorsal images are contained on the inside of it is an indication that the body wrapped within was the source of radiation.” Thomas Phillips, “Shroud Irradiated with Neutrons?,” Letter to the Editor, *Nature* 337 (1989): 594, suggested that “if the Shroud of Turin is in fact the burial cloth of Jesus . . . the body . . . may have radiated neutrons, which would have irradiated the Shroud and changed some of the nuclei to different isotopes by neutron capture.” More recently, two different controlled experiments, one conducted by J. Rinaudo, the other by M. Moroni, F. Barbesino and M. Bettinelli, demonstrated that radiation could alter the amount of C-14 in the Shroud, which would automatically provide inaccurate test results by as much as thirteen centuries. See J. Rinaudo, “Protonic Model of Image Formation on the Shroud of Turin,” a paper presented at the Third International Congress on the Shroud of Turin, Turin, Italy, June 5-7, 1998; See also “A Sign for Our Times,” *Shroud Sources Newsletter* (May/June 1996): 2-4; M. Moroni, F. Barbesino and M. Bettinelli, “Verification of a Hypothesis of Radiocarbon Rejuvenation,” a paper presented at the Third International Congress on the Shroud of Turin, Turin, Italy, June 5-7, 1998; M. Moroni, F. Barbesino and M. Bettinelli, “Possible Rejuvenation Modalities of the Radiocarbon Age of the Shroud of Turin,” a paper presented at the Shroud of Turin International Research Conference, Richmond, VA, June 18-20, 1999. K. Little, “The Formation of the Shroud’s Body Image,” *British Society for the Turin Shroud Newsletter*, 46 (Nov/Dec. 1997: 19-26; “The Holy Shroud of Turin and the Mystery of the Resurrection,” *Christian Order* (Apr. 1994), 226, points out that “An instantaneous disintegration of the nuclei of the atoms in the body would account for the formation of the image, detail by detail, and the good state of preservation of the linen in the Shroud. It would seem to be the only mechanism whereby the straw-yellow color could be produced.” This theory of image formation proposes that the body “dematerialized” in a sudden burst of “light,” creating a kind of photographic negative of the body contained within it (Wilson, *The Turin Shroud*, 211). Most recently, Paolo Di Lazzaro, Daniele Murra, Antonino Santoni, Giulio Fanti, Enrico Nichelatti, and Giuseppe Baldacchini, “Deep Ultraviolet Radiation Simulates the Turin Shroud Image,” *Journal of Imaging Science and Technology* 54/4 (2010): 040302-(6), present results of laser irradiation on raw linen, including a permanent yellow coloration of linen as a threshold effect of the laser beam, and a “submicrometer depth of coloration of the outermost part of the fibers.”

³⁶ Raymond Rogers and Anna Amoldi, “The Shroud of Turin: an amino-carbonyl reaction may explain the image formation” *Melanoidins in Food and Health* 4 (Office for Official Publications of the European Communities, Luxembourg, 2003), 106-113.

³⁷ These tests include the discovery of (1) high iron content in blood-stained areas detected by X-ray fluorescence tests; (2) spectral fingerprint of blood revealed by reflection spectra; (3) indications of blood from microspectrophotometric transmission spectra; (4) charismatic generation of porphyrin fluorescence disclosed by ultraviolet imaging; (5) positive hemochromagen tests; (6) positive cyanmethemoglobin tests; (7) positive detection of bile pigments; (8) positive demonstration of protein; (9) positive indication of human albumin in immunological tests; (10) positive results from protease tests; (11) forensic judgment; and (12) the matching appearance of microscopic Shroud samples with control fibers that contained blood.

³⁸ Pierluigi Baima-Bollone, Mario Jorio & Anna Lucia Massaro, “Identification of the Group of the Traces of Human Blood on the Shroud,” *Shroud Spectrum International* 6 (Mar. 1983), 3-6.

³⁹ *The Mysterious Man of the Shroud*, CBS documentary, April 1, 1997; Garza-Valdes, *The DNA of God?*, 41-42. The presence of DNA was also discovered in 1995 by Marcello Canale at Genoa’s Institute of Legal Medicine, Italy.

⁴⁰ Antonacci, *The Resurrection of the Shroud*, 30.

⁴¹ For example, the blood located in the chest wound area.

⁴² Medieval artists consistently portrayed Jesus' wounds in the wrists, not in the palms. It was not until 1931 that French surgeon Pierre Barbet discovered, solely through working with cadavers, that the palms could not possibly bear the weight of an adult human male. See Pierre Barbet, *The Passion of Our Lord Jesus Christ* (trans. Earl of Wicklow; Dublin: Clonmore & Reynolds, 1954).

⁴³ It would seem that the man was also delivered a piercing thrust to the right side of the chest. Both a heavy blood flow and traces of blood serum have been identified on the right side of the image and this has led many researchers to conclude that this wound corresponds to the scene in John's gospel (19:34) where a Roman soldier pierces Jesus' side with a lance. The medical explanation of the mysterious "blood and water" that reportedly came out of Jesus' side has been identified as hypovolemic shock caused by blood loss, a condition which would induce a sustained rapid heart-rate and a collection of fluid in the membrane around the heart, called a "pericardial effusion," as well as around the lungs, which is called a "pleural effusion." See Lee Strobel, *The Case for Christ: A Journalist's Personal Investigation of the Evidence for Jesus* (Grand Rapids: Harper Collins/Zondervan, 1998), 199.

⁴⁴ P. Maloney, "Modern Archaeology, History and Scientific Research on the Shroud of Turin," in *The Mystery of the Shroud of Turin: An Interdisciplinary Symposium*, video, Elizabethtown, Penn: Elizabethtown College, Feb. 15, 1986. Frei's method--taking dust samples from in between its threads with adhesive tape--has rightly been criticized by other researchers.

⁴⁵ See Max Frei, "Nine Years of Palinological Studies on the Shroud," *Shroud Spectrum International* 3 (June 1982): 3-7; Paul Maloney, "The Current State of Pollen Research and Prospects for the Future," a paper presented at the Paris *Symposium Scientifique International Sur le Linceul de Turin 7-8 September 1989*, 10.

⁴⁶ Of the three exceptions, one grows only in Constantinople and the other two in Edessa, Turkey, two locations which, many Sindonologists believe, once contained the Shroud. See Ian Wilson, *The Shroud of Turin* (London: Gollancz, 1978).

⁴⁷ In 1985, Dr. M. Whanger discovered flower images and botanical materials particular to Jerusalem on the Shroud, although they are allegedly visible only in high-resolution photographs. By 1989, Whanger had identified twenty-eight species of plants that grow in Israel, twenty-seven grow in the close vicinity of Jerusalem. See also M. Whanger and A. Whanger, *The Shroud of Turin: An Adventure of Discovery* (Franklin, Tenn: Providence House Publishers, 1998). See also Avinoam Danim, "The Origin of the Shroud of Turin From the Near East as Evidenced By Plant Images and By Pollen Grains," a paper presented at the 1998 Turin Symposium; www.shroud.com/danin2.htm; "Pressed Flowers: Where Did the Shroud of Turin Originate?: A Botanical Quest," *ERETZ* (1997).

⁴⁸ See Avinoam Danin, "Where Did the Shroud of Turin Originate? A Botanical Quest," *Eretz* (Nov./Dec. 1998) <http://www.shroud.com/danin.htm> [accessed February 12, 2012]; "The Origin of the Shroud of Turin from the Near East as Evidenced by Plant Images and by Pollen Grains," (1998): <http://www.shroud.com/danin2.htm> [accessed February 12, 2012]; Avinoam Danin and Uri Baruch, "Floristic Indicators For the Origins of the Shroud of Turin," <http://shroud.com/pdfs/daninx.pdf> [accessed February 12, 2012]; Aharon Horowitz, Israel's leading pollen analyst has also confirmed that the pollens establish that the Shroud has been in Israel. For a sampling of his pollen studies relative to Israel, see "Climatic and Vegetational Developments in North-eastern Israel during Upper Pleistocene—Holocene Times," *Pollen et Spores* 13 (1971): 255-278; "Preliminary Palynological Indications as to the Climate of Israel during the last 6000 years," *Palaeorient* 2 (1974): 407-414.

⁴⁹ For the discovery of "dirt" by the foot area of the Shroud-image, see John Heller, *Report on the Shroud of Turin* (Boston: Houghton & Mifflin, 1983), 112. Joseph Kohlbeck and Richard Levi-Setti examined these dirt particles taken from the Shroud and discovered that their chemical signatures matched Jerusalem

limestone. While this may not be taken as conclusive proof, it is significant that no other location containing limestone matching both the Shroud samples and those obtained from Jerusalem has yet been found. See Joseph A. Kohlbeck and Eugenia L. Nitowski, "New Evidence May Explain Image on Shroud of Turin," *BAR* (Aug. 1986), 23.

⁵⁰ The "linen cloth" (σινδών) mentioned in Mark (15:46), Matthew (27:59), and Luke (23:53) is a "shroud." Luke also refers to the linen cloths (τὰ ὀθόνια) (24:12), or linen "wrappings" used to bind the body (or chin-strap) together. John does not mention the σινδών, only the "linen wrappings" (οθόνια; 19:40; 20:5) and "face-cloth" (σουδάριον; 20:7). These details are not contradictory or incompatible. In the Gospels, the word σινδών is often translated as a full-length cloth or "shroud." Generally speaking, however, σινδών simply refers to a fine cloth, not necessarily linen, and not necessarily a burial shroud. Nonetheless, we cannot ignore the fact that the synoptic Gospels use σινδών in the context of Jesus' burial. In Mark 15:46, Jesus is wrapped in "fine linen" or "a linen shroud" (σινδών). Similarly, in Matthew 27:59, there is a reference to "a clean linen shroud" (σινδόνι καθαρᾷ).

⁵¹ Wilson, *The Blood and the Shroud*, 124-175.

⁵² Wilson recognizes that there is an almost 150-year gap between the disappearance of the Constantinople cloth and the appearance of the Turin Shroud and suggests that it was in the possession of the Knights Templar, whose leader was named Geoffroy de Charnay, a name remarkably similar to that of the Shroud's first owner, Geoffroy de Charny. For criticism, see Malcolm Barber, "The Templars and the Turin Shroud," *CHR* (April 1982), republished in *Shroud Spectrum International* (Mar. 1983), 16-34. Charles Freeman's *Holy Bones, Holy Dust, How relics Shaped the History of the Medieval World* (New Haven: Yale University Press, 2011), does not mention the Shroud, but he elsewhere criticizes Ian Wilson's theory that the Mandylion, or the Image of Edessa, is the Shroud of Turin, in an online article dated May 24, 2012:

http://cybercomputing.com/freeinquiry/skeptic/shroud/articles/freeman_shroud_edessa_misguided_journey/index.htm [accessed September 4, 2012]. On the other hand, Wilson's theory is regarded as "plausible" by medieval art historian Thomas de Wesselow, *The Sign: The Shroud of Turin and the Secret of the Resurrection* (London: Viking, 2012), 192. See also de Wesselow's response to Freeman's review, and his defense of Wilson's Mandylion/Shroud theory:

<http://thesignbook.wordpress.com/responses/> [accessed September 4, 2012]

and an additional post, "Tetradiplon Revisited,"

http://cybercomputing.com/freeinquiry/skeptic/shroud/articles/freeman_tetradiplon_revisited/index.htm

[accessed September 6, 2012]. Freeman is a secular humanist and predisposed towards seeing the Shroud as inauthentic, but his law and masters' degrees in *African* history and applied research do not make him a *trained* historian of early Christianity. Similarly, Shroud-blogger Yannick Clément, with obvious infelicities in English grammar, punctuation, spelling, and an obvious lack of familiarity with scholarly form and tone (e.g., the "shouting" in all caps, the use of multiple exclamation points, belligerent tone, etc.), challenges Ian Wilson's theory:

http://shroudofturin.files.wordpress.com/2012/06/clc3a9ment_questions-about-the-mandylion-hypothesis-of-wilson_2012-06-28.pdf [accessed September 6, 2012].

⁵³ Wilson argues that the Shroud was given to King Abgar of Edessa and displayed above the town gates. After King Abgar died, his son, reverting to paganism, began persecuting the early Christian community and the Shroud was hidden for the next five hundred years. It was then re-discovered in the sixth century. The Shroud became known as the "Mandylion" and was brought out for public celebrations on holy days. Wilson proposes that the Shroud was kept folded in a frame, so that only the head was visible.

⁵⁴ See L. 12 and April D. DeConick, *Recovering the Original Gospel of Thomas*.

⁵⁵ An eleventh-century Greek manuscript recently discovered in the Vatican Archives contains a sermon made by the archdeacon of Hagia Sophia in Constantinople on the occasion of the arrival of the Image of Edessa in 944 C. E. For the original Greek, see André-Marie Dubarle, *Revue des Etudes Byzantines* 55 (1997): 5-51. For an online English translation of the sermon, see Mark Guscini, "The Sermon of Gregory

Referendarius,” January 2004; www.shroud.com/pdfs/guscini3.pdf. See also Daniel C. Scavone, “Greek Epitaphioi and Other Evidence for the Shroud in Constantinople up to 1204,” a paper presented at the Richmond Conference, 1999, www.shroud.com/pdfs/scavone.pdf

⁵⁶ The figure in the Pray Codex does not have a beard or mustache. Moreover, the shroud depicted in the codex seems much smaller than the fourteen-foot long Shroud of Turin.

⁵⁷ Gervase of Tilbury, *Otia Imperialia*, III, from *Scriptores rerum brunsvicensium* (ed. G. Liebnitz; Hanover, 1707), I, 966-967; cited in Wilson, *The Blood and the Shroud*, 139.

⁵⁸ The Royal Library, Copenhagen, Denmark, MS 487, folio 123; See Philippe Laver, *La conquete de Constantinople* (Paris, Classiques francais du moyen age, 1924), 40, rep. 1956; See also Edgar H. McNeal, *The Conquest of Constantinople, translated from the Old French* (CURC 23; New York, 1936), cited in Wilson, *The Blood and the Shroud*, 124.

⁵⁹ Paris, Bibliothèque Nationale, Collection de Champagne, vol. 154, folio 138.

⁶⁰ It seems most likely that D’Arcis was jealous of the pilgrimage revenues that the Shroud was earning in Lirey, only twelve miles away from Troyes, and was eager to claim the Shroud for himself or reject its authenticity if he couldn’t.

⁶¹ William Meacham, “The Authentication of the Turin Shroud: An Issue in Archaeological Epistemology,” *Current Anthropology* 24/3 (1983); see www.shroud.com/meacham2.htm; Jack Kilmon, “The Shroud of Turin: Genuine Artifact or Manufactured Relic?” *The Glyph (Journal of the Archaeological Institute of America)* 1/10 (Sep. 1997); no. 11 (Dec. 1977); no. 12 (Mar 1988); see www.historiannet/shroud.htm. See also Craig, *Assessing the New Testament Evidence*, 180-181. Even though the extensive scientific research conducted on the Shroud had not succeeded in establishing it as a medieval painting or photograph, Craig points out that it is natural that a common “initial reaction to the shroud is skepticism.”

⁶² Harry E. Gove, *Relic, Icon or Hoax?: Carbon Dating the Turin Shroud* (Bristol/Philadelphia: Institute of Physics Publishing, 1996). In his 1996 book Gove reveals how opposed he was to the STURP scientists who had conducted the 1978 tests. In fact, he makes it clear that he wanted nothing to do with them and played a major role in preventing their participating in the 1988 tests. For challenges to the results of the 1988 testing, see Daniel Scavone, “Objections to the Shroud’s Authenticity: The Radiocarbon Date,” Texas Medieval Association, 1993; www.shroud.com/pdfs/craig.pdf; Remi Van Haelst, “Radiocarbon Dating the Shroud of Turin: A Critical Statistic Analysis”; www.shroud.com/vanhels3.htm; “Radiocarbon Dating the Shroud of Turin: The Nature Report”; www.shroud.com/vanhaels5.pdf.

⁶³ Antonacci, *The Resurrection of the Shroud*, 184-185; Wilson, *The Blood and the Shroud*, 192-194.

⁶⁴ Austin Long, “Attempt to Affect the Apparent C14 Age of Cotton by Scorching in a CO2 Environment,” *Radiocarbon* 40/1-2 (1998). In 1996, Dr. Leonard Garza-Valdes of the University of Texas Health Science Center reported that the Shroud tests could also have been influenced by atmospheric and environmental conditions (Garza-Valdes, *The DNA of God*). Garza-Valdes claimed that a microscopic layer of bacteria and fungi on the Shroud, an invisible layer or organic bacteria which forms over time on all ancient textiles to produce a “bioplastic coating,” could have contaminated the samples used in the 1988 test and affected the dating. The physical existence of this alleged “coating,” however, has not been confirmed. Alternatively, Russian biochemist Dmitri Kouznetsov has argued that the Shroud’s exposure to extreme temperatures during the 1592 fire may have increased the carbon atoms in the Shroud, perhaps also resulting in a later date being given, although Kouznetsov’s hypothesis has largely been discredited by Wilson. See Andrei A. Ivanov and Dmitri A. Kouznetsov, “Biophysical correction to the old textile radiocarbon-dating results,” *L’Identification Scientifique de l’Homme du Linceul* (June, 1993): 229-235; Dmitri A. Kouznetsov, Andrei A. Ivanov and Pavel R. Veletsky, “Effects of fires and biofraction of carbon isotopes on results of radiocarbon dating of old textiles: The Shroud of Turin,” *Journal of Archaeological Science* 22 (1995). On the other hand, see A. J. T. Jull, D. J. Donahue and P. E. Damon, “Factors affecting

the apparent radiocarbon age of textiles: a comment on effects of fires and biofractionation of carbon isotopes on results of radiocarbon dating of old textiles: The Shroud of Turin,” by D. A. Kouznetsov, et al, *Journal of Archaeological Science* 1 (1996): 157-160. While Kouznetsov’s hypothesis caused a stir in Shroud-circles, his experiments have never been successfully duplicated by any independent scientists. See Wilson, *The Blood and the Shroud*, 222. For another study on how the fire of 1592 may have increased the amount of C-14 atoms present in the linen, see Bryan Walsh, “The 1988 Radiocarbon Dating Reconsidered,” a paper presented at the 1999 Richmond Conference (<http://members.aol.com/turin99/radiocarbon-a.htm>).

⁶⁵ See Alan Adler and Alan & Mary Whanger, “Concerning the Side Strip on the Shroud of Turin,” May, 1997 Nice Symposium, Nice France, *Actes Du III Symposium Scientifique International Du CIELT—Nice, 12-13 May*, 103-105; www.shroud.com/adler2.htm. Here Adler contends that the samples taken from the 1988 C-14 test may have been taken from a part of the cloth that was re woven in medieval times. See also “Radiological Aspects of the Shroud of Turin,” paper presented at the Third International Dallas Conference, September 2005, <http://www.shroud.com/pdfs/whanger.pdf> [accessed December 26, 2011]. See especially Joseph G. Marino and M. Sue Benford, “Evidence For the Skewing of the C-14 Dating of the Shroud of Turin Due to Repairs,” “Sindone 2000,” Orvieto Worldwide Congress, August 28, 2000, Orvieto, Italy; see www.shroud.com/pdfs/marben/pdf; “Historical Support of a 16th Century Restoration in the Shroud C-14 Sample Area,” August 2002, www.shroud.com/pdfs/histsupt.pdf; “Textile Evidence Supports Skewed Radiocarbon Date of Shroud of Turin,” August 2002; www.shroud.com/pdfs/textevid.pdf; M. Sue Benford & Joseph G. Marino, “New Historical Evidence Explaining the ‘Invisible Patch’ in the 1988 C-14 Sample Area of the Turin Shroud,” paper presented at the Third International Dallas Conference, <http://www.shroud.com/pdfs/benfordmarino.pdf> [accessed December 26, 2011]; M. Benford & J. Marino, “Discrepancies in the Radiocarbon Dating Area of the Turin Shroud,” *Chemistry Today* 26.4 (July/Aug. 2008): 4-12, proposing a 67/33% ratio of newer and original materials. Joseph G. Marino and Edwin J. Prior, “Chronological History of the Evidence for the Anomalous Nature of the C-14 Sample Area of the Shroud of Turin,” <http://www.shroud.com/pdfs/chronology.pdf> [accessed December 26, 2011].

⁶⁶ Ray Rogers, “Studies on the radiocarbon sample from the shroud of turin,” *Thermochimica Acta* 425/1-2 (Jan. 2005): 189-94, esp. 190-93 [<http://www.metalog.org/files/shroud/C14.pdf>] [accessed December 26, 2011]. See also “Unwrapping the Shroud: New Evidence,” Discovery Channel, (Dec. 2008). See also John L. Brown, “Microscopical Investigation of Selected Raes Threads from the Shroud of Turin,” (2005), 2; Robert Villarreal with Barrie Schwartz and S. Benford, “Analytical Results on Threads Taken from the Raes Sampling Area (Corner) of the Shroud,” paper presented at The Shroud of Turin: Perspectives on a Multifaceted Enigma, Columbus, Ohio, August, 2008; Thibault Heimburger, “Cotton in Raes/Radiocarbon Threads: The Example of Raes #7,” (2009) accessed December 26, 2011 [<http://www.shroud.com/pdfs/thibaultr7part1.pdf>]; G. Fanti, F. Crosilla, M. Riani, and A.C. Atkinson, “A Robust statistical analysis of the 1988 Turin Shroud radiocarbon analysis,” Proceedings of the IWSAI, ENEA, 2010. But see Mechthild Flury-Lemberg, “The Invisible Mending of the Shroud, the Theory and the Reality,” paper presented at the II International Congress on the Sudarium of Oviedo, Oviedo, Spain, April 13-15, 2007, <http://www.shroud.com/pdfs/n65part5.pdf> [accessed December 26, 2011].

⁶⁷ The depicted method of burial, with the hands clasped and covering the genitals, is also consistent with the Essenes buried in the cemetery at Qumran. See Roland de Vaux, “Fouille au Khirbet Qumran,” *RB* 60 (1953): 83-106.

⁶⁸ Robert L. Webb, “The Historical Enterprise and Historical Jesus Research,” in *Key Events in the Life of the Historical Jesus: A Collaborative Exploration of Context and Coherence* (eds. Darrell L. Bock and Robert L. Webb; Grand Rapids: Eedrmans, 2010), 16. Webb argues that this is not “a bifurcation and separation of history and theology; rather, the point is that history has narrow and specific limits” (47).

⁶⁹ For surveys, see Michael Bentley, *Modern Historiography: An Introduction* (London: Routledge, 1999); Joyce Appleby, et al., *Telling the Truth About History* (New York: W. W. Norton, 1994); Georg G. Iggers, *Historiography in the Twentieth Century: From Scientific Objectivity to Postmodern Challenge – with a*

New Epilogue by the Author (2 ed.; Middletown: Wesleyan University Press, 2005).

⁷⁰ Meier, *A Marginal Jew: The Roots of the Problem*, 167. See especially Gerd Theissen and Dagmar Winter, *The Quest for the Plausible Jesus: The Question of Criteria* (trans. M. Eugene Boring; Louisville: Westminster John Knox Press, 2002).