Denying, Doubting, Believing, and Knowing – Can We KNOW the Identity of the Man in the Shroud?

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Abstract

The Shroud of Turin has long been a source of controversy, particularly concerning the identity of the man imaged on the Shroud. Many researchers claim that the image is that of Jesus of Nazareth, born circa 4 BCE. Others state that the image cannot be that of Jesus of Nazareth. The major disagreement is heightened by the proclamations of Christianity that Jesus of Nazareth is God. On the other hand, atheists proclaim there is no such entity as God. Because of this the issue has become inflamed and the criteria for reaching reasonable conclusions can become skewed. This paper deals with the concept of knowing versus proving and examines past and present similar conflicts between Faith versus Science and relates those conflicts to the study of the Shroud of Turin.

Keywords: Turin Shroud, Faith and Science

Part I: INTRODUCTION

The Shroud of Turin (TS) is an internationally known linen measuring about 4.4 meters by 1.1 meters upon which a faint image of a crucified man, both dorsal and ventral, is seen. The image itself has been made in a totally unique manner. The uniqueness of the image will be discussed later. As there is no known natural method nor modern day technological method which can create the image, the TS has piqued the interest of many experts in the fields of art and textiles. Because the image also mirrors the description of the passion and crucifixion of Jesus of Nazareth as recorded in Christian scriptures, the interest of religious scholars is doubly piqued or more. As a result, this linen has been investigated far more than any other such cloth or image in the world. Great controversy has arisen about the TS specifically about the person who is imaged and the meaning of this cloth. The disagreements unfortunately have often obscured the scientific studies of TS.

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It is clear to most observers that the reason for the great interest in the TS is not because it is an ancient cloth, nor because it is an unusual form of art (if it is art), nor because it is a glimpse of the cruelty of Roman crucifixions. The reason is not even because it might be an image of the body of Jesus of Nazareth. This goes much deeper. The real reason is the implication that the beliefs of Christianity are true, that there was a resurrection, there is a transcendent side of life, and there exists a God. Without this context, there would be relatively few studies of the TS. And studies there have been. Those who have followed the research are well aware that the image cannot have been made by man as there is no natural mechanism for it to happen, and even modern science now can only make a poor shroud-like image. Yet there are those who cannot accept the possibility of a transcendent cause making the image on the TS, even if it is the only known possibility at this point. This is a bias, and biases distort reality resulting in "what's true for me" and not "What is true". Biases must be eliminated if one is to find Truth. Should science study the TS. Yes, for the formation of the image is a physical event. Should religion investigate the TS. Yes, because, whether art or not, the TS conveys Spiritual meaning as to the suffering, death, and, perhaps, even the Resurrection of Jesus of Nazareth.

PART II: SIMILAR FAITH/SCIENCE CONFLICTS

In the common vernacular, this is not society's first rodeo. We have had other Faith/Science apparent conflicts. All are conflicts between transcendence and materialism. Many in the scientific community disregard any theory which includes a concept outside of materialism. But true science evaluates all evidence, even if it contradicts long-held personal beliefs. This conflict has happened numerous times in the past. Hopefully, we can learn from our past. Relevant conflicts have included:

- **Origin of the Universe**[1]
    - Big Bang versus Steady State
    - Evolution vs 6 Day Creationism

[1] Keys, David J, *Discovering the Fullness of Reality,* p.21-42 En Router Books and Media, St Louis, MO (2021)

- **Fine Tuning** of the laws of Physics and Cosmic Evolution[2]
    - Random vs Intentional
    - Cosmological constant (expansion) - Must be exact to within 1 in 10^{120}
    - Multiverse versus Single Universe
- **Origin of Life**[3]
- **Intelligent Design**
- **Near Death Experiences**[4]
- **Differentiation of mind and the brain**[5],[6] – Conscience/creativity/consciousness
- **Reality as a Computer Simulation**

Origin of Universe

Almost from the beginning, Man has queried the existence of God and the Origin of man and the Universe. Initially, having no science but great spirituality, man reasoned that there must a reason why the world is as it is. They made up various gods to perform all the Nature functions, whether that be rain, fertility, harvest, etc. As science began to develop, the early scientists saw science as a method to see how God got things done. Eventually, with the "Enlightenment" many no longer saw a need for a transcendent being. Instead God didn't exist but the Universe always existed. Then in 1927, Fr Georges Lemaitre proposed that the Universe is expanding. Therefore, looking back in time, the Universe at one point was a singularity and came into being with a large explosion – out of nothing. This sounded too much like the scriptural story of Genesis and Fr. Lemaitre was at first ridiculed by other physicists. Albert Einstein even told Lemaitre that he was a fine mathematician, but his physics was atrocious. Edwin Hubble, just two years later in 1929, however, showed that the Universe was indeed expanding.

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[2] Keys, David J, ibid., p. 43-73
[3] Keys, David J, ibid., p. 75-106
[4] Keys, David J, ibid., p. 137-160
[5] Keys, David J, ibid., p. 161-175
[6] Egnor, Michael "Is the Soul Real - neuroscientist explains", https://youtu.be/41bIJ7hYbLs?si=VU85vl0GABNWRV9

Except for a small percentage of Christian Churches, most now understand that the Genesis use of the Hebrew term “Yom” for days (or even as eons) was meant to convey truth in a manner that ancient man would understand and is not meant to be literalist. It simply indicates an intentional period of time. In spite of Hubble’s evidence that the Universe was expanding, Sir Fred Hoyle and other physicists continued to promote the Steady State theory, and still derided the Lemaitre’s theory, calling it the “Big Bang”— a name which stuck. Today, science and faith can both describe the origin of the Universe without contradiction by recognizing that different questions are being asked. Science attempts to describe the WHAT and the HOW. Faith is less concerned about the WHAT and the HOW, but only insists that God is the cause. Faith with its transcendent nature can readily describe the WHO and the WHY. On the other hand, Science cannot explain HOW or the WHY it happened. Science, can only try to explain what happened after the Universe began. This is true also of the TS. Science is concerned with the WHAT and HOW, while Faith is concerned with the WHO and the WHY.

Fine-Tuning

Tremendous effort went into the development of theories describing the initial growth of the Universe during the earliest days after the Big Bang, but a problem soon arose. Sir Fred Hoyle, in his attempt to explain the abundance of Carbon in the universe, realized a very special condition must be present to explain the overabundance of Carbon. He then predicted that there must be in existence of what is now called the Hoyle state— a specific, short-lived, excited energy level of the carbon-12 nucleus, which was crucial for the creation of carbon from three helium nuclei (2 protons and 2 neutrons) inside stars through the triple-alpha process. When this was discovered to be true, Hoyle realized that the absorption process was so fine-tuned that Hoyle was forced to decry, “A super intellect has monkeyed with physics, as well as chemistry.” Hoyle was admitting the existence of a higher being who designed the Laws of the Universe. Despite this, Hoyle could not overcome his bias against a transcendence to physical existence and remained an atheist with an unsolved problem.

Fine-tuning would not go away, however, and by the 1960’s papers were being generated which showed the extreme fine-tuning of the Gravitational Constant, Electrical constant, masses of protons versus electrons, cosmological constant

(specifies rate of expansion of the Universe), and many more physics constants. For instance, it has been stated that the cosmological constant[7] must be exact within 1 part in 10^{120}. This ratio is so small, it is difficult for the mind to understand the extreme smallness required. There is no known reason why our Universe just happened to be so "LUCKY".

In addition, even our very own solar system seems to be fine-tuned. There are over 200 conditions which have to be met in order to have life on our planet, conditions such as the perfect size of our sun, the perfect mass ratio between the earth and the sun, the perfect distance of the earth to the sun, the perfect tilt of the earth, the presence of land and water, the shifting of tectonic plates, the presence of magnetic N and S poles, the presence of Jupiter to help sweep away cosmic debris from the earth, etc. While there are many planets in the Universe, we have yet to find any that meet all the necessary conditions.

In response to being "LUCKY", some scientists propose that there must have 10^{28} universes or more, so statistically we would not appear so "LUCKY". As of yet, we have not been able to detect even ONE universe besides ours (except for mathematical, theoretical universes). While it is OK to propose the possibility that such extreme luckiness may exist, one should also be able to propose a transcendent existence beyond our universes controlling our Universe and our existence.

Origin of Life

Ancient man with their polytheistic gods proposed many methods for the origin of life including man. Monotheistic religions propose there is but one transcendent God who intentionally created life in the Universe by, essentially, instilling a life force into physical material (a soul —mortal or immortal). Science has tried all kinds of means to generate life from inorganic material. All science attempts have been unsuccessful. Currently, science is reduced to make use of the concept that life somehow began, and at some point, one or more cells became alive. The name for this (these) common pre-existent single cell is LUCA—the Last Universal Common Ancestor. Again, as with the origin of the Universe and the TS, the study of the origin of Life can only proceed with an existent physical object.

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[7] Barnes, Luke *The Fine-Tuning of the Universe for Intelligent Life, Publications of the Astronomical Society of Australia, 29(4), 529-564*

Why is there such a problem? One of the great holdbacks on developing a model of the first living cell has been shown to us by Science itself. Modern science itself has demonstrated that there is a transcendent, non-physical side to life. The study of DNA has shown that DNA contains all of the INFORMATION necessary for a cell's existence—how to metabolize, how to make proteins, how to replicate, how to repair itself, etc. Information is, of course, non-physical. To understand the magnitude of this problem, understand that DNA makes use of only 4 nucleotide bases (for DNA, Cytosine, Adenine, Guanine, and Thymine) in its structure. This would be like only having 4 letters to use to create words providing instructions on how to make a protein. One must have many letters to define a specific instruction and would get tired very quickly of reading aagactcat…. etc. and. In effect, the bases must be in a certain order to describe how to, for instance, make a protein. If the nucleotide bases are in the wrong order, the protein would not be created or would not work properly.

As an example, let's say only 250 nucleotide bases are required for an instruction set for a function, the likelihood that the right order is randomly arraigned is mathematically given by 4^{250}, that is approximately a probability of 1 in 10^{150}. If we generously say the 250 bases could re-organize once every second, it would take 10^{150} seconds or 10^{142} years to probably get the right order. Well, the clinker is that the Universe is only 13.8 billion years old or only 13.8 x 10^{9} years— a vast difference. In addition, there are not just 250 base pairs that must be in the correct. Man has 3.2 billion base pairs in its DNA. The probability of this information being correctly stored in the DNA is more than astronomically high. Richard Dawkins stated that 1 in 10^{29} should be the probability should be the point at which LUCK runs out[8]. We are way beyond that. So, is it really reasonable to propose that life just occurred randomly?

By choosing to only consider the starting point of a LUCA, science has ignored the question of transcendence. In relation to the research on TS, many ignore the development of the image and concentrate on just the question of the involvement of an artist, the Carbon-14 date, the historical evidence or lack thereof, and seem to forget the most salient point— it is an object not made by human hands (to be shown later), in other words a transcendent object.

[8] Dawkins, *The Blind Watchmaker*, (London, UK: Penquin Books), 2016, 144

Intelligent Design

As scientists and engineers have developed new equipment and methods to study biological systems, they have routinely run into one continuing piece of evidence — the systems seem to have a design built into their structure. Evolutionary Biology requires that all advances (evolution) of biological life results from random mutational occurrences built on previous mutational occurrences. Because of the strong influence of Darwin and evolutionary biologists such as Richard Dawkins, many scientists have downplayed the possibility of intelligent design. ID speaks too much of the possibility of a transcendent element in the development of biological systems.

This pressure can be seen in the words of Dr. Francis Crick — the Noble prize winner for his work on determining the structure of DNA. He stated, "*Biologists must constantly keep in mind that what they see was not designed, but rather evolved."*[9] Can you imagine a scientist seeing a pattern of design over and over again, then being forced to throw it out, because the existence of a design suggests a transcendence to the creation of biological laws?

Near Death Experiences

The development of modern medicine has resulted in tens of thousands who have returned to life from a state of clinical death. The stories of their time of clinical death have been recorded, studied, and published in peer-reviewed medical journals. The accounts share many common elements such out of the body experiences, seeing a light, entering a tunnel, seeing past relatives, etc. This, of course, is evidence of a transcendent life after bodily death. The response from some neuroscientists who do not believe in transcendence is to state that the individuals were actually experiencing the effects of anesthesia, loss of oxygen, etc. Maybe this is true for some, but the overwhelming evidence, as seen by juridical events, such as people who are blind from birth who return to life (and are still blind after the event) but can describe in utter detail objects, and occurrences in the room, even the socks the surgeon was wearing. Others return and describe meeting a friend "on the other side" who, unbeknownst to them died while they were being revived at a different hospital or even going into the waiting room

[9] https://en.wikiquote.org › wiki › Francis_Crick

while out of the body and overhearing conversations and noting the clothes worn. Key also is the lucidity of the events which is just the opposite compared to the memories of those under anesthesia.

Again, as with the TS the solution of those who do not believe is to deny, often propose something unrelated, and/or ignore the evidence at hand.

Differentiation of mind and the brain

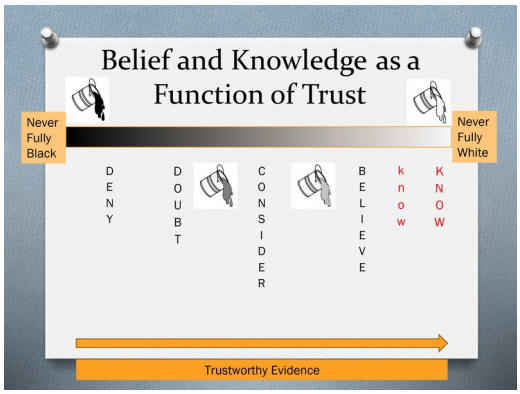
Many studies have shown that the brain is physical and the mind is spiritual, that is non-physical. The mind and the brain are not the same. Studies on epileptic patients show that the brain does control certain interactions, but cannot physically generate an abstract thought, a conscious, or creative thoughts, much less have evil thoughts.

Reality as a Computer Simulation

Going even farther, there are some scientists that reality doesn't exist. We are all part of a transcendent computer simulation—just like *Matrix* the movie. Do you believe that?

The purpose of the above section is to help remove or at least soften the modern scientific biases which deny the possibility that there is a transcendent side to existence, while not replacing them with religious biases.

Part III: DENYING, DOUBTING, BELIEVING, AND KNOWING



How is Knowledge related to what we Believe? In other words, how do we come to KNOW anything? All knowledge is dependent on the amount of TRUST we have in the source. If we have little trust in the source of the information, then one will be unlikely to believe the knowledge so obtained. This is true independent of whether the source of the knowledge is a parent, a teacher, a book, an experiment, a personal experience or whatever. Absolute Knowledge is not knowable for man. There is always an element of distrust. Proofs really only occur for

Figure (1) Linear depiction of Knowledge vs Trust

abstract ideas, such as mathematics or logic. The best we can do is to come to a point beyond reasonable doubt where we can say we KNOW something with nearly full Trust or Deny something with great Distrust. This is shown in Figure (1) which depicts Knowledge as a function of Trust. Unfortunately, Knowledge can also be WRONG. There is a risk that one takes when they say they KNOW something. Science has many examples of changing what science believes to be true.

Denying, Doubting, Believing, and Knowing are but different points on **the path of Knowledge of Truth.** At some point, different for different individuals, we come to the willful, intellectual assent that we **BELIEVE** or Not, that we **KNOW** or Not. Knowing is a decision. Some people never come to the point of trusting, no matter how much evidence is presented. Consider the Flat Earth Society for instance.

Your degree of Trust will depend on the number of sources and the frequency of Trustworthy evidence. This is shown with subjective data in Figure 2. Here it is evident that the quantity and quality of of trustworthy evidence plays a role in the amount of Belief one will have in their knowledge. The more research one does into a particular aspect should enable one to have greater trust in your acceptance of the data, or even to the point of concluding that there is no reason to trust a particular source.

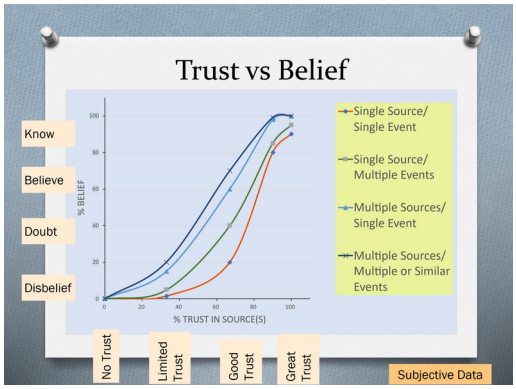


Figure (2) Subjective Plot of Trust vs Belief

The point at which one has a Preponderance of Evidence which one can say they KNOW something is not absolute and will differ for different individuals. The lack of universal Trust in evidence is is why there will never be a time in man's existence that ALL will agree about the TS, God, economic policies, etc. On the other hand, there is a point where a complete lack of Trust, that is **Never Trusting/Believing** at all could lead others to say you are Delusional, Insane.

So how can one recognize biases and determine the degree of one's belief? One simplistic way is to look at all aspects of a partcular topic and estimate how much trust have you in your belief about the aspect.

Mathematically:

Strength of Belief = $\sum t_i\omega_i \,/\, \sum \omega_i$

Where

t_i is the amount of Trust in reasonableness of Aspect ω_i,

t ranges from -1 (Denying) to 1 (Knowing); (your choice)

ω_i is a particular Aspect, e.g for TS —Historical record, Biblical record, C14 dating, Wide Angle x-ray Scattering, Age, Method of Image creation, Art history, Numismatics, etc.

ω can have a value 0 to 10 (your choice) depending on user importance of the aspect.

A User Belief of 0.75 might be the chosen point where one gives intellectual assent.

The goal is to help you RECOGNIZE Biases by being forced to assign trust values.

Part IV: Applying this methodology to the question "Whose image is intended to be on the Shroud?"

To evaluate the TS, we must ask the right questions in order and proceed as necessary.

Q1: The Prime Question is not how old the TS is. The question is "Is this Jesus of Nazareth?". If not, let's go home and study the linen from Masada or something else that might be mysterious.

Q2: How could it have been made?

Q3: Who could have made it?

Q4: When did it get made? Where has it been?

Q5: Why was it made and What are the ramifications?

So, no matter how it came to be, can we, first of all, KNOW who that man in the Shroud is, or is supposed to be? I will address **Who**, then touch upon **HOW in this paper.**

We know the TS has an image of a man on it, so let's address that.

Q1.1: Is the image an **Art form** or a result of some unknown **physical process**?

Q1.2: If Art, then WHO, HOW, WHEN, and BY WHOM?

Q1.3: If a Natural physical process, then WHO, HOW and WHEN?

Q1.4: If a Natural physical process caused by a Transcendent entity, then WHO, HOW, WHEN, and BY WHOM?

The image seems to be realistic and not an impressionic or other art form. It is more of a photograph (although not the same process) recording what is there. If the image is intentionally made by man, it must be a form of art. Perhaps the artist wanted to show "*The Cruelty of man to other men*", but this seems highly unlikely. More reasonably the artist was trying to present a realistic image of the crucified Jesus of Nazereth. The artist's purpose may be one of devotion, or perhaps to sell as part of a scam. If so, the artist would gather all the readily available information he could about Jesus' passion and death and include that in the image, otherwise others would describe the image as not being true to the historical record.

On the other hand, if the image is unintentional by man, then it must be made by some "freak of nature" or by some transcendent cause. If a some "freak of nature", then one must ask, "Why is there only one such image in the history of man?" This would seem to be highly doubtful (my bias) and no research has found a random way to make such an image. If the image has a transcendent cause, one has to ask, "What's special about this person?" and "What is the reason for this image to exist?" If unintentionally caused, the image would potentially confirm or deny many aspects of Jesus passion as recorded in historical accounts and perhaps would show aspects not recorded by Scripture, e.g. the absoute the height of Jesus.

Because so much hinges on the Scriptural historical evidence, let's primarily focus on the Shroud's evidence versus Scripture's claims. First let's take a quick look at the Shroud which we should be familiar.

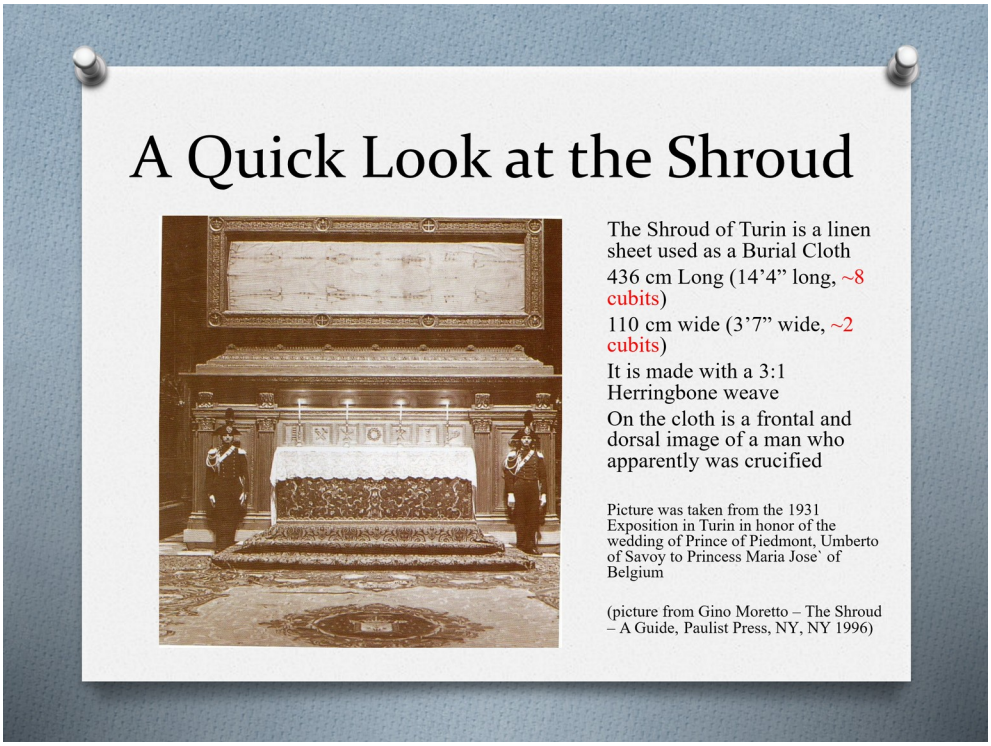


Figure (3) A Quick look at the

Now let's look at Scripture versus the Shroud's information, considering that the Artist would be creating an image of Jesus of Nazareth, while also looking at the Shroud's information considering the image is not made by man and the image is that of an arbitrary Jewish man in the first century.

Association with the rich

Scripture[10]	TS Evidence
○ "And he made his grave with the wicked, and with the rich in his death" Isaiah 53:9 ○ "Joseph of Arimathea, a rich man… went to Pilate and begged for the body of Jesus" Mt 27:57-	○ The burial cloth was fine linen. Therefore, the "Crucarius" (Victim of Crucifixion) was rich or had rich connections. ○ Most crucarius bodies were placed in a common grave, and

[10] Scripture is taken from the New Revised Standard Version (NRSV), 2021

58 o They took the body of Jesus, and bound it in <u>linen cloths</u> with the spices, as is the burial custom of the Jews. Jn 19:40	some even eaten by wild animals o Similar fine herringbone linens were found at Masada and dated to 73 CE o Linen size is in Biblical Units?
My Odds – **Artist probability 1 out of 1** that the artist would have intentionally made his image to show Jesus had rich connections **; Jewish Man Event probability 1 in 100** that a crucarius would be imaged on fine linen in a style consistent w the time of Jesus This aspect I gave a weight of ω_1 **= 8** and a trust factor of **t_1 = 0.9; t_1 = 0.8** (weight factor is the same whether considering the Artist or a Jewish man Event; **Red = Artist**, **Blue = Jewish man**)	

Stature of Jesus

Scripture	TS Evidence
o *"until all of us come to the unity of the faith and of the knowledge of the Son of God, to maturity, to the measure of the full **<u>stature</u>** of Christ*." Eph 4:13 o Stature can refer to physical height and/or deeds o Neither Napoleon nor actor Danny Devito would physically have great stature o "*Your lamb shall be without blemish, a male a year old*" Ex 12:5 o That is, a lamb in the prime of its life.	o "Jesus" was about 5'11", 165 to 175 lbs o For comparison, the average Jew was about 5'4" o 1% of population is 7" taller than average o The crucarius is a man of physical stature o "Jesus" is Robust o "Jesus" was a Young Man In the Prime of Life (30 to 35 years old) o The age of the crucarius is appropriate
My Odds – **Artist 1 in 3** (perhaps chose height to show stature) true height not known; **Jewish man Event 1 out of 100** that the man in the Shroud would be a man of physical stature in top 1% in height with good musculature, sex and age similar to Jesus of Nazareth **This aspect I gave a weight of ω_2 = 5; t_2 = 0.5; t_2 = 0.5**	

Beating of Jesus

Scripture	TS Evidence
○ "But he was wounded for our transgressions, he was bruised for our iniquities;" Isaiah 53:5a ○ "When he had said this, one of the officers standing by struck Jesus with his hand, saying, "Is that how you answer the high priest?" Jn 18:22	○ He was beaten about the face before crucifixion ○ The Right and Left Cheeks are swollen ○ The Cartilage at the tip of the nose is displaced from the bone ○ Lip is swollen
My Odds probably **Artist 1 out of 1**; **Jewish man Event 1 out of 1** that the man in the Shroud would also be beaten like Jesus. I believe that the Romans would treat all of the men condemned to crucifixion poorly. **I gave this aspect a $\omega_3 = 8$; $t_3 = 1$: $t_3 = 1$**	

Extreme Scourging of Jesus

Scripture	TS Evidence
○ "upon him was the chastisement that made us whole, and with his stripes we are healed." Isaiah 53:5b ○ "Forty stripes may be given him, but not more; lest, if one should go on to beat him with more stripes than these, your brother be degraded in your sight." DT 25:3 ○ Paul states "Five times I have received at the hands of the Jews the forty lashes less one." 2 Cor 11:24	○ He was scourged before crucifixion ○ 100 to 120 scourge marks in groups of 3, probably from a Roman flagrum, ~33 to 40 lashes. Roman style of scourging ○ Unusual for so many lashes, as they did not want the victim to die too soon.
My Odds for **Artist 1 out of 1** as the artist should have known Pilate used scouring in an attempt to release Jesus of Nazareth; for **Jewish man Event 1 out of 10** that the man in the Shroud would mimic Jesus and be scourged this way as the Romans wanted the crucified to live a substantial time as a deterrent to anti-	

Roman behavior.
I gave this aspect ω_4 **= 10;** t_4**= 0.9;** t_4**= 0.9**

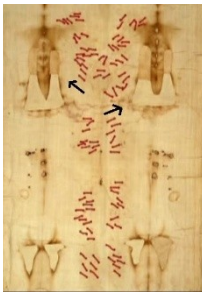


Figure (4) Scourge Marks -- 100 to 120 marks are counted, typically in sets of ~

Crown of Thorns

Scripture	TS Evidence
○ "[28] And they stripped him and put a scarlet robe upon him, [29] and plaiting a crown of thorns they put it on his head and put a cane in his right hand...[30] And they spat upon him and took the cane and struck him on the head." Mt 27:28-30	○ A <u>cap</u> of thorns was placed on His head, <u>not a circlet</u> ○ Unknown for any other crucified victim ○ Extensive bleeding from the top/back of the head shown on the shroud

My Odds for **Artist 1 out of 2** in that in the West a circlet crown was used. In the East a cap was used. The artist had to guess which and chose a cap**.** For **Jewish man Event less 1 in 5000** that the man in the Shroud would mimic Jesus of Nazareth.

- In Israel, 2000 crucified after revolt, 7 CE.
- 500 crucified per day for months in 70 CE,
- Rome crucified 6000 in a single day during the Spartacus uprising.

The crown of thorns was truly a unique event, ω_5**= 10;** t_5 **= 1.0;** t_5 **= 1.0**

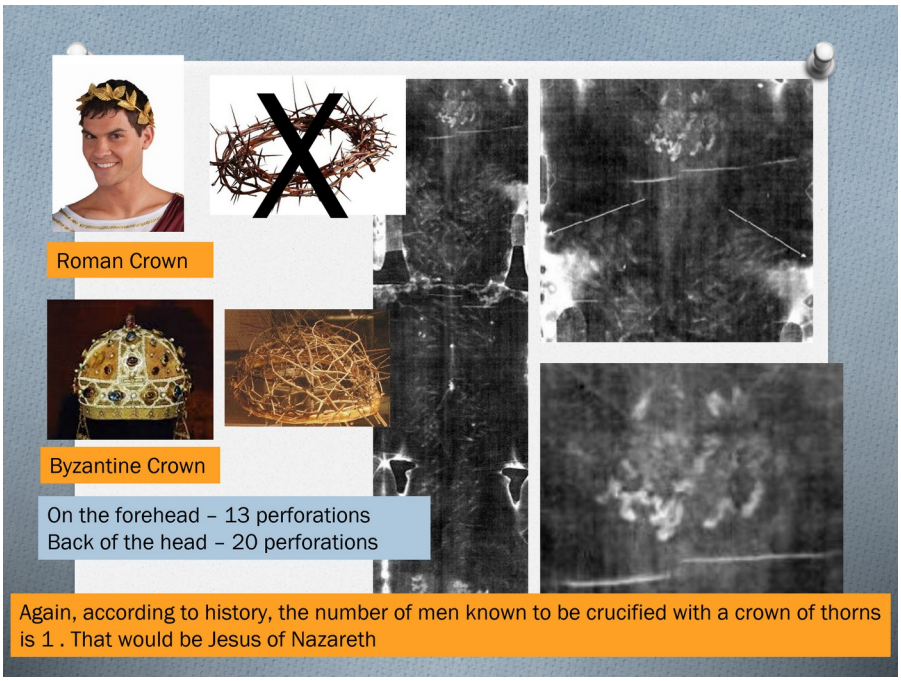


Figure (5) "Images of Roman and Byzantine crowns; Blood marks due to

Jesus Carries His cross.

Jesus was forced to carry a cross. A full crucifix weighed 175 to 200 lbs. Typically only the "*patibulum*" (Crosspiece) 60 to 80 lbs. was carried. It is unlikely anyone who had been fully scourged and beaten could carry the full cross. Normally, the "*stipes*" (stake, ~7-7.5' tall) would already be in the ground at the crucifixion site

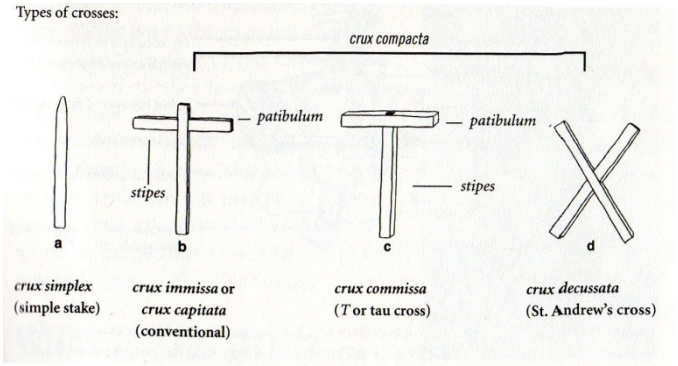


Figure (6) Various Cross configurations

Scripture	TS Evidence
○ I am poured out like water, and all my bones are out of joint" Ps 22:14 ○ Simon of Cyrene had to help carry the cross Lk 22:36	○ **Information not in Scripture** Shroud shows possible dislocation of left shoulder, abrasions on knees from falling ○ Extreme pain would be present from "crown", scourging, beating ○ Crucarius would be exhausted, in shock, thirsty, sweaty, short of breath

My Odds that Jesus would have of shoulder dislocation and scrapes on knees like the man in the Shroud **Artist 1 out 1** as the Artist knew some bones would be out of joint**; Jewish man Event 1 out of 2** as surely some individuals (e.g. the two thieves crucified with Jesus of Nazareth) would not have separated shoulders. M*y aspect* ∧ *trust factors are* ω_6 **= 5;** t_6**= 0.9;** t_6**= 0.7**

Dorsal Image, Back of Neck

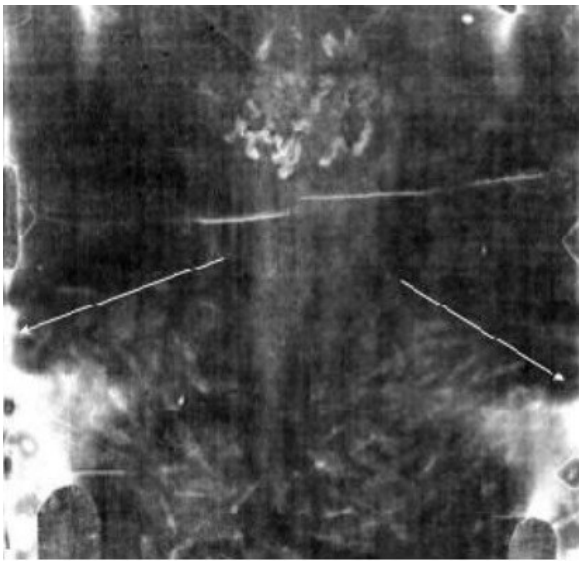


Figure (7) Dislocated Right Shoulder shown on the TS

Jesus at the Crucifixion Site

Scripture	TS Evidence
○ "*Yea, dogs are round about me; a company of evildoers encircle me; they have pierced my hands and feet— I can count all my bones— they stare and gloat over me; they divide my garments among them, and for my raiment they cast lots*." Ps 22:16-18 ○ Note: Psalm 22 was written around 1000 BC, Earliest account of Crucifixion is 519 BC E ("The History of Herodotus")	○ **Information not in Scripture.** ○ A Group of 5 – a centurion and 4 Roman soldiers (the "quaternio") performed the crucifixion ○ "Jesus" is **stripped naked** ○ Jesus is laid onto the ground. A soldier would lay across his legs, another across his chest. ○ The crucarius arms were either roped or nailed to the *patibulum*, or a combination of the two. Jesus was nailed. Only evidence of 2 nails are definitely seen on

	the Shroud (Barbet), some believe 3 (Zugibe), as the R & L hands and the R & L feet were crossed over.
My Odds on nailing: Assume 50% nailed, of those 50% 3 nails. **Artist 1 in 2**; **Jewish man Event 1 in 4** as the likelihood that the man in the Shroud would mimic Jesus of Nazareth. My aspect and trust factors are ω_7 = **10**; **t_7 = 1.0**; **t_7 = 1.0**	

Confirmation of Death

Scripture	TS Evidence
○ *"So the soldiers came and broke the legs of the first, and of the other who had been crucified with him; but when they came to Jesus and saw that he was already dead, they did not break his legs. But one of the soldiers pierced his side with a spear, and at once there came out blood and water."* Jn 19:32-34	○ A Lance was inserted into his right chest ○ Most common procedure was to break the legs to achieve death
My Odds **Artist 1 out of 1** as he is using scripture as a guide; **Jewish man Event < 1 in 20** that the man in the shroud would be pierced in the chest like Jesus of Nazareth. Apparently, it had happened before that the crucarius was obviously dead as the Centurian knew what to do and where to insert the sword. My aspect and trust factors are ω_8 = **10**; **t_8 = 1.0**; **t_8 = 0.8**	

No Putrefaction

Scripture	TS Evidence
○ "Early on the first day of the week, while it was still dark, Mary Magdalene came to the tomb and saw that the stone had been removed from the tomb. [2] So she ran and went to Simon Peter and the other disciple, the one whom Jesus loved, and said to them, "They have taken the Lord out of	○ The Shroud shows no putrefaction of the body. An unknown man who was crucified and buried would have decomposed and decayed. ○ Only a few incorruptible bodies have been known not to decay. ○ Only a few persons have been known to be "saved by the bell"

the tomb, and we do not know where they have laid him." Jn 20:1-2	and would not have decayed in a burial shroud.
My Odds **Artist 1 in 1** as the Artist would have known from Scripture that the body had been dead only 39 hours or so; **Jewish man event < 1 in 5000** that the man in the shroud would be removed from the shroud before decay. Why would the shroud of any other man have been removed in such a short time? My aspect and trust ratios are $\omega_9 = 10$; $t_9 = 1.0$; $t_9 = 1.0$	

Probability Calculation

Aspect	**Artist Odds**	**Jewish man Event Odds**	**Any Crucified Man Odds**
Image type	**Intentional Man Made**	**Random or Transcendent**	**Random or Transcendent**
Wrapped in Fine Linen	**1/1**	**1/100**	**1/100**
Stature of Jesus	**1/3**	**1/100**	**1/100**
Beaten about the face	**1/1**	**1/1**	**1/20**
Odds of being Fully scourged and crucified	**1/1**	**1/3**	**1/10**
Cap of Thorns on the Head	**1/1**	**1/5000**	**1/100000**
Dislocations from carrying the cross	**1/2**	**1/2**	**1/2**
Odds of being nailed on the cross; 3 nails, no roping	**1/2**	**1/4**	**1/4**
Wound on the Right side	**1/1**	**1/20**	**1/20**
No Evidence of Putrefaction	**1/1**	**1/5000**	**1/100000**
Probability	**1 in 12**	**1 in 120 Trillion**	**~1 in 5 million Trillion**
Strength of Belief in Estimate (Reasonable Trust in my (Under Estimates)	**93.7%**	**88.7%**	**88.7%**
Conclusion based on an analysis of Scripture versus TS evidence if image is from Artist/Jewish Man/Any Man	**Intended Image of Jesus of Nazareth**	**Actual Image of Jesus of Nazareth**	**Actual Image of Jesus of Nazareth**

As the Artist would have used Scripture as much as possible to create an image of Jesus of Nazareth, one would expect that the Artist's image would match Scripture perfectly except where Scripture gives no specific evidence or inference. Of course, the intentional **artist's image** would be intended to appear to be that of Jesus of Nazareth, even if it doesn't look like the true image of Jesus of Nazareth. For the any unintentional **Jewish man event**, it is extremely unlikely that any Jewish man crucified in Israel would have the same details as Jesus of Nazareth, unless it was actually Jesus. I added the category of **any crucified man at any time** as a consideration that the image of the body would not be limited to Jews alone and could have occurred up to the 143th century. Again, to have such agreement between the image and what Scripture tells us about the passion and death of Jesus of Nazareth would be incredibly unlikely, particularly adding in the fact that only 117 Billion humans[11] have lived on this Earth.

From this simple analysis, it is seen that we can **KNOW** that the image is, at the very least, certainly intended to be that of Jesus. Furthermore, if the image is not made by an Artist, probability shows that it **IS** the image of Jesus of Nazareth. So, we should, whether it's a man-made image or not, always refer to image on the TS as the image intended to be or actually is the true image of Jesus of Nazareth. We accept with far less evidence the images of other individuals from the past to be who history tells us they are. For instance, we have far greater evidence who the Man in the Shroud is than we know who is depicted in the image of Whistler's Mother (more historical, eye witness details as noted in Scripture above; yet no one is concerned that it might be Whistler's Aunt).

Figure (8) "Whistler's Mother" by American-born artist James McNeill Whistler (1881)

Conclusion: No matter **how, when** or **why** it was created, the image is intended to be or is that of Jesus of Nazareth.

NOW, FOR THE HOW

[11] Google AI 09/04/2025

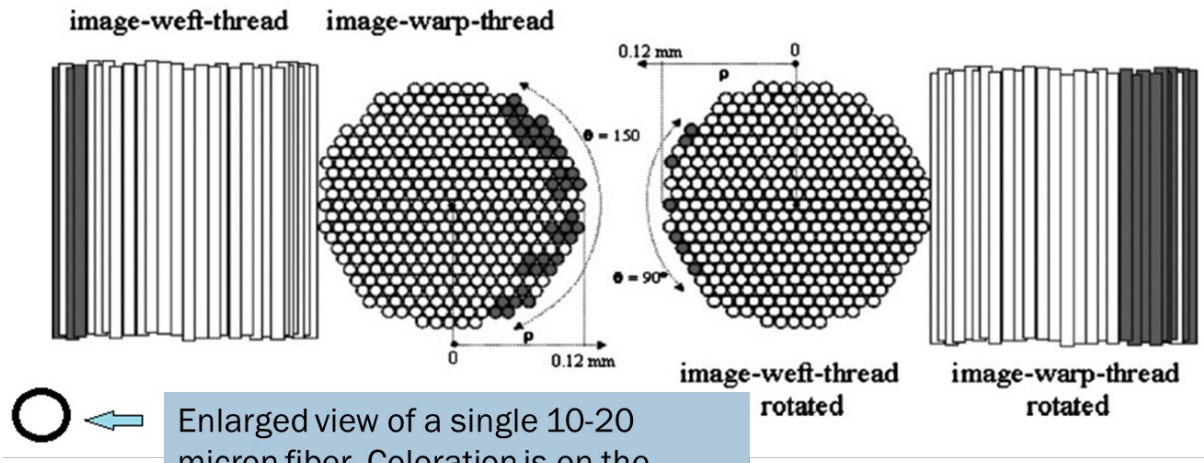
As stated earlier, HOW is the next critical issue. HOW is critical, because the HOW question will COMPLETELY ELIMINATE the consideration of an Artist man-made creation of the TS image. This will leave only an UNINTENTIONAL or TRANSCENDENT possibility for the image, which means that the TS image is that of Jesus of Nazareth (perhaps with some small distortions do the imaging process).

Figure (9) Striated Imaging on threads of the TS

Scientists have spent almost 50 years of effort since the 1977 STURP evaluation of the TS trying to determine and create a TS-like image. The conclusion is that it can't be done, now, much less using technology available anytime in the last 2000 years. There is no paint, or other external material on the TS. Figure (3) shows a close-up image of the threads/fibers of the TS. There is no paint or other material in the gaps between threads. There is only one color (other than that of blood). The coloration goes along the fibers of the TS, yet jumps across from one thread to another. Adjacent fibers may have no coloration at all. The image is only on the top 20 or so microns fibers on the thread. Color does not extend further or go through the TS. The coloration of fibers is only on the outer 0.2 microns of the fibers. The inside of the fibers is not colored at all.[12] How could any Artist have done this?

Figure (10) Schematic of TS Fibers

[12] *Journal of Imaging Science and Technology® 54(4): 040201–040201-8, 2010.*



Enlarged view of a single 10-20 micron fiber. Coloration is on the outside 0.2 micron only, white inside

It's taken awhile, but we now know that the coloration is caused by a dehydration-oxygenation of the outer cellulose in the fibers. How can that happen? The dehydration-oxygenation can occur if somehow the material and surrounding air became ionized— meaning negatively charged particles become present. How can ionization become present? It can occur due to the presence of electric fields, high energy ultraviolet radiation, by intense lasers, or by charged particles. But the equipment necessary to do this has only been available since the 20th century, yet the TS has been around since the 13th century (as agreed by all, 1st century by others). NO ARTIST CAN DO THIS. Even modern-day researchers cannot do this and obtain images with the resolution that is displayed on the TS. Fifty years of research has produced no natural means, whether paints, oils, chemical reactions, or lightning bolts, etc. that produces images that meet all the characteristics of the TS image (too numerous to discuss here). Whether the TS is 2000 years old or just 700 or so years old, the critical point to remember is that it is an image not made by man. There is a transcendence to our routine existence.

OTHER SIMILAR INCIDENTS

Like it or not, we are currently left with only one possibility. Based on our best scientific evidence, the TS image was apparently created in a one-of-a-kind TRANSCENDENT incident involving the body of Jesus of Nazareth (whether Jesus was God or not). As Sherlock Holmes said, "When you have eliminated the impossible, whatever remains, however improbable, must be the TRUTH".[13] So, we

[13] Doyle, Arthur Conan *The Sign of Four*, Lippincott's Monthly Magazine, Philadelphia, PA 1890

are back to the Faith/Science conflicts with yet another unduplicatable incident which is serves as evidence of the transcendent. But the TS is not the only physical object which is not made by man. There are many well tested material objects which are not explainable by modern science, all beginning as the TS with an inexplicable event. The existence of the Tilma of Juan Diego (Our Lady of Guadalupe) and Eucharistic Miracles are but two examples I will mention here.

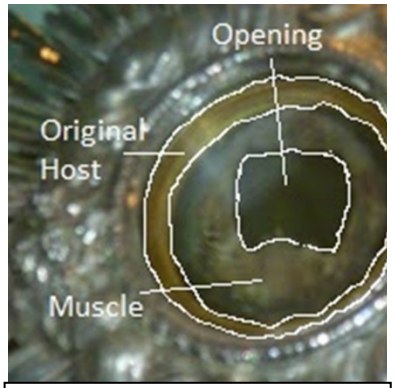
The Tilma of Juan Diego

Figure (11) Pictures of Our Lady of Guadalupe on cloak compared to Infrared Image

On December 12, 1531 a transcendent event took place in what is now Mexico City, Mexico. Mary the Mother of Jesus had appeared to Juan Diego a few days before asking a church be built, but the Bishop Zumarraga needed proof. So on Dec 12, Mary had Juan Diego gather roses from Tepeyac Hill. When Juan Diego showed them to the Bishop, a flash of light occurred, and an image of Mary appeared on his cloak.

Like the TS, the image has no brush strokes, but unlike the TS, the image did not affect the Agave fibers (which only lasts ~15 years; the cloak is now almost 500 years old), and the image produced is in color. It has been inspected using Infrared imaging, showing no previous drawing or sizing. The image is also iridescent, that is it changes colors like a DVD exposed to light at an angle. One cannot hand paint that. The pattern of the stars on the cloak corresponds to the position of the stars on December 12, 1531, ~6:30 AM—the time when Juan Diego showed the roses. Reflected images of those in the room are seen in the eyes. In 1921 a bomb blast occurred directly in front of the cloak which broke windows far away but had no effect on the cloak. No one has been able to duplicate the cloak. Sound familiar? There are many other aspects to the image, not discussed here.

Eucharistic Miracles



At a Catholic Mass, the hosts are consecrated by a priest and, according to Catholicism, become His glorified

body and blood (although the outer appearance remains as before). Occasionally in history (about 200 times), part of the wheat host has turned into cardiac tissue and the wine has turned into blood. These miracles have been scientifically tested multiple times and are always from a Middle Eastern male with type AB blood (same as on the Shroud). The cardiac tissue is alive and comes from the same spot near valve near the left ventricle. The muscle is living tissue with capillaries and nerves. Examining with electron microscopes shows the muscle fibers to be interspersed with the bread fibers. Impossible but true. Red and white blood cells from the samples are alive years after the event. Impossible but true. The first one occurred in Lanciano Italy around 750 CE and is still viable. There have been 8 such miracles since 1992 alone. As the muscle cells are alive, this is also an example of living cells arising out of dead material.

Final Thoughts

It is a mistake to dismiss or ignore evidence that does not fit your point of view, your bias. Can you imagine where we would be if the scientists at the turn of the 20th century rejected quantum theory because it didn't fit into their everyday life. By looking at all the data, they came to believe in a new, fuller view of reality. Today, we must recognize that reality extends beyond physicality in order to have an even fuller sense of reality.