Why Jesus carried the whole cross and not only the patibulum.

Rebuttal of a long-standing sindonological myth.

The long standing myth of sindonology is that Jesus carried only the horizontal arm of the cross—the *patibulum*. This view (which is illustrated on the picture below) is based on several premises; namely the permanent presence of vertical beam, the *stipes* in Roman places of public executions, and the conviction that the whole cross would have been "too heavy" to carry by the single person. **Neither of those premises are correct**, in fact—and if we confront them with empirical evidence from relics (the Shroud of Turin, the Tunic of Argenteuil, the Good Thief patibulum) and archeological evidence, it is clear to us that Jesus most likely carried the whole cross.

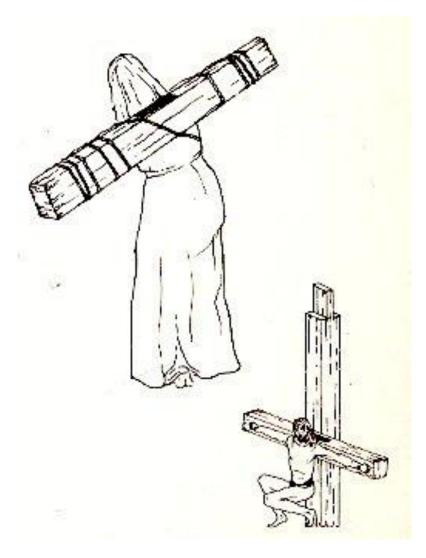


Fig. 1 The usually maintained view of carrying only the *patibulum*, which was then attached to vertical *stipes* during crucifixion.

This conclusion has been postulated before –namely by C.M. Glory in his paper from ENEA 2010 conference¹, and by Andrè Marion & Gerard Lucotte in their book *Le linceul de Turin et la tunique d'Argenteuil*.² Here I want to summarize their conclusions and add my own observations.

To show the title thesis we need to answer several questions.

1. Were stipes permanently placed on Golgotha in the times of Jesus?

Glori writes:

At this point, let us place the torture of the Roman crucifixion in the Jewish (Hebrew) society. According to Monsignor Ricci, Jesus carried only the patibulum. His supposition was based on the fact that the Romans used to keep the stipes or the stipites in the appointed place of the crucifixion of the convicts. This supposition is right, but not suitable for Palestine and for Jerusalem in particular, where the Temple and the presence of many priests who served in it involved that the observance of the Jewish rules was more strict and rigorous than elsewhere. According to the Jewish belief, people had to avoid any contamination with all that had touched the blood of a convict or a victim of a violent death. The rule stated that everything had to be burnt or removed. Moreover, all that was touched by a corpse, was considered "impure", so that anyone, who had to face such an event (because of love, work, or compassion), had to submit himself to purificationn according to strict rules. The above mentioned rules are listed in Numbers (19:11-21; 31:18-24). The same rules, but much more detailed, have been quoted by the Jewish tradition in the Talmud, where they have been carefully codified

It was impossible, therefore, that in the Jewish environment and above all in Jerusalem, the Romans could keep the stipites permanently in a place, in spite of the fact that they were polluted by the blood and the feces of the convicts.

[...]

As I have already said, the Romans never left the stipes on the ground of the execution when it took place in Jewish towns or villages. Moreover, we have to deduce they did not help the local convicts by driving in those poles the very day of their crucifixion. Such a care towards men condemned to the slanderous torture of the crucifixion would have been quite unbelievable. The convicts had to carry their own cross to the appointed place of their execution.

2. What Shroud of Turin and the Tunic of Argenteuil tell us about the shape of instrument of crucifixion?

In 1998 Andrè Marion and his team performed detailed comparison of the bloodstains on the Shroud of Turin and the back of the **Tunic of Argenteuil**, the little known and largely destroyed cloth considered as the seamless robe of Jesus, which has been worn by Him on his way to Golgotha. The Tunic, according to the tradition, was present in Argenteuil since Charlemagne times. It was hidden in the walls of monastery during Norman invasion circa

845 AD, and rediscovered 300 years later, around the year 1156. As the original color of the Tunic is red, the presence of bloodstains (best visible on infrared pictures, type AB!) was unknown at that time, only to be discovered in the late 19th century.

During their comparative examination Marion and his team used computerized anthropometric models (allowing for simulation of the Tunic's distortions while carrying the cross), as well as volunteers, who wearing similar cloth carried both patibulum and the whole cross. To their surprise, their analysis shown to contrary to common opinion, it is more likely that the convict carried the whole cross, instead of merely horizontal beam.

Marion and his team found 9 corresponding points between bloodied areas on both the Shroud and the Tunic. They concluded that the "results seem to leave no doubts", the correspondence is unlikely to be coincidental.

The results of the Marion's work (from the book by him and Lucotte) are presented below:

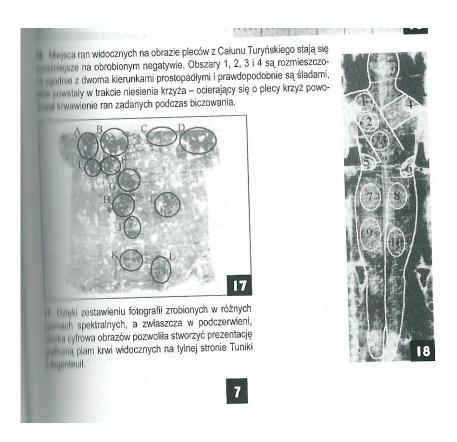


Fig. 2: The bloodstained areas on both the Tunic of Argenteuil and the Shroud of Turin. We see the large strip of bloodstained areas on the Tunic going from up towards down due to the pressure of the (whole) cross.



Fig. 3: The computerized model of the Tunic while being worn by the Man from the Shroud, and the superimposition of it on His silhouette.

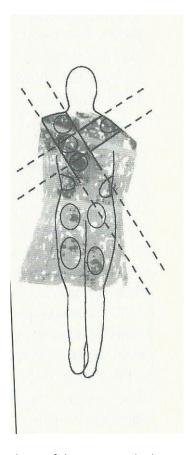


Fig. 4: Similar as Fig 3., but with the shape of the Cross marked. According to the Marion's research, the crossing of two beams was in the left scapula area (from Jean-Charles Leroy, *Tunika Jezusa: Cudowna relikwia chrześcijaństwa*, Kraków 2013, pg. 81)

These observations are perfectly consistent with the observations of the back of the Shroud Man, where we see abrasions going into two perpendicular directions (see Fig. 5 below). This agrees much more with the whole cross than single beam theory:

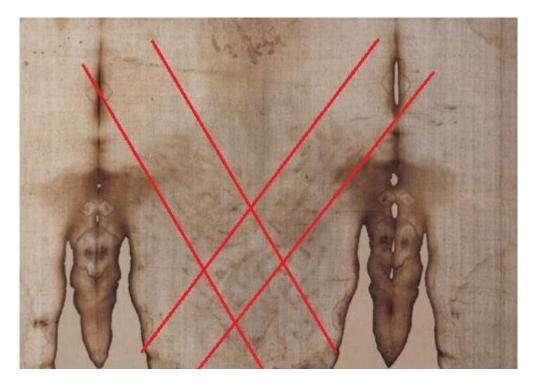


Fig. 5: Abrasions on the dorsal image of the Shroud going in two perpendicular directions –most likely the result of carrying the whole cross.

3. Was the whole cross too heavy for a single man?

The popular myth says that the whole cross was too heavy to be carried by a single person, that the patibulum alone weighted 50-70 kg, so the weight of the whole cross must have been about 200 kg. In fact **all depends on the cross dimensions**, which can be estimated with high likeness, based on all premises available.

First, although the True Cross, allegedly discovered in 326 AD by St. Helena in the dry cistern on Golgotha (where it was thrown on the evening of Good Friday, most likely with nailed Titulus allowing its identification 300 years later) does not exist anymore as a single object (being divided in innumerable parts), we have other relics that may give us insight on the cross dimension. Most important is the so called Good Thieft patibulum, found by Helena as well and stored in the Rome's Basilica of the Santa Croce in Gerusalemme:



Fig. 6: The 'Good Thief patibulum', preserved in Santa Croce in Gerusalemme basilica in Rome.

The patibulum is 178 cm long, about 13 cm high, and 4.5 to 8 cm wide.³ And **that's enough**, As the nails were likely to be about 11-12 cm long and the combined length of the arms of proportional man is about the same as his height (remind yourself Vitruvian Man), there is **no need for more.**

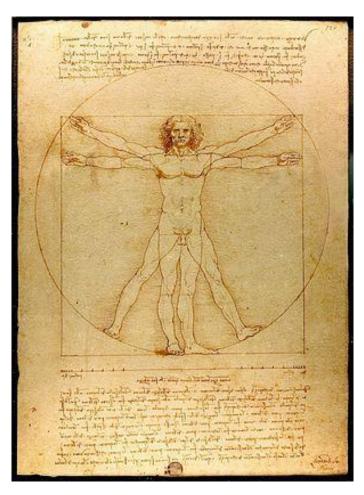


Fig. 7: Vitruvian Man

The width of such patibulum corresponds exactly with the width of abrasion areas on the dorsal image of the Shroud (see Fig. 8 and 9 below):



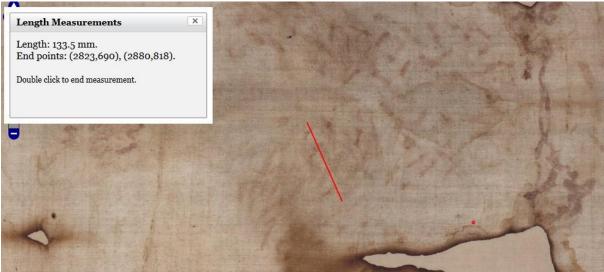


Fig. 8-9: The measurements of the abrasion areas widths give the results of about 13 cm.

We need to estimate the size of vertical beam as well. To do so, we need to use the results of the 1986 conservation works in the Basilica of the Holy Sepulchre when two Greek conservators found a stone ring, 11.5 cm in diameter, which could have been (although this is by no means certain) used to hold the cross up to 2.5 meters high in vertical position.⁴



Fig 10: The stone ring found in the Church of the Holy Sepulchre in 1986. From Grzegorz Górny, Janusz Rosikoń, Świadkowie Tajemnicy; Śledztwo w sprawie relikwii Chrystusowych, Rosikon Press 2012, pg. 313. See english edition as Witnesses to Mystery; Investigation of the Christ's relics by Ignatius Press.

Assuming that the interpretation of this stone is correct, we have almost all necessary data to estimate the weight of the whole cross. What remained is the wood density, as the investigations of the purported remmants of the True Cross classified them as made of pine wood⁵, we can assume the average density as 0.75 g/cm³. We assume also that vertical beam was round pine trunk, 11.5 cm in diameter and 250 cm high, while the horizontal beam was 2 meters long, and 13 cm high and wide. Thus:

The weight of vertical beam= $250 \text{cm} \times 11.5 \text{ cm} \times 3.14 \times 0.75 \text{ g/cm}^3/4 = 20 \text{ kg.}$

The weight of horizontal beam= $200 \text{cm x} 13 \text{ cm x} 13 \text{ cm x} 0.75 \text{ g/cm}^3 = 25 \text{ kg.}$

Summary =45 kg!

Less than 50 kg!

So where the values of 200 kg originated? Most likely due to the oversize of the assumed cross dimensions. If we double the assumed diameter of vertical beam, and the width and height of horizontal beam, the result would be 4 times as large, or circa **180 kg**. But as I have shown, there was no need for the cross so large.

The myth of the "too heavy cross" was very easy to debunk. The most astonishing thing is that for about 80 years no one has made a simple calculation.

4. So how the cross was being carried to Golgotha, and installed there.

Although the recent widely announced CNN show Finding Jesus was poorly reviewed (which was justified), it presented one thing very accurately: the carrying and raising of the whole cross.



Fig 11: Carrying of the Cross (from the latest CNN *Finding Jesus* documentary). Here we can see the whole cross being carried on the shoulder of Jesus. The main idea is right but the cross seems a little bit oversized and the cross is being kept only on the right shoulder. Marion's analysis of the Shroud and the Tunic of Argenteuil suggest that the upper part of the vertical beam was carried on the left shoulder, while the horizontal beam was carried on the the right shoulder. As the horizontal beam weight lied entirely on that shoulder (and not on the whole back like in the case of vertical beam) this resulted in its dislocation.

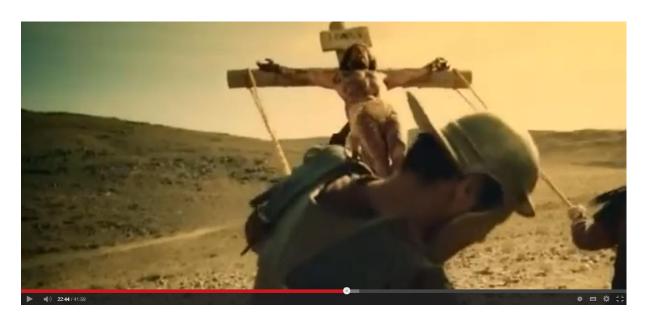


Fig 12: Raising of the Cross (from the latest CNN *Finding Jesus* documentary). After convicted was nailed to the cross in horizontal position the cross with the victim was being raised into horizontal position and placed into the hole drilled before. The total weight was about 130 kg —enough for 4-man execution squad.



Fig 13: The bottom of the Cross being dropped into the hole in the rock of Golgotha (from the latest CNN *Finding Jesus* documentary). This technique allowed for easy and fast mounting/dismounting and disposal of the crosses.

Footnotes:

¹C.M. Glory *Did Jesus Carry cross or the patibulum?*, Proceedings of the International Workshop on the Scientific Approach to the Acheiropoietos Images, ENEA Frascati, Italy 4-6 May 2010 http://www.acheiropoietos.info/proceedings/GloriWeb.pdf

² Andrè Marion, Gerard Lucotte, *Tunika z Argenteuil i Calun Turyński* (the polish edition of *Le linceul de Turin et la tunique d'Argenteuil*), Wydawnictwo M, Kraków 2008 pg. 175-182

³ Michael Hesemann, *Milczący Świadkowie Golgoty*, Wydawnictwo Salwator, Kraków 2006, pg. 85, and Leoncio A. Garza-Valdes, The DNA of God, Doubleday & Co. 1999 <a href="https://books.google.pl/books?id=SRt9DuMlHyoC&pg=PT249&lpg=PT249&dq=Good+Thief+Patibulum+%22Santa+Croce+in+Gerusalemme%22&source=bl&ots=OF1IsLN5Tn&sig=aH-mZll2TOCJXk9WQiuvQJD7OfI&hl=pl&sa=X&ei=mxMDVeaaEcLzUqiNgjA&ved=0CCIQ6AEwAA#v=snippet&q=Good%20Thief%20&f=false

⁴ http://en.wikipedia.org/wiki/Calvary#Rockface During a 1986 repair to the floor of the Calvary Chapel by the art historian George Lavas and architect Theo Mitropoulos, a round slot of 11.5 cm (4.5 in) diameter was discovered in the rock, partly open on one side (Lavas attributes the open side to accidental damage during his repairs);[23] although the dating of the slot is uncertain, and could date to Hadrian's temple of Aphrodite, Lavas suggested that it could have been the site of the crucifixion, as it would be strong enough to hold in place a wooden trunk of up to 2.5 metres (8 ft 2 in) in height (among other things).

⁵ Michael Hesemann, *Milczący Świadkowie Golgoty*, pg. 87-88