Researchers question the idea that the Shroud would date from the Middle Ages

Written by Adelaide Pouchol, following an interview with Tristan Casabianca on July 09, 2019 in Religion
Translated by Joe Marino

Can you briefly introduce yourself and the team of researchers you work with?

I am a 37-year-old independent French researcher with a degree in modern history, public law and economic law analysis. I am currently working in an agency of the Corsican Community. I published in international academic journals of philosophy and theology on the shroud of Turin. In 2017, I created and led a team with three Italians: Emanuela Marinelli, author of books on the subject translated into many languages, and two statisticians from the University of Catania: Giuseppe Pernagallo and Professor Benedetto Torrisi.

You have just announced a discovery on the dating of the Holy Shroud, news that could put into question the thesis that the shroud of Turin would be a forgery. Can you tell us more?

In 1989, the results of the shroud dating were published in the prestigious journal *Nature*: between 1260 and 1390 with 95% certainty. But for thirty years, researchers have asked the laboratories for raw data. These have always refused to provide them. In 2017, I submitted a legal request to the British Museum, which supervised the laboratories. Thus, I had access to hundreds of unpublished pages, which include the raw data. With my team, we conducted their analysis. Our statistical analysis shows that the 1988 carbon 14 dating was unreliable: the tested samples are obviously heterogeneous, and there is no guarantee that all these samples, taken from one end of the sheet, are representative of the whole fabric. It is therefore impossible to conclude that the shroud of Turin dates from the Middle Ages.

Did the results of the 1988 carbon 14 dating prevail so far in the scientific community? Yet there seems to have been some questioning of this carbon dating, is there not?

The findings of the 1988 dating were immediately contested by isolated individuals who had no chance of ever publishing their deductions in statistical journals. In the mid-2000s, a change began to take place. The American chemist, Ray Rogers, was persuaded by the thesis of patching the sample taken and published his conclusions in an important chemistry journal. The second challenge took place during the 2010s, when renowned statisticians Marco Riani and Anthony Atkinson suggested the lack of validity of the dating. But, if they used powerful tools, they relied only on the data published in *Nature*, which is to say on very little data. From now on, our statistical analysis, supported by the unpublished reports of the laboratories indicating that the samples contain foreign materials, is of the order of the obvious: the dating of 1988 is not reliable.

The dating of 1988 has often been perceived among the general public as the triumph of science - rigorous and implacable - on the Christian religion - necessarily naive or exploiting credulity. Academic careers were built on the dating of 1988. It needed extremely strong evidence to contradict this unavoidable episode of carbon dating. I think we provided it.

How did you get these new results and how much time do they represent?

I made a legal request in 2017 (Freedom of Information Act) to the three laboratories and the British Museum who supervised the dating. The laboratories did not share their most interesting data, but the British Museum granted my request. It took a year and a half between the discovery of the archives and

the publication of this article in an academic journal. To give an idea, the process called "peer review" took about ten months. By way of comparison, *Nature's* article was almost immediately accepted after a cursory review: about 5 weeks.

How were the conclusions of your work welcomed by the scientific community and the general public?

Our work appeared at the end of March on the *Archaeometry* website, a review published for the Oxford University Department, which dated 1988. Some commentators have immediately pointed out the irony that this represents, it shows above all that the challenge of dating is recorded at the highest level.

The media coverage has been very important in the Anglo-Saxon world and in Italy, and I must say for the moment positive, including within the Carbon 14 community. This is explained by the crisis of the reproducibility that science is currently going through. The researchers realized that it was very difficult to reproduce results published in prestigious journals. Our research provides an additional example.

Many specialists now hope to organize new tests on the shroud. The publication of our article led to the organization of a symposium in May at the University of Catania to determine what could be a future protocol much more robust than that of 1988.

For you, personally, what does this discovery mean?

I was baptized recently in 2016. This discovery is part of my journey of conversion, which was accelerated especially when I realized that the "science" and the truths proclaimed by the Catholic religion were not in conflict, but strengthened.

With this discovery, I am happy to be able to show why Christians should not be afraid of science. We must seek the truth, whatever it is. The study of the Shroud of Turin can be part of an apologetic movement that has profoundly changed so many lives - and my life - but still remains unknown in France. This discovery offers us a concrete example in favor of a renewed and uninhibited apologetics. Why would we be afraid to discover the truth, and tell it to the world?

Tristan Casabianca, Emanuela Marinelli, Giuseppe Pernagallo, Benedetto Torrisi, "Radiocarbon Dating of the Turin Shroud: New Evidence from Raw Data", Archaeometry, 2019.