Why it is impossible to clone the Man of the Shroud?

The dismissal of a fear without a cause

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If we accept that the Man of the Shroud is Jesus Christ, would it have been possible to create a copy of the Crucified by cloning, using the Shroud of Turin? The question seems to be sacrilegious for the believers. Even the well-intentioned non-believers may find the idea to be perverse. An additional circumstance is the bioethical ban of cloning, which may come along with legal prohibition. Despite all of this it was published in the media around the world that the Man of the Shroud can be cloned using the DNA traces found in the Shroud, which has frightened believers. This fear is however absolutely irrational. Why?

- 1. According to our knowledge, the process of cloning requires intact DNA parts which can be implanted into the ovule. The DNA is the genetic core in scaffolding of an organism. The cloning of the world famous Scottish sheep Dolly was possible using this method. Moreover, in Dolly's case the whole cell nucleus was also available. Such intact DNA parts can not be found in the Shroud of Turin, which makes even the possibility of cloning questionable. The situation is however not that simple. Namely, one can ask, whether the decipheration of the genetic code of the DNA in the human blood could give a possibility for cloning.
- 2. As a matter of principle we can say that the cloning of a human being cannot be applied for the whole personality. The recreation of Jesus Christ as 'Jesus Christ' is absolutly impossible. He was the most influential personality of the human history, which cannot be denied by any non-believer ether. This axiom is true for all the great men of the history. Of course this is true for all human beings, but these prominent personalities are in the primary focus of cloning. Moreover these exceptional human beings bore some sort of enhanced individuality. Therefore we can state it even as a rule that *the geniuses as genius cannot be cloned*. If an intact DNA part e.g. of Michelangelo would be available and using this genetic material we could, let's say "re-create" 10 Michelangelos (using the biotechnological methods of cloning), this would only mean 10 *biological imitations*. And substantially this has nothing to do with the original Michelangelo, the genius of the Renaissance. The extraordinary intellectual or charismatical power of a genius is a very complex phenomenon. It is already widely acknowledged as it was for example u.a. stated by professor of genetics Gabor Vida member of the Hungarian Academy of Science that *the genetic capabilities are only in part responsible for the mental and personal abilities*. There are many other conditions to become a genius.
- 3. But would it be possible to re-create such a "biological imitation" of the "Man of the Shroud"? In his famous book Ian Wilson gives a detailed and convincing proof of the impossibility of such a process based on the results of the latest research (see The Blood and the Shroud. The German edition: Das Turiner Grabtuch. Die Wahrheit. 1999. Goldmann). In order to understand the details of his explanation a short retrospection is needed. The most important is the discovery of an American professors Garza-Valdés of San Antonio / 1994 /. The substantial phenomenon is that it is a plexiglass-like "biolayer" on the surface of the Shroud, which was created by fungi and bacteria and can only become visible by a special microscopical method. What was the echo of this very important scientific result? An English expert was examining the Egyptian mummies using the C14 test method, responded to this discovery of Garza-Valdés. She is Rosalie David / Manchester /. Searching the chronology of one mummy of Egypt she had made already earlier a radiocarbon-test in the British Museum of London. The result was astounding and puzzling. It was inexplicable how

the result could be possibly be. It show that *the bandage of mummy was approximately one thousand years younger than the body itself.* This was one of the strongest counter-argument after the publication of the results of the radiocarbon method in 1988, which implies that the research has to be continued. The debate is still not yet closed, though the science of today is more skeptical concerning the general efficacity of the radiocarbon tests / as 20 year ago /. It is known that due to the discovery of Garza-Valdès Rosalie David got the explanation to her question. She later confirmed this discovery of the "biolayer" by using the radiocarbon test on a mummified Ibis Bird / in the laboratory of Huston /.

- 4. But how does this all relates to the question of the credibility of the Shroud of Turin? The "biolayer" is namely perceptible on the Shroud, too. To what extent do these facts prove that the planned cloning of the "Man of the Shroud" would be practically impossible? What are the antecedents? After Alan Adler detected the traces of real blood on the Shroud. Baima Bollone determined the blood group and therefore the earlier hypothesis that the Man of the Shroud is a painting become incongruous. The result of the new scientific investigation made completely indefensible that the "Man of the Shroud" was painted. A French professor Lejeune has detected the traces of the DNA, but he died in 1994. His investigation was continued by an Italian professor Marcello Canale. He announced that he found the DNA, but only a few elements of its long chain have been identified. The piece of textile carrying the blood traces from the crown of thorns went from Giovanni Riggi to Garza-Valdès / San Antonio /. The excellent experts of genetics Dr Tyron and his wife Nancy Tyron accepted the material to perform genetic investigation. They did not know from where the piece of textile came from (it was the fringe of the material cut off the Shroud in order to perform radiocarbon examinations in 1988). They determined that the blood is human and it is the blood of a man. Nancy Tyron has affirmed – and this is decisive - that the cloning is impossible, because only 700 pairs of bases were identified, while the whole molecule contains about 3 billion pairs of bases, and this is an opinion of crucial importance.
- 5. One can ask, what are the exact genetic elements that the scientists were able to recognize on the Shroud of Turin? Ian Wilson gives the answer to this question in the afore-mentioned book, however it is only understandable for the professionals.
 - 1. Beta globin, a protein which is coded by a segment of the DNA in the 11th chromosome
 - 2. Amelogenin, a protein which is coded by a segment of DNA in the X chromosome
 - 3. Amelogenin, a protein which is coded by a segment of DNA in the Y chromosome.
- 6. And this is exactly the part of the information about which the fears of the people has to be dismissed. Why? The Y chromosome in the DNA found in the Shroud could imply that a father from the Earth has to be supposed in the conception of Jesus. However the words of Mary, the mother of Jesus can be unequivocally read in the Holy Script "I have no relations with a man" (Luc. 1. 34). Although if the Y chromosome would be taken out of our consideration, we had to face another problem: according to our knowledge the result of parthenogenesis could only be a girl-child. What is then the answer of the theologian? It is the mistery of the conception of Jesus Christ by the Holy Spirit. It can not be explained by biological arguments, and at the best it can be biological only approximated. If Jesus is the Messiah indeed, then this is clearly in accordance with the theological idea. As the biblical citation indicates: "For nothing is impossible with God" (Lukas. 1, 36). According to the Gospel everything has happened through the holy Spirit (Mat. 1, 20; Luc. 1., 35). Therefore *neither the mystery of conception, nor the mystery of resurrection of Christ can be explained only by biological arguments.* "The meaning of this event is accessible only to faith ... from his Incarnation to his Passover" (The Catechism of the Catholic Church, 498). That is why the theologian does not have to become confused, and the believer geneticist can also peacefully go

about his task. He knows well that there are higher forces above biology (e.g. the appearance of stigmas as a result of psychological experience).

7. The possibility of the cloning – meant in a qualified sense – of the "Man of the Shroud" can be excluded even if we regard *the future developments of the methods of genetics*. If let's say in five or ten years there would be a possibility to know the whole DNA molecule from the blood traces in the Shroud, the biological copy of the "Man of the Shroud" could still not be "re-created". Like this we could only re-create some sort of "biological dummy" which totally lacks the property of biological continuity. To achieve this, the whole DNA molecule should have to be built up using the genetic map of the genome for that is should possible to implant it to an ovule. This would be possible using the DNA of kin species. Maybe. *The exclusion of the biological continuity in this case would mean that the real historical personality would act only as a model for an imitation*, which does not have any relation with its own biological material. And this is so because *the genetic map itself can not be implanted into an ovule!*

Let's took a simple example from architecture, which can be easily understood. An antique temple that has only its walls which has remained together with a drawing, which could be used to rebuild the original walls. By this the continuity is completely assured. This is how the Dome in Cologne was rebuilt to its actual form after centuries. The replacement of the cells in the body is a continuous process, which assures *the biological continuity*. And this is the only thing which is absent from the result of this hypothetical cloning process. In the case of this process we can not talk about any kind of biological continuity because the result should be *only an imitation created using a blueprint, which is not else than a "biological dummy"*.

In summary we can say that, the "Man of the Shroud" can not be cloned, neither theoretically nor practically using the available DNA. This would not even be possible if we suppose that the experts of some genetics of sindonology would obtain a more detailed map of the DNA. But the actual possibility of this is practically zero. Even if we would take into account the possibility of cloning of a prominent personality of history it would only result in some sort of a "biological dummy". Therefore it should be the fears of the possibility of cloning of the "Man of the Shroud" peacefully dismissed.

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