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COMPATIBILITY BETWEEN THE DIGITIZED BODY IMAGE AND A COMPUTERIZED ANTHROPOMORPHOUS MANIKIN

Abstract

The frontal body image, 1.95 m long, is not directly compatible with the dorsal image that is 2.02 m long: does it imply that the Turin Shroud is not authentic? To verify the compatibility due to the wrapping of a corpse, a computerized anthropomorphous manikin was utilized and the following procedure was done.

First of all the manikin was wrapped by a numerical sheet in which the dimensional characteristics of both the frontal and the dorsal body images were reported.

Then the manikin was moved in order to obtain the correspondence between its anthropometric points and that of the sheet.

The most probable position of the arms, not completely visible on the Shroud, are finally determined on the basis of a cinematic analysis.

The main results are:

- both the frontal and the dorsal body images are compatible with the wrapping of a man 175±2 cm tall;
- the tridimensional position of the Man of the Shroud was determined in terms of angles of head, arms, legs and feet.