



Animal Tendon on Late Medieval Wooden Artefacts – Problems of Analysis and Questions of Gistoric Preparation of Tendon Material

Dr. Beate Fückler and Josefine Kramer M.A.

Institute of art technology and Conservation (IKK), Germanisches Nationalmuseum, Nuremberg

Since 2013 three research projects at the Germanisches Nationalmuseum in Nuremberg, Germany have been dedicated to the study of late medieval German panel painting. In the course of the projects we discovered many paintings with intermediate layers or rear facings of animal tendon. It soon became clear, that in the 15th century the material was obviously not only used in painting's production but also in other contexts like weaponry (crossbows, shields and targes), wooden sculpture and memorial shields. Regardless of its context, the fibers mainly served as a reinforcement of the wooden main structure. The tendon, formerly often described as vegetable fibers or tow, can be fairly easily identified by microscopy. Much more complex is the identification of the animal source – so far, we have cooperated with Daniel Kirby (Milton, USA), who successfully applied peptide mass fingerprinting (PMF). DNA-analysis in cooperation with the microbiology lab of the University of Applied Sciences HAWK Hildesheim, Germany, however, did not yield reliable results.

To better understand the material properties of the fibers and their preparation, we have recently done reconstructions of tendon coverings as we find them on late medieval panels using cattle and sheep tendon. The time consuming preparation of freshly butchered hamstrings raised several questions concerning the handling of the material and especially the application on the panels, as the coverings seem to be applied with abundant proteinaceous binder, which could affect the correct analysis of the animal source of the fibers.