

Facts and figures

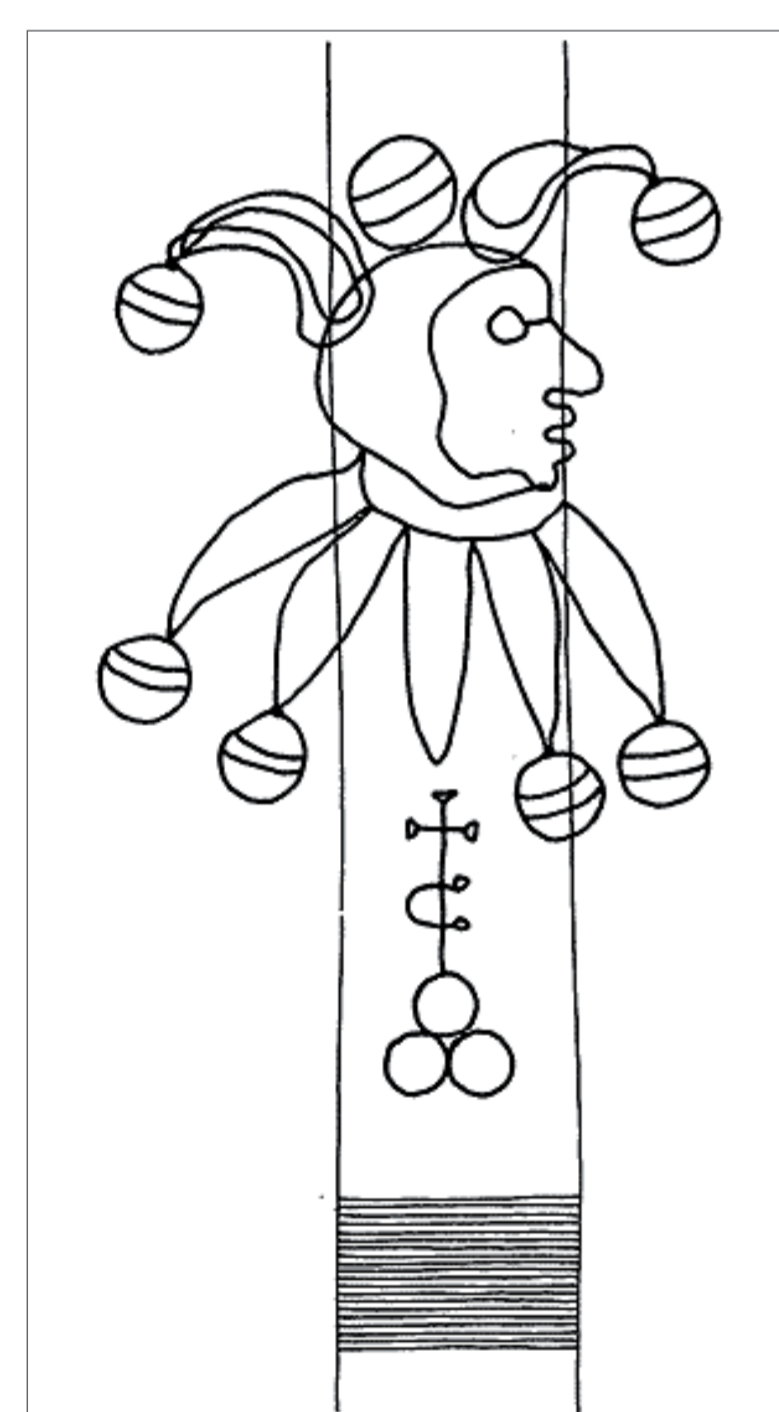
92.000 watermarks in
38 groups
collected in
9 European countries
from manuscripts in
120 archives and libraries
covering the
13th-19th centuries

Gerhard Piccard, initially a painter, developed an artistic interest in the shapes of watermarks. His private passion became a profession and he dedicated over 40 years of his life travelling and tracing watermarks, which he eventually published in 25 volumes. In 1951 he donated his collection to the State Archives of Baden-Württemberg which today is home to the world's largest online accessible collection of watermarks.

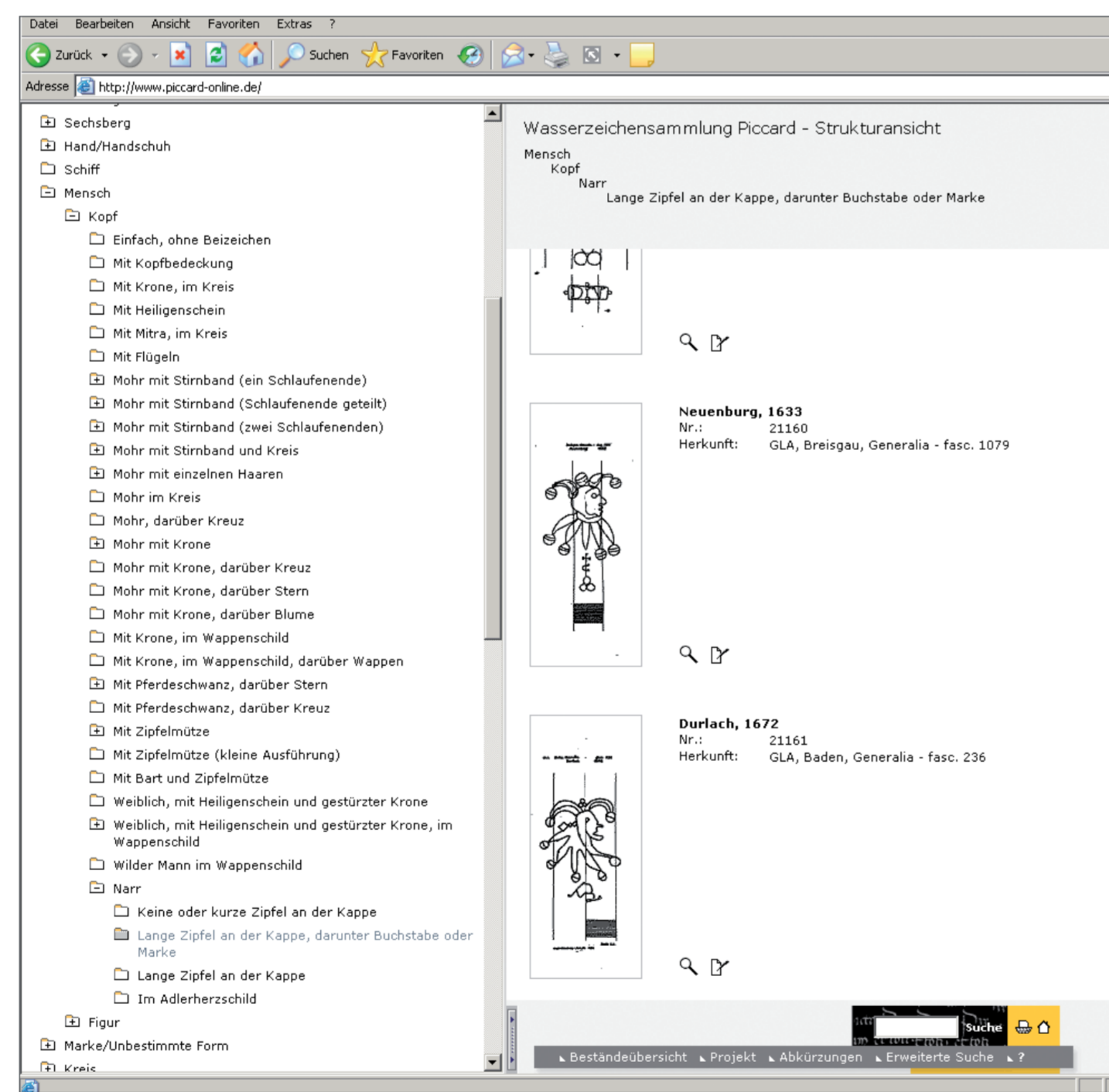
The collection and its creator

Watermarks are an important source for dating manuscripts. Given the presence of two identical watermarks, one deriving from a dated, one from an undated document, deed or painting, it can be assumed that both were written on at the same time. Piccard proved that the dating can be determined with an exactitude of more or less 5 years.

The purpose of watermarks



picture 1: scanned file card



picture 2: Piccard-Online

Piccard copied each tracing of a watermark to a standard size file card. These cards were scanned and the corresponding data was entered into a database (date of the manuscript, place of issue, issuer, possessing institution). The watermark images are presented in a tree structure and can be searched by visual or full-text search.

The digitisation project

Duration and funding

finished in September 2006,
funded by the German Research Foundation (DFG)

The Bernstein project aims to generate the conceptual and technical infrastructure for the expertise and history of paper.

The purpose

The individual resources are databases of watermarks and other related features, image measurement software, contextual resources for cartography and bibliography and an integrated workspace.

„Bernstein“ is German for „amber“. Amber is famous for preserving insects from long ago. We can see these ancient insects by holding the amber against a light source, a movement similar to that of the historian who looks for traces of the past revealed to him in the structural features of papers.

The name

The consortium brings together all major European actors in the field of digital historical paper expertise who come from both the humanities and computer sciences.

The consortium

Dutch University Institute for Art History Florence, Italy
NIKI (International Database of Watermarks and Paper used for Prints and Drawings)

Austrian Academy of Sciences, Austria (coordinator)
WZMA (Watermarks of the Middle Ages)

State Archives of Baden-Württemberg, Germany
Piccard-Online

National Library of the Netherlands, Netherlands
WILC (Watermarks in Incunabula printed in the Low Countries)

Institute for Information Systems and Computer Media, Austria
internet services, knowledge management systems

Liverpool University, United Kingdom
Cheshire3 database integration system, cross-domain resource discovery tools

German National Library, Germany
international bibliography of paper history

Laboratory for Occidental Medieval Studies in Paris, France
quantitative history of paper

Delft University of Technology, Netherlands
image processing tools

Main users will be historians and cultural heritage conservators, although other areas where paper identification capabilities are required are expected to benefit from the project, such as the art market, forensic science, security research and the papermaking industry.

The user community

Duration and funding

30 month (September 2006 – February 2009),
funded by the eContentplus programme