



**Capabilities and the challenges of
the use of special scanning
technology for practical training
and research -
an abridged report**

- about 6000 Students
- Faculty of Media: over 1000 Students
- Faculties:
 - Applied Social Science
 - Business Administration
 - Civil Engineering & Architecture
 - Computer Science, Mathematics & Natural Science
 - Electrical Engineering & Information Technology
 - Mechanical & Energy Engineering
 - **Media**



Engineering/Technology



Economy



Library and Information Science



Booktrade and Publishing Management



Applied Museology (Museum Studies)



Publishing Technology



Media Technology



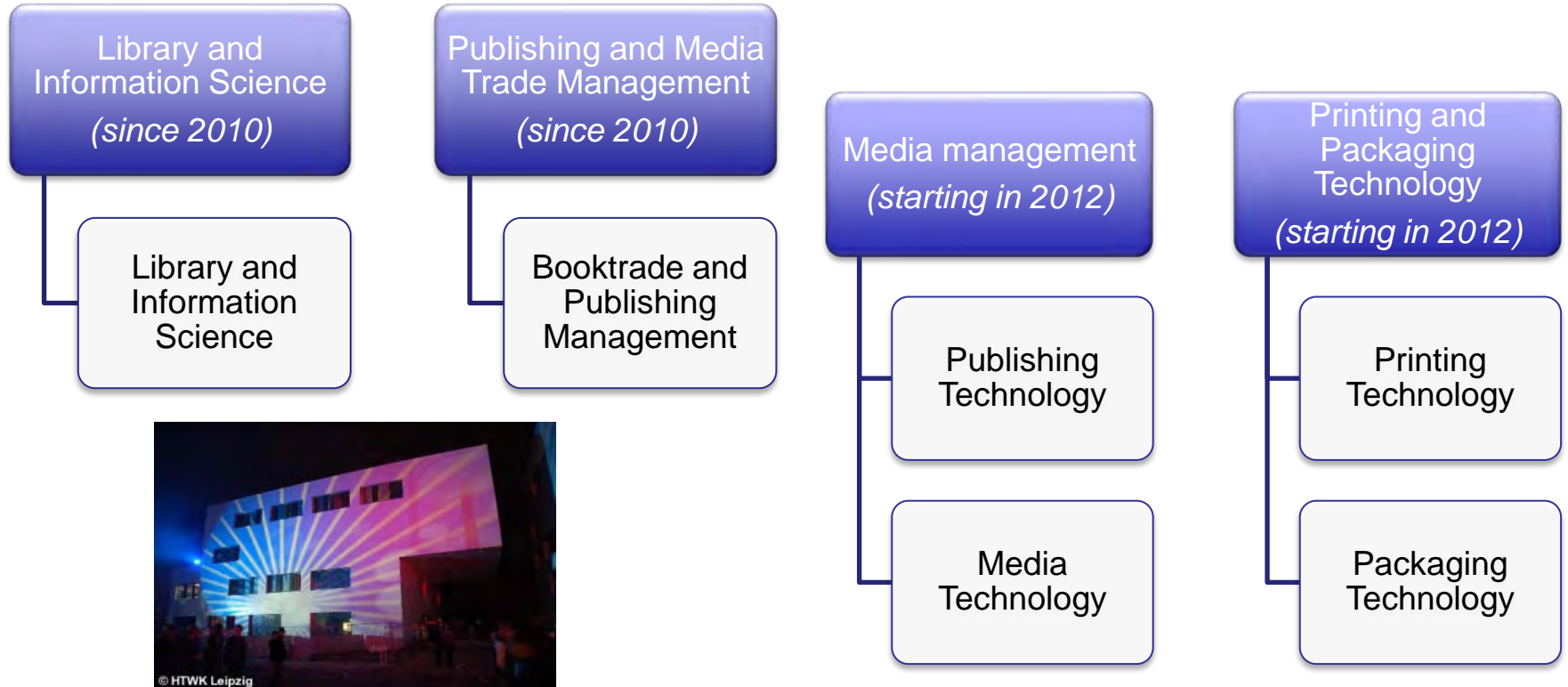
Television

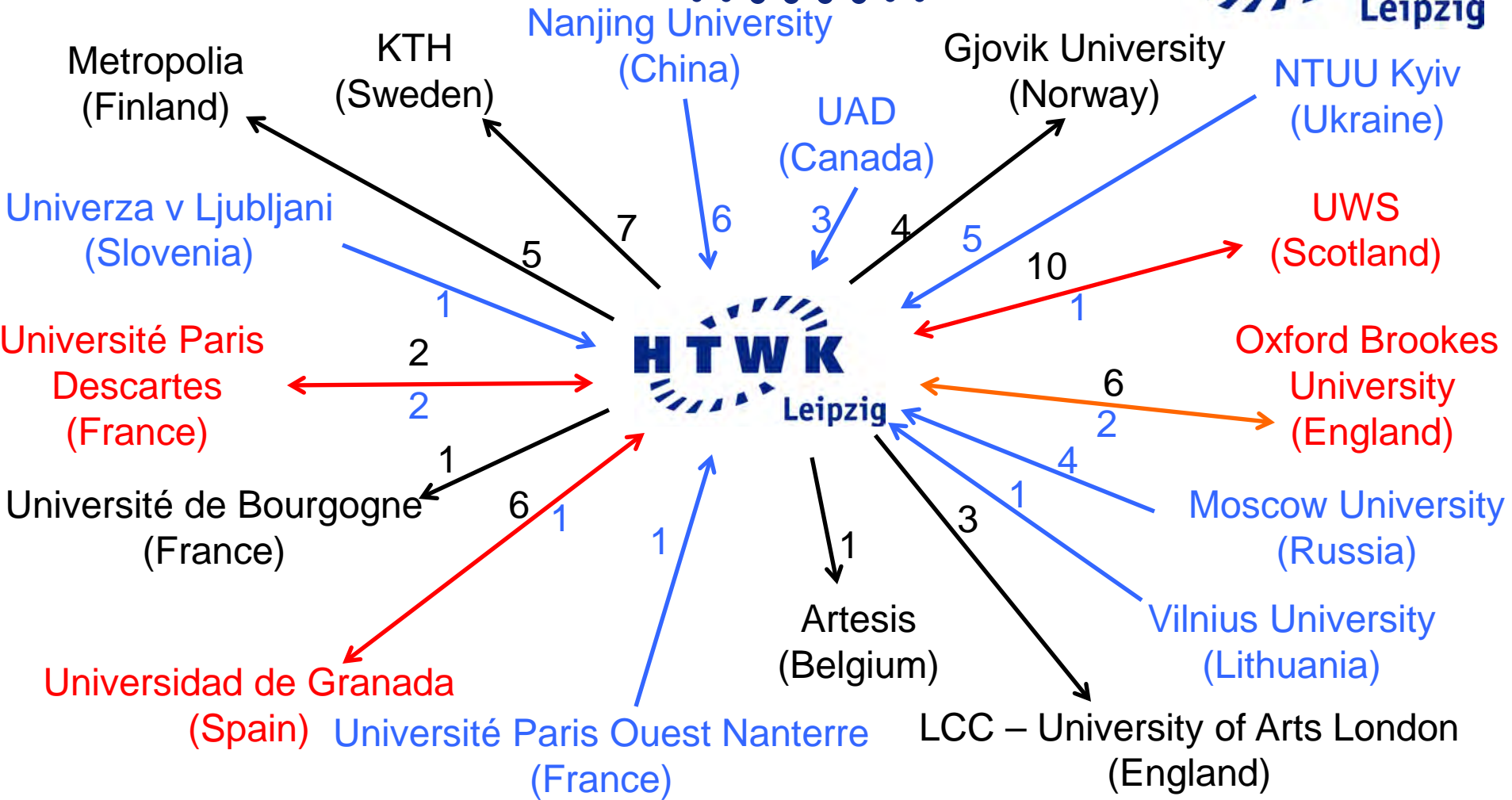


Printing Technology



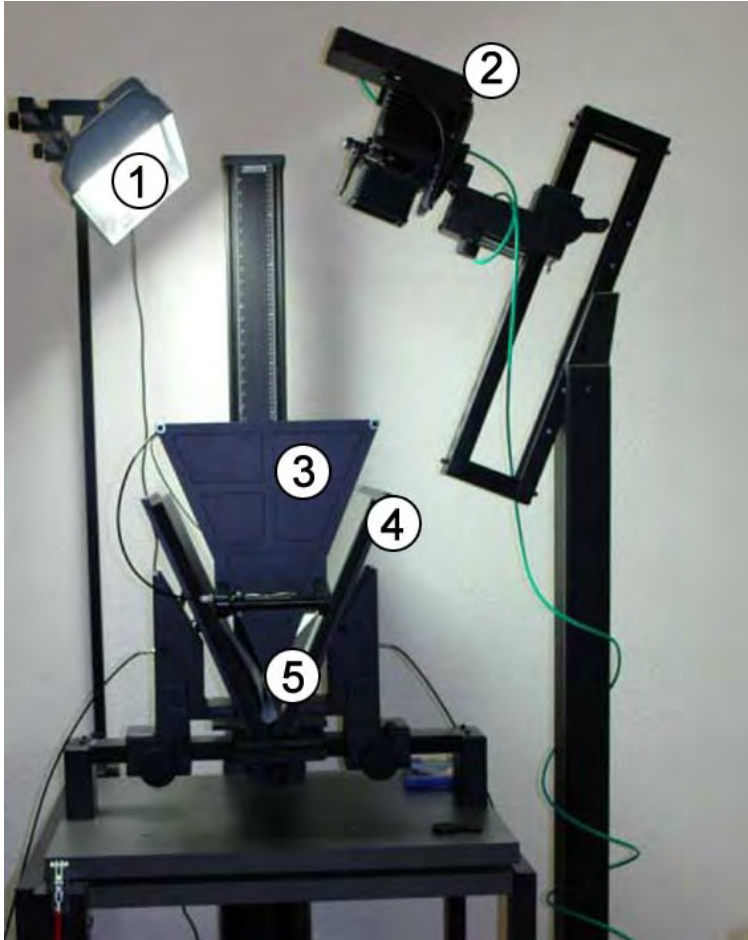
Packaging Technology







- Typesetter by profession
- Studies in engineering at Chemnitz Technical University
- Project engineer for logistics systems
- SAP consultant
- Scientific staff at Institut for Print and Media Technology at Chemnitz Technical University
- Professor at Leipzig University of Applied Science (HTWK) responsible for training in prepress technology
- Dean for student affairs for students of publishing technology

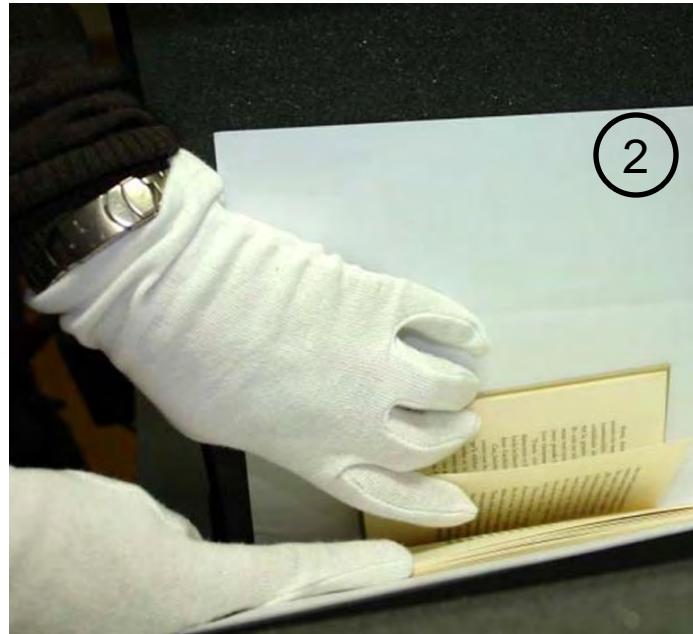


- ① Lighting System
- ② Camera System
 - Scanning camera back
 - One-shot-camera
- ③ V-shaped mirror-glass-construction
- ④ Bookstand
- ⑤ Book
- ⑥ Processing System



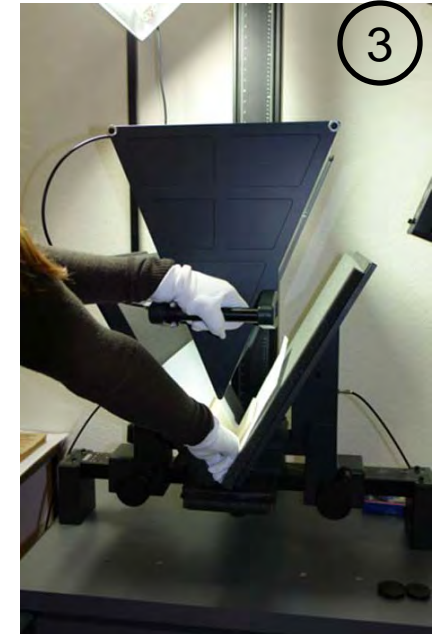


1 Setting-up the system



2 Inserting the book / turning the pages

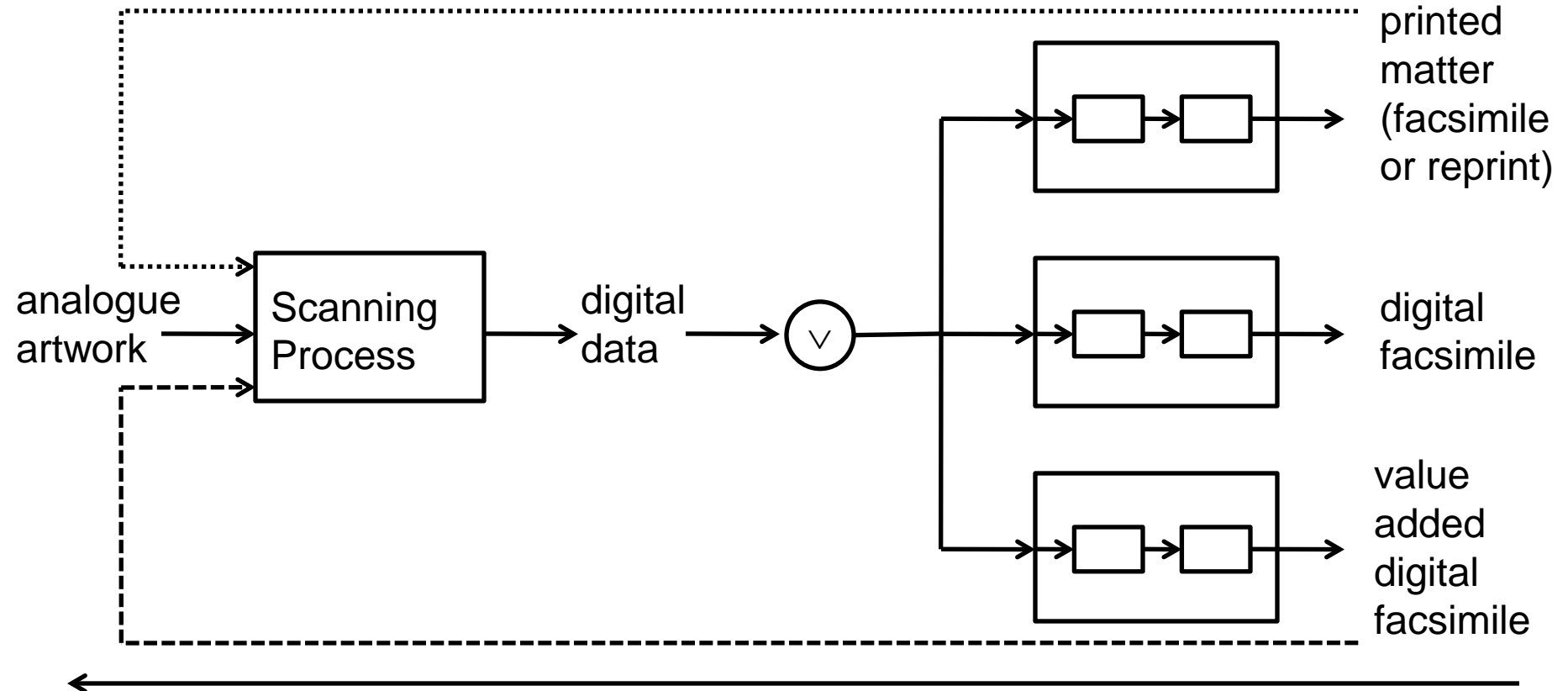
3 Lowering the V-shaped mirror-glass-construction



- ④ Clamping the pages,
bring them to the
photographic plane



- ⑤ Taking the picture
- ⑥ Quality control

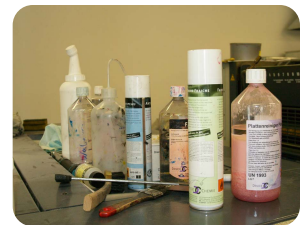


← Intended properties of the final product define the parameters at the Input side of the process

Training goals:

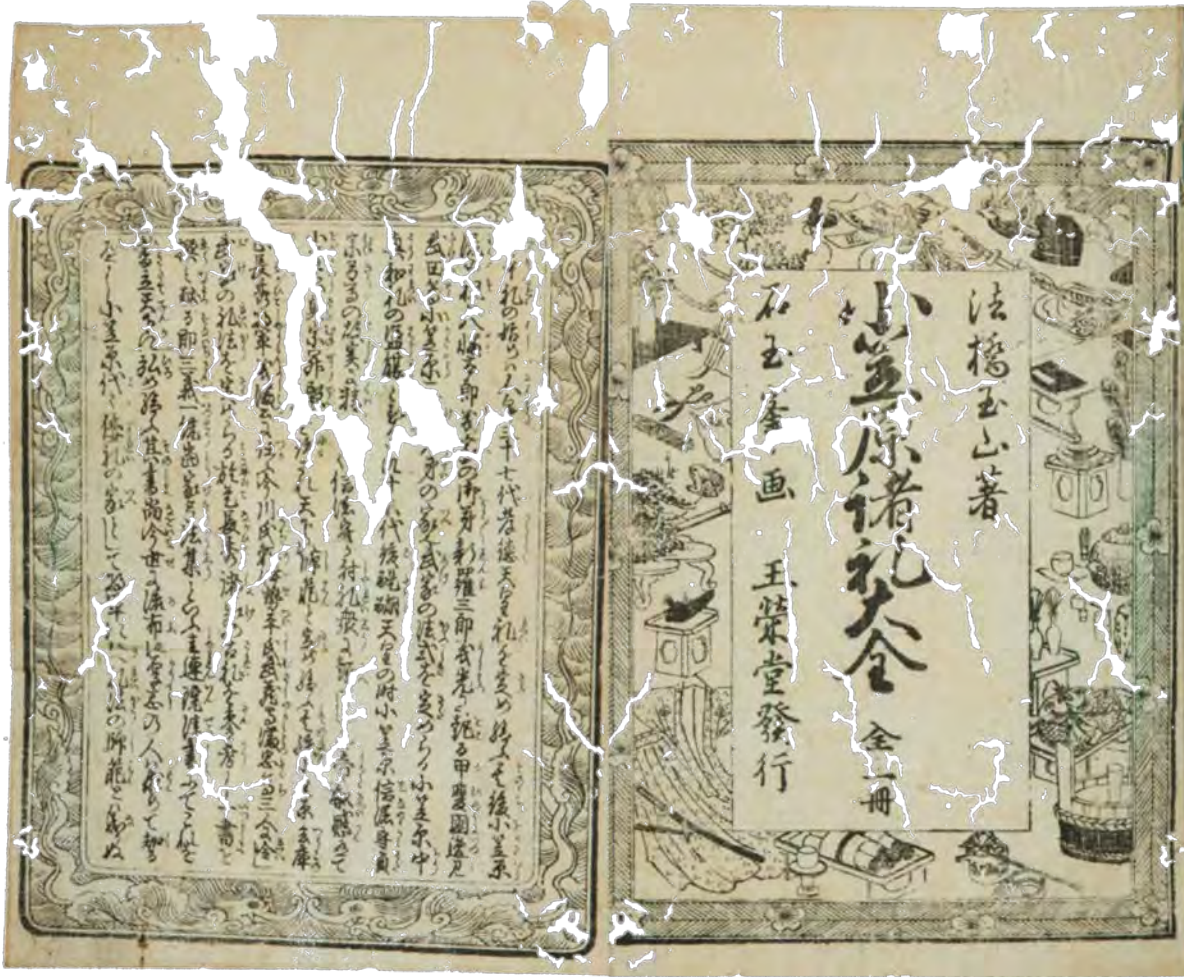
- Development of abilities and skills in using scanning technologies
- Getting a feeling for the effort and the time consumption of the process (and the methods to measure them..)
- Quality opinion, patience
- Understanding processes
- Defining Workflows according to the properties of the final product
- Interdisziplinäre cooperation

Applicable for (nearly) all courses:

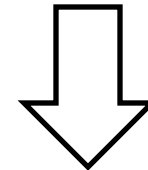




- Cooperation with the famous Grassi Museum of Applied Arts
- Digitalisation of very unique Japanese xylographic books from the 18th and 19th century
- Intended results:
 - General:
 - making the (digital) books accessible to a wider audience
 - In the first step:
 - digital facsimile
 - browsable PDF
 - In the second step (just ongoing)
 - scientific editing
 - added value: transcription, translation
 - preparation for Ebook-readers



- Extremely pre-damaged books
- Extremely complicated preparation of the book before scanning
- High risk of damage during the process



- Contact-free scanning is necessary