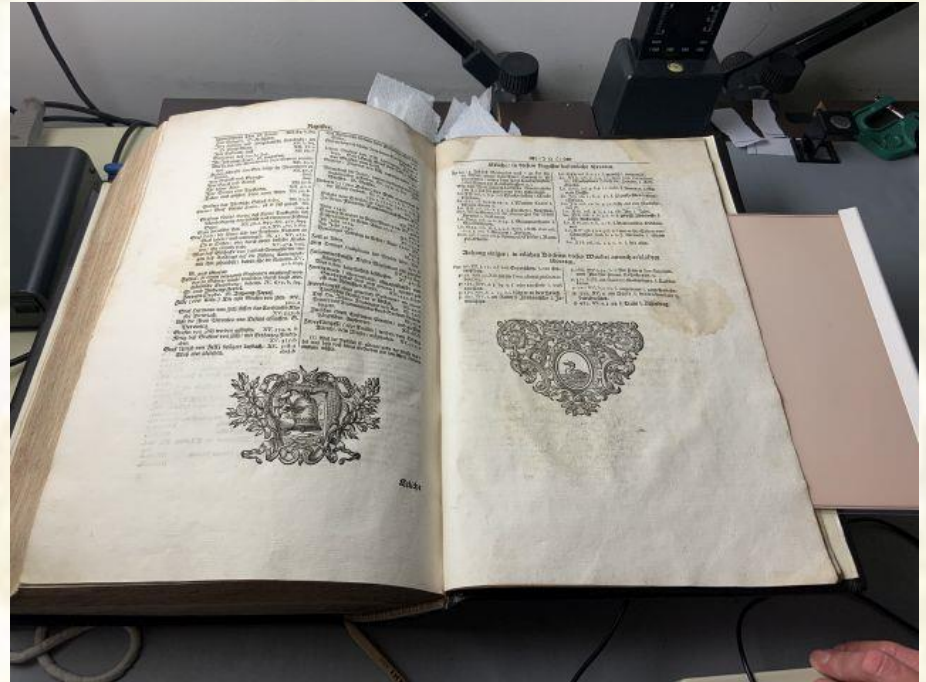
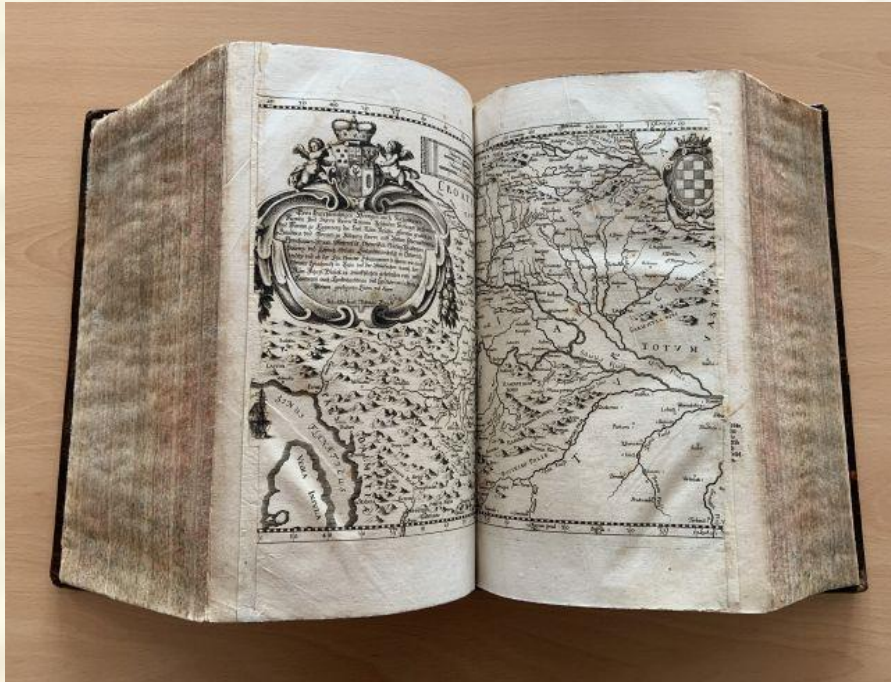


# PAPER AND WATERMARKS in VALVASOR'S GLORY, 1689



Jedert Vodopivec Tomažič  
University of Ljubljani & AlmaMater EC Maribor  
Verona, 7. 9. 2023

# The Valvasor's Glory - Glory of the Duchy of Cariola

## *Die Ehre dess Hertzogthums Crain*, Nürnberg, 1689

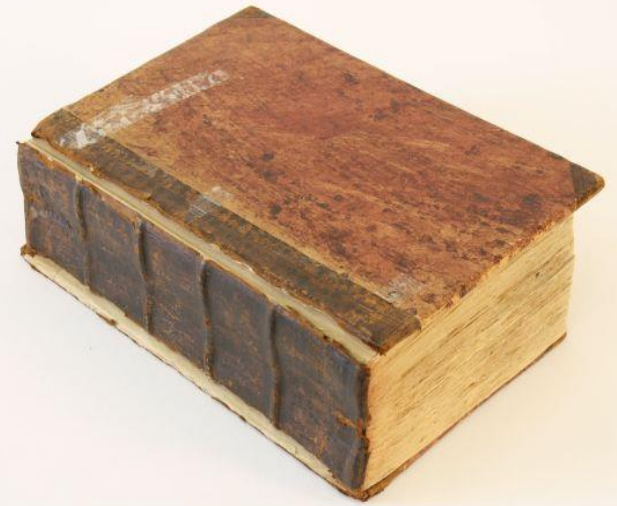
This encyclopedic work is one of the pillars of Slovenian history and culture, appreciated by many scientific disciplines, from the natural and social sciences, to the arts and humanities and is the masterpiece of the Slovenian polymath

**Johann Weichard Valvasor**

- 22 known copies in Slovenija
- 76 known copies out of Slovenia
- **29 examined copies:** Slovenija, Croatia, Austrija, Germany



- **DAMAGED COPY:**  
volume 3 ZRC SAZU, Ljubljana
- Restoration at the Book and Paper Conservation Centre, National archives of Slovenia, Ljubljana

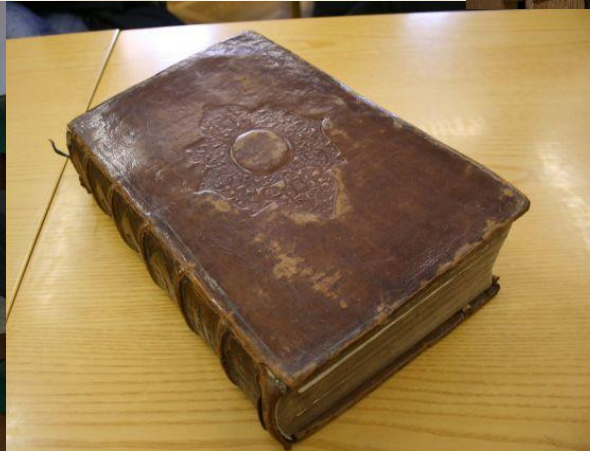
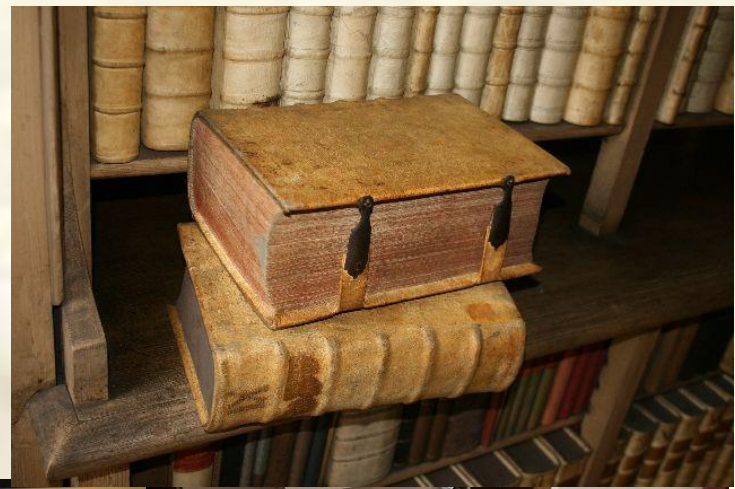


CONSERVATION is always an excellent occasion for the examination of materials and structure of the object



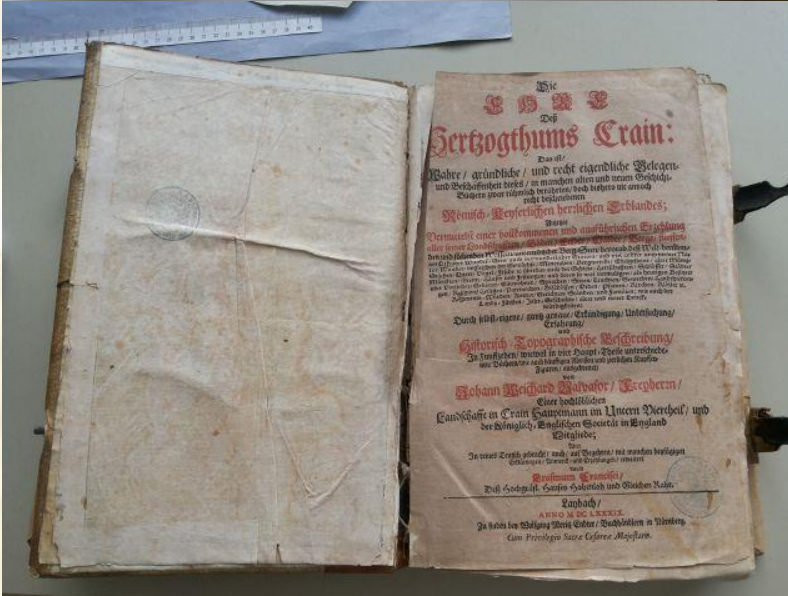
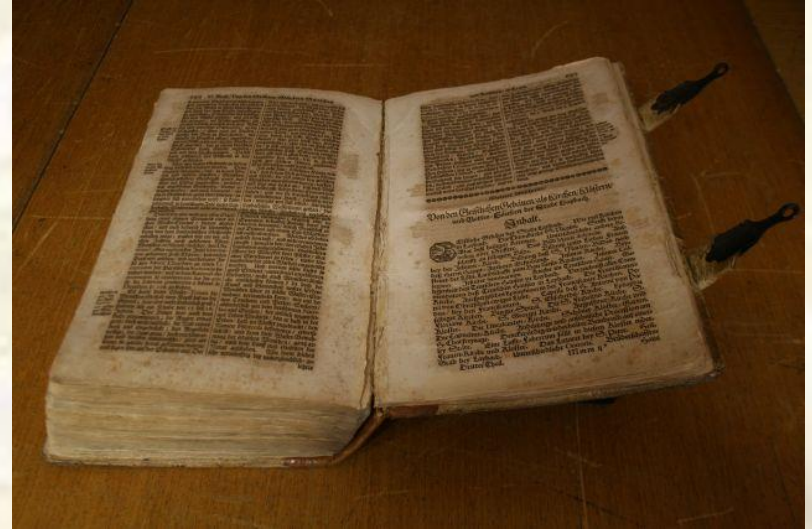
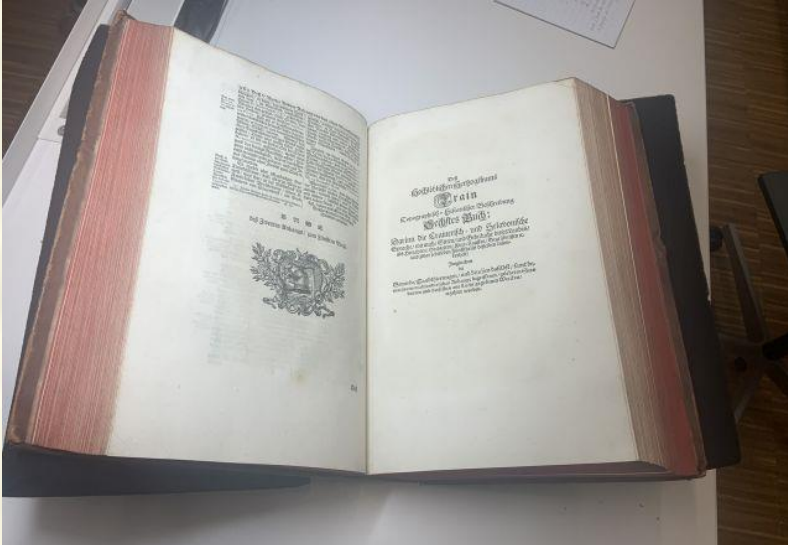
# FINDINGS about BINDINGS

the structure is similar, but the covers are different,  
bound in 2 or 4 volumes



# FINDINGS about PAPER:

The quality and the browning varies



Giulia Orti:

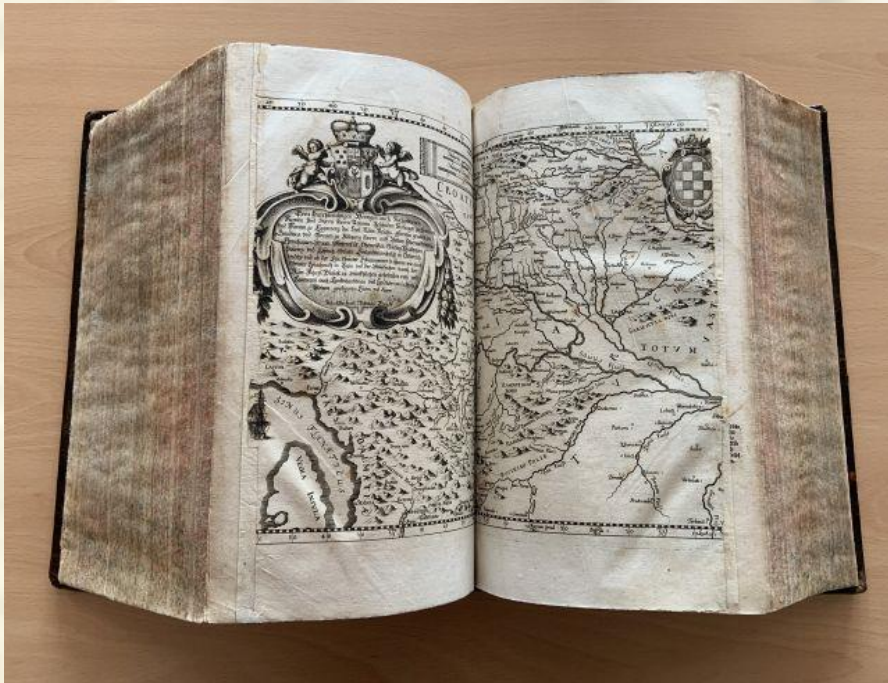
# Browning in Printed Books from 16th and 17th century from the Seminar Library in Padova

Published in 2016 in „*Book Conservation 2*“, Ljubljana, Arhiv  
Republike Slovenije



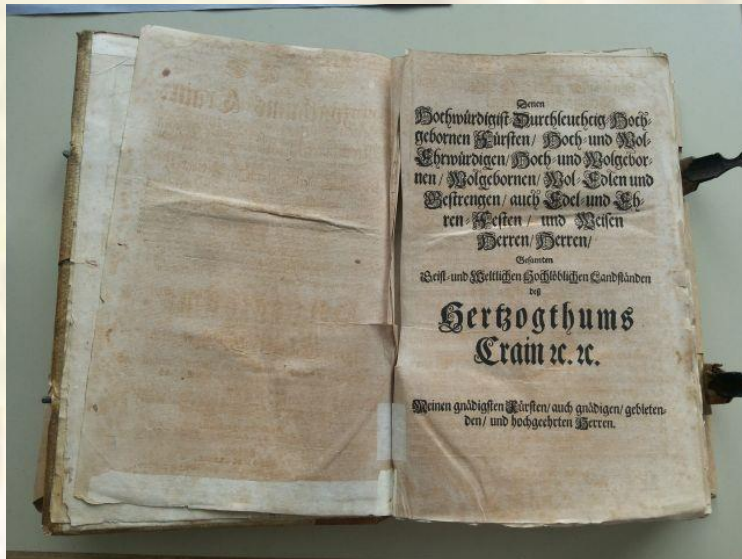
# PAPER: watermarks, browning, sound, feel

- The text block was printed in folio format
- Watermarks in paper are not present in all leaves
- In the majority of examined copies is present the watermark (fig. below right)





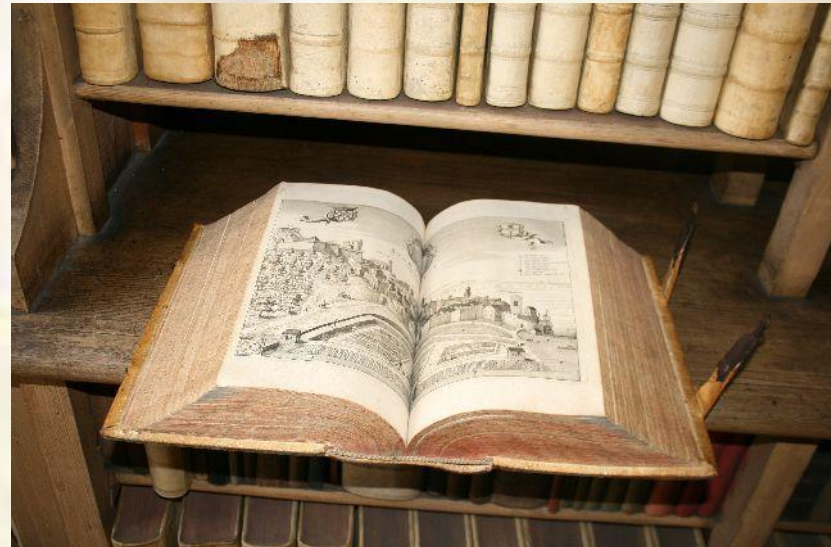
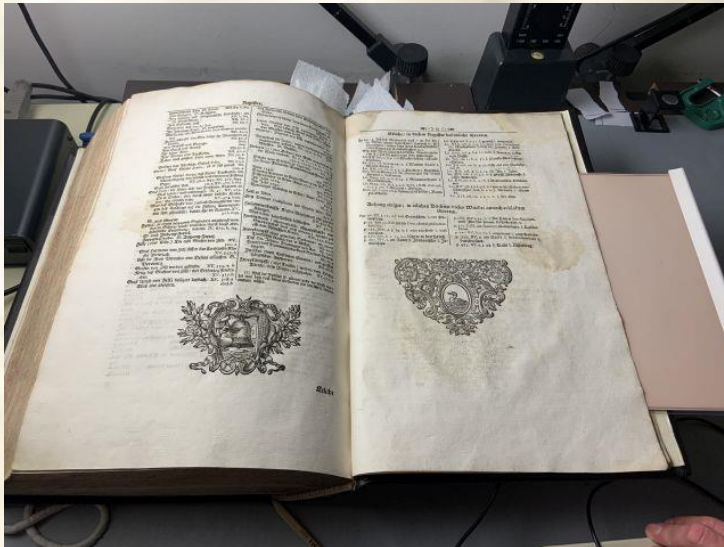
Browning is more intensive in paper with no sound, the reason could be the non impregnation with gelatine



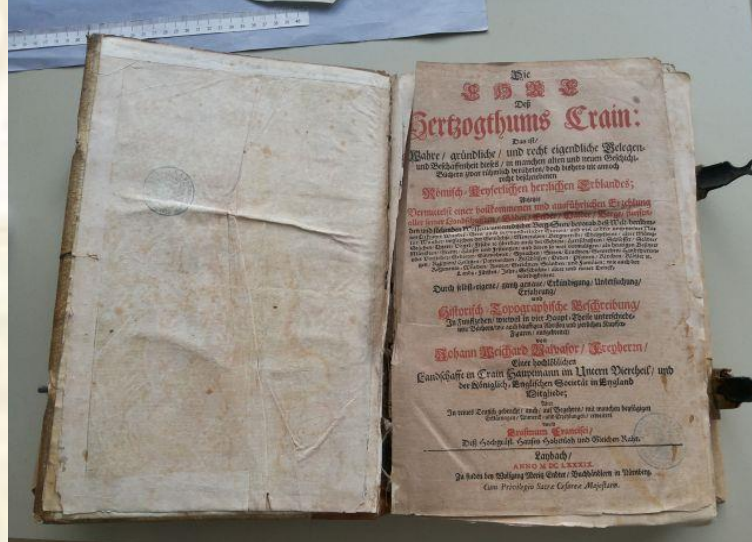
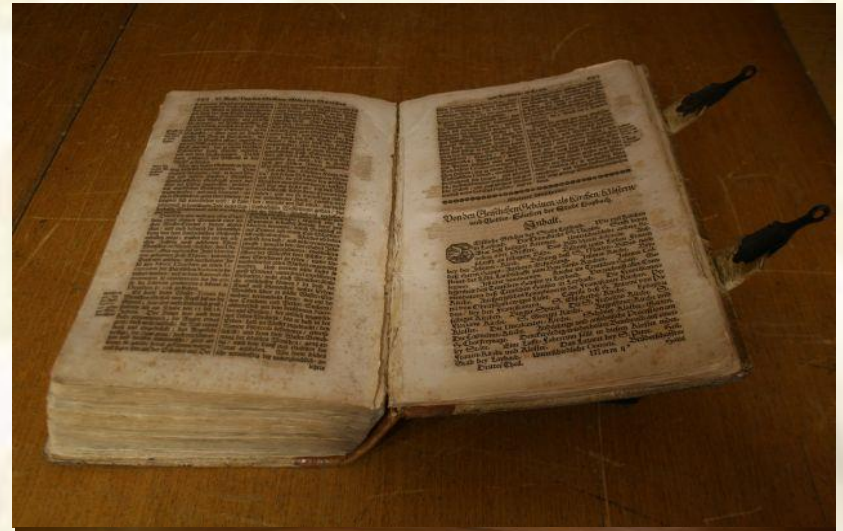
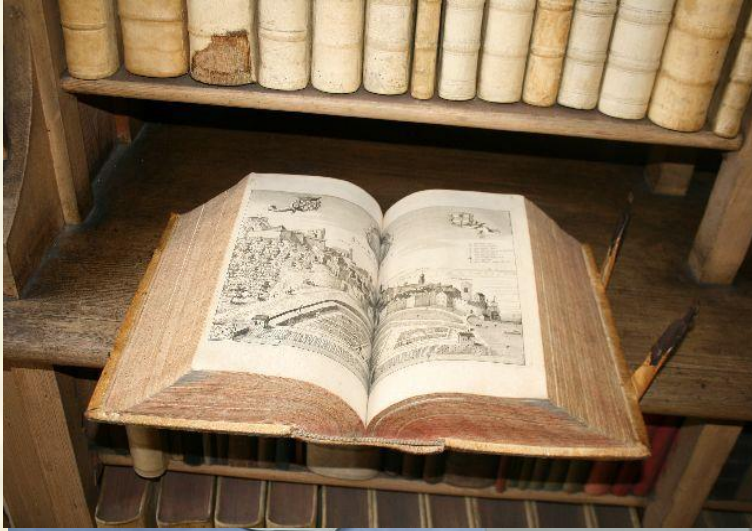
in German countries at that time paper for printing was not necessarily impregnated with gelatine

# WHY?

- Time consuming operation - more expensive
- Impregnation with gelatine was done in Germany by the book binders - after the printing  
(T. Barrett, N. Pickwoad)

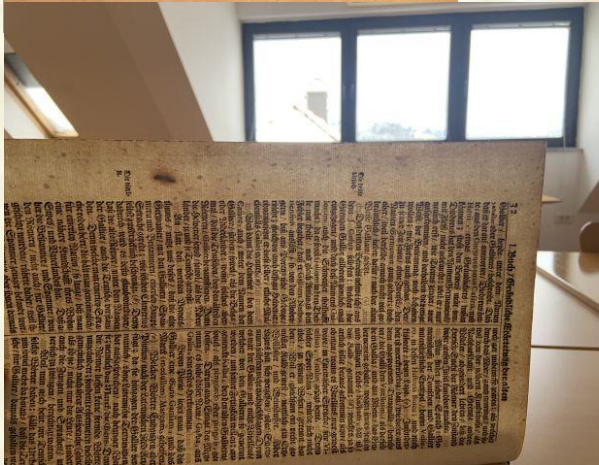
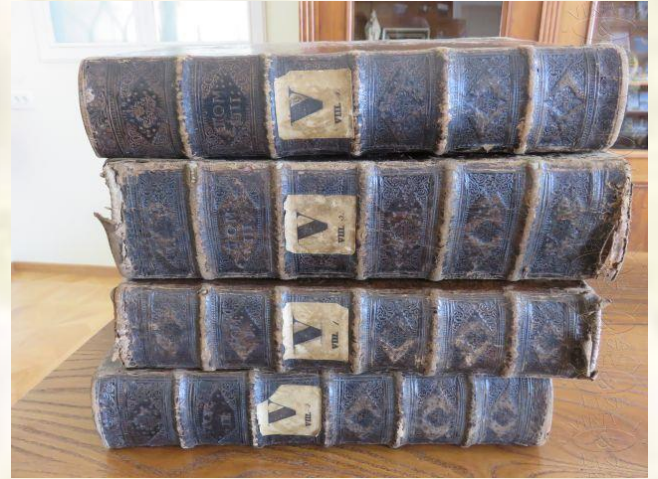
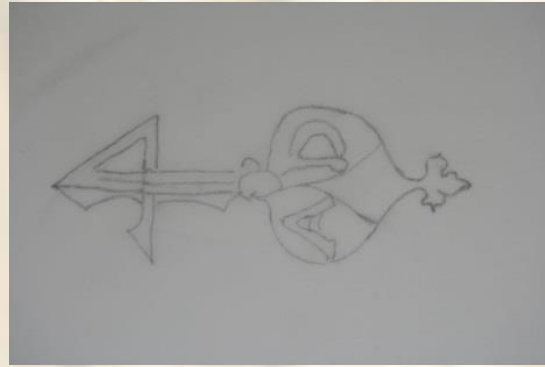


# The paper quality and the browning varies in existing copies



# The paper with intensive browning:

Cerknica city Library, Seminar Library in Ljubljana  
the paper has similar watermarks, thickness and  
no sound



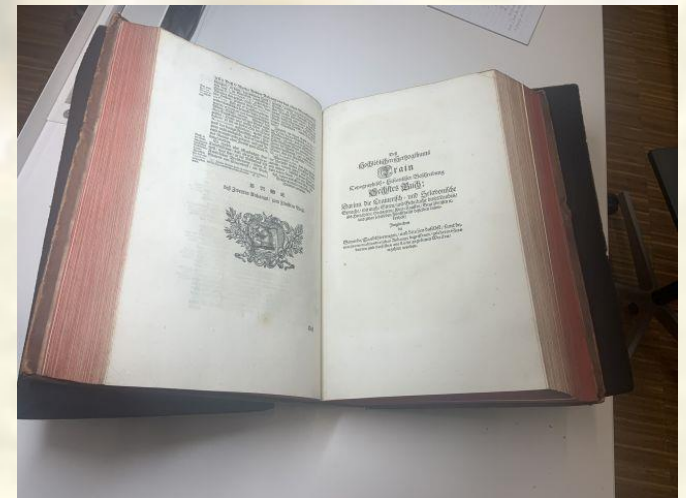
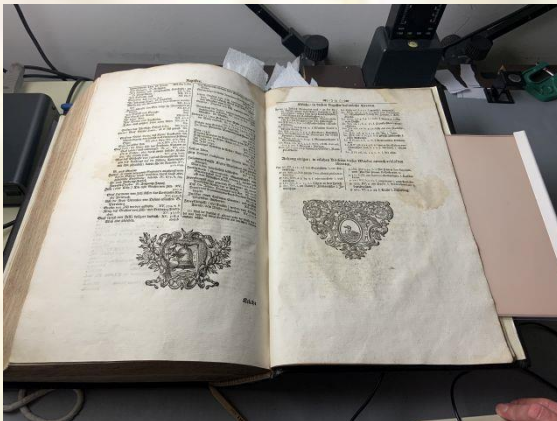
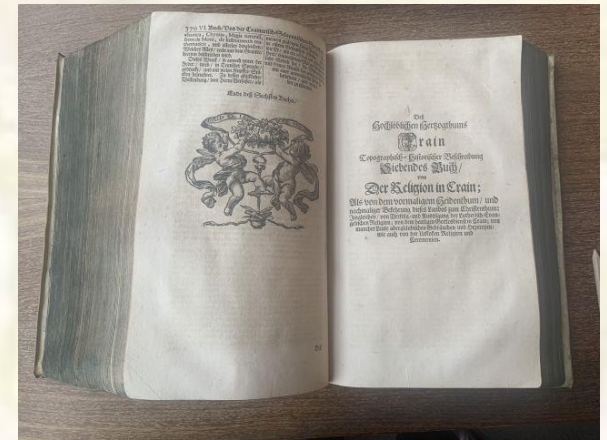
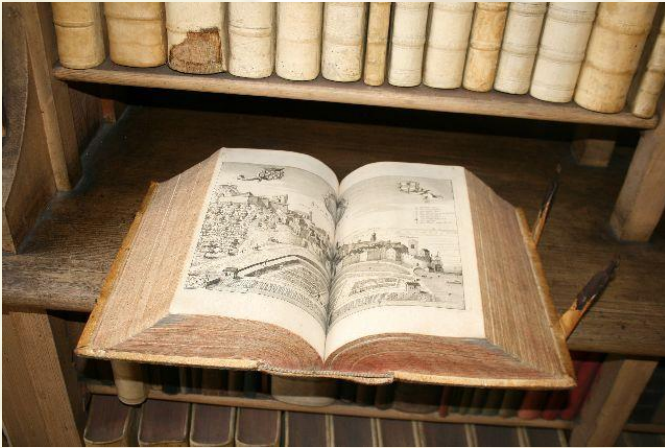
# Copies with no browning in paper:

Franciscan Monastery in Ljubljana (left up)

Metropolitan Library in Zagreb (left down)

German National Museum in Nürnberg (right up)

City Library in Nürnberg (right down)

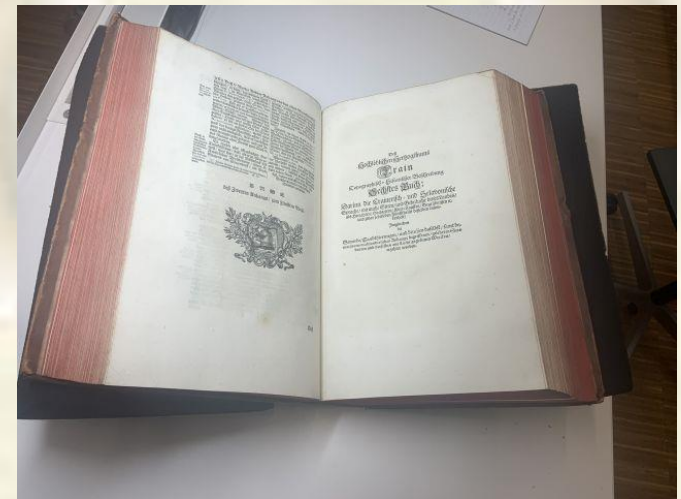
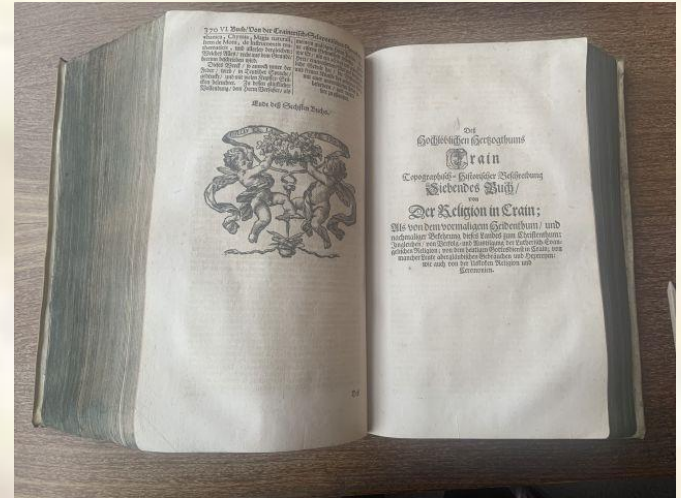


# COPIES from NÜRENBER

## German National Museum(GNM) Nürnberg,

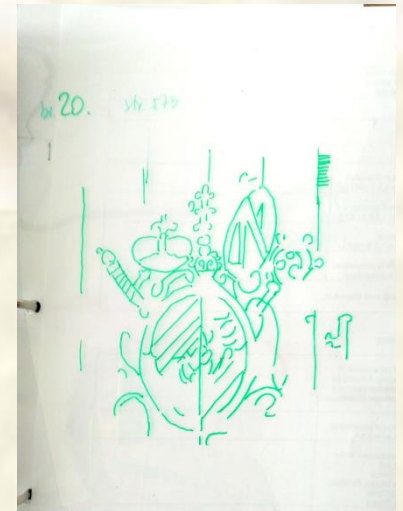
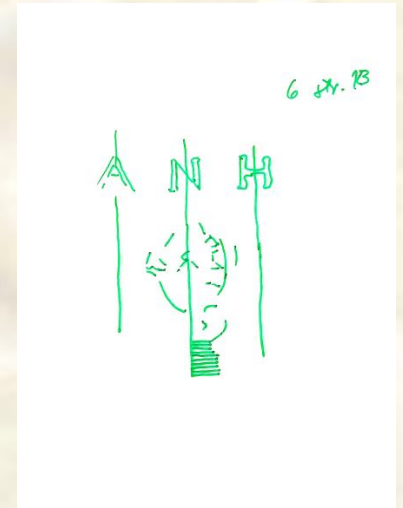
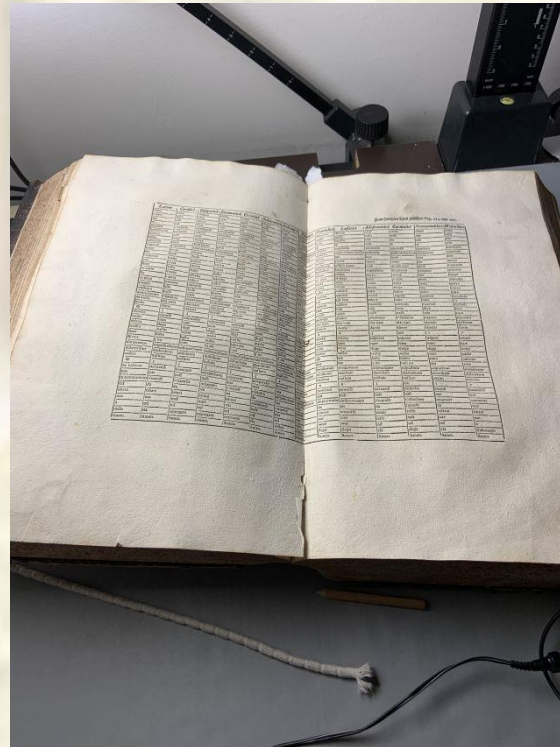
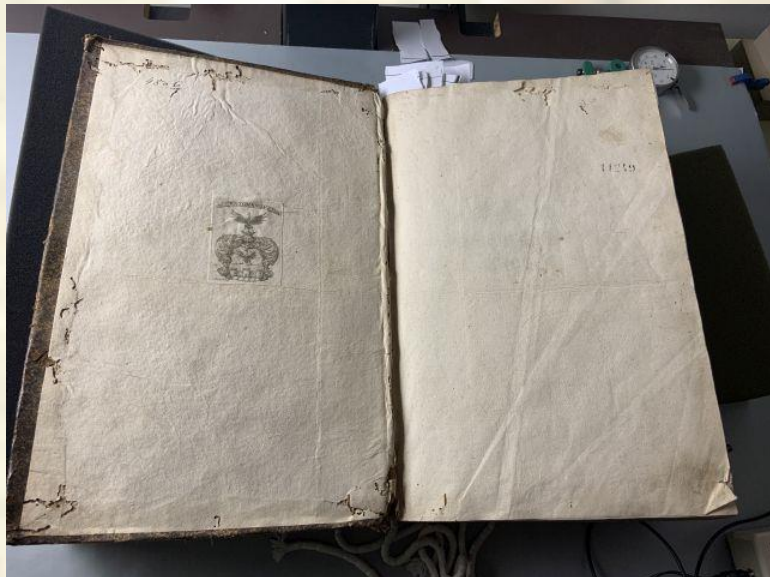
sign. 4° G 6429

- cover: **334 x 205 mm**, paper: 328 x 204 mm
- text.: 291 x 172 mm
- **City Library (CL) Nürnberg**  
sign. Solg. 977-980 2°
- cover: **398 x 252 mm**, paper: 388 x 250 mm
- text: 291 x 172 mm
- **the BIGEST among the known existing copies**



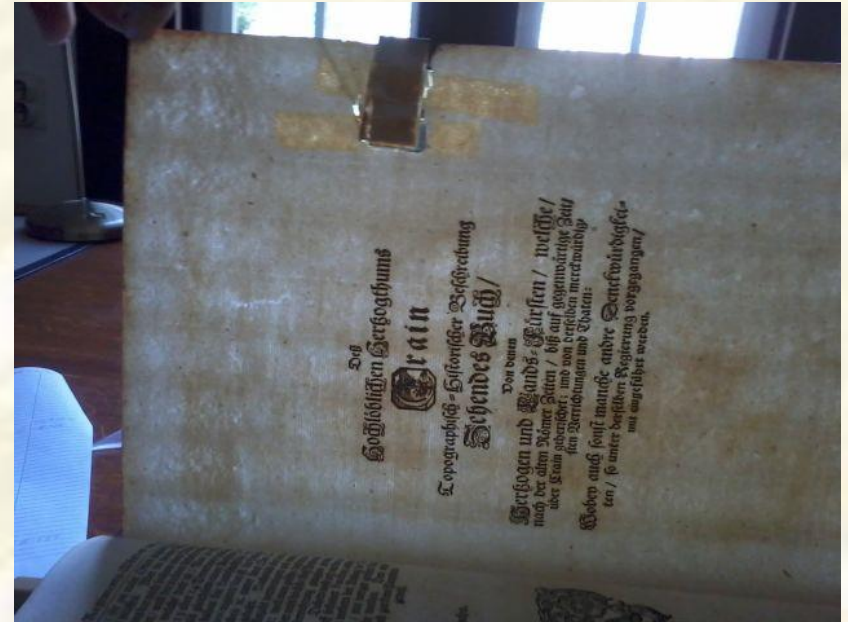
The copy from the Metropolitan Library  
(ML) in Zagreb, Croatia  
is different in size, paper quality and  
watermarks

cover: 380 x 245 mm, paper: 372 x 245 mm  
text: 291 x 172 mm



# PAPER in ML Zagreb

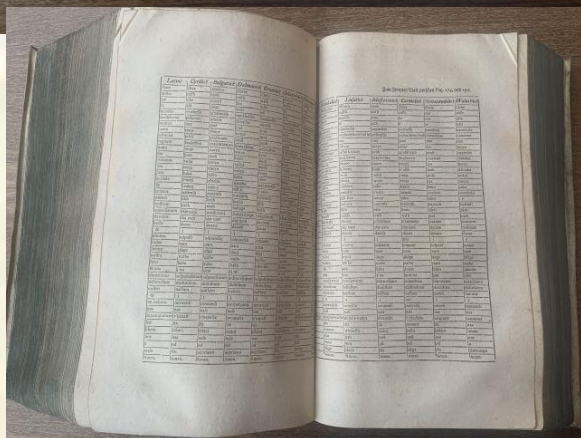
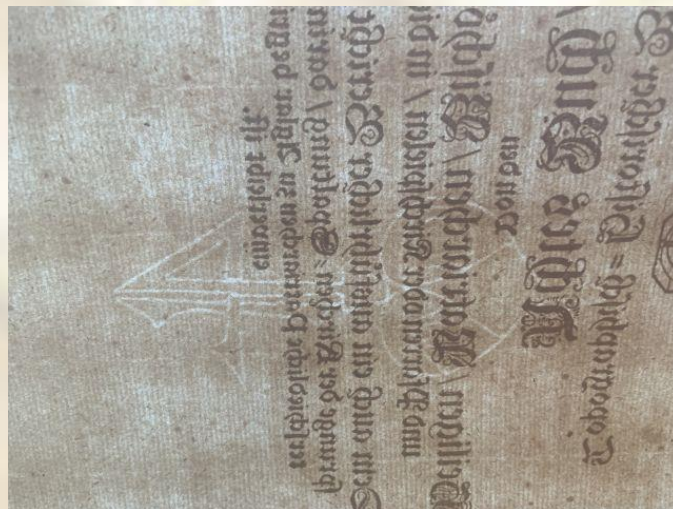
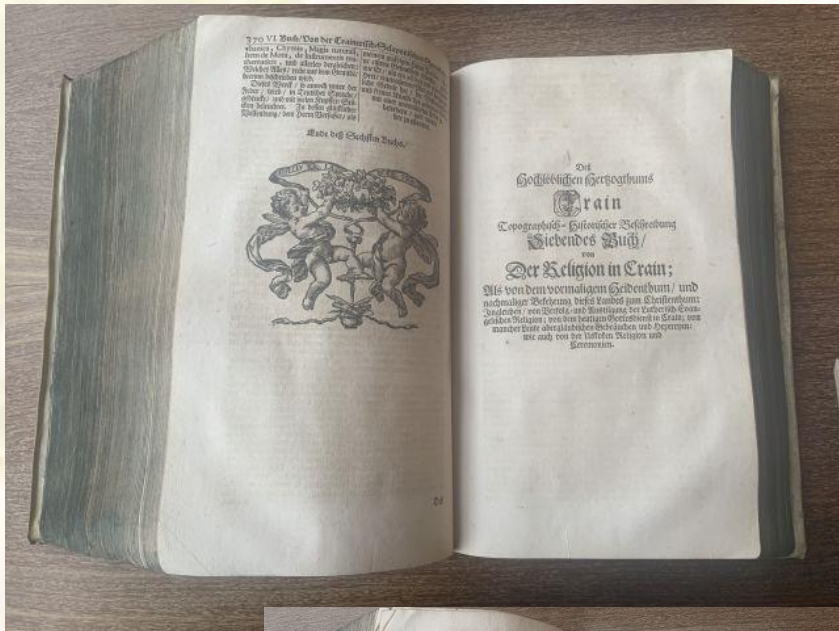
- Has NO browning
- Paper has sound
- But papers differ in thickness, feel, smoothness, homogeneity, fibrillation of fibres and impurities
- Paper is lower quality





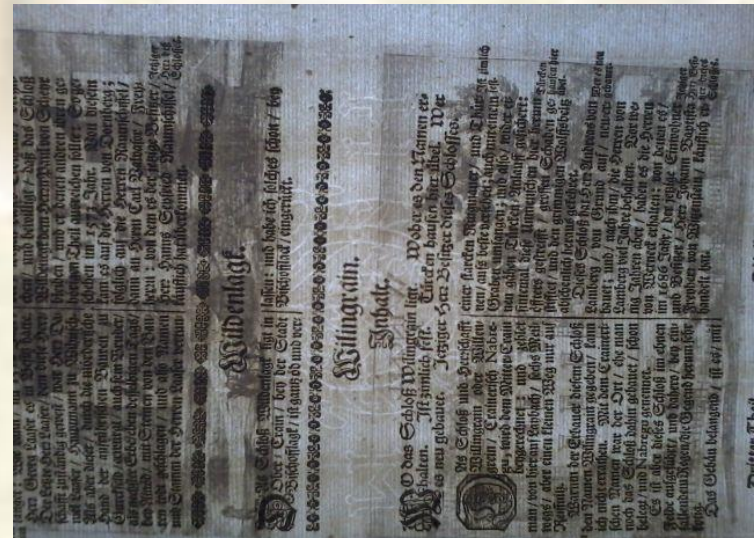
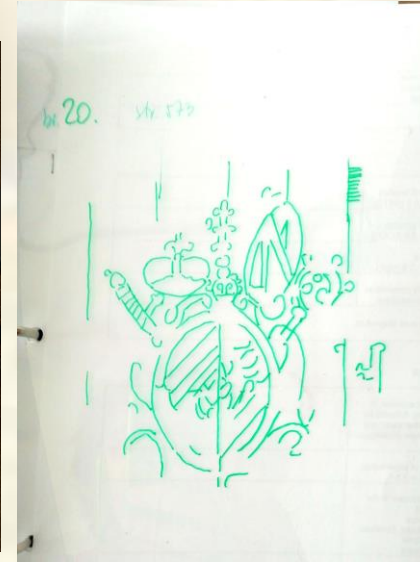
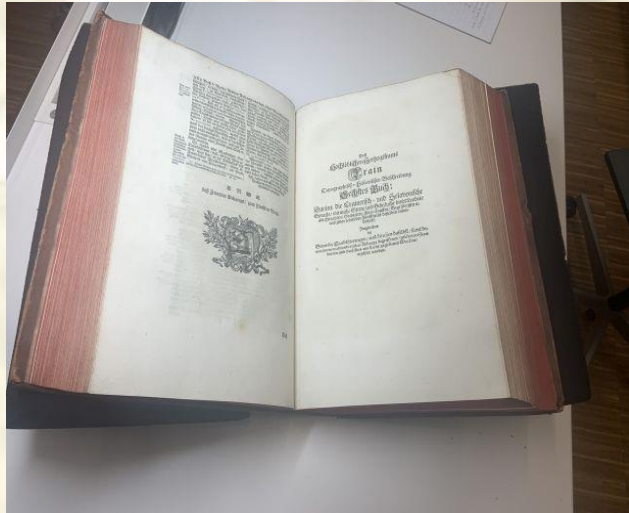
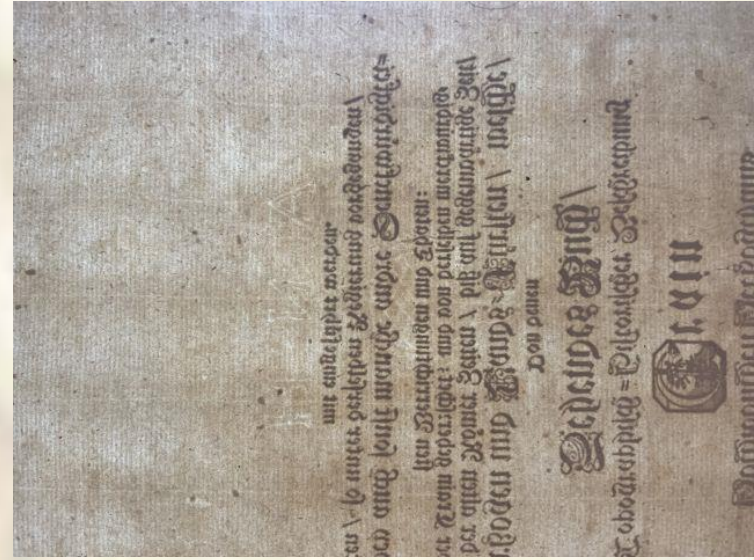
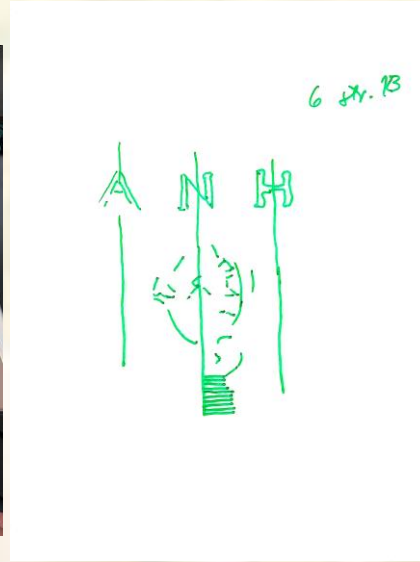
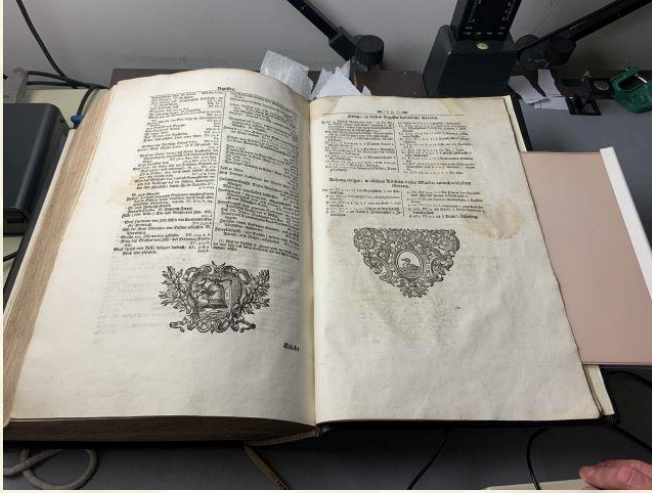
# GNM Nürnberg:

no browning, good quality paper, good sound watermarks as in the majority of the copies

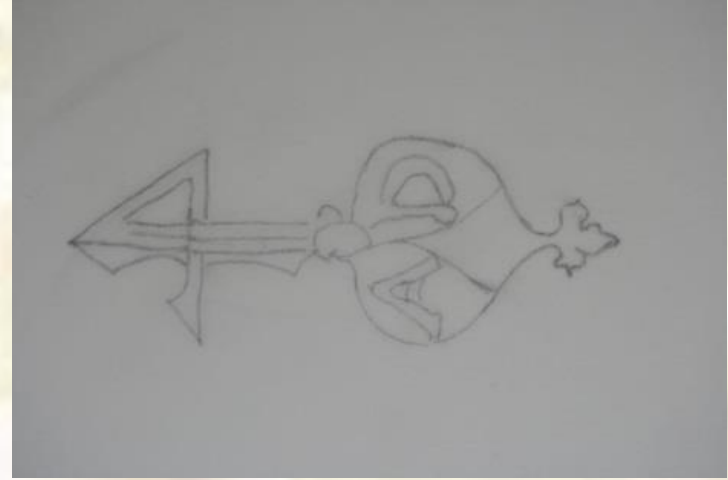
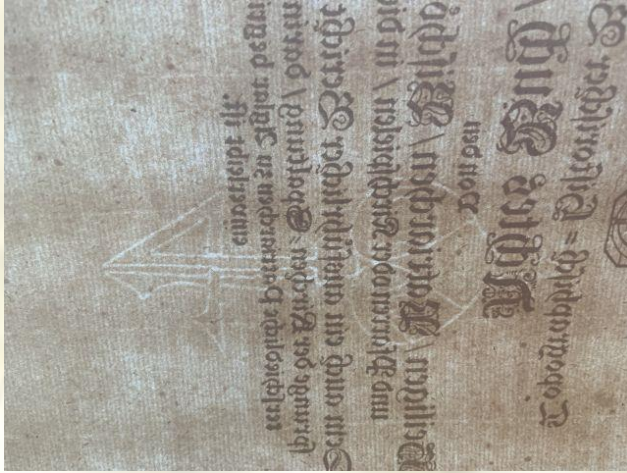




# ML Zagreb and CL Nürnberg have similar WATERMARKS



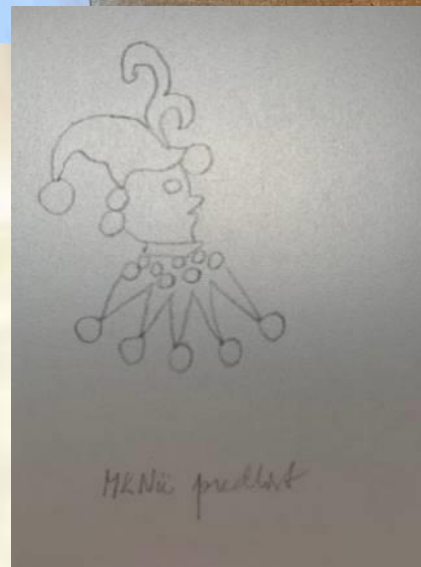
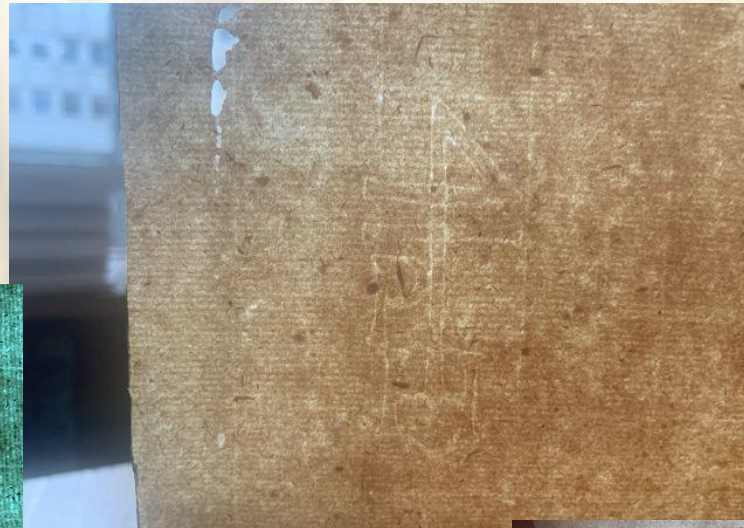
# all the other examined copies have different type of watermarks:



- paper differs in browning, sound, feel, thickness
- the majority of copies have paper of lower quality
- except some copies: like the copy in the Franciscan monastery in Ljubljana and the German National Museum in Nürnberg

# Watermarks in endleaves:

are different, they were added by the bookbinders, and have no connection with the text block paper

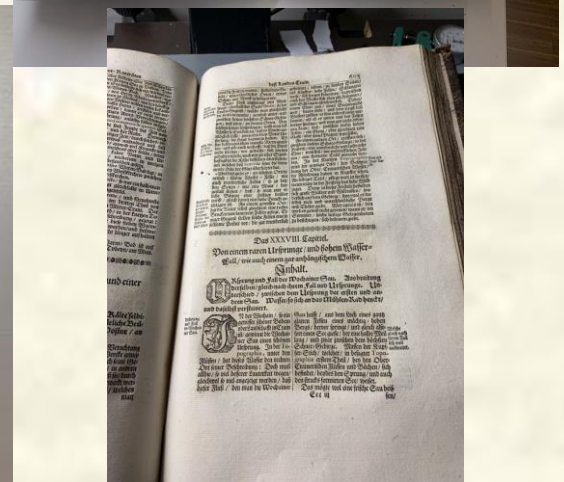
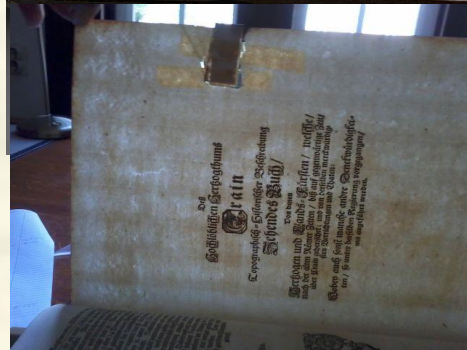
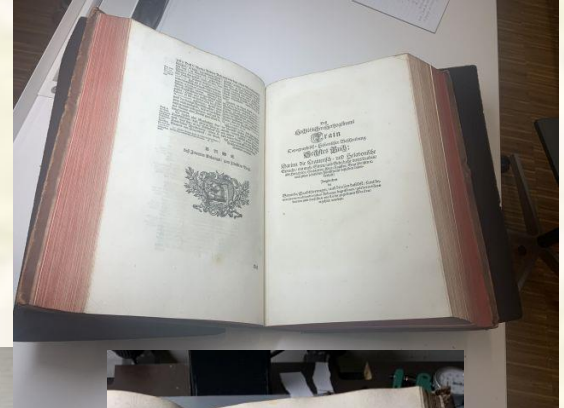
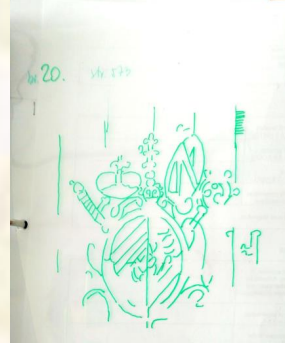
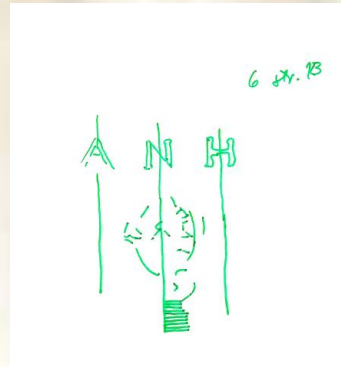
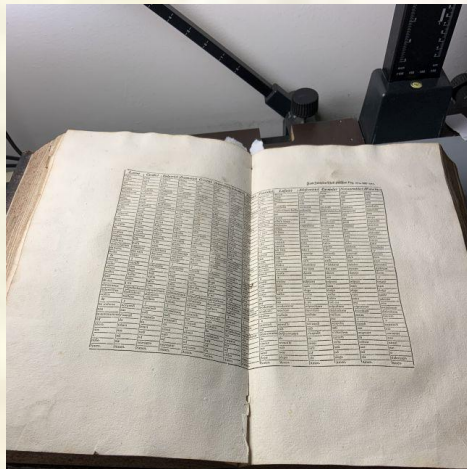


# RESULTS

The paper quality for the majority of the copies is low:  
thin paper, not homogenous, small knots of fibres,  
soft, no sound, impurities and  
technological mistakes



Copies from ML Zagreb (left) and CL Nürnberg (right) were printed on paper with similar watermarks, but the quality of paper differs the paper in CL Nürnberg is more homogenous, no impurities and no technological mistakes



# CONCLUSION

Copies in ML Zagreb and  
CL Nürnberg are connected:  
have similar watermarks  
– proof printing copies?



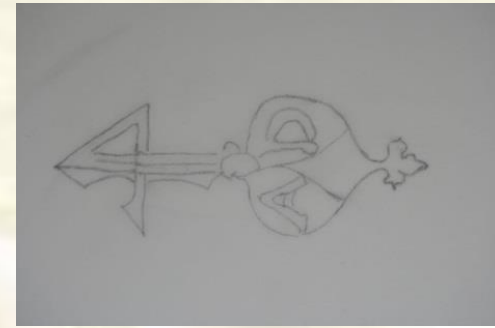
THE PAPER in:

**ML Zagreb:** no browning, good sound, different in thickness and smoothness, a lot of knots of fibres, impurities and technological mistakes – presumably sized with gelatine

**CL Nürnberg:** no browning, good sound, uniform in thickness and smoothness, exist knots of fibres, but no impurities and no technological mistakes - presumably sized with gelatine



*In all other examined copies  
exist a watermark (see right )*



*In this group exist at least 2 different quality of  
paper, regarding: browning, thickness and sound*

- Thicker paper, with sound, no browning –  
presumably sized with gelatine: GNM Nürnberg,  
Franciscan Monastery Ljubljana
- Thinner paper, with no or poor sound and more  
or less expressed browning – presumably with  
no gelatine size: all the rest of copies.

*THANK YOU FOT THE ATTENTION!*