



Medieval & Modern MS Studies in the Digital Age

Manuscript Production

Peter Stokes

dixit-mmsda@uni-koeln.de

Cambridge, 28 April 2014



Parchment

1. Skin and bleed the animal
2. Soak the skin
3. Scrape the skin
4. Stretch the skins on a frame to dry
5. Scrape the skins again while still on the frame
6. (Optionally) pounce
7. (Optionally) treated with liquid chalk



Parchment

- Skin and bleed the animal:
 - Remaining blood reacts and stains parchment
 - Usually bad, can be used for bindings
- Soak the skin:
 - For up to two weeks in an alkaline solution of brine, lime, or similar
 - Removes hairs, loosens fibres, and cleans skin



Parchment

Stretch the skin:

- Breaks and realigns fibres in the dermis
- Makes the skin thinner and more supple
- Distinguishes parchment from leather



Parchment

Scrape the skin:

- Use a lunette, a half-moon shaped blade
- If not done carefully then parchment can be torn



Parchment

Can pounce the skin: roughen with pumice

- Takes up ink more easily
- Less difference between hair and flesh sides
- Distinctive (usually) of Irish and Anglo-Saxon

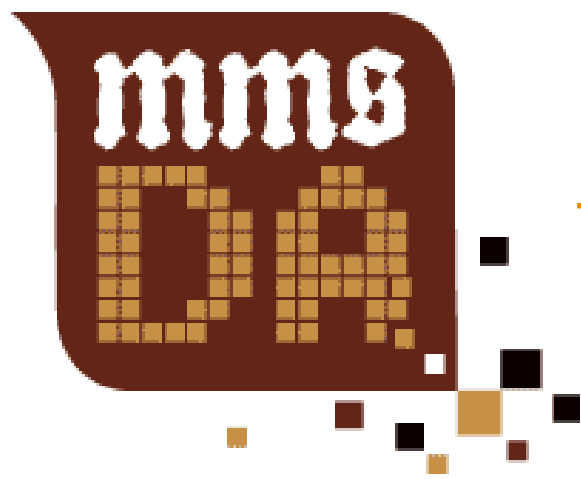
Can treat with liquid chalk before drying

- Makes parchment whiter
- Most common in late medieval Italy



Parchment

- Animal skins: cows, sheep, goats
 - 'Vellum' strictly calf skin
 - S Europe: often goat;
 - N Europe calf or sheep
- NB 'hair' and 'flesh' sides
- NB useful images at <http://www.bl.uk/catalogues/illuminatedmanuscripts/glossary.asp>



Traditional Paper

1. Boil material then beat into pulp
2. Add water to form a suspension,
3. Pour into a rectangular frame of wires
4. Cover then shake to distribute evenly
5. Stretch resulting material on a 'couch'
6. Build up layers of pulp and felt, then press
7. Hang sheets paper to dry
8. Treat with animal gelatin



Paper

Different materials used at different times

- Early: mostly rag, generally very resilient
- From C19: wood-pulp; very bad due to acidity



Paper

Chain lines, laid (or wire) lines, watermarks...

- Chain lines: thicker lines, lengthwise in folio
- Laid lines: thinner lines, crosswise in folio
- Watermarks: designs created by adding wires bent into particular shapes
- All useful for identifying format of book, place and date of paper manufacture



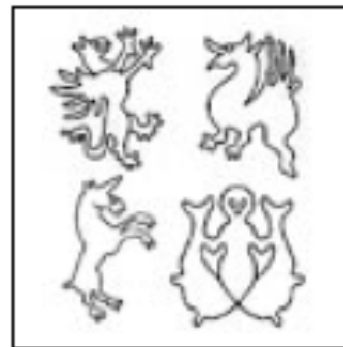
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http://www.memoryofpaper.eu:8080/BernsteinPortal/appl_start DISP

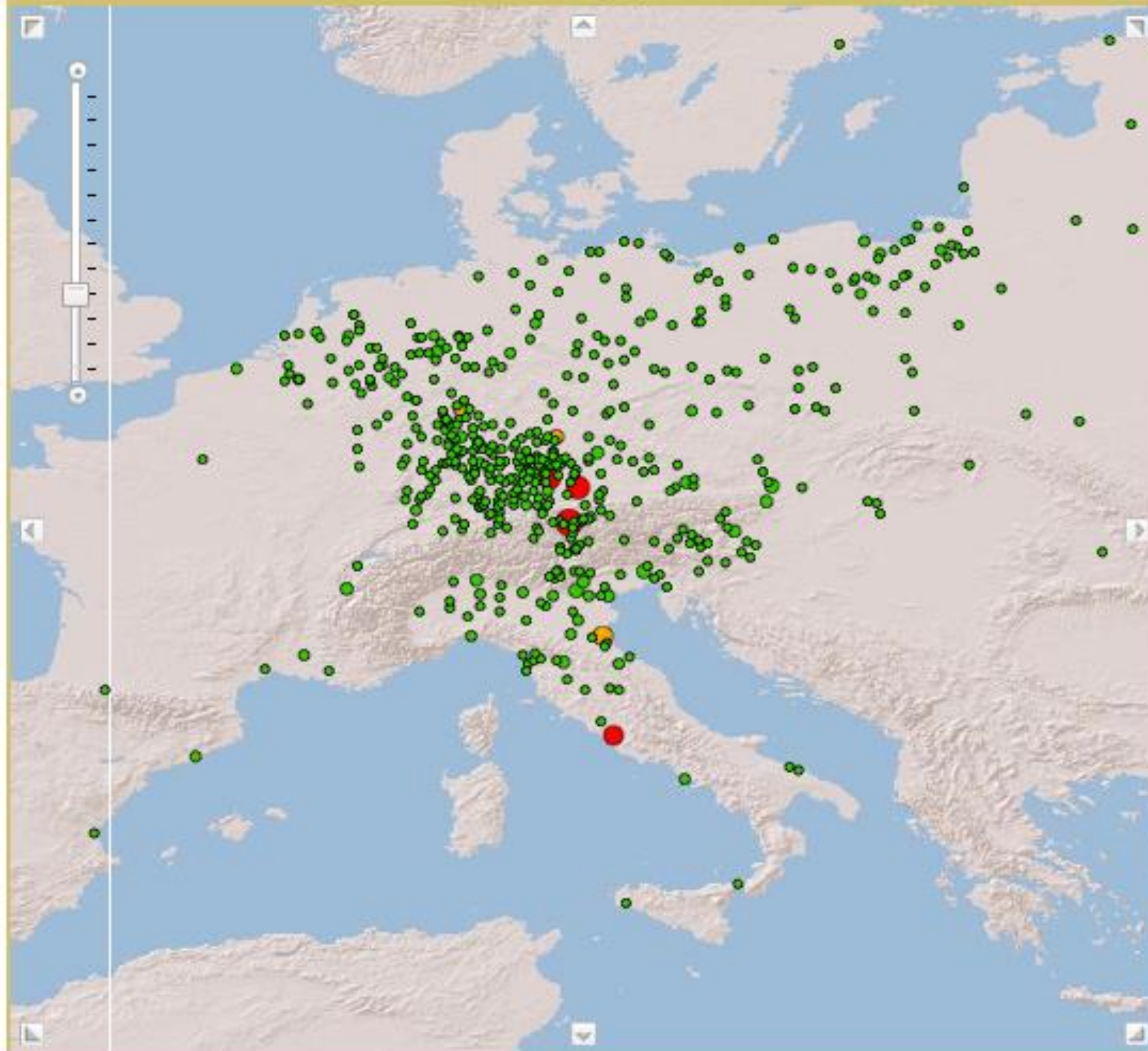
Translated Keywords:

- 'fabulous creature' [Fabelwesen, animal fabuleux, animal fabuloso, creatura fantastica, фантастическое животное]
- 'dragon (wyvern)' [Drache, dragon, dragón, drago, дракон]
- 'in circle' [im Kreis, au cercle, en círculo, in cerchio, в круге]

- + figures, anthropomorphic
- + fauna
- **fabulous creature**
 - + griffon
 - **dragon (wyvern)**
 - detached, entire figure without
 - detached, entire figure with a
 - in circle**
 - others
 - + unicorn
 - + mermaid
 - others
- + flora
- + mountains/luminaries
- + realities
- + symbols/insignia
- + geometrical figures



No further systematics available.



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 CONTENT
title

Places of paper use from a selection in the Memory of Paper databases

legend

● known records number

○ 0 / unknown records number

abstract

These locations represent places where papers were used, like handwritten or printed, as it results from historical analysis, mostly from inscriptions on the papers. The source are the databases connected to the Memory of Paper website, according to search criteria provided by the user.

search terms

?

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 QUANTITIES
records available

119963 in source datasets

3350 search matches

3104 georeferenced



Modern Paper

- Changed from rags (etc) to wood-pulp in mid-19th cent.
- Changed from couch to moving belt
 - Main identifying features gone!
- *Many* different types, grades, weights, colours, textures...



Pricking and Ruling

- Pricking only relevant to parchment!
- Very much variation in the details:
 - Prick before or after folding
 - Prick with knife, wheel, ...
 - Rule with pencil, hard-point, ...
 - One or two vertical bounding-lines
 - Above or below top line



Terminology

- A folio, a page, a bifolium...
 - NB that ‘folio’ here is not the same as folio, quarto etc. in reference to paper!
- Recto and verso
 - NB possible ambiguity:
is fol. 43 the same as fol. 43r?
 - For some (e.g. BL): yes. For others: no.



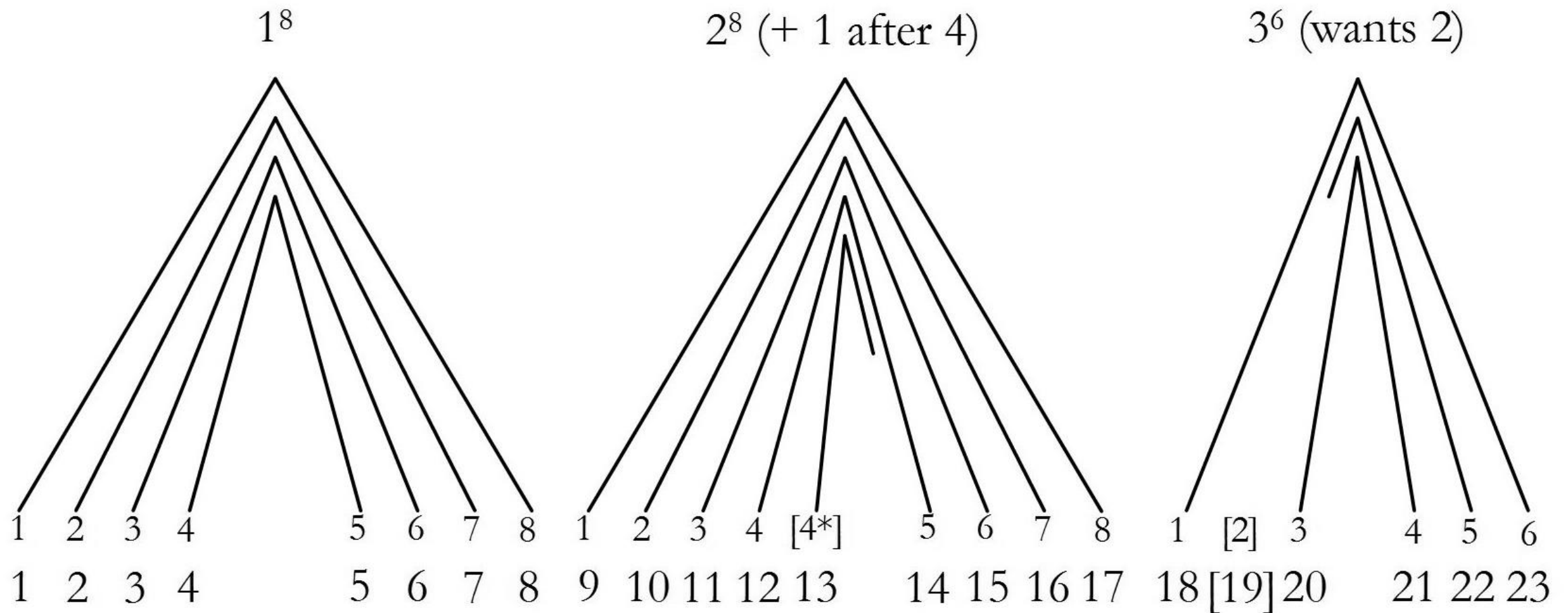
Quires

- Parchment folded as gathering or quire.
- Number of pages can be very irregular
 - Ten in Britain and Ireland until about saec. ix
 - Eight in Cont. Europe and late A-S England
 - Early Coptic one enormous gathering!



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Quires

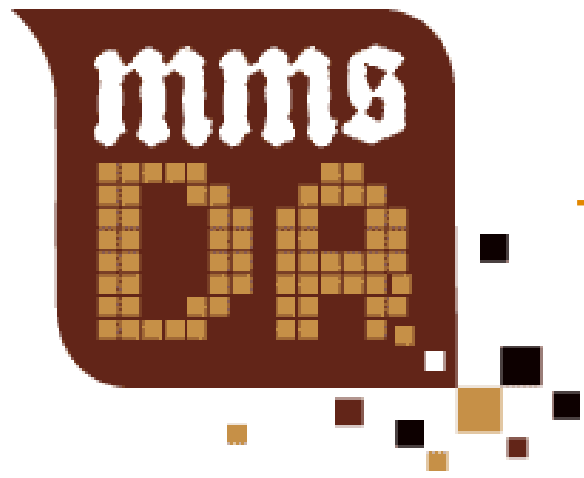




Iron Gall Ink

- Gall + Iron
- Can soak gall in wine or vinegar
- Can add gum arabic
- Can add colouring (carbon, indigo, etc.)





Problems

- Not enough gallic acid: ink doesn't burn into support and can flake off
- Too much gallic acid: ink corrodes support

Both (relatively) common,
but especially the second.