

EVIDENCE OF STRUCTURE AND PROCEDURE IN BOOKS

selected examples of potential clues

*Handout at "Book Forensics: Interpreting Evidence of Structure" presented by Martha Little
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Any detail, no matter how revealing it seems, can be misleading or simply insignificant. It seldom can bear much meaning on its own. Below are some things that are useful to look for, since they may direct your attention in fruitful directions and help you ask questions you might not otherwise have thought of. However, any conclusions should be supported by a variety of evidence.

Remember that anything you notice on a binding may be the result of mistakes, inconsistency, lack of skill, whim or innovation. A binder doesn't always do things that make sense to a future observer or accord with prevalent practice.

Remains of absent or moved elements

Material

Threads or tackets in gutter
Leather accretions on board, or other remains of previous covering material
Rust or metal fragments from clasps, pins etc.
Remnants of ties, tackets, thongs, cords
Adhesive residue
Spine lining material on spine or board
Orphaned flange hook around outer section
Remains of hinge material or pastedown on board

Workmanship

Kerfs, notches or holes in or near the folds

- whose shape or size doesn't correspond with the present sewing type or with the thickness of present thread or supports
- redundant sewing stations, or perforations at head and tail of spine suggesting there may have been endbands or tackets.

Channels, holes, tunnels in boards - for absent lacings, endbands, fastenings etc.
Bevels of bookblock at head and tail for seating of endbands

Indirect effects

Wear

- from pressure of now-absent tackets on leaves

Unfaded area next to faded area

- where a missing turn-in, furnishing, overcover etc. has protected a material from light

Stains or discoloration

- discoloration on flyleaf showing profile of formerly adjacent turn-ins
- stains from threads or transverse spine linings suggesting locations of sewing stations
- stain patterns through several leaves or found on two separated leaves helping to determine original order or location

Impressions

- thread imprints in the gutter
- impressions in endleaves of board channels and holes

Dirt or handling grime

- can suggest book or sections of a bookblock have been unbound or separated for a period, or altered

Distortion

- spine fold (or cut leaf edge) retaining paper distortion profile of sewing on raised supports

Manifestations of invisible elements

Show-through

Bumps, ridges, raised texture (sometimes more easily felt than seen; sometimes clearer in a rubbing)

Worn areas on cover material indicating where cords are present

Darker or lighter areas under adhered paper (showing profile of hinge material, cords, other pastedowns, brush marks)

Glimpses of thread, supports, linings, etc. down a spine hollow or in gaps between sections

Behavior and indirect effects

How a book opens and drapes

- free or constrained opening; flat or curving drape of leaves, soft or angular spine arch; drag on endsheets

How a book has worn and aged

- a flat-backed book tending to become concave on the spine and convex on the foreedge

How a material has become damaged

- pulpboard edges softening and “curling” around book block; pasteboard corners delaminating

How a material has reacted

- horizontal cockling of vellum leaves caused by shrinking at the folds when spine has been glued

Reading visible structure and materials

Sewing

Pattern and appearance of stitches on spine

- difference in appearance between continuing link stitch and climbing link stitch
- too few stitches for number of sections suggesting two-on sewing
- arrow shape of chain stitch pointing in direction of sewing

Pattern of thread inside folds, combined with above, to help determine sewing configuration

Clues revealing sequence

Layers; elements that are covering others

- pastedowns or tie anchorages under turn-ins
- mends over edge gilding

Piercing or securing

- metal fastenings or ties through pastedowns
- spine fold repairs sewn through by existing sewing

Damage, e.g. fire damage and insect damage, helping to date repairs and added materials

Cutting; trimming

- knife marks showing turn-ins have been trimmed or corners have been mitred after covering
- cropped annotations or margins

Other tool marks

- appearance of sewing station holes, indicating whether spine folds have been cut beforehand or pierced during sewing

Media location

- marbling on board edges (exposed from damage to turn-ins), implying edge decoration done after attaching boards

Irregularity as an alert

Showing alteration

- leaf misalignment on a trimmed bookblock
- anachronistic materials or techniques

Showing reuse

- size of some elements not according with size of others (boards too large for bookblock, pastedowns too narrow for boards)
- clasp anchorage not lining up with marks on outer leaves or with clasp on other board

Showing purpose

- holes in some spine folds that are not common to all sections, suggesting a purpose other than the primary sewing

Showing structure

- irregular lines of sewing stations on the spine may point towards unsupported rather than supported sewing
- unusual number of knots in sections of some Byzantine manuscripts helped support hypothesis that they had been sewn in two halves then joined

Showing location of missing element

- deviation from the pattern of hair side to flesh side in a vellum manuscript may help indicate the number of missing leaves or the position of a separated leaf

Tool marks and effects

Characteristic marks of plough, drawknife, guillotine etc. on bookblock edges

Characteristic marks of rasp, saw, drawknife, chisel etc. on wooden boards

Ridge marks on leaves near the gutter, resulting from backing with a hammer

Crease near gutter at head, resulting from folding printer's sheets without slitting

Shape of sewing kerfs from knife, saw, awl, etc.

Profile of foredge; profile of spine

- Thick sections of Nag Hammadi codices have no leaves sticking out at the foredge, so must have been trimmed (confirmed by narrower widths of central leaves)
- Spine shape [?]of Codex Sinaiticus bookblock showed book was trimmed when whole, but is now missing a section

Absence

- Lack of another set of holes in the folds indicates that the present ones were the original sewing stations
- No offsetting of stain onto adjacent leaf can raise the question of whether leaf order has been changed or bookblock parts had been separate at one time
- Lack of lacing holes makes it likely that the board attachment system used adhesive
- Absence of vestiges of sewing supports bolsters evidence of unsupported sewing

Misleading clues

Fashion - holdovers that no longer reflect structure or reappearances in a later era

- false raised bands
- stuck-on endbands
- pastiche bindings

Human alteration

- restoration, repairs, rebindings
- intentionally "aged" (toned) leaves
- substitution of a new board for an original one; switching the upper board with the lower one; reusing an old board on a different bookblock

Non-human alteration

- Worm holes in wooden boards, looking like lacing holes

Additions

- newer clasps, straps, bosses

Internal changes

- vellum shrinkage causing sewing notches to move out of register

Indirect evidence - to help support a conjecture, if there is ample other evidence

Contemporary manuals - descriptions of procedures and materials

Intact bindings from the same time/place/culture - compare details

Model making - to understand, by doing, the most likely sequence and procedure

Techniques still used in the present by the same culture

- Islamic endbands, Ethiopian binding structure

Knowledge of chronology of bookbinding techniques, styles and materials

What makes sense from a craftsman's point of view

Would it work?

- If bookblock edges have been decorated, they have probably been trimmed beforehand.

Is it an efficient way to do it?

- If one supposition about how something was done would be unnecessarily awkward, complicated or time-consuming to carry out, it is less likely to be the correct one.

Is it needed?

- If one supposition about what was done to produce the evidence you see is a feasible procedure but seems to have no reason or purpose, it is less likely to be the correct one.