

The Anatomy of a Book

1. Introduction

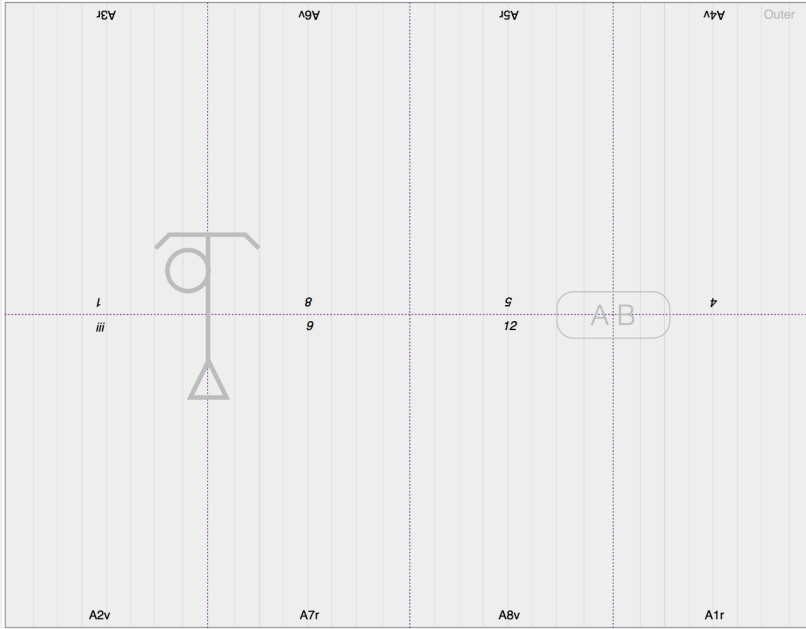
Learning Leaflet: Standup Activities
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In the 1545 Sacrobosco on display, pages are missing from the front matter. Other books have misnumbered pages. Others have page numbers that are missing or that restart from 1 in different sections. To sort all of this out, it helps to have a little understanding of the anatomy of an early book.



Sacrobosco, *De sphaera* (Wittenberg, 1545))



1 sheet, 8 leaves, 16 pages, octavo format, for the "A" gathering

- **Sheet:** A large sheet of paper inserted into the printing press and printed on both sides. It will be folded 1 or more times before being bound into the book.
- **Leaf:** One “page” of paper, both front and back, within a text block.
- **Gathering:** All the leaves (or pages) of a text block that were printed on a single, large sheet of paper, before it was folded up for sewing to make the text block.
- **Format:** If a book is made of gatherings consisting of 8 leaves (or 16 pages), it is in the “octavo” format. Octavo books are typically small enough to be held by a single hand, depending on the size of the original sheets of paper.

- **Collation:** Gatherings may be labeled alphabetically; for example, the first gathering in a text block might be called “A.” A list of all gatherings and how many pages are in each gathering is the collation of a book.
- **Text block:** All the pages of the book, sewn together as a unit (minus the covers and spine). The side of the text block opposite the spine is called the fore edge.

• **Laid paper:**

Paper made by hand, displaying a ribbed or “laid” texture, used during the hand-press period of printing before the 19th century, after which paper became manufactured by mechanical processes.



• **Chain lines:** Visible lines in the texture of laid paper that run parallel to the short side of the paper sheets.

• **Watermarks:** Patterns pressed into laid paper while it is still wet, which remain visible when the printed page is held up to light.



On the front: This extensively annotated copy of the *Sphaera* of Sacrobosco includes 3 hand-colored calculating wheels, or “volvelles.” Editions of Sacrobosco’s *Sphaera* remained the most popular university textbooks in astronomy in the 16th century. This 1545 edition was printed in Wittenberg, where Luther was a professor. Philip Melanchthon, Luther’s collaborator in theological and university reform, contributed a preface. In this censored copy, the preface has been excised and Melanchthon’s name deleted from the title page. It was owned by a Capuchin monastery in Wil, Switzerland. The remains of the excised pages, visible in the gutter between leaves A1 and B1, show that the preface was removed subsequent to the binding of the book.

Kerry Magruder

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The Anatomy of a Book

2. Activity



Scenario:

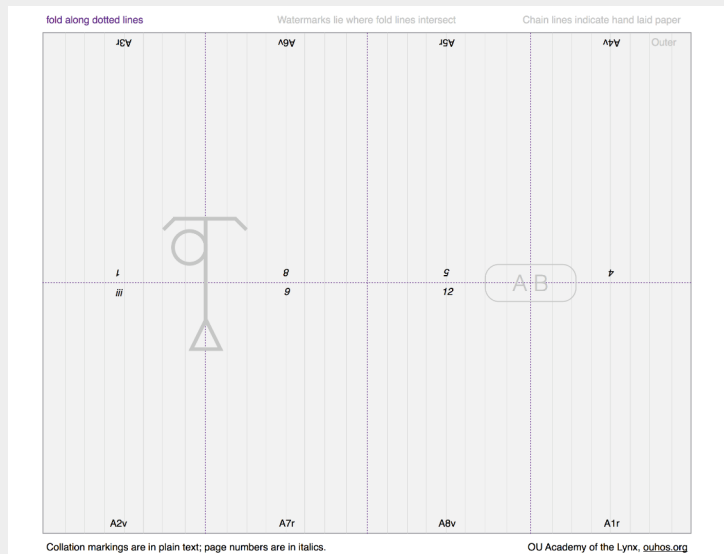
You are applying for a job at the printer's workshop. Your first job will be to fold sheets of *laid paper* as they come off the printing press. After you fold them, they will comprise a *gathering*, and be ready for the binder to sew together in proper sequence to make the *text block*. Follow these steps:

Obtain the *Anatomy of a Book handout*, which represents an original *sheet* of printed paper. Type for printing text and woodblocks for printing illustrations are omitted for clarity. Examine how this sheet will be folded along the purple dotted fold lines. *Watermarks* lie where some of the fold lines intersect. *Chain lines* run parallel to the short side of the original printed sheet.

- How many *leaves* will this sheet make?
- How many *pages*?
- Is this sheet for a book of *octavo* format?
- Do the *chain lines* run horizontally or vertically on each printed page?

Examine the key terms explained in the *Anatomy of a Book Introduction*.

Anatomy of a Book handout

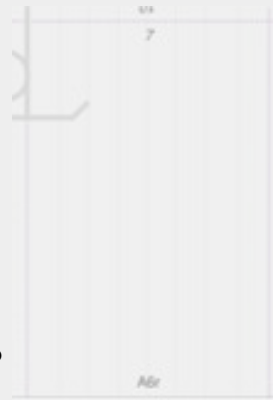


In the 1545 Sacrobosco on display, pages are missing from the front matter. Other books have misnumbered pages. Others have page numbers that are missing or that restart from 1 in different sections. To sort all of this out, it helps to have a little understanding of the anatomy of an early book.



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1. Examine the collation marks ("A6r") which specify the gathering, leaf and side of any page.



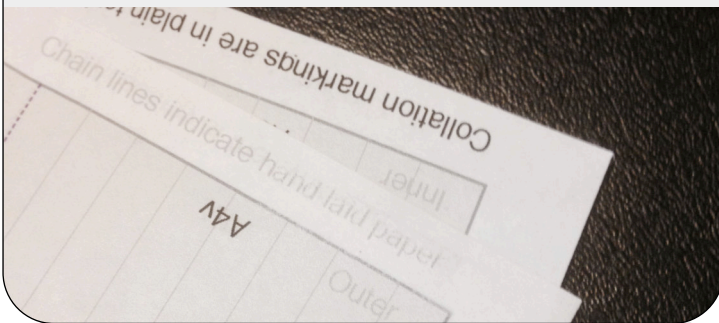
Gathering: In this model, "A" represents the gathering.

Leaf: Within the A gathering, leaves are numbered from 1 to 8.

Side: The front side of each leaf is the "recto" page. The back side of each leaf is the "verso" page.

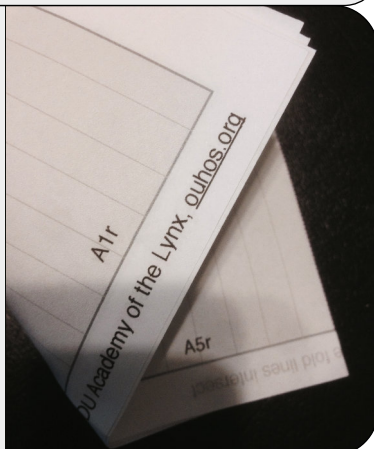
For example, once the sheet is folded, **A1r** will be at the front. **A8v** will be the last page. **A3v** will become the back side of the 3rd leaf of the A gathering, and so on.

2. Fold the paper along the purple dotted lines. For the initial fold, make the corner marked "Inner" fall on the inside, and the corner marked "Outer" fall on the outside.



3. For the next folds, keep the "A1r" page in view so that it will end up as the first page of the gathering.

4. For the final fold, "A8v" should be the last page.

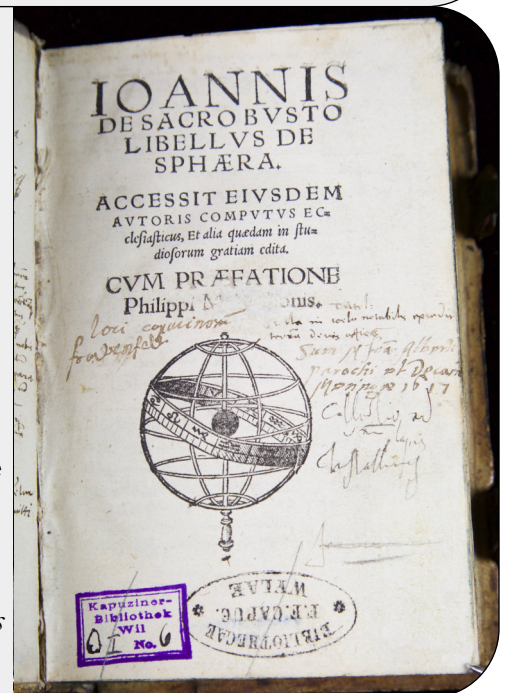


Examine your "book":

- How many times did this sheet need to be folded to make the A gathering of the book?
- When this gathering is sewn into the book, will the pages need to be trimmed on the top or on the bottom?
- Will some of the pages need to be trimmed on the fore edge of the text block?
- Will the watermarks be easy to identify in the bound book?
- Are the collation marks in order?
- Are the page numbers (shown in italics) in order?
- Does every page in this gathering have a page number?
- Why might collation marks be a more reliable indicator of the original anatomy of a book than page numbers?

How many missing?

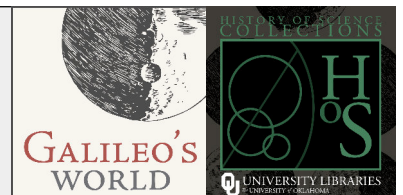
The Preface for this Sacrobosco has been torn out in its entirety. The first leaf of the A gathering remains. The next intact page is the first leaf of the B gathering. *How many pages are missing?*



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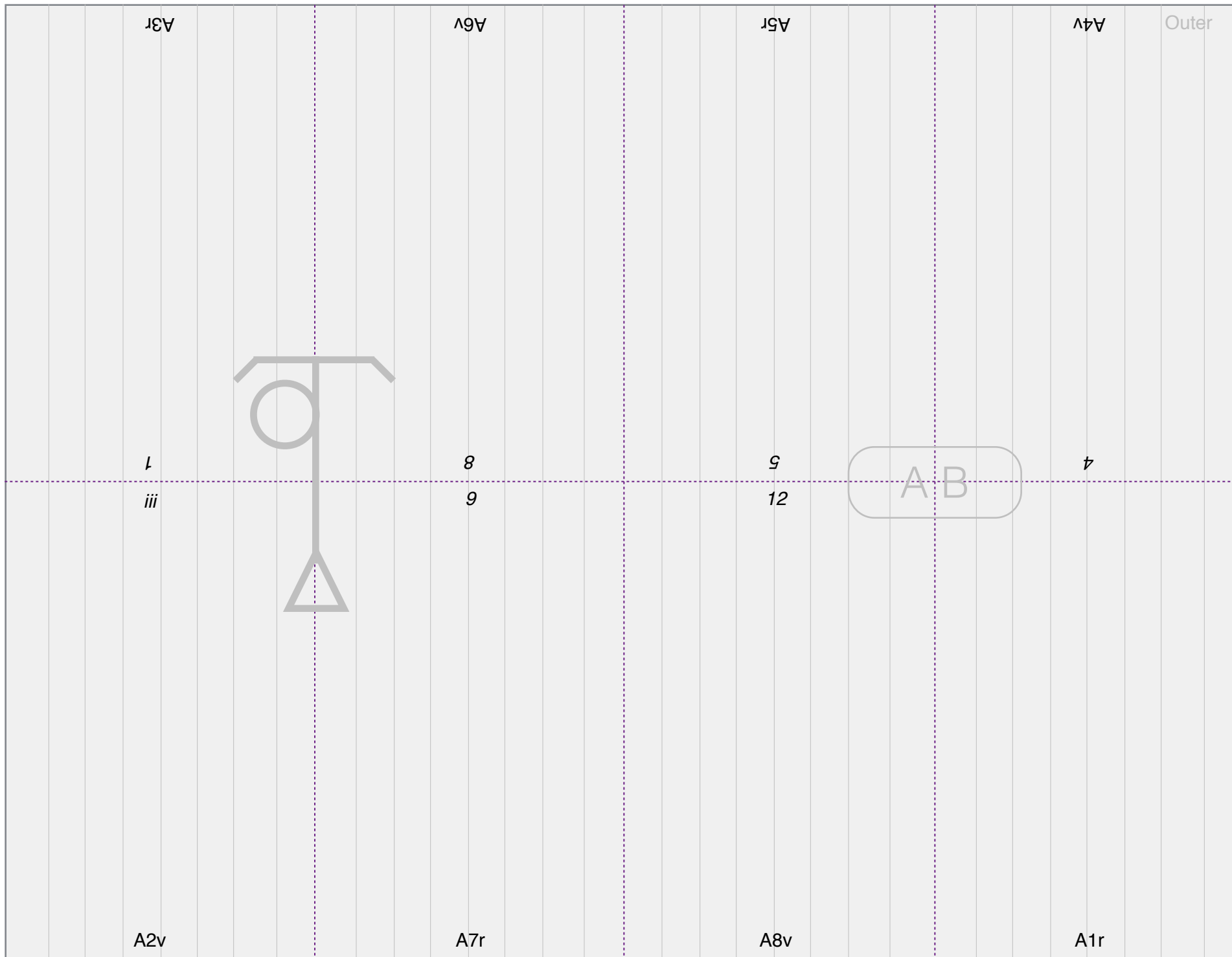
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told along dotted lines

Watermarks lie where told lines intersect

Chain lines indicate hand laid paper



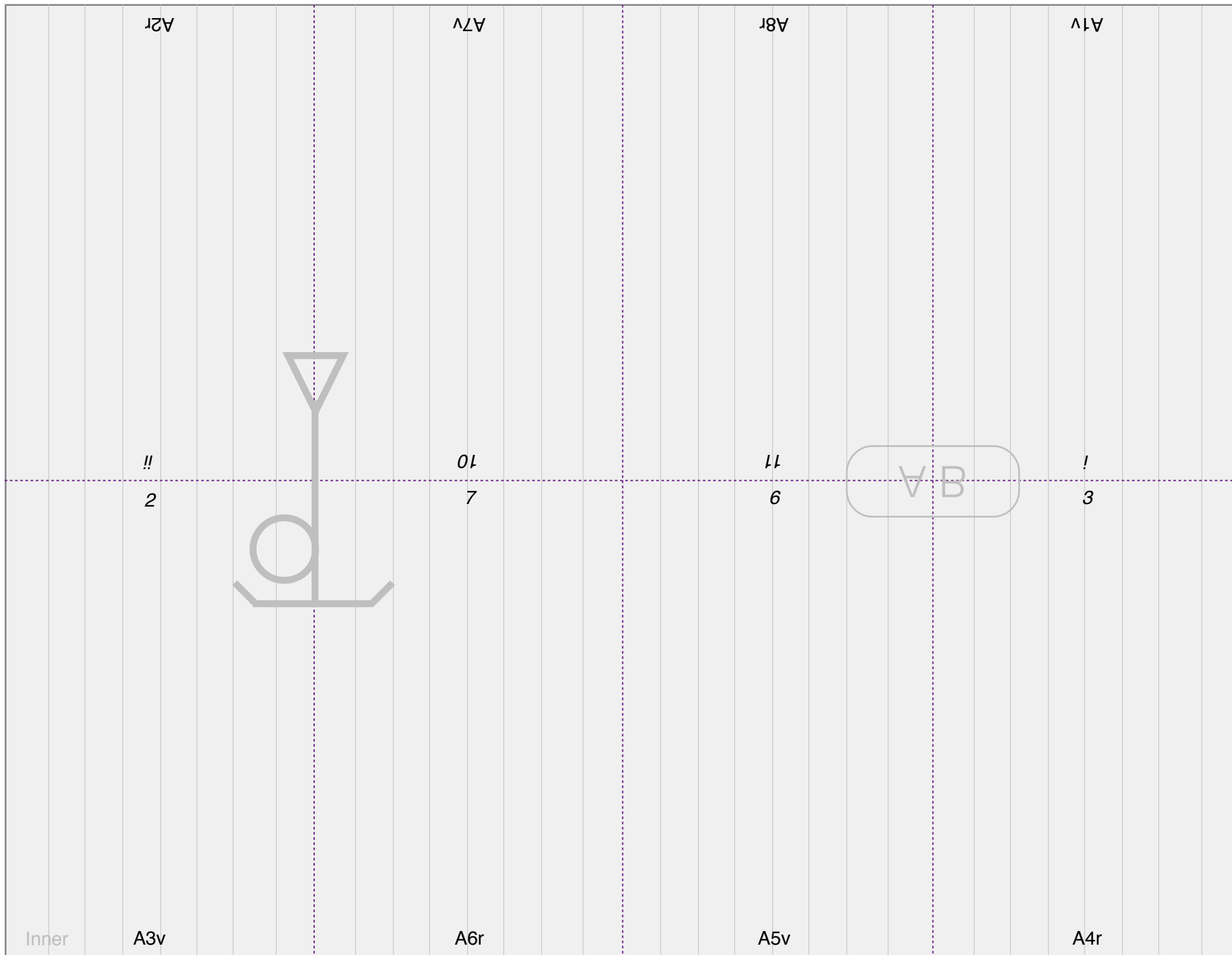
Collation markings are in plain text; page numbers are in italics

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