

Supporting the Investigation of Text Genesis of Large Manuscripts by an Overall Interactive Visualization Tool

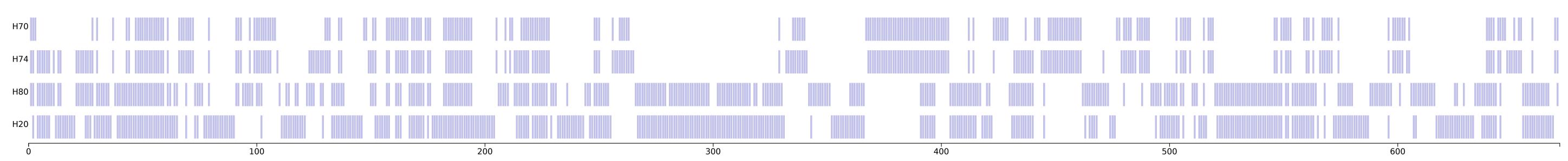
Manuscripts that have been strongly revised multiple times are of special interest for historians, sociologists and philologists. Identifying the differing text passages and presenting them in critical editions play a central role in these fields. The identification can be supported by information technology tools comparing the witnesses of a manuscript. In addition, the text differences found by such tools should be visualized in a way that allows scholars to effectively navigate and explore them.

The **Colored & Aligned Texts view** (*CATview*) is an interactive visualization tool providing effective possibilities for navigating and exploring the textual differences of the variants of a manuscript. It processes data generated by the comparison tools developed by SaDA¹. It can be adapted to standard tools as Juxta.

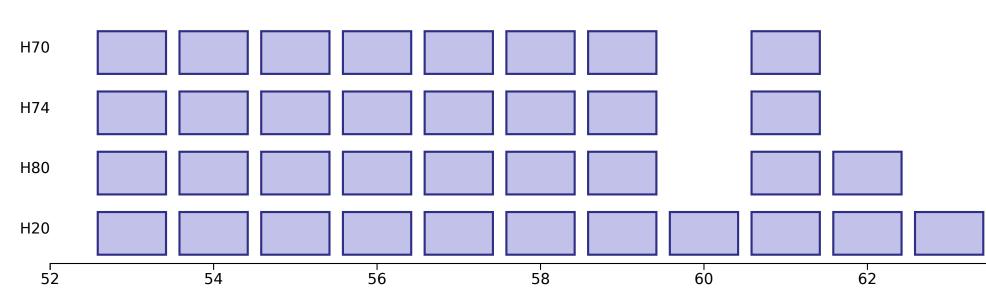
CATview is an add-on for web-based editions and tools for their creation.

Macro-Level View of Aligned Text Segments

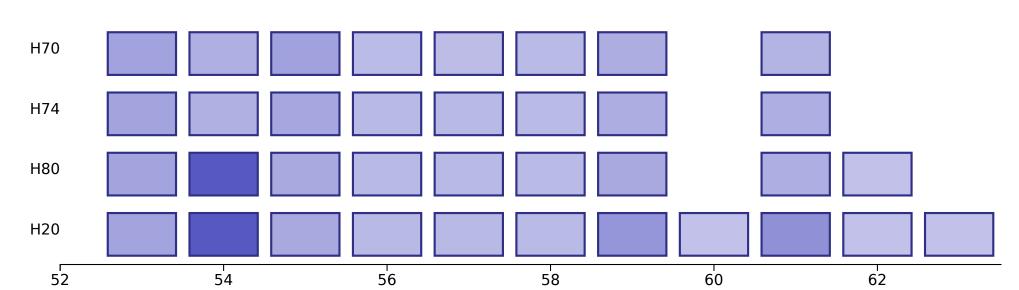
- ★ review the overall structure to see patterns of revisions
- ★ identify spots with relevant portions of text that have been added or removed



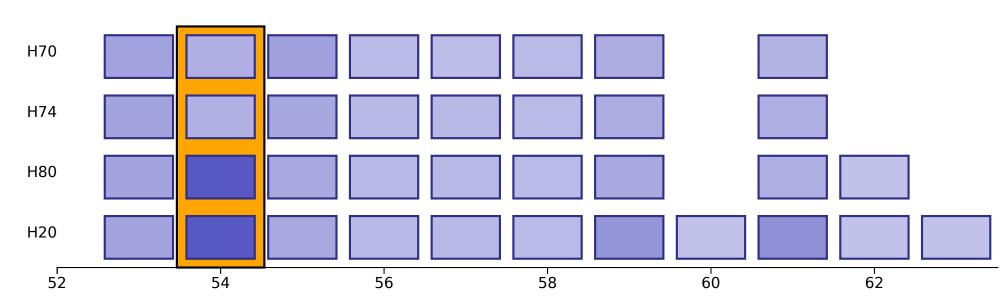
CATview represents text segments (lines, sentences or paragraphs) in a tabular manner whereat a row corresponds to a text witness and a column to a set of aligned segments.



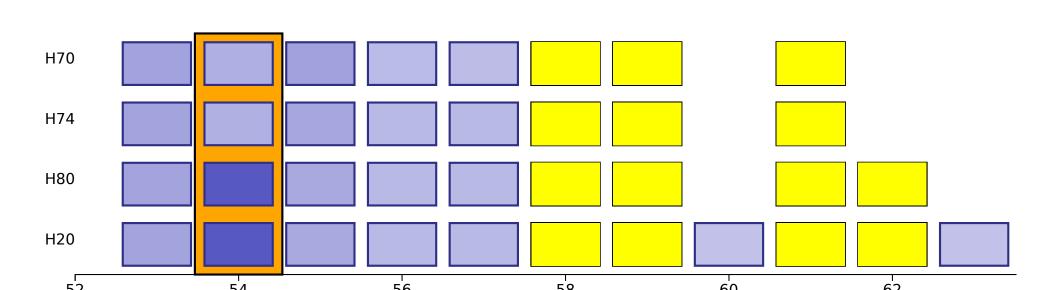
Excerpts can be increased by using the built-in zoom.



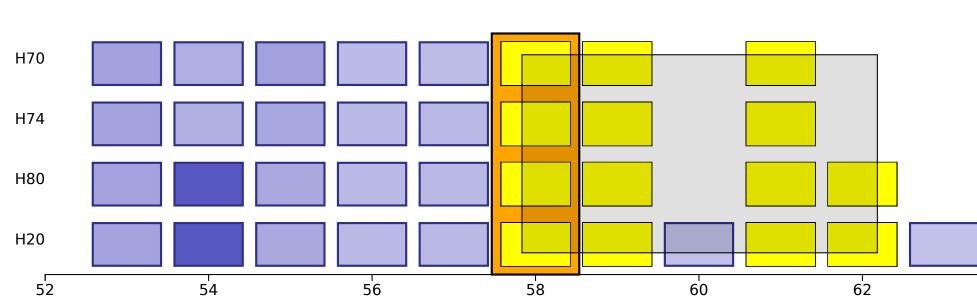
Differences between aligned segments will be indicated by color.



Easier navigation within extensive text representations.



Highlighted search results can reveal the distribution of subjects.



Select segments by the brushing tool.

Levels of Detail

- built-in zoom via mouse wheel
- drag and drop for shifting the excerpt
- ★ fast and intuitive switching between different levels of detail

Visualizing Textual Differences

- color based representation of the degree of dissimilarity
- the darker the more different aligned segments are
- ★ help for locating hot spots of revisions

Navigation

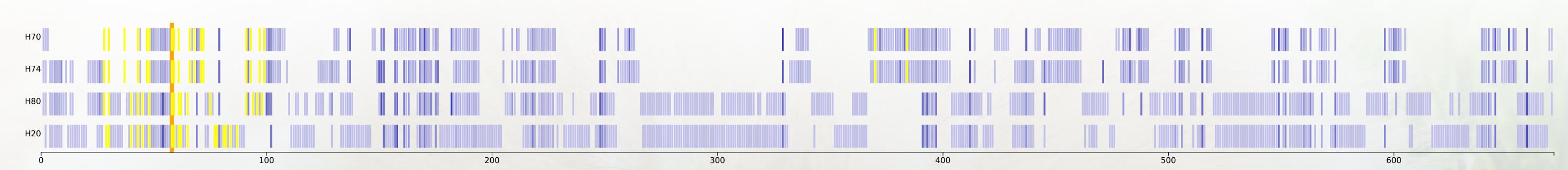
- rectangles linked to the respective text segments
- marking (orange) for visualizing the scroll position
- ★ navigation within a comprehensive synoptic representation of the text witnesses and their differences

Highlighting Search Results

- coloring (yellow) of segments matching the search request
- different modes: single rectangles or full columns
- ★ assistance for estimating the distribution of a subject within all witnesses

Brushing Tool

- comfortable selection of consecutive text segments
- ★ respective restriction of the synoptic representation
- ★ respective restriction of statistical analysis



CATview on lowest zooming level with color decoded text differences (shades of blue), highlighted search results (yellow) and the scrollspy at position 58 (orange).

catview.uzi.uni-halle.de

¹ SaDA - Semi-automatische Differenzanalyse von komplexen Textvarianten http://www.informatik.uni-halle.de/sada



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