

AOR User documentation

August 2016

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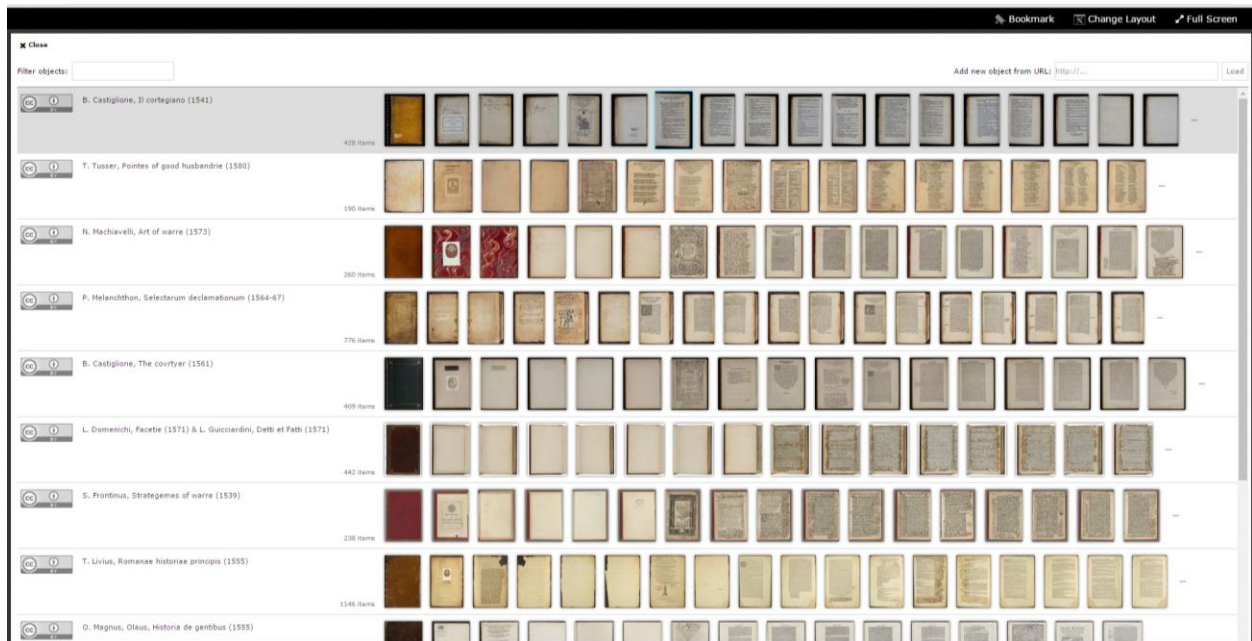
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Introduction

The AoR viewer can be accessed by clicking on the bookwheel image at the start page of our website: www.bookwheel.org or, alternatively, by clicking on this link: <http://archaeologyofreading.org/viewer/>

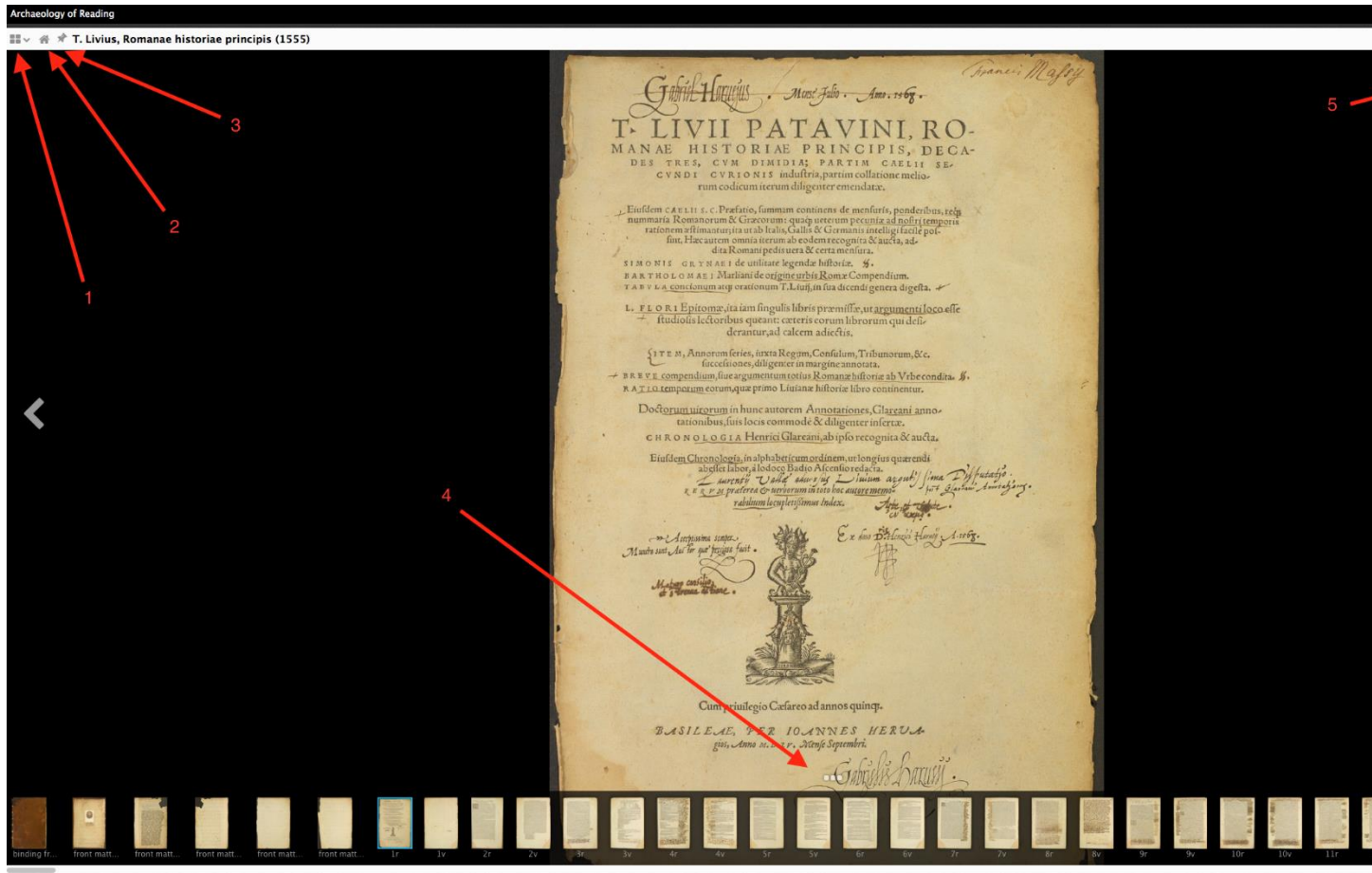
1. Book browser

The viewer immediately opens the gallery or book browser, a list of books, each with the first few pages shown:



Select the book you wish to view by clicking on one of the page images. This will transition you to the book viewer (alternatively, clicking anywhere in a selected row outside of a page thumbnail will open a thumbnail browser of that book):

The book viewer has a number of functionalities which are highlighted in the following image and which will be explained in greater detail below:



1.1 Overview of the viewer's functionalities

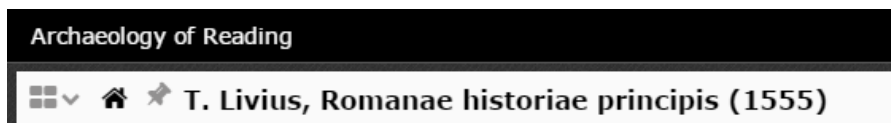
The arrows indicate the following buttons/functionalities:

- 1: Add object
- 2: Home button (go back to book gallery)
- 3: Pin window

- 4: Enable/disable thumbnails
- 5: Open/close transcription panel
- 6: Open image viewing menu
- 7: Open full thumbnail view
- 8: Open object information/metadata panel
- 9: Reset/restore image view (undo previous image manipulation actions)

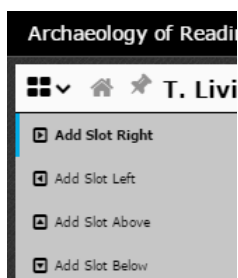
1.2 Open/close object

If you wish to select a different book, click on the ‘home’ button in the upper left corner of the workspace¹ (arrow 2), which returns you to the book gallery, and select one of the books from the AOR corpus.



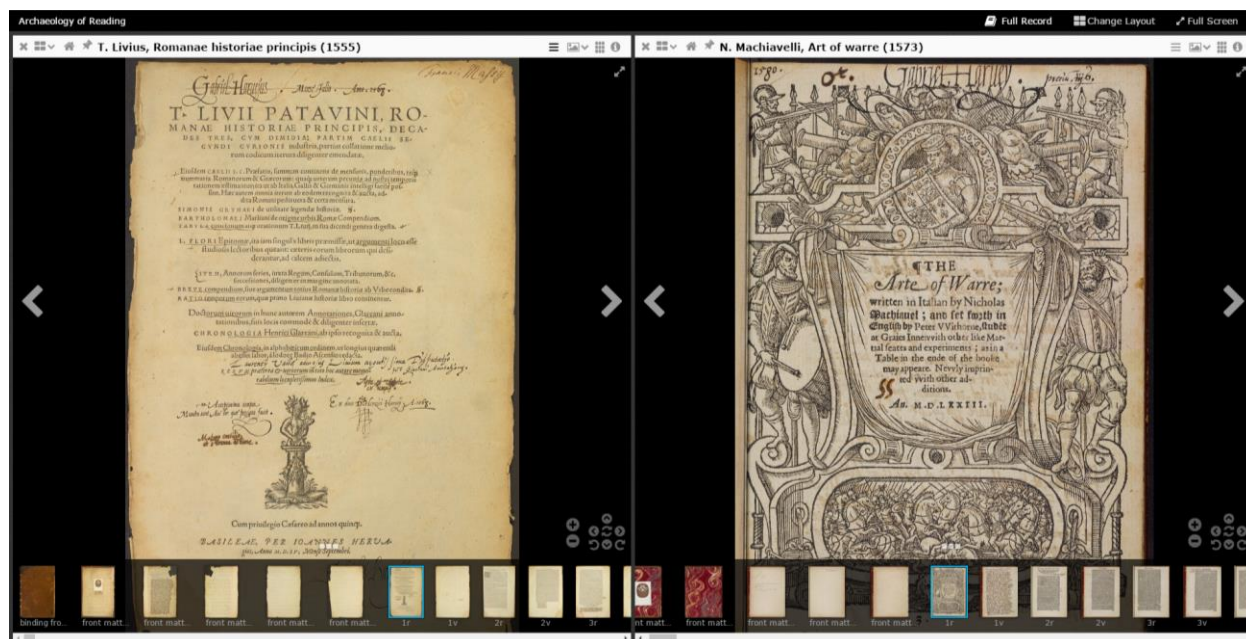
1.3 Opening another workspace

The AOR viewer enables to open and work with several workspaces at the time – up to twenty-five in total! Opening new workspaces can be done in two different ways. One can add a new workspace by going to the ‘change layout’ button and choose one of the ‘Add slot’ options:

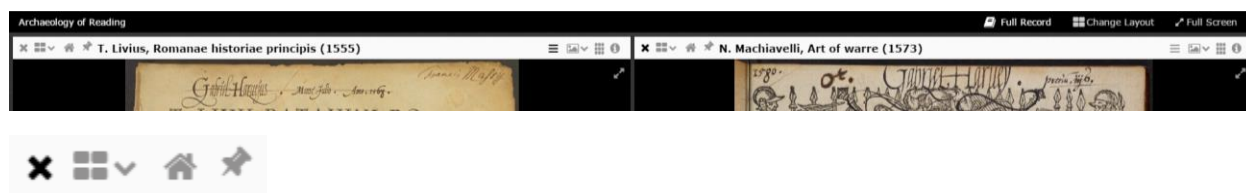


¹ A workspace is a panel in the AOR viewer, consisting of a space for the digital image and the transcription viewing and search panel.

The value of the ‘Add Slot’ specifies the location of the new workspace in relation to the workspace currently in use. For example:

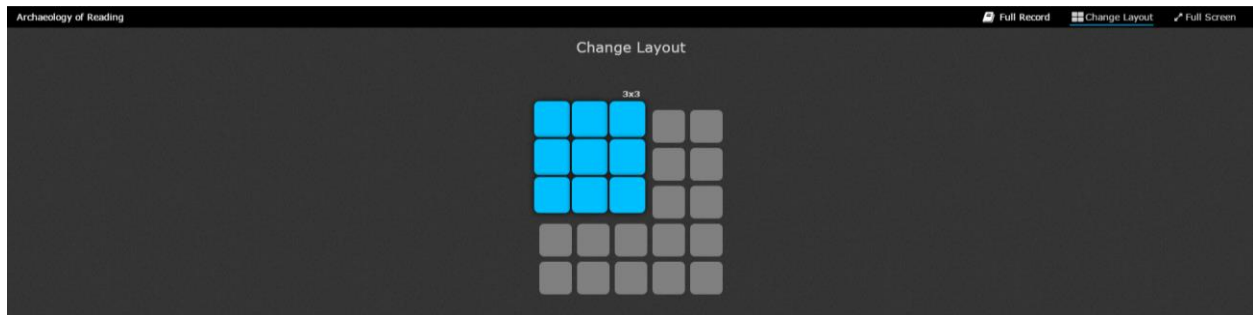


Once more than one workspace is opened, every one of them can be closed by clicking on the “X” to the left of the “Add slot” button.




Another way in which one can open a new or indeed several new workspaces is to click on the larger ‘change layout’ button in the upper right corner of the screen, which enables the user to select a grid of workspaces.

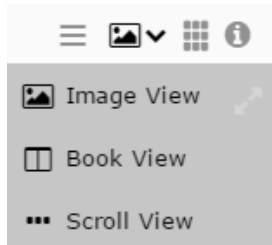




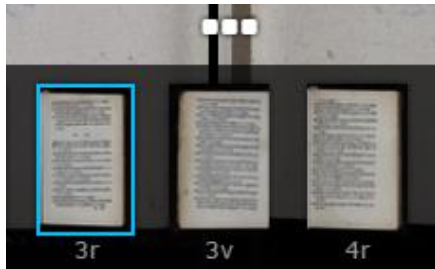
2. Book viewing


2.1 View selection

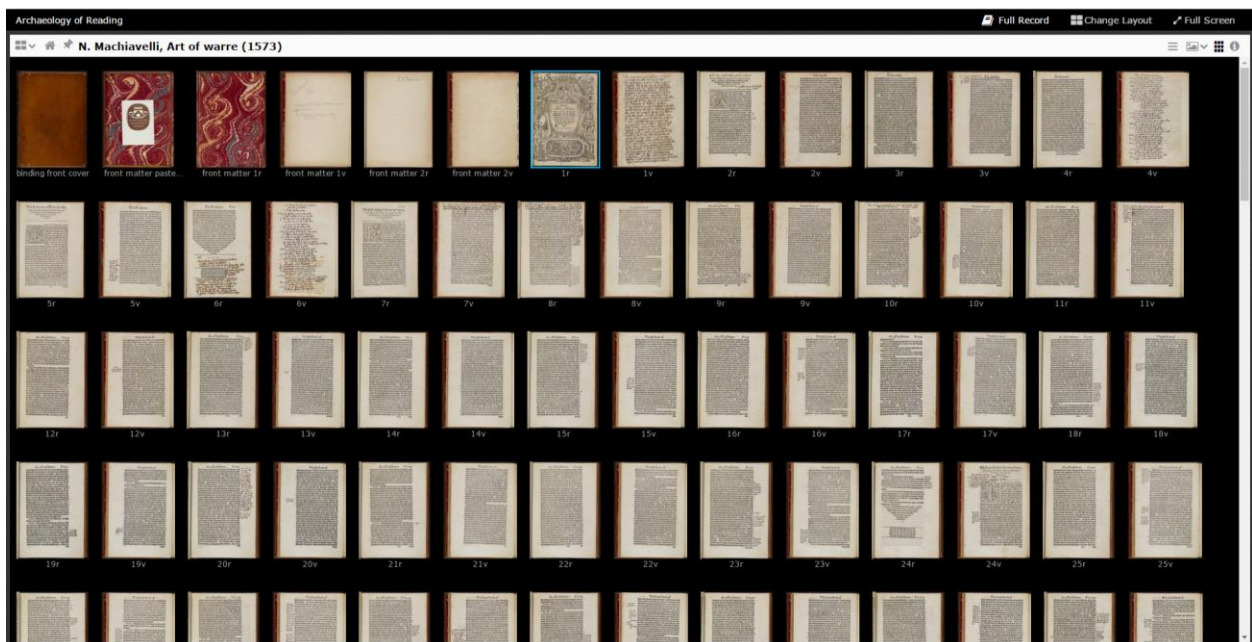
When viewing a book you can switch between image view, thumbnail view, book view, and scroll view by clicking on this icon (arrow 6): . The image view shows you a single page image. The book view shows page images together as an opening. The scroll view shows multiple page images together.



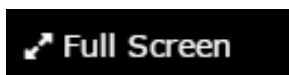
In the book and image views, there is a thumbnail strip at the bottom that lets you browse thumbnails of the pages in the current book. Clicking on these thumbnails will change pages. This thumbnail strip can be hidden by clicking the ellipsis icon (arrow 4).



In order to view the whole book in thumbnails, one should click on this icon (arrow 7):  This will open the following view:



Another possibility is to view a workspace in full-screen mode, which can be opened by clicking on the button in the far right upper corner:



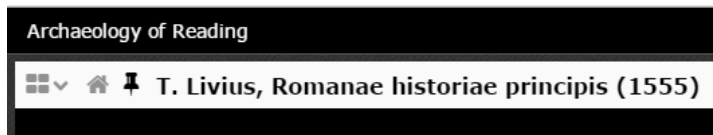
In the full-screen mode, it is still possible to view transcription and to conduct searches. When opening a new workspace, the viewer exits the full-screen mode.

2.2 Pin image

One of the valuable points of feedback we received from our BETA testers was the need to ‘freeze’ an image, partly in order to avoid that the image gets lost due to subsequent searches and movements within the corpus. We have duly set ourselves to implement this functionality and succeeded in doing so by including a “pin” button.



Once this button is clicked, the pin will point down, which means that the current image is pinned:



When an image is pinned, it is no longer possible to:

- scroll to another image
- go back to the gallery of books (via the home button)
- open an item of the search result in the pinned workspace
- close the workspace

It is, however, still possible to view transcriptions or to execute search in the pinned workspace. One can open a new grid of several workspaces too, without causing the pinned workspace to disappear. By clicking the “pin window” button again, the window is “unpinned” again and behaves as a normal workspace.

2.3 Bibliographical information

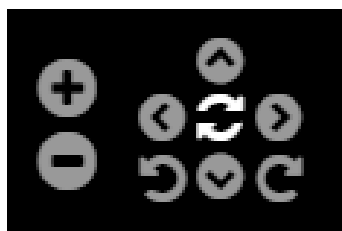
A document which contains short essays with bibliographical information on each of the books in our corpus can be accessed via the “full record” button in the upper right corner.



Full Record

3. Image manipulation

The image can be zoomed and pan with a mouse or touch gestures. Clicking on the image will zoom in at that point. Using the mouse scroll wheel will allow you to zoom in and out. Clicking and dragging will pan the image. These operations can also be performed by using the controls in the bottom right of the workspace. The controls also support rotation in 90 degree increments. There are also button controls on the bottom right of each workspace to pan, zoom, and rotate. The button that sits in this middle (arrow 9) will reset the image back to its default state.



4. Transcription viewing






To view transcriptions, go to the image viewer and click on the leftmost button (arrow 5) of the row of four buttons in the top right corner of the panel.



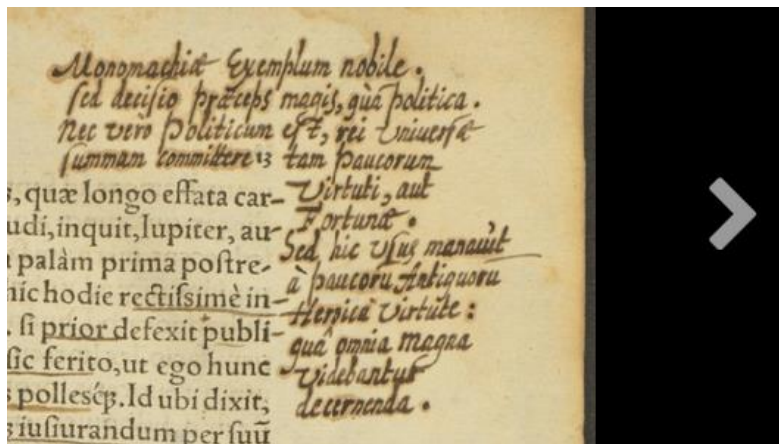
This will bring up a sidebar showing information about interventions in the text. Note that not all pages will have transcriptions associated with them. Moreover, not all the data captured in the digital transcription are displayed in the transcription view. Most data serve search purposes; only marginal notes and their translations and symbols are displayed.


An explanation of Harvey's annotations (or interventions as we like to call them) and the way in which we have tagged them in XML can be found in our Transcriber's Manual, the most recent version of which can be found on the [download page](#) of the AOR website.

The transcription of a particular marginal annotations is preceded by an icon which explains the position of the annotation on the page and the orientation of the page (for orientation, see the Transcriber's Manual, pp.12-3).The set of icons which deal with the position on the page are:


Icon	Position on page
	Left margin
	Right margin
	Tail
	Head
	Intext


The 'values' of the icons can be combined, for instance when a marginal note moves from one to another space on the page:




 Monomachia[e] exemplum nobile. sed decisio pra[e]ceps magis, qua[m] politica. Nec vero politicum est, rei Univerſa[e] summam committere tam paucorum Virtuti, aut Fortuna[e]. Sed hic vsus manavit à paucoru[m] Antiquoru[m] Heroica virtute: qua[m] omnia magna videbantur decernenda.

[A noble example of duels, but a rash, rather than political decision. And it is not really politically clever to entrust the entire state to the virtue of so few, or to Fortune. Yet this practice derived from the heroic virtue of a few ancient men, by which all important issues, it seemed, had to be decided.]

 Unicus Horatius.
[One single Horatius.]

 Strategematica funa. Ne Hercules quidem

In this case, the upper and the right sides of the square are black, indicating that this particular annotation is written in the header and right (or outer) margins of the page.

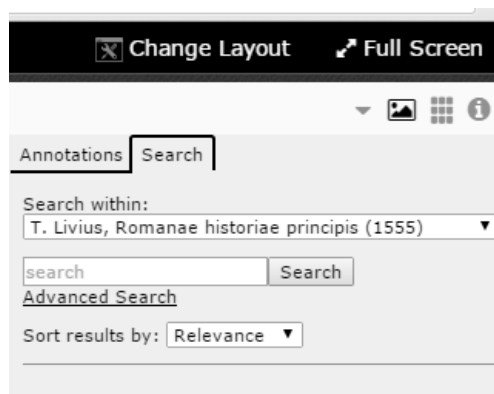
In case an annotation is written on a blank page, this will be indicated by an empty or blank, i.e. non-filled square: 

Around the circle icon, arrows denote the orientation of the page, as visible in the image above.

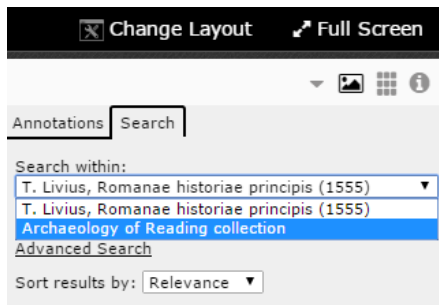
- Up arrow: 0 degree orientation
- Left arrow: 90 degree orientation
- Down arrow: 180 degree orientation
- Right arrow: 270 degree orientation

5. Search

The sidebar which shows transcriptions also has a tab which allows pages to be searched.



A search can either be across the entire corpus of books or within the book being viewed, based on the value selected in the 'search within' field:



5.1 Basic search

A basic search is a string search, which searches for a particular value across all the text associated with the different types of annotations. As can be glanced from the AOR XML schema, which is available [here](#), Harvey's annotations consist of seven main categories or types: marginalia, symbol, mark, underline, numeral, errata, and drawing. All of these annotations can have text associated with them. For example, marginalia contain the actual words of a marginal note, while the underline tag consists of the word or words of the printed text that are underlined. The text associated with the various types of marginal annotations therefore does not solely consist of the manuscript interventions made by readers such as Harvey. In some cases, the text of marginal notes or parts of the printed text are associated with types of annotations other than underline, for example when a transcriber was confident that a particular annotation has a clear link to the printed text or to a marginal note. Sometimes marginal notes are anchored to the printed text as well. A fairly straightforward relationship between a marginal note and the printed text is established when a marginal note copies part of the printed text. Other, less-straightforward relationships are formed by marginal notes which comment on the printed text in one way or another. Such relationships are therefore often established by the scholars working on the project and are dependent on their interpretation, whereas the textual values of the marginalia (to be specific, that of the *marginalia_text* element) and underline tags simply reflect the reader's activity. A simple search conglomerates all the textual data derived from the various types of annotation and the user should be aware that this data includes different degrees of interpretation.

A simple search makes use of the data included in these elements and attributes:

- *marginalia_text*
- *marginalia_anchor_text*²

² This attribute captures the link between the marginalia and a word or words in the printed text. See the AOR *Transcriber's Manual*, pp. 9-10.

- X-ref text³
- mark text
- symbol text
- underline text
- numeral text
- drawing text
- errata copytext⁴
- errata amendedtext

5.2 Advanced search

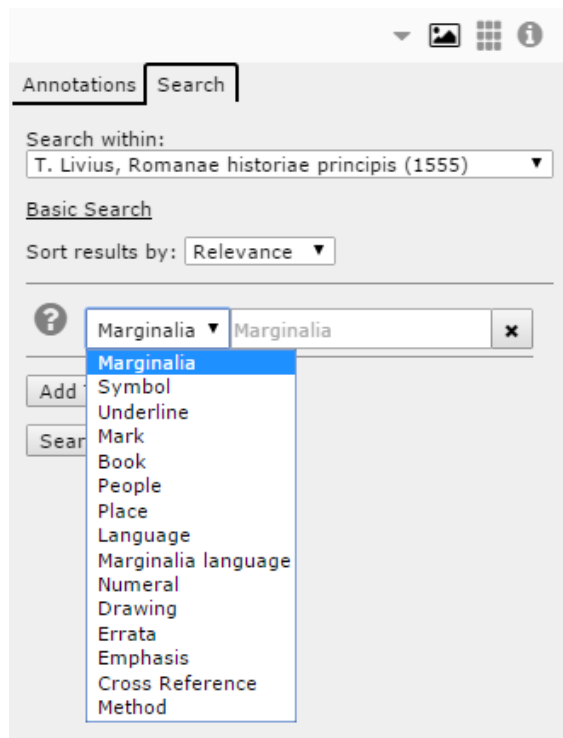
The main advantage of a basic search is that it is a broad search, aimed at (quick) discovery. Users can resort to the advanced search to construct more detailed searches in order to drill down into the data captured in the digital transcriptions. This makes it possible, for example, to focus on a single type of annotation or on the data which consist of the transcription of the interventions made by the reader, excluding the data which has been influenced by the interpretation of the transcriber to a larger extent.

The advanced search screen can be opened by clicking on ‘Advanced Search’, underneath the basic search field (see the image above). Harvey’s annotations are divided into several categories or forms, the most important of which are marginalia, marks, symbols, and underline. In addition, there are a couple of sub-categories which can be searched individually. These sub-categories include the people, books, and geographical locations mentioned and the cross-references made in marginal notes as well as the language in which a marginal note was written. The last two sub-categories are method (whether a marginal annotation was made in pen or pencil) and emphasis (words in the marginal notes which the reader underscored him- or herself).

The advanced search allows the user to specify which categories or sub-categories are searched, which the user can select from a drop-down list:

³ Ibid., pp. 16-7

⁴ Ibid., pp. 62-7.



For example, one can search for the word ‘Caesar’ in the marginalia element, and the search will return instances of this word which are captured in the various attributes and child elements of the marginalia element, namely: *marginalia_text* and *translation* elements, and the *anchor_text* attribute.

The advanced search allows for the construction of more complicated queries, for instance by combining various categories of interventions. By clicking on the “Add term” button, another search row is opened, providing the user with the opportunity to select another form of annotation. A match occurs if any of the set of keywords and phrases given by the user occurs in the specified categories. Keywords are separated and phrases are enclosed in double quotes. Each keyword and phrase can also be required to exist by prepending a “+” or required not to exist by prepending a “-”.

The screenshot shows a search interface with the following elements:

- At the top, there are tabs for "Annotations" and "Search".
- Below the tabs, a "Search within:" dropdown menu is set to "T. Livius, Romanae historiae principis (1555)".
- A "Basic Search" section with a "Sort results by:" dropdown menu set to "Relevance".
- A search input field containing "Caesar" with a "Marginalia" dropdown menu to its left.
- A dropdown menu is open, showing a list of marks: Apostrophe, Apostrophe, Box, Bracket, Circumflex, Colon, Comma, Dash, Diacritic, Dot, Double Vertical Bar, Equal Sign, Est Mark, Hash, Horizontal Bar, Page Break, Pen Trial, Plus Sign (highlighted), Quotation Mark, Scribble, and Section Sign.
- Buttons for "Add Term", "Reset", and "Search" are visible.

In the example in this image, a user is searching for the pages in which the word Caesar appears in the marginalia tag AND a plus sign. AND is the default value of the boolean operator, which can also be set to 'OR'. Note that in an advanced search, the first categories specified by the user have precedence. For example, if the user searches for Marginalia Moon AND Underline Earth OR Mark Sun, the query is treated as Marginalia Moon AND (Underline Earth OR Mark Sun). Putting the query in a different order changes the meaning of the query and may result in different results. Also take into account that constructing such a "X and Y" query does not imply a direct relationship between the two or more elements in the query. For example, a search for a Mars symbol and the text "bellum" returns the pages which have a Mars symbol and any symbol with the text "bellum" associated with it.

Results are displayed in the same search panel and are returned in order of relevance. They may be paged through if there are too many to display at once, as is shown below:

Annotations
Search

Search within:
Archaeology of Reading collection

Basic Search

Marginalia
Caesar

AND Mark
Plus Sign
Mark

Add Term
Reset

Search

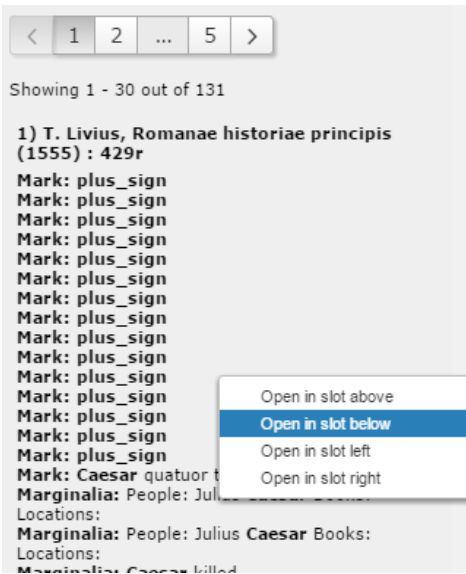
< 1 2 ... 5 >

Showing 1 - 30 out of 131

1) T. Livius, *Romanae historiae principis* (1555) : 429r
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: plus_sign
Mark: Caesar quatuor triumphos duxit
Marginalia: People: Julius Caesar Books: Locations:
Marginalia: People: Julius Caesar Books: Locations:
Marginalia: Caesar killed.
Marginalia: People: Julius Caesar Books: Locations:
Marginalia: I would prefer the lives or actions of the two brightest leaders, Julius Caesar and Augustus, over
Marginalia: People: Julius Caesar Augustus Augustus Caesar Books: Locations:
Marginalia: Caesar trucidatus.

2) L. Domenichi, *Facetie* (1571) & L. Guicciardini, *Deti et Fatti* (1571) : 9v
..

Each individual item of the search result is a clickable link. Clicking on the link with the left mouse button will open this item (and the digital image associated with it) in the workspace you are working in at that moment. However, clicking on a search item with the right button enables you to open it in a new workspace at a specific space on the screen in relation to the current workspace:



Also note that at any time you can flip between the search and transcription panel without losing the search results in the process.

5.3 Sorting of search results

As mentioned above, search results are ordered according to relevance.⁵ However, users can change the order in which the search results appear (both in case of basic and simple searches).

⁵ For information about the way in which relevance is determined, see:
<https://en.wikipedia.org/wiki/Tf%E2%80%93idf> (last accessed: 30 August 2016).

Annotations Search

Search within:
T. Livius, Romanae historiae principis (1555)

Basic Search

Sort results by: Relevance
Relevance
Page Order

? Marginalia Caesar x

Add Term Reset

Search

A drop-down list enables the user to select the preferred order: relevance or page order. Once one of the two options has been selected, press the search button, and the order to the search results will be amended in accordance with the option selected.

5.4 Transcription viewing and search peculiarities

- The data in the transcription panel contain various marks such as square brackets which are the result of our transcription policy and editorial practices, and represent, in the case of square brackets, uncertainty on the part of the transcriber as well as abbreviations and ligatures. It proved to be difficult to retain these marks in the search results, and in the end we decided to display these and other marks only in the transcription panel. Always make sure to use the data in the transcription panel for your research purposes!
- In some cases the same data appear several times in a digital transcription, often as part of different types of marginal notes. For example, on the title page of Frontinus' *Strategemes*, there's a marginal note "Wecceri Secreta, multa habent polemica, et mechanopoietica[n] praesertim è Cardano" and this text also appears next to a SS symbol, because within the digital transcription this symbol is associated with this marginal note. In a similar way, symbols can be associated with parts of the printed text. All the text associated with symbols (be it printed text or marginal notes) is displayed similarly (partly because no conceptual distinction has been made in the XML schema).



- There are around forty instances of marginalia which start on one page and continue on another. We have devised a method to link the different parts of such marginal notes,⁶ yet this will be implemented in AOR phase 2. Because we need to signal that a marginal note is either continuing on another page or is a continuation of a marginal note which started elsewhere, we have decided to include the part of the marginal note which is written on another page in between square brackets, together with a reference to the page number or signature. For example, a note in the Domenichi starts on page 326 and continues on the following page. When viewing the digital transcription of the marginal annotation on page 326, this marginal note has been transcribed as follows: “At non legit quotidiè rarissima mundi ingenia: - [p. 327: - et spiritus omnium viuiddissimos.]”. The translation of this marginal note looks like this: “But he does not read daily the rarest natural talents of the world: [p. 327: and the most lively souls of everyone.]”.
- We realized that it would be useful to search for the pages on which marginal notes in a specific language appear. This can be done in the advanced search. Select ‘marginalia language’, then the specific language you want to search for, and press “search”. In this way you can, for example, find all the Greek marginalia in a particular book or across the AOR corpus. We aim to extend this functionality to all types of annotation (at the moment, the search will not return anything when you select marginalia (in the advanced search) and do not include anything in the text box), but this will have to wait until AOR phase II. These enhanced search possibilities will make it possible to search for all pages with any type of marginal annotations, all pages with marginalia, all pages with symbols, et cetera.

⁶ *Transcriber's Manual*, pp. 23-7. Also see the blogs [“Marginalia > space”](#) and [“Linking marginalia”](#).

- Stemming always is a tricky part of search. Searches for particular words in the AOR viewer are likely to return a larger number of hits than perhaps expected, caused by the fact that the stemming, to echo our senior programmer Mark Patton, “improves recall at the cost of precision.” We think that, in the end, it’s probably better to have more results which need sifting through, rather than excluding precious data because of a too linear search engine.