

Amanuensis V5.0 instructions

(last review: 1 February 2020)

1 Purpose

Amanuensis is a utility for searching within the database of Latin sources pertaining to Roman Law created by the University of Linz ("Romtext"). By courtesy of Hofrat Dr. Josef Menner, Amanuensis includes the complete Romtext database. By courtesy of Ingo G. Maier, Amanuensis additionally includes the Latin novels plus a comprehensive collection of unabridged constitutions which happened to be transmitted beyond the codes. Thanks to Projet Volterra and more specifically Benet Salway, Amanuensis also includes the Greek portions of CJ and the Greek Novels; these texts were digitalized originally by the Prof. Spruit's team in the Netherlands. Amanuensis is available in different versions for Windows, Mac, iOS and Android devices. The permanent URL of Amanuensis is www.riedlberger.de/amanuensis. Check back regularly for updates.

2 License

Amanuensis itself is freeware. You can use it for free (even in commercial contexts). You can also pass it on for free. However, you must in this case always clearly state the authors' names. And remember, there is no warranty or liability whatsoever. The license is "Creative Commons Attribution-NoDerivatives 4.0 International Public License."

Note that the Windows Amanuensis version includes some open source code with different licenses, namely:

- The Code Project Open License 1.02 (www.codeproject.com/info/cpol10.aspx)
 - *A Pretty Good Splash Screen in C#* by Tom Clement (www.codeproject.com/Articles/5454/A-Pretty-Good-Splash-Screen-in-C)
- GNU Lesser General Public License (<http://opensource.org/licenses/lgpl-3.0.html>)
 - *Fast Colored TextBox for Syntax Highlighting* by Pavel Torgashov (www.codeproject.com/Articles/161871/Fast-Colored-TextBox-for-syntax-highlighting)
 - *gettext-cs-utils* by Manas Technology Solutions (<http://code.google.com/p/gettext-cs-utils>)

Further, Windows Amanuensis ships with two free monospaced typefaces (polytonic Greek looks simply awful when displayed using Courier New):

- DejaVu Sans Mono (<http://sourceforge.net/projects/dejavu>)
- Ubuntu Monospace (<http://font.ubuntu.com>)

3 Requirements for the Windows version

Basically, as a Windows user, you need three things. First, you need the current version of Microsoft .NET Framework. This is a piece of software provided by Microsoft without which Amanuensis cannot work. Don't worry: if your Windows installation does not include this software, installing Amanuensis will in many cases automatically prompt you to download

and install it (otherwise, search for the program on the Microsoft website). Second, Amanuensis needs a whopping one gigabyte of free memory. That's a lot, we know, but your reward is incredibly fast searches. Third and finally, you need administrator privileges to install Amanuensis. This is not a problem if it is your own computer. In an office environment, you might need to ask your administrator for help.

4 Installation

Windows version: if you double-click the Amanuensis installer, you might be prompted to download and install .NET Framework (in that case, do so!). Otherwise, simply follow the installer's instructions.

Mac version: download the file to your Mac computer. Mount it by double-clicking it. Then drag Amanuensis.app to your program directory. In case your Mac computer complains about an "unidentified developer", ctrl+click or righ-click Amanuensis and select "Open" from the context menu. A dialog pops up, and there's a button "Open".

5 A few notes on Romtext

The creation of Romtext started back in 1970, at that time by means of punchcards! Around 100,000 of these cards were necessary to input just the Digests, and this took no fewer than five years. Back then, there was one mainframe running the Romtext database based at Linz University, and researchers in the field of Roman Law could send their queries by snail mail to Linz. Romtext includes the following texts:

a) Corpus Iuris Civilis

- Iustiniani Institutiones (I.) - P. Krüger, 16th ed. Berlin
- Iustiniani Digesta (D.) - Th. Mommsen, Voll. I,II, Berlin 1870
- Codex Iustinianus (C.) - P. Krüger, 16th ed. Berlin [[the Greek portions were added from the work of Prof. Spruit]]
- Constitutio Deo Auctore (Const. Deo Auctore) - P. Krüger, 16th ed. Berlin
- Constitutio Tanta (Const. Tanta) - P. Krüger, 16th ed. Berlin
- Constitutio Omnem (Const. Omnem) - P. Krüger, 16th ed. Berlin
- Constitutio Imperatoriam (Const. Imperatoriam) - P. Krüger, 16th ed. Berlin

b) Codex Theodosianus

- Codex Theodosianus (CTh.)
- Novels of C. Th. (Nov. Theodos., Nov. Val., Nov. Maior., Nov. Marc., Nov. Sev., Nov. Anthem.)
- Constitutiones Sirmo-dianae (Const. Sirm.)

c) Germanic Law Codes

- Lex Romana Burgundionum (Lex Rom. Burg.)
- Edictum Theodorici Regis (Edict. Theodor.)
- Breviarium Alaricianum (Brev. Alar.)

d) Various pre-Justinianic juristic texts

- Gaii Institutiones (Gai.) - Leiden 1964

- Sententiae Pauli (Paul.) - FIRA II
- Pauli Sententiarum Interpretatio (Interpr. Paul. sent.)
- Fragmenta Vaticana (Vat. fr.) - FIRA II
- Collatio legum Mos. et Rom (Coll.) - FIRA II
- Epitome Ulpiani (Epit. Ulp.) - F. Schulz, 1926
- Consultatio (Consult.) - FIRA II
- Gaius Augustodunensis (Gai. Aug.) - FIRA II
- Epitome Gai (Epit. Gai.)

e) Individual leges, senatus consulta, diplomas, municipal laws and similar

- Leges (Lex)
- Senatus consulta (SC)
- Senatus auctoritates
- Oratio Claudii
- Diploma
- Tabula Heracleensis
- Fragmentum Atestinum

Apart from these texts (all of which are part of Romtext), Amanuensis also includes three further data sets provided by Ingo G. Maier (f, g) and Prof. Spruit (h):

f) ExtraCod: a comprehensive collection of late antique constitutions that happened to survive in their integrity; for the original of ExtraCod, check <https://www.notitiadignitatum.org/extracod.pdf> ; also, this document provides a list of the editions and translations which are indicated in abbreviated form within ExtraCod search results.

g) Nov.lust.: the Latin Justinianic novels. Note the format: (e.g.) “Nov.lust. 43 CAPUT I”

h) Nov.lust.gr.: the Greek Justinianic novels.

The abbreviations such as “D.” are what you’ll see in Amanuensis when search results are displayed. You can also use them to jump to individual passages of interest (cf. below). Note that Romtext’s orthography may diverge from what you may encounter in the editions.

If you knew the original Romtext database, you will remember that it used to be an all-caps database. The Romtext version included in Amanuensis provides capitalization. It was created by changing the Romtext database to all-lower case and then manually adding upper case where appropriate. Since this immense work (we are talking here about more than a quarter of a million text lines!) was carried by Hofrat Dr. Menner manually and all on his own, there might be some minor mistakes. You would help us and your fellow Amanuensis users a great deal if you could drop us an e-mail whenever you spot such a capitalization error: peter@riedlberger.de

As to Greek, Romtext only includes shorter passages of the kind you might occasionally encounter e.g. in the Digests; longer texts (passages from CJ and the Greek Novels) have been supplied from the Dutch CIC translation project. In contrast to the original Romtext

database (which used a proprietary system to transliterate the Greek), Amanuensis displays all Greek texts using a polytonic Greek Unicode font.

6 Basic search

The following paragraphs will show you how to use Amanuensis in the most efficient way. It is recommended that you do exactly what we do in the examples. This is the quickest way to understand all the capabilities Amanuensis has to offer.

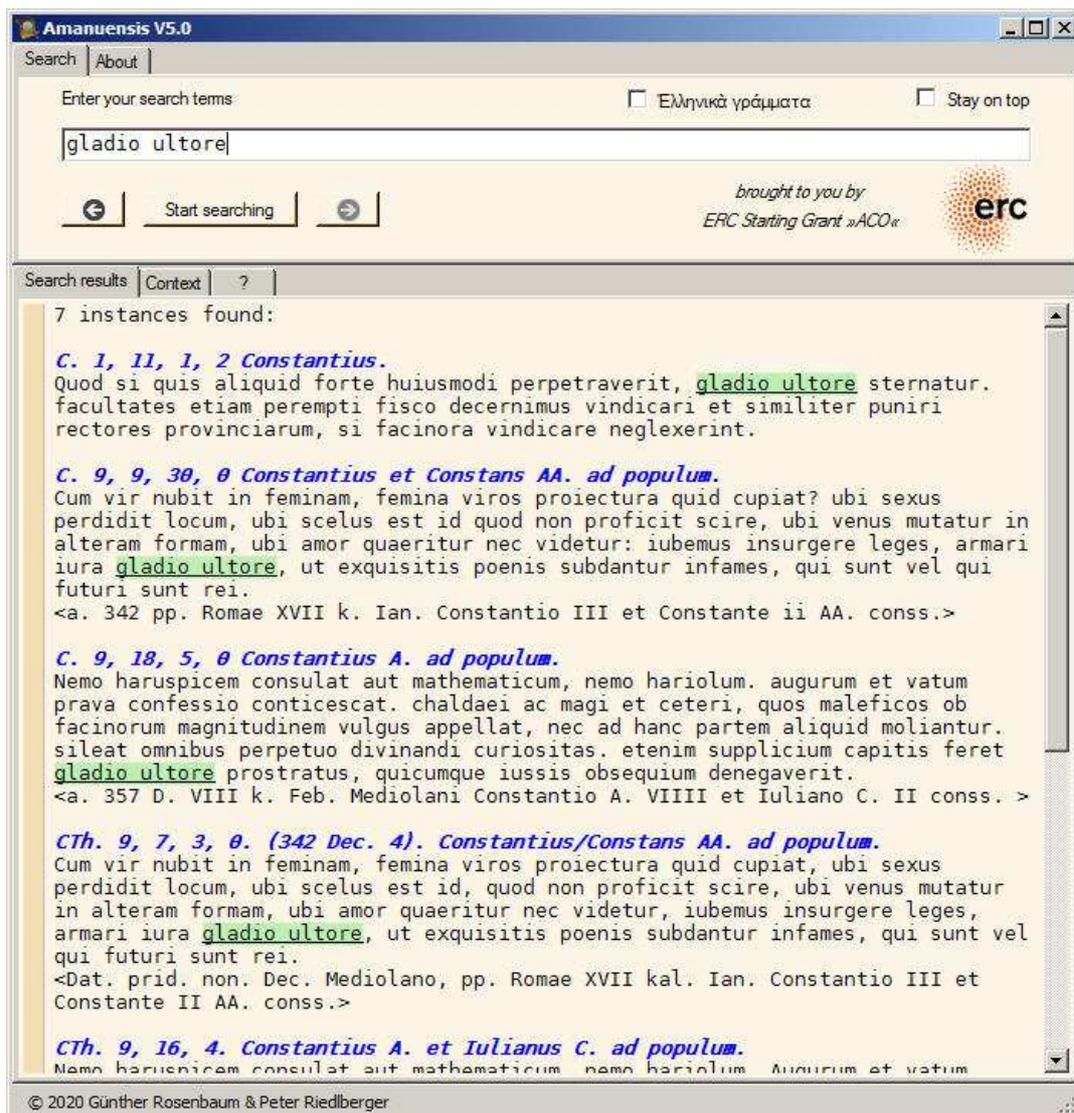
The screenshots are taken from the Windows version. The Mac user interface looks slightly different, but don't worry: all the steps detailed below work exactly the same.

Let's assume that you are interested in the lovely phrase "gladio ultore." Just type

gladio ultore

into the search box and hit [return] (you can also click "Start Searching," but I myself always use the [return] key).

Your result should look like this:



Note a few things:

- i) All the instances found are marked in green, which is quite useful for quickly skimming through them.
- ii) Note the numbering scheme. It is a feature of Romtext that a zero is displayed in the case of a principium or if there are no further paragraphs.

7 Refining the search: free positions

We've only found instances with "gladio ultore" in *exactly* this sequence and with *exactly* these endings. But Latin is a flexible language; "ultore" could be at a different position. So, what do we do when we want to allow for this? Quite simply, add a plus sign in front of the second word. Search for this:

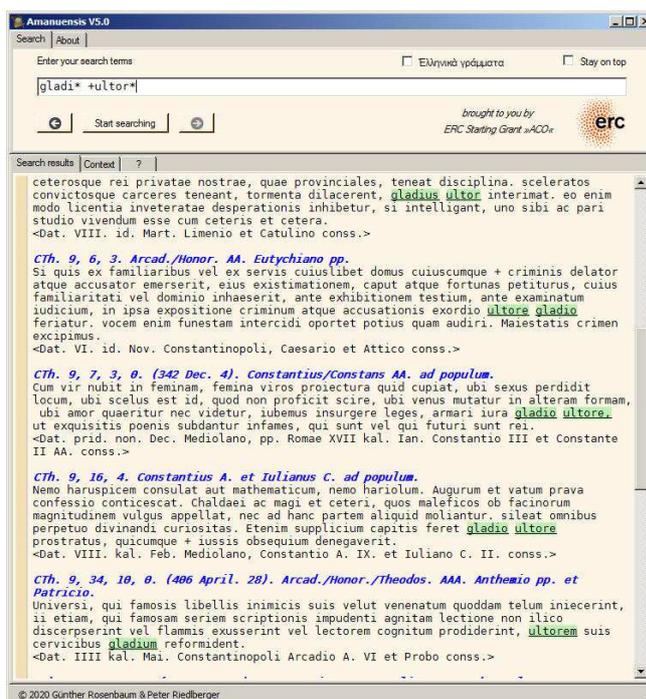
```
gladio +ultore
```

You see, now "ultore gladio" is found as well. Actually, the whole "paragraph" (meant in a non-technical way) is searched through, so theoretically, in a long paragraph, there might be "ultore" in the first phrase and three sentences later "gladio." In practice, this is not much of a problem, especially as the green highlighting enables you to detect such false positives at a glance.

8 Further refining the search: wildcard for endings

Latin is also quite flexible when it comes to endings, and therefore we have included a wildcard, the usual asterisk. So, to further refine our search, let's try this one:

```
gladi* +ultor*
```



And indeed, we've thus stumbled across "gladius ultor" and "ultorem ... gladium".

9 Advanced combinations of operators

You can use as many search terms as you want. Maybe you start by searching for

```
gladi* +ultor*
```

Then you take an interest in the idea of “sternere” people with the aforesaid device. Thus you search for

```
gladi* +ultor* +stern*
```

Good Latinist that you are, you remember that different stems of this verb look differently, hence you search for:

```
gladi* +ultor* +strat*
```

Oops, no hits at all. But wait, there are compounds of “sternere” which might occur. Luckily, Amanuensis supports the asterisk wildcard in any position, hence also in front position:

```
gladi* +ultor* +*strat*
```

Indeed, in this way we find “gladio ultore prostratus”. Hopefully the basic idea of how searching with Amanuensis works is clear by now.

Finally, the asterisk wildcard can be used in any position, not just at the start or the end of a word. This might be useful in cases of words with varying orthography, such as “plaustrum” and/or “plostrum”. A search for

```
pl*str*
```

catches both. Note however that you do NOT need this option for cases of prefix assimilation, e.g. “inlatus”/“illatus”, because Amanuensis takes care of this automatically (see no. 11 below).

There is also another option available, though I doubt that most users will ever need this one:

```
gladi* +ultor* prost*
```

finds any combination of “gladi...” and “ultor... prost...”. Note that here, “ultor...” and “prost...” have to be in direct sequence. If you add a plus to “prost*”, this word could be at any position in the “paragraph,” which makes a lot more sense in most cases.

Another operator is the minus sign. Passages which include the word marked with minus will *not* be displayed. This is a feature most users won’t need often, but it can be very useful in some situations. Thus, for example,

```
gall* -aquil*
```

is useful if you’re interested in Gauls, rather than in the jurist Aquilius Gallus.

10 Ignored characters

The following characters are ignored in searches: comma (,), period (.), semicolon (;), colon (:), quote (") and blank (). This means that

ea quae

will find both "ea quae" and "ea, quae".

11 Prefix assimilation

As you know, prefix assimilation in Latin is not mandatory, though possible. For instance, both "conpetere" and "competere" may occur. As a rule of thumb, Romtext normalizes Latin orthography according to Heumann-Seckel, i.e., applying assimilation, even if the employed edition uses a different policy. However, this task has not been carried out consistently, and texts not deriving from Romtext might follow different principles anyway. In earlier installments of Amanuensis, one had to search for both alternatives, e.g., "conp*" as well as "comp*" (or use a complex search, i.e. "co*p").

Now, prefix assimilation (at least regarding ab, ad, cum, ex, in, ob, sub; I hope I haven't missed anything ...) is *automatically* taken care of. Hence, searching for, e.g., "summersus" will find both "submersus" and "summersus"; one could also search for "submersus" and find both.

12 Automatic handling of *-que* and *-ve*

The enclitics *-que* and *-ve* can be attached to almost any Latin word. Amanuensis is clever enough to ignore them. For example, if you search for "ius +facultas", you would theoretically be able to find both "facultas iusque" as well as "facultas et ius" (the latter however is unattested).

13 Advanced operators

If you are not a papyrologist or a power user, you may safely skip this paragraph, as it might create more confusion than be helpful to you. It is about two advanced operators, "?" and the "refinement minus" (which is minus without space before it).

Papyrologists face situations in which some characters in an otherwise readable text are lacking. In that case, it is surely helps to see what *realistic* options are available, and when working on *juristic* papyri, the realistic options boil down to all attestations in other juristic texts. So let's imagine you work on a papyrus where you can read a word starting with GLA; after that, a letter is lost in a lacuna; after this lacuna, you can see something that very much looks like an I; after that, everything else is lost. Help arrives in the case of the "?" operator, which is a wildcard for *exactly* one letter. So, in our example, just search for: "glad?i*". Amanuensis from version 5.0 onwards has three tabs. The third tab "?" shows you all the attestations found in the database that match our query, sorted according to frequency. In our example, these are mostly various inflected forms of "gladius," though there are also forms of "gladiator" and of the rare adjective "gladiatorius." There is, however, also one completely unrelated hit: "Glafirioni". This is a name in the dative: the co-recipient of a tetrarchic rescript. Further, you can use as many "?" operators in the same query as you

wish. So, if the third letter is illegible as well, try “gl??:i*”, which of course gives you many more options (many deriving from “gloria” or “gleba”).

The second advanced option has to do with the minus operator. The following might not be very easy to understand, especially if you are not used to think in mathematical operators. Hopefully, my real-world example will help make things clear. The standard minus operator removes a paragraph from the result list if that word is encountered. Our example above was “gall* -aquil*” which helps if you’re interested in Gauls, rather than in the jurist Aquilius Gallus. Now, however, imagine that you are working on CTh. 16.5.40 (this is exactly what the author of these lines did). In this fragment, both manuscripts transmit “perpetui metallorum operi deputetur”, which is nonsensical. This is why Mommsen changed to “perpeti”. But “perpes” is a rare word, and paleographically, the run-of-the-mill “perpetuo” would be as good or bad as “perpeti”. Yet before we dare contradict Mommsen, let us better check! So, let’s find out how rare (or not) “perpes” *really* is in juristic texts. Searching for “perpet*”, however, doesn’t help much: there are 859 hits, in their vast majority unrelated! So let’s try something different: “perpet* -perpetu* -perpetr*”. This should kill all those paragraphs with “perpetuus” and forms of “perpetrare.” Indeed, it does. And that’s *exactly* the problem. For it removes all those paragraphs which happen to have a form of “perpes” *but also one of these words!* This is not what we want, as this would mean that we will never obtain our full list of “perpes” attestations. This is why Amanuensis V5.0 now offers what we call the “refining minus operator”: the standard minus removes *any* paragraph (so, in a way, it *overrides* attestations otherwise found), the “refining minus” only removes a paragraph if each and every instance *both* matches the main search term *and* the refining minus search term. Huh, sounds complicated? But try yourself: “perpet* -perpetu* -perpetr*” results in 21 hits, “perpet*-perpetu*-perpetr*” raises this number to 24 hits. (This also gives you the syntax for the “refining minus”: there is no space between the search term which you want to refine!). The difference is due to texts such as Sirm. 11 which feature both words (in the case of Sirm. 11: “perpeti firmitate”, “exilio perpetuae deportationis”). This is an important observation: when checking the other occurrences, one quickly notices that practically all “perpes” instances are positive, while in negative contexts, we encounter “perpetuus”. Sirm. 11 is a gorgeous confirmation of that impression because there, within the *same* text, a different word is used depending on context. So Mommsen’s idea is not convincing: “perpetuo” is certainly a more plausible option than “perpeti” when we’re talking about life-long forced labor. If all of this doesn’t make sense to you, don’t worry: 99,99% of Amanuensis users will never need the “refining minus” operator.

14 Searching in Greek texts

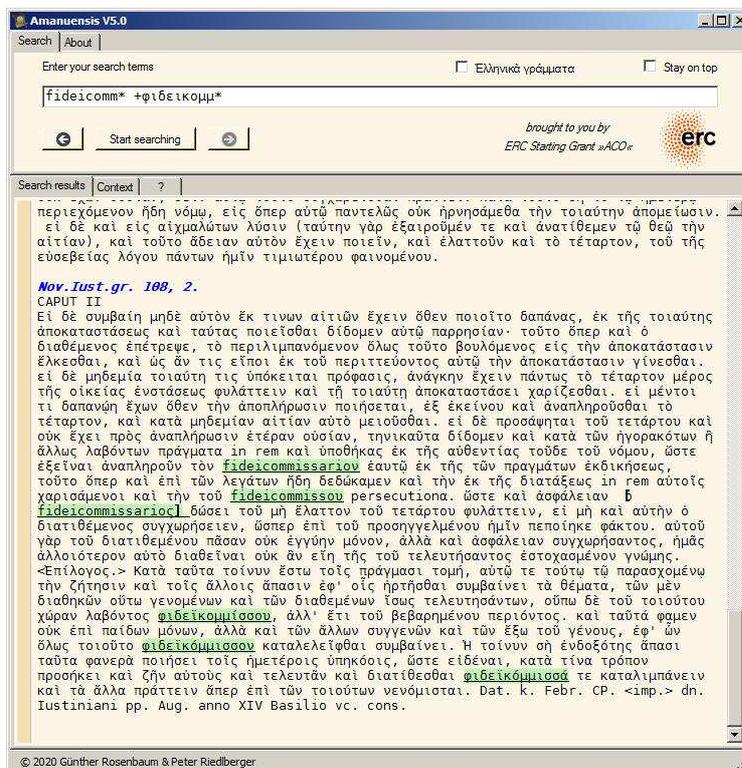
If you want to search within Greek texts, you first need to input your Greek search terms. To do so, you have to switch to Greek inputting, which you do by either putting the check mark in the Ἑλληνικὰ γράμματα checkbox or by simply pressing [CTRL G]. The keys on your keyboard are mapped to Greek characters according to Beta Code (which you most probably already know and which is straightforward at any rate, but if you want to check a table, here you are: https://en.wikipedia.org/wiki/Beta_Code). Besides, you can use any other external or OS-provided method to input Greek (in the mobile versions of Amanuensis, you even have to use a Greek keyboard, such as the MultiLing Keyboard app for Android). Of course, you can also simply paste your Greek search terms into the search box.

The main thing to keep in mind is that *diacritics are completely ignored by Amanuensis*. This means: no matter whether your search term is βασιλεια, βασίλεια or βασιλεία, your search will invariably result in a mix of instances of βασιλεία and βασίλεια (nope, no queen, just a neuter plural: Nov. Iust. gr. 30.6, εἰς τὰ ἡμέτερα βασίλεια).

This little limitation allows us to maintain the incredible searching speed for which Amanuensis is rightly famous; also, it makes life a lot easier for most people (as you don't need to verify whether "diacritic-sensitive" searching is activated or not).

Apart from that, searching for Greek terms works exactly as any other search in Amanuensis. You can also mix Greek and Latin search terms. For example, if you want to find all passages that use a form of fideicommissum both in the Latin original and its Greek transliteration, search for:

fideicomm* +φιδεικομμ*



15 Getting the context

One of the first things I learned when I was inculcated with the rudiments of German Civil Law was that you invariably have to throw a glance both at the immediately preceding and the immediately following paragraphs. My guess is that the same holds true for Roman Law, hence we've included a nifty option for seeing the context.

Whenever you see your search result, simply double-click the "paragraph" you're interested in. This takes you to the context pane where you see this "paragraph" in its context. You can get back by clicking the "search result" tab or by double-clicking in the context pane.

16 History

Amanuensis includes a history feature which works exactly the same way as in your internet browser. By clicking the little arrow buttons below the search box, you can return to previous searches. If you have a decent mouse (and use the Windows version of Amanuensis), you can also navigate through previous searches clicking the “back button” or the “forward button” (if you don’t know what a “back button” or “forward button” is, don’t worry, simply use the arrow buttons).

17 Searching for a passage

You can also use Amanuensis for accessing your sources. Imagine you need the text of Digests, Book 39, Title 2, and you are too lazy to stand up and walk to the bookshelf; further, you wish to paste it into a document, so having the text digitally would be quite handy. For this purpose, simply search for the passage in question, using the abbreviations as explained above in no. 5. If you want, you can separate the numbers using commas, but as blanks, commas and periods are ignored at any rate, so it’s your choice if you use them or not. For example, in order to see Digests, Book 39, Title 2, search for:

D. 39 , 2

or

D. 39 , 2

or even

d 39 2

All of these searches will return the same result.

18 Additional features

- It goes without saying that you can copy and paste texts from Amanuensis. Just highlight them with your mouse, and then either use [CTRL+C] or, if you are a mousy kind of person, the context menu.
- Speaking of copy/paste, we’ve found it very useful to have Amanuensis permanently on top when doing a lot of work in a text processing application (otherwise it would disappear to the background when you continue your work on the document). To activate this, simply check “Stay on top” at the upper right corner.
- If you don’t like the font size, you can zoom in and out by using the plus and minus keys with CTRL, viz. [CTRL++] and [CTRL+-]. Note that these must be the keys of the numeric keypad. Using [CTRL+0], you can get back to the default font size. This time, however, you need to use the zero key of the main keyboard. Obviously, the keys only work if the textbox has focus (meaning you have clicked into it). If all of this seems rather unintuitive to you, you can accomplish all of these actions by using the context menu (i.e., right-clicking and choosing the appropriate entry).

- At the top, there's an "about" tab. Here you can switch to another interface language, though if you made it this far, I guess you feel rather comfortable with English!
- In the Windows version of Amanuensis, you will also find an option to change the typeface in the "about" tab. The default is the remarkably beautiful font "DejaVu Sans Mono," but you are free to change to the rather peculiar font "Ubuntu Mono" (in that case, you might find it useful to adjust the zoom factor). Using the Mac version, you're more flexible when it comes to fonts, because you may simply change your system font to any font.

19 Final remarks

If you detect any errors or if you have ideas for additional functionality that might be implemented rather painlessly (be reasonable, Amanuensis is freeware after all!), please contact us. Furthermore, if you like the program and use it, you might as well just drop me an e-mail. A happy Amanuensis user somewhere on the globe who sends me a nice e-mail might just make my day! The contact address is peter@riedlberger.de .

20 Version history

1 February 2020

V5.0

- Features for papyrologists added ("?" operator, frequency-sorted list of matching hits)
- "Refining minus operator" added; really useful, but too complicated to explain here ;)
- Some minor corrections in Romtext

5 June 2018

V4.0

- The Greek portions of CJ and the Justinianic Greek novels added from the work of the Dutch CIC translation project (Prof. Spruit); the inclusion was made possible by Projeet Volterra (Dr. Benet Salway)

23 April 2017

V3.0

- Ingo G. Maier's "ExtraCod" and Latin novels added; check his website at <http://notitiadignitatum.org/>

11 February 2016

V2.0

- History feature added
- Dutch localization added
- Minor corrections in Romtext

15 March 2015

V1.5.2

- Slight revision of the instructions; the Amanuensis binaries are unchanged.

4 December 2014

V1.5

- Some minor mistakes in Romtext removed
- Hungarian and Polish localization added

20 July 2014

V1.4

- Enhancement of Romtext continues (all Greek passages now in polytonic Greek; CTh., Nov. and Brev. passages now also show inscription in blue; minor mistakes removed)
- Codex Theodosianus is now abbreviated as CTh.
- Search terms are found even if –que or –ve is attached to them (e.g., *ius* also finds *iusque*)

6 June 2014

V1.3

- Enhancement of Romtext continues (most Greek transliterated texts now replaced by polytonic Greek; catenae now start with lower case letters; numerous minor mistakes removed)
- Minus operator added
- Prefix assimilation automatically taken into account (e.g., *illatus* automatically finds both *inlatus* and *illatus*)

1 May 2014

V1.2

- New version of Romtext database with capitalization
- Partial change of Greek transliterated texts to Greek with polytonic Greek font
- New fonts included, with an option to change the display font

13 April 2014

V1.1

- Commas etc. are ignored
- Slicker display of source references (no dollar signs, capitalization, standard abbreviations)

20 March 2014

V1.0

- First release version