

## Review Essay: On First Looking into the Digital Loeb Classical Library<sup>1</sup>

The Loeb Classical Library has been a mainstay of anglophone Classics for many years. The earliest volumes in the series, which, in its own now-quaint words, “gives access to all that is important in Greek and Latin literature,” date back a little over a century. In its new incarnation the whole collection can appear on your computer screen, though at a price that will regrettably restrict access. Should you join this club, or urge your institution to do so, in an era of rising institutional subscription costs in all fields? In this review, I will offer my first impressions and some suggestions for improvement.<sup>2</sup>

The homepage of loebclassics.com has the look of a glossy catalog for the print volumes. As a result, however, the paths by which users need to enter the site do not stand out as clearly as they might. These paths are “Browse” on the left, below the masthead, and a “Search” box to the right of the masthead, but equal prominence is given to such items as “About the Library”.

### *The Browse Menu*

One can first of all browse “Authors”, a strictly alphabetical list. Once an author has been selected, a list of works will appear that can be limited by Form (prose/po-

<sup>1</sup>I would like to thank students and colleagues at Chicago and beyond for sharing their views, and in particular Andrew Horne, Larry McEnerney, Catherine Mardikes, and Peter White for their comments on an earlier version of this review.

<sup>2</sup>This review will steer clear of the economic aspects beyond mentioning that individuals can subscribe for \$65 per year, after an initial fee of \$195. By way of full disclosure, I should add that in 2007, I received funding from the Loeb foundation (lclf.harvard.edu), which supports a broad range of research projects in the Classics from the income of the Loeb Classical Library. On the other hand, I am a grateful beneficiary of open-access policies of many digital projects, including most notably the Perseus Project. More recently, various dictionary projects have also made their data available, such as the Diccionario Griego-Español and the Dictionary of Medieval Latin from British Sources. For the philologically inclined, my students and I have developed perseus.uchicago.edu and Logeion, a collection of lexicographical resources.

etry) or by Genre / Subject, which can make sense for a prolific author like Plutarch, where one can select genres from ‘Analytics’ (e.g. *Against the Stoics on Common Conceptions*) to ‘Zoology’ (e.g. *Beasts are Rational*). One can also choose to browse “Greek works” and “Latin works” through another alphabetical list of authors or by period,<sup>3</sup> form, and genre. These criteria are easier to apply in this collection than in many other collections, if they can be used as a searching criterion at all. To take another paid resource as an example, tragedies and satyr plays are designated as such in *TLG*, but I do not see how one can use that information to limit one’s search in the current (January 2015) interface. One is restricted to searching work by work or author by author.

How do these options compare to standing in front of a well-ordered bookcase at home or in the library? Muscle memory will probably get you to Aeschylus or *Letters to Atticus* on your shelf faster, but I find myself in more trouble when it comes to authors who do not have their own full volumes; the logic of where the *Minor Attic Orators* or *Greek Mathematical Works* go on the shelf tends to escape me. This is no problem in the digital realm--Dinarchus and Euclid are as easy to find in the listings as are Aeschylus and Cicero. To preserve quick access to one’s own canon-of-the-canon (the Aeschylus volumes, say), it is furthermore possible to designate certain bookmarks (*not* volumes, as far as I can make out) as “My Loeb”, which are then gathered in a separate menu.<sup>4</sup>

### *Reading*

Having found the volume that we were looking for, we quickly find ourselves on the first two facing pages of the main text by clicking on the title of the work. The Digital Loeb comes into its own here, and yet it is also likely to be the source of some confusion. The good part first: the presentation is spare and elegant. Thin but quite noticeable borders remind us of the brand: green for Greek volumes, red for Latin ones. The font is familiar.<sup>5</sup> The look of the printed page has been meticu-

<sup>3</sup> Dating is fairly ecumenical. Homer and Hesiod are listed in both the 8th and 7th centuries, along with the Greek Anthology, which will show up in any century you pick.

<sup>4</sup> I did not see if this feature could be used to assemble one’s own corpus for use in searches, as for instance is possible in Peter Heslin’s *Diogenes* search program (but not anywhere else that I am aware of).

<sup>5</sup> The font looks familiar and elegant to me, with the exception of the Greek capitals (as opposed to the small caps which are used more often) and the placement of apostrophes in the Greek. Aesthetics aside, Unicode standards have not always been followed, unfortunately; the texts use the officially

lously reproduced, including even the small caps at the opening of sections. Diminutive arrows point the way to further pages. But - does the page look pretty short? And what about the introduction to the text, where did it go? It quickly becomes apparent that clean pages have been preferred over footnotes, and a single entry point at book 1, line 1 over tables of contents.<sup>6</sup>

Given the Loeb collection's target audience, I believe it would please many users if they could set a preference to always see all notes. Textual notes do appear spontaneously in some volumes (e.g. Aeschylus) but not others (Achilles Tatius). Footnotes to the translation always need to be summoned by clicking on a superscript reference. If, in a particular volume, textual notes are not showing up automatically, then 'view all footnotes' on the righthand side of the page will not do the trick: a note in the Greek or Latin text will have to be found and clicked separately, and this process repeats on every new page.

As one is reading along, basic bibliographical information, such as the editor and date of the text one is reading, is not immediately accessible, nor is the rest of the front matter. To get to see this, users have to accustom themselves to clicking on the green or red *LCL* volume number above the top right corner of the virtual page spread. Clicking on the volume number conjures up a picture of the dust-jacket, the bibliographical information, and, most importantly, an overview of the contents of the volume: introduction, maps, indices, separate works or parts of works included in the volume. It is crucial to be aware of this non-obvious feature, since the skeuomorphic<sup>7</sup> page view might lead one to believe that such information is nowhere to be found: left and right arrows never point outside the body of the texts. Worse, when one has read a preface, one comes either to a dead end

'deprecated' versions of characters accented with acute. This is relatively unimportant in a 'walled garden', of course, but can lead to unpleasant surprises when using standard technology or when contemplating any future collaborative work with mainstream digital classicists.

<sup>6</sup> My own theory about this and other design choices is that the vendor that the Press used for this project is probably well-versed in collections of the 'Great American Novel' and the like, where one can expect footnotes to be afterthoughts and textual variants to not be deemed of interest to the average reader, let alone that they might be interested in the translator's or editor's introductions. Perhaps it is even by design that footnote references are currently (Jan. 2015) quite hard to spot in the text.

<sup>7</sup> Skeuomorphic: of the appearance of an object as in real life, a design practice now mostly abandoned by software architects. The practice was abandoned in part to avoid user frustration when digital objects fail to behave like their real-world equivalents, as when we might try to browse from the beginning of a text to its table of contents.

(e.g. Thucydides volume 1), or to the index of names or similar back matter. It is only through the volume number that one can navigate to and from the body of the text, so that the illusion of pages of a book at times becomes a maddening one.

It would be helpful to have additional navigational tools in the ample space around the pages. As a bolder move, I might suggest that, once one has selected an author or work, the presentation page, with the short blurb about the author and work(s), and the table of contents, be shown in the first instance, as opposed to the first page of the body of the text. I for one would appreciate that change, since it would truly allow me to *browse* the contents of the book, and the 'blurb' texts are always a pleasure to read.

A final aspect of straightforward linear reading is that often, for quick reference, one wants to start somewhere other than page 1. Unfortunately, although one can go to the table of contents and select a different book, chapters, sections and lines cannot be used for navigation. As a result, one is reduced to guessing at Loeb page numbers. I can only hope that this problem will be remedied soon, so that users will be able to go directly to the book, chapter, and section of their choosing. From bitter experience, I know that this is a hard problem to crack, but I trust a serious Classics resource will make implementing it a priority.<sup>8</sup> Adding a horizontal scroll bar to indicate relative position in a volume, as found in various e-readers, could be useful in the meantime.

#### *The Search box*

In my own use of the site, I have in fact not used the "Browse" option very much. Rather, I type author names and anything else in the Search box, treating it rather like a Google search box. Since the site uses standard technologies, this can work quite well if one is prepared to ignore the side effects. For example, the site successfully offers up the *Iliad* when entering 'Homer Iliad' in the search box, and it will give you *The Women of Trachis* when you enter 'Trachiniae'; similarly, it will offer you Macrobius *Saturnalia* when you merely enter 'Kaster'. In other words, any piece of so-called metadata (data *about* the data, which evidently includes authors, titles, alternate titles, editors) has been indexed and will be offered up as a search result. This is a nice feature, since it allows works to be located quickly (faster than browsing author names under H or S or M and then selecting works, especially if

<sup>8</sup> The website advises that "a user seeking to follow up a citation to Josephus, *The Jewish War* 5.468 should use the Table of Contents to navigate to the beginning of Book 5, **at which point s/he may use the "Go to page" box to browse rapidly ahead, just as with a printed volume.**" [emphasis mine]. I have not found such boxes in the books on my shelf.

variants of titles are included, such as *Trachiniaiæ*). We can click on the title of the work and settle down to read.

However, these same results appear out of reach when the system attempts to display them, and so it is that when we click on search results for these items, we see the message “Sorry, ‘Kaster’ (or: ‘Homer Iliad’, or: ‘Trachiniaiæ’) does not appear on any facing pages.” The same thing happens when entering multiple Greek or Latin words in the search box. This disconnect presumably occurs because words were found somewhere in the text, front matter, or metadata (criterion for showing the existence of search results), but not anywhere near each other in the body of the text (needed to display them). The elegant simplicity of the interface militates against search results that are more nuanced: “we have found 1 Kaster in ‘editor’ for..”; “we have found 1 Trachiniaiæ in ‘alternate title’ for..”; “please use Advanced Search instead when searching for multiple words”, but the current implementation can be mystifying to users that are accustomed to more precise search criteria.

When it comes to actual text searching, as opposed to quickly locating a particular text, I hope that future versions of the site will offer expanded possibilities. The Loeb library of course is not the only site that fails to offer frequencies and other means of aggregation of search results, as opposed to mere lists of occurrences, but one is well advised to only search for words that are not all that frequent, otherwise a search will yield many pages of undifferentiated results. Snippets of search results are only shown after an additional click on “Show results within [a work]”, which makes it impossible to quickly scan a page of search results for relevant ones (in the human, *subjective*, sense of that word). Furthermore, the system will order results by what *it* terms ‘relevance’ as a default option; that is, it will order search results on the basis of an undefined algorithm.<sup>9</sup> Thankfully, one can choose to order by author or title instead.

The standard technologies implemented here also mean that you can only search for exact words (or parts of words), not for all forms of a particular lemma (as is possible on the *Perseus* and *TLG* websites). Search results for complete words are highlighted, but if wildcards are used for parts of words, these words are not

<sup>9</sup> An initial implementation of such technology led to *War and Peace* being outside the top 20 of search results for ‘war and peace’ in my local University library; a better object lesson in the importance of knowing one’s audience when implementing technology is hard to find. On the Loeb website, Dio Chrysostom has consistently been at the top of my search results, for no good reason in the eyes of this user.

highlighted, making them very difficult to spot on the page. Any Greek is searched without regard to accents, so that your searches will not be able to distinguish between *δικαίων* and *δικαιῶν* (entering either one will get you results for both). However, unlike at other sites, the iota subscript is not considered a diacritic like breathings and accents, which means that entering *λόγω* or *λογω* will not give you results for *λόγω*.<sup>10</sup> Latinists can avoid results from the English translation by selecting to search only the ‘verso’ pages, confirming this reviewer’s worst suspicions about what pages are read the most.

#### *Textual accuracy*

I have found very few problems with the text. Predictably, any problems that do show up tend to be in non-textual elements: geometrical figures in the mathematical works and the text surrounding them can get confused,<sup>11</sup> line drawings in family trees or manuscript stemmata are awkward. Maps, on the other hand, usually look good. When it comes to text, running headers can... run on. In the *Fragments of Sophocles, Ajax the Locrian* (ending on page 17) still sits at the top of the page when we have reached *The Searchers* (page 142). Once one is in simple running text, the data entry has been quite accurate; in fact, it has been accurate to the point of faithfully reproducing errors or glitches from the print edition of Appian’s *Roman History*, (e.g. *ἐλαττούμενος, Καρχηδόνα, ἕτερος, ἐνεκλάοθη*). When one then finds the exact same errors in the Perseus version of this text, one shudders at the duplication of effort, on the one hand, but also at the ethical conundrum for the Loeb editors: they promise that the texts shall mirror the printed editions, and so *ἐλαττούμενος*, etc., might have to stand until the print edition is retired.<sup>12</sup>

<sup>10</sup> Many such details are helpfully spelled out in the site’s ‘Frequently Asked Questions’.

<sup>11</sup> In LCL 335, *Greek Mathematical Works*, footnotes and main text get interspersed, superscripts are not rendered, and line drawings are awkward, for example on pp. 396-99, or p. 268-71 of the same volume, where the original typesetting of the translation is much clearer than the default setting in the digital format. Footnotes and footnote continuations sometimes land on the fixed page display, or remain unfindable in whole or in part to this reviewer (e.g. pp. 283-4).

<sup>12</sup> Another mysterious slip in fact suggests that it may not have to stand for long: As of this writing, the presentation page of Loeb volume 2 (*Appian Roman History* vol. 1) lists Horace White on the dust jacket but Brian McGing, 1912 (sic) in the bibliographic data (?), <http://www.loebclassics.com/view/LCL002/1912/volume.xml>. I happen to own a print volume (LCL 56) that announces itself as Race’s Pindar on the dust jacket but is in fact Sandys’ older edition. I wonder whether the editors know that they are maintaining a venerable tradition here.

### Conclusion

To sum up: My first impressions are of a beautiful interface whose functions do not quite live up to its aesthetics yet, but I should immediately admit to a bias. My primary use of the various classical text corpora is for the purposes of searching, and I am often interested in the distribution of linguistic phenomena. For these purposes, 'relevance' results are anathema, and translations irrelevant. This makes me an atypical user especially of the Loeb series.

More typical users of the Loeb library, however, may think twice about a subscription as well. They will have been able to find many of these same texts and translations elsewhere on the internet, accompanied by commentaries, dictionaries and other enhancements, in familiar open-access collections. The strongest appeal of the Loeb library for now is the promise of one-stop shopping for the 'canon,' and its established brand that, after a century, has well-earned associations of permanence and reliability. So what things should change to make me truly happy with the Digital Loeb Library, and, perhaps opportunistically, warmly endorse it despite not being open-access? Here is a partial wishlist in my personal order of priority.

1. **Navigation** with standard "book-chapter-section" and line numbers. Quick look-up of references is an important, if not the primary, use of the Loeb library for most professional classicists.
2. **Highlight search results**, even if the search term included a wildcard character.
3. Allow **diacritics-sensitive** searching.
4. **Cross-references**: A note at Aristophanes *Peace* 219 merely referring to *Clouds* 186 can work as it stands if navigation (above) is made to work, but could also be reformatted to repeat the note. As it is currently, these cross-references are all but impossible to follow.
5. **Off-line** use: We read that the entire Library now "can fit inside a coat pocket".<sup>13</sup> However, this is only true if one has a working internet connection. Suggestion: Allow users to 'check out' up to 60 pages at a time for a transatlantic flight or other emergency situation (make that 120 facing pages).
6. Allow **user preferences**: Always show all the notes, for instance. Enhance 'My Loeb's' functions to allow users to define search corpora as in Heslin's *Diogenes*.
7. Enable **lemmatized searching** ('sum' finds 'eram' and 'fuit'), morphology searching (find any perfect subjunctives), frequency and collocation data.

<sup>13</sup><http://www.loebclassics.com/page/from-the-general-editor> retrieved January 2015.

8. Link words to a **dictionary** (or two or three or twenty).<sup>14</sup>
9. **Don't retire old editions** (except for Appian maybe)! I would love to see Lloyd-Jones' Sophocles text, to name just one, side by side with the earlier one, especially if one could automatically highlight differences. Setting translations side by side could be equally interesting from a pedagogical point of view.
10. Allow **scholarly exploration** of the corpus with tools other than the standard web interface. This is a beautiful, balanced corpus, proofread to a high level of accuracy: it would be a pity to have it only used for reading and simple searches. Instead of following the *TLG*'s lead, the Loeb Library could make its collection a research library as well as a reading library.

I strongly believe that many of these features can be implemented fairly easily without losing any of the best parts of this new offering, and I look forward to the Digital Loeb 2.0. No provider of free or paid texts can currently offer us an ideal research environment, so if you or your library can afford this, Loeb 2.0 will be a worthwhile complement.

The price tag and the 'walled-garden' effect actually *do* matter, of course. This review has focused on the merits of a new offering, but I have had occasion to note that it has not made use of now-standard capabilities in the open-access world. Interaction with existing projects would enhance the collection, in my view, and would prevent significant duplication of effort. The Library's existence behind a paywall, in the meantime, will keep it off-limits to many students and scholars throughout the world, and its openness to research projects is an unknown at this point. I can only hope that this paid offering does not reduce support for open-access texts on the part of classicists at large, and that members of the open-access community, on their part, will be happy to advise on any or all of the above issues.

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<sup>14</sup>Users can work around the problem by copying text and pasting it into the search box of Logeion, for instance ([logeion.uchicago.edu](http://logeion.uchicago.edu)), or in the word study tool available at [perseus.tufts.edu](http://perseus.tufts.edu).