

# Toward An Epic Epigraph Graph

Francis Bond, Graham John Matthews

Linguistics and Multilingual Studies, English

School of Humanities

Nanyang Technological University

[www3.ntu.edu.sg/home/fcbond/](http://www3.ntu.edu.sg/home/fcbond/)

[www.soh.ntu.edu.sg/Programmes/english/FacultyandStaff/Pages/Graham-Matthews.aspx](http://www.soh.ntu.edu.sg/Programmes/english/FacultyandStaff/Pages/Graham-Matthews.aspx)

[bond@ieee.org](mailto:bond@ieee.org), [gmatthews@ntu.edu.sg](mailto:gmatthews@ntu.edu.sg)

## Abstract

We present a database of epigraphs collected with the goal of revealing literary influence as a set of connections between authors over time. We have collected epigraphs from over 12,000 literary works and are in the process of identifying their provenance. The database is released under an open license.

**Keywords:** epigraph, influence, digital humanities

*The best ideas are common property.*

Seneca the Younger,  
“On Old Age”, Moral Letters to Lucilius

## 1. Introduction

An epigraph is a quotation at the beginning of some piece of writing. Genette (1987, Ch. 7, pp156–160) identifies four major uses: (i) commenting on and justifying the title of the work; (ii) commenting on the text of the work (the most canonical usage); (iii) claiming a relationship to the cited author (name dropping); (iv) signaling the genre of the work (romantic and gothic authors use more epigraphs, classical and realistic fewer). As a result authors use them both to set the theme and to link their work to the existing body of literature.

We have built a database of epigraphs, as a preliminary step to creating a network which maps epigraphs and their provenance (author, work, date, and country of origin) and consequently reveals literary influence as a set of connections between authors over time.

Epigraphs are indicative of the intended audience: for example, Evelyn Waugh uses epigraphs written in Ancient Greek, which suggest that the reader is expected to have some familiarity with the Classics, while Ali Smith utilises epigraphs from around the world, suggesting a more cosmopolitan readership. Most importantly however, they function as a clear marker of influence. From their choice of epigraph, we know that writers such as Jeanette Winterson and Margaret Atwood were influenced by Greek tragedy, Ian McEwan was influenced by Jane Austen, and that Roberto Bolaño’s influences range from Malcolm Lowry to Petronius. Reading literature as a communal network of ideas, philosophies, and artistic practices rather than a set of discreet objects signals the ways in which societies, institutions and structures of power represent themselves in art and language and are shaped in turn by representations. Rather than focusing attention on the idiosyncratic group of writers that comprise the canon, this project examines the larger patterns that shape entire literary forms and periods. For instance, it is commonly understood that the writers of

the English Renaissance were heavily influenced by the recently re-discovered Greek classics yet preliminary studies of the choice of epigraphs suggest that the Ancient Greeks were just as much, if not more, of an influence on British writers from the 1950s and 1960s, a notion that is born out by closer inspection of the novels’ themes.

Epigraphs are often discussed within wider literary criticism as a way authors explicitly show their influences (Poplawski, 2017). However, to date there has been no large scale quantitative study of who cites whom. There is a tumblr (a microblog) of epigraphs: *epigraphic*<sup>1</sup>, but the data cannot be downloaded and there is no explicit license. Our large collection of epigraphs makes it possible to explore questions such as the following:

- To examine the literary field as a whole through vastly larger sampling than the tiny number of novels that comprise the canon traditionally studied by literary scholars. Although epigraphs are a small part of the ecology of the novel, treated as a network they reveal fresh connections and perspectives on literature
- To study the hitherto untold history of the literary epigraph and its evolution in purpose and form. In particular, the project seeks to discover the origin of the first epigraph, to determine whether the use of epigraphs increases in frequency over time, and to contextualise its evolution in relation to a changing socio-historical context.
- To establish the groundwork for an encyclopaedia of literary epigraphs with entries written by leading experts in the field. This book is projected to be an indispensable resource for academics and students working at all levels.

The epigraph database has the potential to not only provide a new means of describing and analysing the development of the epigraph but to reshape our understanding of the dissemination and international reception of the novel more generally.

<sup>1</sup><https://epigraphic.tumblr.com/>

Epigraphs also appear in more technical works, for example *The TeXbook* (Knuth, 1984) cites epigraphs both from the poet Byron and the Proceedings of the United Typothetae of America. Although our database focuses on literary works, we also include a few technical works, and hope to add more in the future

## 2. The Epigraph Database

The database contains the following records:

- the epigraph
  - text of the epigraph
  - image of the page it appears on or link to online text
  - title of original text
  - author of original text
  - country of origin or more detailed region if available
  - year of origin
  - language of the epigraph
  - original language of the epigraph if different from the language it is cited in
  - medium (novel, play song, ...)
  - ISBN of the original text (if it exists)
- the work
  - title
  - author(s)
  - country of first publication or more detailed region if available
  - year of first publication
  - language of work (all currently English)
  - original language of work
  - genre
  - ISBN (if it exists)
- Remarks (for other information such as whether the cited work is fictional)

For example for this paper, the data would be:

- Epigraph
  - The best ideas are common property.
  - [image of page 1]
  - “On Old Age”, *Moral Letters to Lucilius*
  - Seneca the Younger
  - 65 AD\*
  - Rome\*
  - English
  - Latin\*
  - Letters
  - ISBN=9780674990845 (Loeb Classical Library)

- Work
  - Toward An Epic Epigraph Graph
  - Francis Bond, Graham Matthews
  - Miyazaki, Japan
  - 2017
  - English
  - Academic
  - ISSN=???

\* shows data that was deduced, rather than explicit in the original. For works such as *Moral Letters to Lucilius*, for which many editions exist, we select one – the goal is to link to a controlled vocabulary to allow further look up of metadata.

The database can be thought of as a very unconnected graph. However, by backing off to the meta-data (e.g. group authors from a location or time or genre as one node) the graph can be made more connected.

### 2.1. Selection Criteria

The acquisition of data followed a combination of opportunistic and guided data collection strategies. First the data collection started at Nanyang Technological University’s Humanities and Social Sciences Library. Research assistants (RAs) photographed epigraphs and the novels’ meta-data using smartphones and then entered the data into the database. They used <https://isbnsearch.org> in order to accurately record the ISBN and <https://www.bookbrowse.com> to record the date of first publication. We took advantage of the locally hosted Singapore Literature in English Bibliography (Koh, 2008) to ensure that all Singaporean literary texts were checked for epigraphs. The RAs then systematically worked through the novels in all of the public libraries in Singapore. At this stage, it became clear that Young Adult Fiction would dominate the database since these writers typically publish in large quantities and have a high proportion of epigraphs. The RAs added a tag to these texts so that they could be identified as such their effects on the database accurately recorded. Since public libraries display a preference for contemporary literature, the RAs also developed a list of influential literature from the seventeenth century to the present (based on Wikipedia lists). They then sourced electronic copies of these texts using the Eighteenth Century Collections Online (ECCO),<sup>2</sup> the Literature Online Database (LION),<sup>3</sup> Google Books,<sup>4</sup> and Project Gutenberg<sup>5</sup> to record the epigraphs. The literature list records whether or not each novel contains an epigraph. This gave us a picture of the history of the epigraph and its spread. The RAs later returned to the dataset for quality control: removing repeat entries, double checking the accuracy of the metadata, and normalizing the data.

<sup>2</sup><https://quod.lib.umich.edu/e/ecco/index.html>

<sup>3</sup>[http://www.proquest.com/products-services/literature\\_online.html](http://www.proquest.com/products-services/literature_online.html)

<sup>4</sup><https://books.google.com/>

<sup>5</sup><https://www.gutenberg.org/>

## 2.2. The State of the Database

There are currently 10,921 records in the database, although not all fields are complete. Many epigraphs do not identify the source at all, or only the author's name, it is rare to give the work and date. In addition misquotation (or paraphrasing) is common.

The most common works cited in epigraphs are shown in Table 1, the most common authors in Table 2, the most common types of works in Table 3 and finally the most common quotations used in epigraphs are shown in Table 4. The most cited author (if we exclude the bible) is Shakespeare, by an extremely wide margin. Gothic and fantastic authors are common, reflecting the fact that these genres use epigraphs more. Finally, it is interesting to see that poetry is the most common source of epigraphs, with plays, songs, and proverbs all also popular.

# Cites	Work Cited
129	Bible
35	The Tempest
32	Hamlet
23	Paradise Lost
23	Macbeth
22	Romeo and Juliet
20	As You Like It
19	The Book of Counted Sorrows
18	King Lear
15	Alice's Adventures in Wonderland

Table 1: The most common works quoted in epigraphs

# Cites	Author Cited
323	Shakespeare, William
74	Dickinson, Emily
62	Poe, Edgar Allan
45	Wilde, Oscar
44	Whitman, Walt
43	Blake, William
37	Nietzsche, Friedrich
36	Carroll, Lewis
35	Thoreau, Henry David
35	Milton, John
34	Emerson, Ralph Waldo
33	Einstein, Albert
32	Twain, Mark
32	Frost, Robert

Table 2: The most common authors quoted in epigraphs

The most commonly cited quotations are all from famous literary works, and show a wide spread from Ancient Greece and China (Aristotle and Sun Zu) to modern novels (such as Faulkner). The most common works are dominated by the Bible and Shakespeare, and include one originally non-existent work *The Book of Counted Sorrows*.

This comes from a young adult series where the author cites poems from a fictional book at the start of each book.<sup>6</sup>

<sup>6</sup>In a letter dated August 10, 1992, Koontz stated: "Actually, there is no such book. I made it up. The way you

# Cites	Type of Work Cited
435	Poem
291	Novel
173	Play
149	Song
73	Proverb
66	Bible Verse
29	Letter
28	Fictional
24	Speech
24	Film
22	Essay
18	Definition of a word

Table 3: The most types of works quoted in epigraphs

Later, the author wrote the book (Koontz, 2001). Another book cited by the same author, *The Book of Counted Joys*, remains non-existent.

### 2.2.1. Access

The epigraph database is released under the Creative Commons Attribution 4.0 International (CC BY 4.0) license<sup>7</sup>, which allows you to share and adapt in any medium or format for any purpose, so long as you give appropriate credit, provide a link to the license, and indicate if changes were made. A snapshot is currently available at <http://compling.hss.ntu.edu.sg/projects/epigraph/>, and future releases and analysis will be made available there.

## 3. Future Work

In future work, we intend to both increase the size and richness of the database, further analyze it and add support for visualizing patterns.

First we intend to add another 10,000 or so epigraphs, and fill in as much missing information as possible. This work will be completed within a year. The revised network will be published as an open-access online resource available to other scholars and researchers as well as members of the general public.

We wish to take advantage of linked open data to link locations to the geonames database<sup>8</sup> and the works, through ISBN, to further metadata, with the help of NTU's librarians. This helps both with normalization and checking of the data. Having an ISBN number allows us to link to the library catalogue's controlled vocabulary.

We also aim to display computer-generated visualisations of the map of literary influence in a manner accessible to a lay audience at venues such as the British Library and the Art-Science Museum in Singapore: we give sample visualizations in Figures 1 and 2. This will involve both clustering and visualization.

made up footnote sources for fabricated facts in high-school English reports." <http://flavorwire.com/135568/5-real-books-inspired-by-fake-books>

<sup>7</sup><https://creativecommons.org/licenses/by/4.0/>

<sup>8</sup><http://geonames.org/>

# Cites	Epigraph Text	Author
6	The past is never dead. It's not even past.	Faulkner, William
5	If an injury has to be done to a man it should be so severe that his vengeance need not be feared.	Machiavelli, Niccolo
5	We shall not cease from exploration And the end of all our exploring Will be to arrive where we started And know the place for the first time.	Eliot, T.S
4	Truth is beautiful, without doubt; but so are lies.	Emerson, Ralph Waldo
4	Hell is empty and all the devils are here.	Shakespeare, William
3	What is a friend? A single soul dwelling in two bodies.	Aristotle
3	All war is deception.	Sun Tzu
3	If a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties.	Bacon, Francis
3	Time present and time past Are both perhaps present in time future, And time future contained in time past.	Eliot, T.S

Table 4: The most common epigraphs

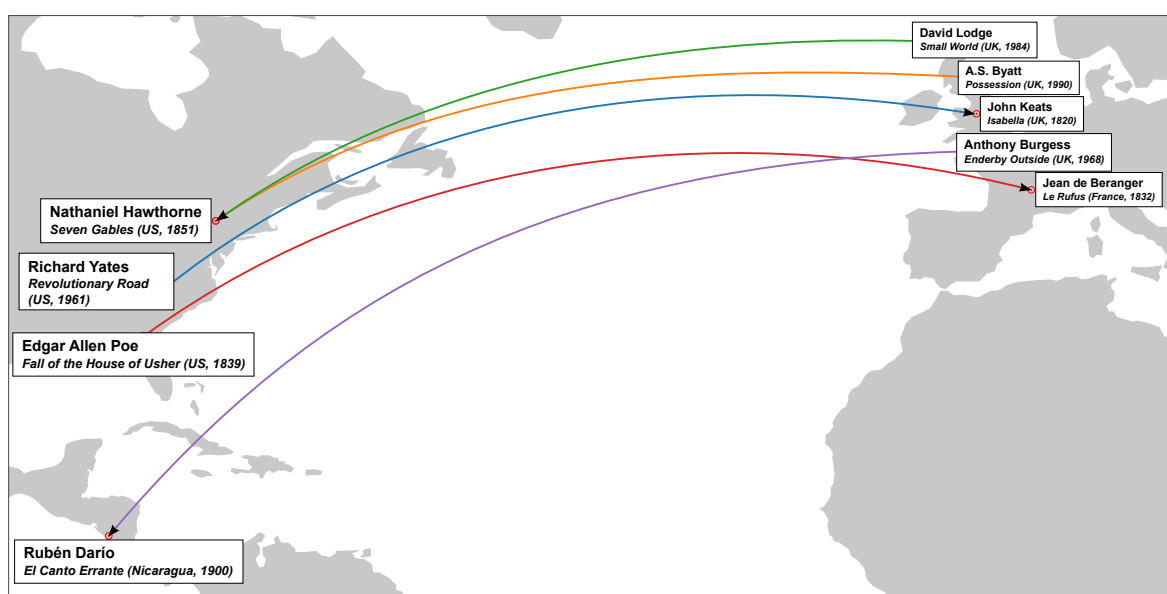


Figure 1: Epigraphs showing trans-atlantic influence

Arrows point from the work with the Epigraph to the cited work.

Further, we will use the network of literary epigraphs to test connections and densities. For instance, we can map the influence of key literary authors such as Charles Dickens or Jane Austen by seeing how much of the network they capture. We can similarly track the influence of women writers or writers of a particular nationality or movement. For example, this project would allow us to determine the extent of the influence of the key Russian realist writers, Turgenev, Tolstoy, and Dostoyevsky on European literature of the late-nineteenth century. When are the Ancient Greek and Roman writers in their ascendancy? Is eighteenth-century satire an influence on postmodern writers of the late-twentieth century? Are lines of literary influence intercontinental or do they cluster around Europe? Singapore has a burgeoning literary movement and this project can determine where in the world Singapore writers take their inspiration from: is it predominantly the English literary canon, the Chinese classics, Indian literature, Malay writers, self-contained, or derived from more eclectic sources?

We can also determine the influence of Singaporean literature on world literature.

A figure like William Shakespeare is widely acknowledged as important by literary critics because his works are meaningful and there is a great deal to be said about them. However, if we remove Shakespeare from the network, we can then explore the extent to which the network is altered: is Shakespeare such a focal point that it breaks apart or do the connections occur with a high enough frequency that its shape is unaffected? Conducting a series of case studies such as these presents us with fresh insight into literary and cultural influence, the dissemination of ideas, and the circulation of people.

Finally, the data can also be used to track influence through miscitation. Scholars have found the academics often copy citation information (including mistakes) without checking it, and possibly without reading the paper (Simkin and Roychowdhury, 2003). Similarly in our database, in addition to six citations of *The past is never dead. It's not even past.*

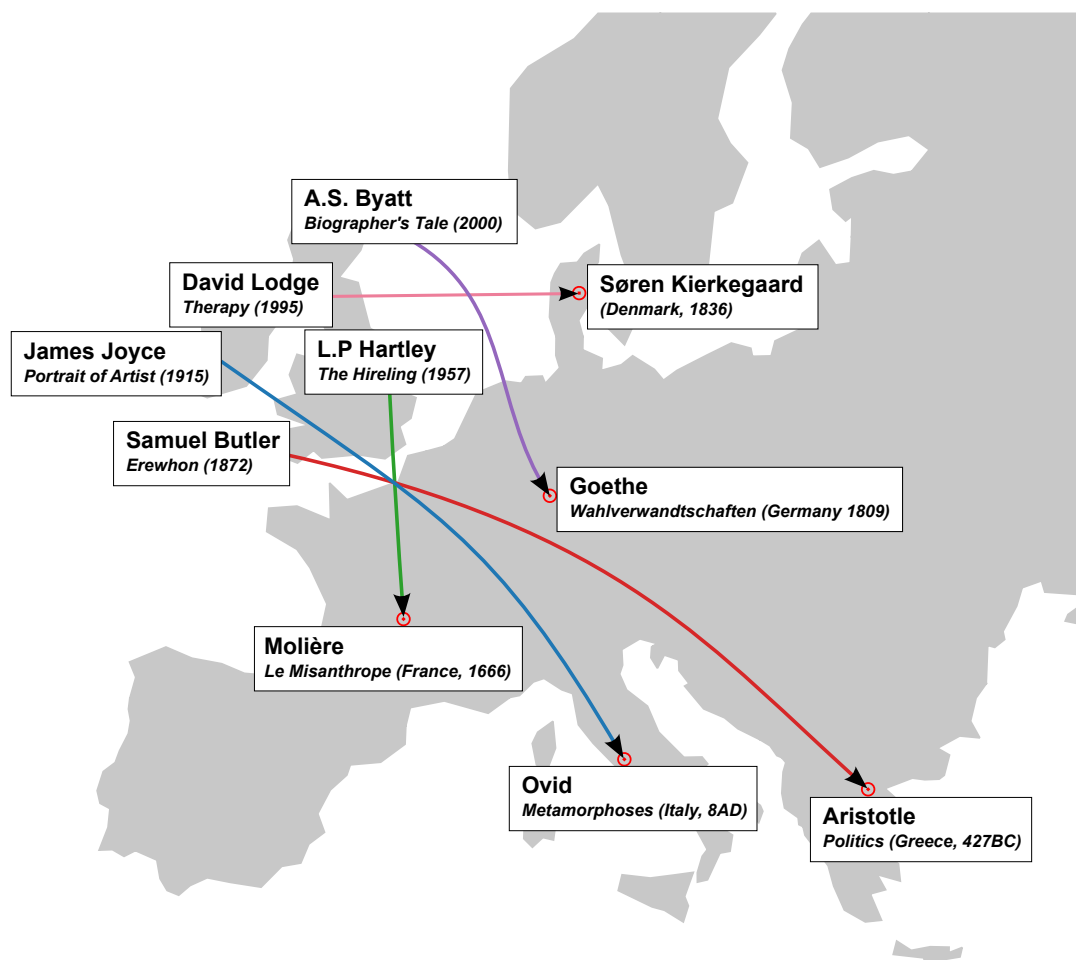


Figure 2: Epigraphs showing the diverse range of European works that have influenced twentieth-century British literature. Arrows point from the work with the Epigraph to the cited work.

from Faulkner (1951), we have several variants, shown in Table 5. We would like to investigate whether the change from *never* to *not*, which happens twice, reveals a connection between the two citing works. We add a link in the database between a variants of the same text.

#### 4. Conclusions

We have created a database of 10,000 epigraphs, which we released under an open license. It allows us to study how works influence each other, as well as the use of the epigraph itself.

#### Acknowledgments

This research was supported by the Singapore MOE Tier 1 Grant: *Digital Mapping the Literary Epigraph: Quantitative Analysis of Literary Influence Using Network Theory and Thousands of Epigraphs* (RG158/16) and the NTU CO-HASS Cluster on Digital Humanities. We would like to thank the reviewers for their insightful comments.

#### 5. Bibliographical References

Faulkner, W. (1951). *Requiem for a Nun*. Random House.  
 Genette, G. (1987). *Paratexts: Thresholds of Interpretation*. Cambridge University Press. (trans Jane E. Lewin).  
 Knuth, D. (1984). *The TeXbook*. Addison-Wesley.  
 Koh, T. A. (2008). *Singapore Literature in English: an Annotated Bibliography*. National Library Board Singapore and Centre for Liberal Arts and Social Sciences, Nanyang Technological University. (now online and updated: [https://eps.ntu.edu.sg/client/en\\_US/SingaporeLiterature/](https://eps.ntu.edu.sg/client/en_US/SingaporeLiterature/)).  
 Koontz, D. (2001). *The Book of Counted Sorrows*. Charnel House.  
 Paul Poplawski, editor. (2017). *English Literature in Context*. Cambridge University Press, second edition.  
 Simkin, M. and Roychowdhury, V. (2003). Read before you cite! *Complex Systems*, 14:269–274.

Variant	Cited in
<i>The past is never dead. It's not even past.</i>	cited by 6 authors
<i>The past is never dead, <u>it's not</u> even past.</i>	Langley Lee (2010)
<i>The past is <u>not</u> dead. It is not even past.</i>	Carey, Peter (2012)
<i>The past is never dead. <u>It isn't</u> even past.</i>	Wolff, Isabel (2014)
<i>The past is <u>not</u> dead; <u>it's not</u> even past.</i>	Ohanesian, Aline (2015)
<i>The past <u>isn't</u> over. It isn't even the past.</i>	Poulson, Christine (2016)

Table 5: Variants of *The past is never dead*. . .  
Differences underlined