# **Textual Optics:**

# Databases and Data-mining at the ARTFL Project



Clovis Gladstone, University of Chicago Robert Morrissey, University of Chicago

### The ARTFL Organization

#### ARTFL is a collaboration between:

- Laboratoire ATILF (Analyse et Traitement Informatique de la Langue Française) of the Centre National de la Recherche Scientifique (CNRS) of France
- The Division of the Humanities and The Computation Institute and the Electronic Text Services (ETS) of the University of Chicago Library









### **ARTFL Activities**

- Collection development quantity, quality. (Frantext, French Classical Theater, Encyclopédie, Bayle Dictionary, ECCO-TCP, Shakespeare...)
- Software development (PhiloLogic): developing and improving the means of exploring and navigating textual collections.
- Inquiry: participating in digital humanities scholarship and research.

# **Textual Optics: Scales of Reading**

- Up-close: focus on one or more words with PhiloLogic
  - Concordances, KWIC
  - Collocations
  - Faceted Browsing
- From afar: focus on groups of words (data-mining)
  - Words out of order (bag of words): text as a collection of word frequencies
  - Words in sequence: retain word order

- Open source full-text search and analysis system based on traditional models of humanistic textual scholarship.
- The development of PhiloLogic was guided by three guiding principles:
  - Support traditional text analysis (philology) at scale: provide concordances over thousands of texts.
  - Ease of use more efficient to browse large samples of occurrences than to spend time formulating highly complex queries.
  - Navigate from words to works, to authors, to years, genres...

https://github.com/ARTFL-Project/PhiloLogic4

Export results Searching database for rights ⊗ Bibliography criteria: None Hits 1 - 25 of 4956 View occurrences line by line (KWIC) View occurrences with context AULNOY, MADAME D' (MARIE-CATHERINE), 1650 OR 51-1705. MEMOIRS OF THE PRESENT STATE OF THE COURT AND COUNCILS OF SPAIN: IN TWO PARTS. WITH THE TRUE REASONS WHY More V BROWSE BY FACET THIS VAST MONARCHY, WHICH IN THE LAST CENTURY MADE SO CONSIDERABLE A FIGURE IN THE WORLD, IS IN THIS SO FEEBLE AND PARALYTICK. DONE INTO ENGLISH BY T. BROWN. [PT. 1] [1701] | Section | page 27 Frequency by expect to suffer from an incensed Prince, that his life was at stake, and that there was no other way to preserve it, but by submitting to the present necessity. The Queen answered him with abundance of Tears, that he should not disquiet himself at all, for she would take care to set things to rights again. He was well enough satisfied of Author her own good will for him, but he questioned whether her power answered her inclinations; nevertheless he resolved at last that he would be torn in pieces by the people, before he would leave Mad Title Year AULNOY, MADAME D' (MARIE-CATHERINE), 1650 OR 51-1705. MEMOIRS OF THE PRESENT STATE OF THE COURT AND COUNCILS OF SPAIN: IN TWO PARTS. WITH THE TRUE REASONS WHY More THIS VAST MONARCHY, WHICH IN THE LAST CENTURY MADE SO CONSIDERABLE A FIGURE IN THE WORLD, IS IN THIS SO FEEBLE AND PARALYTICK. DONE INTO ENGLISH BY T. BROWN. [PT. 1] Collocates of query term(s) [1701] | Section | page 77 in the same sentence he were assured beforehand of receiving the honour of the Hand, the Step and the Chair; that Don Juan would never consent to this Proposal, because it was not to be imagined that he would easily give up the rights he had obtained over the other Ambassadors, and that it would be an inconvenient thing for him of France not to treat directly with the chief Minister. What People surmised upon this occasion really happene AULNOY, MADAME D' (MARIE-CATHERINE), 1650 OR 51-1705. MEMOIRS OF THE PRESENT STATE OF THE COURT AND COUNCILS OF SPAIN: IN TWO PARTS. WITH THE TRUE REASONS WHY More THIS VAST MONARCHY, WHICH IN THE LAST CENTURY MADE SO CONSIDERABLE A FIGURE IN THE WORLD, IS IN THIS SO FEEBLE AND PARALYTICK. DONE INTO ENGLISH BY T. BROWN. [PT. 1] [1701] | Section | page 168 willing to suffer this diminution. It is natural to believe, that he knew his own Accounts well enough, not to lose any thing by his Project, and to say the truth, he had been no loser: For the Disorders and Rapines were at that time so great, that not a ninth part of the King's Rights came into his Coffers. The Duke foreseeing the Event of this Affair, advised Marcos Dias not to stir out of the Palace; but he had a mind to go to Alcala, and he returned with vomiting of Blood and AULNOY, MADAME D' (MARIE-CATHERINE), 1650 OR 51-1705. MEMOIRS OF THE PRESENT STATE OF THE COURT AND COUNCILS OF SPAIN: IN TWO PARTS. WITH THE TRUE REASONS WHY More THIS VAST MONARCHY, WHICH IN THE LAST CENTURY MADE SO CONSIDERABLE A FIGURE IN THE WORLD, IS IN THIS SO FEEBLE AND PARALYTICK. DONE INTO ENGLISH BY T. BROWN. [PT.1] [1701] Account The Council d'Aposento. page 190 President, who is called the Aposentador Major, of six Aposentadores of Exercise, (because some others may be admitted into it, if they are Veteranes) of a Fiscal, a Secretary, a Receiver, an Alguazil, and a Porter. This Junto preserves his Majesty's Rights, they take care likewise to lodge the Officers of the King's Houshold. The Council of the Chamber of Castile. Queen Joan

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Bibliography criteria: None

[1701] | Section | page 77

Hits 1 - 25 of 4956

AULNOY, MADAME D' (MARIE-CATHERINE), 1650 or 51-1705. Memoirs of the present state of the court and councils of Spain: In two parts. With the true reasons why
This vast monarchy, which in the last century made so considerable a figure in the world, is in this so feeble and paralytick. Done into English by T. Brown. [pt.1]
[1701] | Section | page 27

Expect to suffer from an incorporal Prince that his life was at stake and that there was no other way to present it, but by submitting to the present access?

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President, who is called the Aposentador Major, of six Aposentadores of Exercise, (because some others may be admitted into it, if they are Veteranes) of a Fiscal, a Secretary, a Receiver, an Alguazil, and a Porter. This Junto preserves his Majesty's Rights, they take care likewise to lodge the Officers of the King's Houshold. The orcet.uchicago.edu/philologic/ecco-tcp/guery?frequency.field=&end=0&script=&g=rights&start=0&sort\_order=rowid&arg=&report=concordance&method=proxy

> BROWSE BY FACET Top 500 results for Author Paine, Thomas, 1737-1809. 635 Burke, Edmund, 1729-1797. Defoe, Daniel, 1661?-1731. 257 Spence, Thomas, 1750-1814. 216 Sharp, Granville, 1735-1813. 175 Pratt, Mr. (Samuel Jackson), 1749-1814. 123 Goldsmith, Oliver, 1730?-1774. 119 Kames, Henry Home, Lord, 1696-1782. 118 Hume, David, 1711-1776. 109 Macpherson, James, 1736-1796. 103 Brand, John, d. 1808. Dodsley, Robert, 1703-1764. Sidney, Algernon, 1622-1683. 87 Gibbon, Edward, 1737-1794 82

Export results

Export results Searching database for rights ⊗ Bibliography criteria: Author: "Paine, Thomas, 1737-1809." ⊗ Hits 1 - 25 of 635 View occurrences with context View occurrences line by line (KWIC) PAINE. THOMAS, 1737-1809. COMMON SENSE: ADDRESSED TO THE INHABITANTS OF AMERICA, ON THE FOLLOWING INTERESTING SUBJECTS. I. OF THE ORIGIN AND DESIGN OF More BROWSE BY FACET GOVERNMENT IN GENERAL, WITH CONCISE REMARKS ON THE ENGLISH CONSTITUTION. II. OF MONARCHY AND HEREDITARY SUCCESSION. III. THOUGHTS ON THE PRESENT STATE OF AMERICAN AFFAIRS. IV. OF THE PRESENT ABILITY OF AMERICA, WITH SOME MISCELLANEOUS REFLECTIONS. WRITTEN BY AN ENGLISHMAN. [TWO LINES FROM THOMSON] [1776] | Front Frequency by INTRODUCTION. page na arise, which are not local, but universal, and through which the principles of all lovers of mankind are affected, and in the event of which, their affections are interested. Author The laying a country desolate with fire and sword, declaring war against the natural rights of all mankind, and extirpating the defenders thereof from the face of the earth, is the concern of every man to whom nature hath given the power of feeling; of which class, regardless of party censure, is the Title Year PAINE. THOMAS. 1737-1809. COMMON SENSE: ADDRESSED TO THE INHABITANTS OF AMERICA, ON THE FOLLOWING INTERESTING SUBJECTS. I. OF THE ORIGIN AND DESIGN OF More GOVERNMENT IN GENERAL, WITH CONCISE REMARKS ON THE ENGLISH CONSTITUTION. II. OF MONARCHY AND HEREDITARY SUCCESSION. III. THOUGHTS ON THE PRESENT STATE OF AMERICAN Collocates of guery term(s) AFFAIRS, IV. OF THE PRESENT ABILITY OF AMERICA, WITH SOME MISCELLANEOUS REFLECTIONS. WRITTEN BY AN ENGLISHMAN, ITWO LINES FROM THOMSON [1776] AMERICAN INDEPENDANCY defended. page 48 in the same sentence upon earth; but an indefinite dependance upon a combination of men, who have, in the face of the sun, broken thro'the most solemn covenants, debauched the hereditary, and corrupted the elective guardians of the people's rights, who have, in fact, established an absolute tyranny in Great-Britain and Ireland, and openly declared themselves competent to bind the Colonists in all cases whatsoever; I say indefinite dependance on such a combination of usurping innovator PAINE, THOMAS, 1737-1809. COMMON SENSE; ADDRESSED TO THE INHABITANTS OF AMERICA, ON THE FOLLOWING INTERESTING SUBJECTS. 1. OF THE ORIGIN AND DESIGN OF More GOVERNMENT IN GENERAL, WITH CONCISE REMARKS ON THE ENGLISH CONSTITUTION. II. OF MONARCHY AND HEREDITARY SUCCESSION. III. THOUGHTS ON THE PRESENT STATE OF AMERICAN AFFAIRS, IV. OF THE PRESENT ABILITY OF AMERICA, WITH SOME MISCELLANEOUS REFLECTIONS. WRITTEN BY AN ENGLISHMAN, ITWO LINES FROM THOMSON [1776] A Review of the American Contest, with some Strictures on the King's Speech, and its consequences. Addressed to all Parents, in the Thirteen United Colonies. By a Friend to Posterity and Mankind. page 59 hands for the purpose, If thine and thy ministers are not evil against us, why didst thou not hearken to the repeated prayers of thy distressed subjects in America? Why dost thou not recal thy troops, repeal the acts, indemnify us for what we have suffered, and offer any further security to our rights, which we may think necessary? Thou begannest the attack, and this is thy duty, besides, thou hast an obedient parliament, which disputes not thy will, and all this is in thy power, and in no one's else." Had the King made a speech to the house recommending these thin PAINE, THOMAS, 1737-1809. COMMON SENSE: ADDRESSED TO THE INHABITANTS OF AMERICA, ON THE FOLLOWING INTERESTING SUBJECTS. I. OF THE ORIGIN AND DESIGN OF More

GOVERNMENT IN GENERAL, WITH CONCISE REMARKS ON THE ENGLISH CONSTITUTION. II. OF MONARCHY AND HEREDITARY SUCCESSION. III. THOUGHTS ON THE PRESENT STATE OF AMERICAN AFFAIRS. IV. OF THE PRESENT ABILITY OF AMERICA, WITH SOME MISCELLANDOUS OFFI ECTIONS. WRITTEN BY AN ENGLISHMAN. TWO LINES FROM THOMSON 1776] APPENDIX TO

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Bibliography criteria: Author: "Paine, Thomas, 1737-1809." ⊗				
Hits 1 - 25 of 53				
View occurrences with context View occurrences line by line (KWIC)				
PAINE, THOMAS, 1737-1809. Prospects on the Rubicon: or, an investigation into the causes and consequences of the politics to be agitated at the meeting of Parliament. [1787]   WEALTH.   page 49	~	BROWSE BY FACET	х	
to the subject, and this is taken for granted they never will. But, if a supposed unnecessary expenditure of between five and six millions sterling in the finances of France, (for the writer undertakes not to judge of the fact) has awakened that whole nation, a people supposed to be perfectly docile in all national matters, surely the		Frequency by		
people of England will not be less attentive to their rights and properties. If this should not be the case, the inference will be fairly drawn, that England is losing the spirit	Author			
that France is taking up, and that it is an ingenious device in the Ministry to compose the nation to unpopular an		Title		
2 PAINE, THOMAS, 1737-1809. Address and declaration, of the friends of universal peace and liberty: held at the Thatched House Tavern, St. James's Street. August	Year	ear		
20th. 1791. By Thomas Paine, Together with some verses, by the same author, [1791]   Illegible   page na				
five millions of our fellow m illegible n. We rejoice in the prospect, which such a magnificent example opens to the world. We congratulate the French nation for having laid the axe to the root of tyranny, and for erecting Government on the sacred HEREDITARY Rights of MAN.—Rights, which appertain to ALL, and not to a yo illegible e more than to another. We know of ill	Collocates of query term(s) in the same sentence			
3 PAINE, THOMAS, 1737-1809. DEFINITION OF A CONSTITUTION: BY THOMAS PAINE [1791]   Section   page 10				
and the Palladium of their liberties? I shall suppose now that the Representatives are wiser than their Constituents; that the body of elements they have devised, is as much better as you please than those that were committed to their protection; nay, I will suppose even that the Nation "enlightened" since by the force of eloquence and of the lanthorn, are at this moment of the same opinion with the Assembly, still, as the Constitution that has been decreed under a commission, not only containing no authority from the people for the destruction of all existing establishments, and the constituting new ones, but containing the most positive commands to protect the existing establishments which were held sacred by them, it is submitted to you, in all humility, whether such innovations come at all within the limits of your Definition; whether those who accept a trust to one purpose, and use it to the direct contrary, can avail themselves of the authority they have betrayed; whether, if added to the breach of trust, there happens to be at the same time a breach of the Oath, their employers exacted from them to abide by their instructions, instead of acting in direct opposition to them; whether any oath imposed upon others afterwards by such an Assembly can be conceived, even by themselves, to have any validity: whether, in short, upon your principle, the powers assumed by such a Body can be regarded as any thing more than a direct usurpation upon the rights of the people, and the force they exercise over all ranks of Citizens, from the Monarch down to the Peasant, with so free a hand, can be considered as any thing but the aristocratical tyranny of an unauthorized though inviolable oppression and perjured Senate. The				
4 PAINE, THOMAS, 1737-1809. Rights of MAN: Being AN ANSWER TO MR. BURKE'S ATTACK ON THE FRENCH REVOLUTION. SECOND EDITION. BY THOMAS PAINE, [1791]  More  Section   page 9				

PAINE, THOMAS, 1737-1809. Address and declaration, of the friends of universal peace and liberty: held at the Thatched House Tavern, St. James's Street. August

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20тн. 1791. By Thomas Paine, ... Together with some verses, by the same author, ... [1791] | Illegible | раде па

five millions of our fellow m illegible n. We rejoice in the prospect, which such a magnificent example opens to the world. We congratulate the French nation for having laid the axe to the root of tyranny, and for erecting Government on the sacred HEREDITARY Rights of MAN.—Rights, which appertain to ALL, and not to a yo illegible e more than to another. We know of ill

we answer (as has been already answered in another place " or the volinteers of be "a "t.) If it Much.—Ividen to us as men. Much to us as Englishmen.

As men, we rejoice in the freedom of twenty five millions of our fellow m \*n. We rejoice in the prospect, which such a magnificent example opens to the world. We congratulate the French nation for having laid the axe to the root of tyranny, and for erecting Government on the sacred HEREDITARY Rights of MAN.—Rights, which appertain to ALL, and not to a yo \*e more than to another. We know of \*o human authority, superior to that of a whole nation: a \*d we profess and proclaim it as our principle that every nation has at all times, an inherent, indefeasible right to constitute and establish such Government for itself as best accords with its disposition, interest and happiness.

-3-

As Englishmen, we also rejoice, because we are IMMEDIATELY interested in the French Revolution.

Without enquiring into the justice, on either side of the reproachful charges of intrigue and ambition, which the English and French Court have constantly made on each other, we confine ourselves to this observation:—That if the Court of France only was in fault, and the numerous wars which have distressed both countries are chargeable to her alone, that Court now exists no longer; and the cause and the consequence must cease together. The French, therefore, by the Revolution they have made, have conquered for us as well as for themselves; if it be true, that their Court only was in fault and ours never.

On this state of the case, the French Revolution concerns us *IMMEDIATELY:* We are oppressed with a heavy National debt, a burthen of taxes, and an expensive administration of Government; beyond those of any people in the world. We have also a very numerous poor: and we hold, that the moral obligation of providing for old age, helpless infancy and poverty, is far superior to that of supplying the invented wants of courtly extravagance, ambition and intrigue.

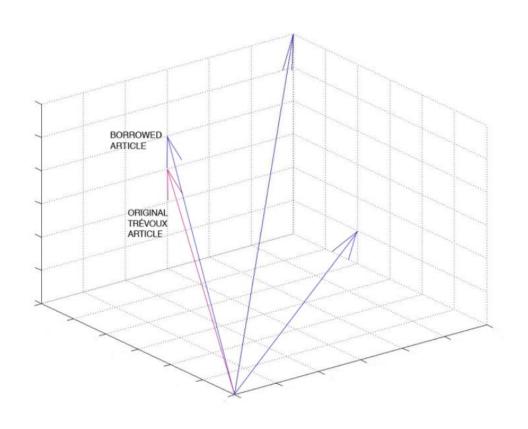
## Textual Optics, Navigating from Afar: Data-Mining

- Data-Mining often is about detecting patterns in large amounts of data
- Our work has focused on leveraging recurring patterns in text to measure similarity between passages of varying length:
  - Thematic similarity (vector space): authors writing about the same topic
  - Text reuse (sequence alignment): find reuses of any given passage across large amounts of texts.
  - O ....

# Navigating from Afar: Vector Space Similarity

- Widely used search model (Lucene, Solr): search term(s) as vectors compared to documents as vectors.
- Can be used to measure the similarity between documents: creates links across potentially very different texts

# Navigating from Afar: Vector Space Similarity



# Navigating from Afar: Vector Space Similarity

GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER, Voltaire: Gramm., Grammaire, Grammar

GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER [Score: 1.000 Count: 861]

Gloire [Score:0.262 Count: 5576] Get similar articles or matching stems.

PRÉSOMPTION [Score:0.256 Count: 344] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

VANITE [Score:0.236 Count: 1159] Get similar articles or matching stems.

Amour de la gloire [Score:0.235 Count: 220] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

VAIN [Score:0.224 Count: 159] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

Temple de la Gloire [Score:0.216 Count: 1604] Get similar articles or matching stems.

RENOMMÉE [Score:0.200 Count: 317] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

VOLUPTÉ [Score:0.195 Count: 3432] Get similar articles or matching stems.

HÉROS [Score:0.190 Count: 454] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

IMPERTINENCE [Score:0.184 Count: 108] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

ATHÉES [Score:0.183 Count: 22355] Get similar articles or matching stems.

OSTENTATION [Score:0.180 Count: 181] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

FIERTÉ [Score:0.179 Count: 382] Get similar articles or matching stems. \* smaller than GLOIRE, GLORIEUX, GLORIEUSEMENT, GLORIFIER.

Orateurs romains [Score:0.178 Count: 8951] Get similar articles or matching stems.

# Textual Optics using Sequence Alignment: Digging Into Data

Large-scale project in the context of Digging into Data Round 3 project funded by the NEH.

#### Goals of the project:

- Develop a methodology to detect commonplaces in a large dataset of over 200,000 texts
- Create a database of commonplaces for use by the scholarly community

## Phases of the project

- Assess and prepare the data: 200,000 texts from the Eighteenth Century Collection Online (ECCO)
- Apply matching algorithms to detect text reuses in ECCO
- Group text reuses by similarity in order to identify commonplaces
- Create navigational tools appropriate for our database of commonplaces



Consisting of every significant English-language and foreign-language title printed in the United Kingdom during the 18th century, along with thousands of important works from the Americas, Eighteenth Century Collections Online (ECCO) was the most ambitious single scholarly digitization project ever undertaken.

=> 205,639 volumes of uncorrected OCR

### The ECCO challenge

- The size of the dataset: 205,000 texts
- The amount of duplication: many, many, many re-editions of works by the same author:
  - => *Hamlet* (Shakespeare): 24 re-editions *Essay On Man* (Pope): 58 re-editions
- Dealing with dirty OCR...

# Eliminating duplicates

#### Why eliminate re-editions?

- We want to find commonplaces representative of 18th century culture, and NOT commonplaces within single authors
- Reduce the computational expense of finding commonplaces
   => 200,000 x 200,000 potential comparisons
- Our approach to detect re-editions: compare metadata information

# Comparing metadata to find reeditions

```
<sourceDesc>
  <bib>>
         <title type="artfl">A translation of the Latin epistle in The
dreamer.</title>
         <author type="artfl">King, William</author>
         <authorGroup>
           <author>
             <marcName>King, William</marcName>
             <birthDate>1685</pirthDate>
             <deathDate>1763</deathDate>
             <marcDate>1685-1763
           </author>
         </authorGroup>
         <imprint type="artfl">London : printed for Jacob Robinson, at
the Golden Lion, in Ludgate-Street, [1754].</imprint>
         <imprint><date>[1754]</date></imprint>
         <idno type="shrtcite">T136705</idno>
```

# Results of deduplication process

88 850 texts out of 205,000+ documents identified as reeditions

- => 43% of the ECCO collection!
- => 116 700 documents used to find commonplaces

# Results of deduplication process

### Result per module:

•	Lit & Lang:	53 351	=> 25 655
•	Rel & Phil:	51 485	=> 29 962
•	SS & FineArts:	48 335	=> 30 498
•	Hist & Geo:	17 950	=> 10 528
•	MedSciTech:	15 636	=> 9 202
•	Law:	13 595	=> 7 726
•	GenRef:	5 198	=> 3 129

# Finding commonplaces in ECCO

### Two steps in this process:

- Detect text reuses in ECCO: identify shared passages throughout the remaining 116,000 documents
- Identify commonplaces among the many text reuses

## Our sequence alignment software

PhiloLine: software implementing a simple sequence alignment algorithm designed to identify "similar passages" in large collections of texts.

https://code.google.com/p/text-pair/

- Identify regions of similarity shared by two strings or sequences
- The model is based on shingles of n-grams which are generated with overlap from one shingle to the next.

The cloud-capped towers, the gorgeous palaces, The solemn temples, the great globe itself— Yea, all which it inherit—shall dissolve (Shakespeare, The Tempest, Act 4, Scene 1) ca. 1611

```
cloud_capped_towers, capped_towers_gorgeous,
towers_gorgeous_palaces, gorgeous_palaces_solemn,
palaces_solemn_temples, solemn_temples_globe,
temples_globe_itself,globe_itself_yea, itself_yea_inherit,
yea_inherit_shall, inherit_shall_dissolve
```

Matching passages are identified by pairwise comparison:

- Generate n-grams and shingles for each document.
- Identify common shingles (relatively rare).
- Anchor match at common shingle in document order.
- Continue comparison until matches fail.

The result is a matching passage.

#### The parents best token to their children.... (1701)

... the Lord's Prayer. (UuR Father which art in Heaven, Hallowed be th : : ~ Name. Thy Kingdomcome, Thy will be'donei Ear ,asit is in Heaven. Give us thisday our d.i I,. B tead Aid forgive us our trfpaffes,3swe forgive them that tre ais against us. Andlea us notinto temptation Baut de ivtr-s from evil,

#### Benjamin Harris, The new English tutor, enlarged... (1705)

...Our Lord's Prayer. ),r Father which art in Heaven, Hallowed be thy Name. Thy tingdom come. Thy Will be done a Earth, as it is in Heaven: Give u [is Day our daily Bread, And forve us our Trespass, as we forgive temthattrefpafs against us, And d us not into Temptation, butde. ?er us from Evil.

#### The parents best token to their children.... (1701)

... the Lord's Prayer. (UuR Father which art in Heaven, Hallowed be th : : ~ Name. Thy Kingdomcome, Thy will be'donei Ear ,asit is in Heaven. Give us thisday our d.i I,. B tead Aid forgive us our trfpaffes,3swe forgive them that tre ais against us. Andlea us notinto temptation Baut de ivtr-s from evil,

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### Results of Sequence Alignment

Literature and Language: 3.5 million shared passages out of 25 665 documents.

Religion and Philosophy: 17 million shared passages out of 29 962 documents

### What to do with millions of passages?

- How can one find commonplaces representative of 18th century culture out of this seemingly infinite list of shared passage?
- Define a commonplace computationally in order to automatically detect recurrent reuses:
  - Group shared passages by finding the repeated use of the same passage and its variants
  - Order variants of same passage by author

### **Digging for Commonplaces**

#### Quote from Scottish poet James Thomson:

Then infant reason grows apace, and calls For the kind hand of an assiduous care. Delightful talk! to rear the tender thought, To teach the young idea how to shoot, To pour the freft infiruAion o'er the mind, 1150 To breathe enlivening spirit, and to fix The generous purpose in the glowing breast.

Two variants in other authors:

#### **Gentleman of the Middle Temple (1775):**

How glorious would her matron employments be, to hear the tender thought, to teach the young idea how to Jhoot; to be at once the precept and example to her family of every thing that was good, every thing that was virtuous.

#### Mrs Lovechild (1790):

Happy the Mother "Distilling knowledge through the lips of " love !"- ' Delightful talk! to rear the tender thought, " To teach the young idea how to shoot, " To pour the fresh inltrution o'er the mind !'Lines which will never cease to be quoted...

### Two repeated passages that share much...

Delightful talk! to rear the tender thought, To teach the young idea how to shoot, To pour the freft infiruAion o'er the mind

```
delightful_rear, talk_tender, rear_thought, tender_teach,
thought_young, teach_idea, young_shoot, idea_pour, freft_mind
```

to hear the tender thought, to teach the young idea how to Jhoot hear\_thought, tender\_teach, thought\_young, teach\_idea, young\_ Jhoot

Delightful talk! to rear the tender thought, " To teach the young idea how to shoot, " To pour the fresh inltrution o'er the mind

```
delightful_rear, talk_tender, rear_thought, tender_teach,
thought_young, teach_idea, young_shoot, idea_pour, fresh_mind
```

### From merging shared passages to commonplaces

In Literature and Language module:

1.6 million shared passages (5-75 words) => 337 675 groups of passages

Are all groups of passages commonplaces?

=> A minimum number of different authors must be represented in each group of passages

### A glimpse at a commonplace

And like the baseless fabric of this vision, *The cloud-capped towers, the gorgeous palaces, The solemn temples, the great globe itself* — Yea, all which it inherit—shall dissolve, And like this insubstantial pageant faded, (...)

(Shakespeare, The Tempest, Act 4, Scene 1) ca. 1611

Of this observation Shakespear gives a beautiful example, in the passage lass quoted: The cloud-capt tow'rs, the gorgeous pa- laces, The solemn temples, the great globe it- self, Yea all which it inherit, (hall dilTolve, And like the baseclfs fabric of a vision, Ic.ive not a rack behind.

**James Elphinston (1771)** 

as in this well-known passage, where you may also mark the fine climax. The cloud-capt Towers, The gorgeous Palaces, the great Globe itself, Yea, all which it inherits, shall diso/lve, And, like the baseless Fabrick of a Vision, Leave not a Wreck behind.

**Pratt, Mr. (1776)** 

Non diffimile Lda quet'idea è quella di Shakefpeare, in quei bei verli, Tlte cloid-capp'd Towers, the gorgeous Palaces, The folemn Temples, the great Globe itfel, YEa, all which it inherifitall diffilve, Aid. liie e btle Ij.les Fabric d'a vfioin, L'ave nol a rate behind!

Giovanni Rucellai (1779)

#### **Common Commonplaces...**

The most common passage in Literature and Language module:

Father which art in Heaven, 'Hallowed be thy Name; Thy Kingdom come; Thy Will be done in Earth... Used by 607 authors

Examples of high frequency commonplaces:

These are thy glorious works, Parent of good, / Almighty! Thine this universal frame,/ Thus wonderous fair; Thyself how wonderous then! (Milton, *Paradise Lost*, Book V, 1667) Used by 118 authors

The cloud capt towers, the gorgeous palaces, The solemn temples, the great globe itself, Yea, all which it inherit, shall dissolve (Shakespeare, *The Tempest*, Act 4, Scene 1) Used by 87 authors

Tho' deep, yet clear, tho'gentle, yet not dull, Strong without rage, without o'er flowing full (Denham, *Cooper's Hill*, 1642)
Used by 70 authors

# **Common Commonplaces...**

To rear the tender thought, And teach the young idea how to shoot... (James Thomson, *Spring*, 1728) Used by 75 authors

And as imagination bodies forth. The forms of things unknown, the poet's pen turns them to shapes and gives to airy nothing a local habitation and a name... (Shakespeare, *A Midsummer Night's Dream*, Act 5, Scene 1).

Used by 49 authors

But he that filches from me my good name Robs me of that which not enriches him And makes me poor indeed. (Shakespeare, *Othello*, Act 3, Scene 3)
Used by 39 authors

When Ajax strives some rock's vast weight to throw, / The line too labours, and the words move slow; / Not so, when swift Camilla scours the plain, / Flies o'er th' unbending corn, and skims along the main. (Pope, *An Essay on Criticism*, 1711) Used by 39 authors

"All the world's a stage..." (Shakespeare, As You Like It, Act 2, Scene 7) Used by 35 authors

1. Shakespeare,	William 16	6. Gildon, Charles
2. Horace	17	'. Young, Edward
3. Pope, Alexand	der 18	3. Congreve, William
4. Milton, John	19	). Rider, William
5. Virgil	20	Cibber, Colley
6. Ayscough, Sa	muel 21	. Griffith, Mrs. (Elizabeth)
7. Bysshe, Edwa	ord 22	2. Fénelon, François de Salignac de
8. Ovid	23	3. Goldsmith, Oliver
9. Terence	24	Fenning, Daniel
10. Dryden, John	25	5. Addison, Joseph
11. Becket, Andre	ew 26	6. Walker, John
12. Thomson, Jar	nes 27	'. Voltaire
13. Cicero, Marcu	s Tullius 28	3. Garrick, David
14. Jonson, Ben	29	Cibber, Theophilus
15. Chambers, Ep	hraim 30	). Enfield, William

<ol> <li>Hora</li> <li>Pope</li> <li>Milto</li> <li>Virgi</li> <li>Ayso</li> <li>Byss</li> <li>Ovid</li> <li>Tere</li> </ol>	e, Alexander n, John I ough, Samuel he, Edward	16. 17. 18. 19. 20. 21. 22. 23. 24.	Gildon, Charles Young, Edward Congreve, William Rider, William Cibber, Colley Griffith, Mrs. (Elizabeth) Fénelon, François de Salignac de Goldsmith, Oliver Fenning, Daniel
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7. Byss	he, Edward	22.	Fénelon, François de Salignac de
8. Ovid		23.	Goldsmith, Oliver
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10. Dryd	en, John	25.	Addison, Joseph
11.Beck	et, Andrew	26.	Walker, John
12. Thor	nson, James	27.	Voltaire
13. Cice	ro, Marcus Tullius	28.	Garrick, David
14. Jons	on, Ben	29.	Cibber, Theophilus
15. Char	nbers, Ephraim	30.	Enfield, William

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3. Pope, Alexander	18.	Congreve, William
4. Milton, John	19.	Rider, William
5. Virgil	20.	Cibber, Colley
6. Ayscough, Samuel	21.	Griffith, Mrs. (Elizabeth)
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8. Ovid	23.	Goldsmith, Oliver
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11. Becket, Andrew	26.	Walker, John
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13. Cicero, Marcus Tullius	28.	Garrick, David
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3. Pope, Alexander	18.	Congreve, William
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12. Thomson, James	27.	Voltaire
13. Cicero, Marcus Tullius	28.	Garrick, David
14. Jonson, Ben	29.	Cibber, Theophilus
15. Chambers, Ephraim	30.	Enfield, William

#### **Classical Latin Sources**

#### 75 different authors reuse this quote from **Virgil**:

Spiritus intus alit: totamque inffufa per artus Mens agitat molem, & magno se corpore mifcet. Indehominum,pecudunquegenus,vitxquevolantum, Ddd Et Et qua marmoreo fert monftra sub xquore pontusi Igneus est ollis vigor, & cceleftis origo

That is, who filleft the Earth, who pene- trateft the Dust, and art the Principle of all Generations, according to the Philosophy of Poets. Spiritus intus alit, totamque infufa per arti nead. 6 Mens agitat molem, G mignoJe corpore miscet Inde hominImm pecuidnmue genus, v vi e volantum, Et quie mar'ml eo fert monfira filb auore Pontus. Pierre, Jurieu (1705)

Mens and Animus for the fame. In E- óeid 6, 7 6. Spiritit 537 \_\_\_ ---- -- I ----- --- Spiritus intus alit, totamq; infufa per artus. Mens agitat molem ---- And he proves, that Virgil asserted the Immortality of Souls, and answers the arguments against it;

#### **Edward Stillingfleet (1710)**

This is what Virgil (I) has exprefs'd in these celebrated Lines. Spiritus intus alit, totamque infufa per artus Mens agitat moler, & magno fe corpore miscet.

L'abbé Banier (1739)

# Building an adequate navigational tool

A number of requirements when thinking about our navigational tool:

- Scale: create an interface that allows an easy interaction given the number of text alignments.
- Discoverability: offer a number of search options to help define and narrow queries or search results.
- Allow the exploration of the reuse of any given passage across time

## Our navigational tool

#### **Current features:**

 Full exploration of all text alignments with metadata search (author, title, date...)

\*by frequency of first use

Later Use of Passages		
Inside passages:	e.g., liberty	
Author:	e.g., Paine	
Title:	e.g., Liberties	
Module Name:	None ▼	
Date:	e.g., 1790 or 1750-1800	

Sort results by: No Sorting A Bible Filter: No filter A

Clear Search

EARLIER USE

Locke, John, Two treatises of government in the former, the false principles and foundation of Sir Robert Filmer and his followers are detected and overthrown, the latter is an essay concerning the true original, extent, and end of civil government.; Two treatises of government [1690]

true, that whatever En gagements or Promises any one made for himself, he is under the obligation of them, but cannot by any Compact what soever, bind his Children or Posterity. For his Son, when a Man, being altoge ther as free as the Father, any act of the Father can no more give away the liberty of the Son, than it can of any body else. He may indeed annex such Conditions to the Land he enjoyed, as a Subject of any Commonwealth, as may oblige his Son to be of that Community, if he

will enjoy those Possessions which were his Fathers; because that Estate being his Fathers Pro

LATER USE

References and able Defence is inserted. By an eminent Barrister of the Inner-Temple. [1792]

Paine, Thomas. The trial at large, of Thomas Paine, for a Libel on the King and Constitution, before Lord Kenyon, and a special jury, on Tuesday, December 18, 1792, In which the whole of Mr. Erskine's

to the government, which they thamfelves fubmnitted to. It "is true, that whatever engagements or promifesany one has made for. " hinfelf, lie is under the obligation of them, but cannot, by any compalt "Fhatfievc-, bind his child en or poterity; for his son, when a man, be- "ing altogether as free as the father, any ad of the father can no more give " away the liberty of the Jon, than it can of any body else ." " And therefore they have a very wrong notion of government who fay, 'that the people have incroached upon the prerogative, when they have c got any part of it to be defined by

positive laws; for in so doing, they "have not pulled from the prince any thing that of right belonged

View similar passages in timeline

perty,

FARLIER USE

Locke, John, Two treatises of government in the former, the false principles and foundation of Sir Robert Filmer and his followers are detected and overthrown, the latter is an essay concerning the

true original, extent, and end of civil government.; Two treatises of government [1690] it: And declared limitations of Prerogative in those Cases which they and their An cestors had left in the utmost latitude, to the Wisdom of those Princes who made no other but a right use of it, that is, for the good of their People. 163. And therefore they have a very wrong notion of Government, who say, that the People have incroach'd upon the Prerogative when they have got any part of it to be

defined by positive Laws. For in so doing they have not pulled from the Prince any thing that of right

belong'd to him, but only declared, that that Power which they indefinitely left in him, or his Ancestors hands, to be exercised for their good, was not a thing they intended him, when he used it otherwise. For the End of Government being the good of the Community, whatsoever alterations are made in it, tending to that end, cannot be an

View similar passages in timeline

LATER USE

lie is under the obligation of them, but cannot, by any compalt "Fhatfievc-, bind his child en or

poterity; for his son, when a man, be-" ing altogether as free as the father, any ad of the father can

Paine, Thomas, The trial at large, of Thomas Paine, for a Libel on the King and Constitution, before Lord Kenyon, and a special jury, on Tuesday, December 18, 1792, In which the whole of Mr. Erskine's References and able Defence is inserted. By an eminent Barrister of the Inner-Temple. [1792]

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'which they indefinitely left in his er Ct " hii (22) c .hii anceitors'hands to be excrcifed for their good, was not a thing " which they intended him when he used it otherwise; for the end of 'Government being the good of the Community, wh. it foever alterations c are made

EARLIER USE Locke, John, Two treatises of government in the former, the false principles and foundation of Sir Robert Filmer and his followers are detected and overthrown, the latter is an essay concerning the

true original, extent, and end of civil government.; Two treatises of government [1690] whatsoever alterations are made in it, tending to that end, cannot be an incroachment upon any body; since no body, in Government, can have a right tending to any other end. And those only are incroachments which prejudice or hin der the publick good. Those who say otherwise, speak as if

the Prince had a di stinct and separate Interest from the good of the Community, and was not made for it. The Root and Source from which spring almost all those Evils and Disor ders, which happen

in Kingly Govern ments. And indeed, if that be so, the People, under his Government, are not a

Society of Rational Creatures, entered in to a Community, for their mutual good, such as have set

Rulers over themselves, to guard and promote that good; but are to be looked on as an Herd of

inferiour Creatures, under the Dominion of a Ma View similar passages in timeline

LATER USE

Paine, Thomas. The trial at large, of Thomas Paine, for a Libel on the King and Constitution, before

Lord Kenyon, and a special jury, on Tuesday, December 18, 1792, In which the whole of Mr. Erskine's References and able Defence is inserted. By an eminent Barrister of the Inner-Temple. [1792] wh.itfoever alterations c are made in it, tending to that end, cannot be an encroachment uporn 'any body, since nobody in the Government can have a right tending to (c any other end; and those only are encroachments which prejudice or < hinder the public good. Those who fay otherwise, speak as if the 'prince had adilinEt and fepar; te interest from the good of the Commu-" nity, and was not made for it; the root and source from which spring a'alrnoft all those evils and disorders which happen in Kingly Govern-'nments. And indeed, if that be so, the people under his government are 'not a focicty ofrational creatures, entered into a comrm'unity for their mutual good; they are not such as have set ruleis over themselves, to " guard and promote their good; but are to be looked on

as an herd of "inferior creatures, under the dominion of a master, who keeps them



FARLIER LISE

LATER USE

## Our navigational tool

#### **Current features:**

- Full exploration of all text alignments with metadata search (author, title, date...)
- Faceted browsing for all available metadata

	1 EARLIER USE	LATER USE	X	BROWSE BY FACET	~
	Cicero (M. Tullius Cicero), Academica [-1]  'Relictam a te veterem Academiam'inquit, 'tractari autem novam."Quid ergo'inquam 'Antiocho id magis licuerit nostro familiari, remigrare in domum veterem e nova, quam nobis in novam e vetere? certe enim recentissima quaeque sunt correcta et emendata maxime .	Cooper, Thomas, 1517?-1594., Thesaurus linguæ Romanæ & Britannicæ tam accurate congestus, vt nihil penè in eo desyderari possit, quod vel Latinè complectatur amplissimus Stephani Thesaurus, vel Anglicè, toties aucta Eliotæ Bibliotheca: opera & industria Thomæ Cooperi Magdalenensis Accessit dictionarium historicum et poëticum propria vocabula virorrum, mulierum, sectarum, populorum, vrbium, montium, & cæterorum locorum complectens, & in his	X	Top 100 results	1141
	quamquam Antiochi magister Philo, magnus vir ut tu existimas ipse, ±negaret in libris, quod coram etiam ex ipso audiebamus,	iucundissimas & Description and State of the Corrigor, Pa??iuum. Terent. Correctus, Participium. Cic. Corrected:		Bayle, Pierre	547
	duas Academias esse, erroremque eorum qui ita putarent coarguit.	amended. Recenti??ima quaeque ?unt correcta & emendata maximé. Laudatio correcta. Cic. Corréctio, onis, f. g. Verbale. Cic. A correction or amendment. Haec e?t correctio		Cooper, Thomas, 1517? -1594.	526
				Bellenden, William	504
	2 EARLIER USE	LATER USE		Tunstall, James	402
	Cicero (M. Tullius Cicero), Academica [-1]	Cooper, Thomas, 1517?-1594., Thesaurus linguæ Romanæ &		Young, William	323
	bonum esse censent; apud nostros autem non ignoras quae sit et	Britannicæ tam accurate congestus, vt nihil penè in eo desyderari possit, quod vel Latinè complectatur amplissimus Stephani Thesaurus.		Rollin, Charles	318
	quanta subtilitas. sive enim Zenonem sequare, magnum est efficere ut quis intellegat quid sit illud verum et simplex bonum quod non possit	vel Anglicè, toties aucta Éliotæ Bibliotheca: opera & Describer amp; industria Thomæ Cooperi Magdalenensis Accessit dictionarium historicum et poëticum propria vocabula virorum, mulierum, sectarum, populorum, vrbium, montium, & Describer amp; in his iucundissimas & Describer amp; omnium cognitione dignissimas historias. [1578]		Pliny, the Younger	302
	ab honestate seiungi ( quod bonum quale sit negat omnino Epicurus se sine voluptatibus sensum moventibus ne suspicari quidem ); si			Morabin, Jacques	253
	vero Academiam veterem persequemur, quam nos ut scis probamus, quam erit illa acute explicanda nobis, quam argute quam obscure	Quaero potuerítne Ro?cius ex ?ocietate ?ua ? partem petere nècne. Cic. Nec ?u?picari, pro Ne ?u?picari quidem. Cic. Quod bonum quale ?		Heuzet, Jean	245
	etiam contra Stoicos disserendum. Totum igitur	arp. cam recount pro non dando cream carrido inspido incido initia	Warburton, William	203	
		necdum Bibuli erant allatae. And Bibulus his letters were not yet brought.		Jacotius, Desiderius	178
	View similar passages in timeline			Taylor, John	163
Ì	3			Middleton, Conyers	162
	EARLIER USE	LATER USE		Lucretius Carus, Titus	156
	Cicero (M. Tullius Cicero), Academica [-1] disciplinam, tu sedum regionum locorum tu omnium divinarum	Cooper, Thomas, 1517?-1594., Thesaurus linguæ Romanæ & Britannicæ tam accurate congestus, vt nihil penè in eo desyderari possit, quod vel Latinè complectatur amplissimus Stephani Thesaurus,		Caesar, Julius	133
	humanarumque rerum nomina genera officia causas aperuisti; plurimum quidem poetis nostris omninoque Latinis et litteris luminis	vel Anglicè, toties aucta Éliotæ Bibliotheca: opera & industria Thomæ Cooperi Magdalenensis Accessit dictionarium historicum et poëticum propria vocabula virorum, mulierum, sectarum, populorum,		Campbell, Archibald	132
	et verbis attulisti atque ipse varium et elegans omni fere numero poema fecisti , philosophiamque multis locis inchoasti, ad impellendum satis, ad edocendum parum. Causam autem probabilem	vrbium, montium, & cæterorum locorum complectens, & in his iucundissimas & omnium cognitione dignissimas historias. [1578]		Baxter, Richard, 1615- 1691.	128
	the suidest officer and sairs Oceans Issues to a suidest probabilett	To make a thyng in meeter. Tenui deducta poemata filo. Horat. Facere			

EARLIER USE LATER USE Chambers, Ephraim, Cyclopædia: or, an universal dictionary of arts and sciences; Containing The Definitions of the Terms, And Accounts of The Things signify'd thereby, In the several Arts. ab se retractum esse et adservatum, ut ipse in eum statueret quod videretur, Agit hominibus gratias et eorum benivolentiam erga se diligentiamque conlaudat. Ipse inflammatus scelere et furore in forum venit; ardebant oculi, toto ex ore crudelitas eminebat. Exspectabant omnes quo tandem progressurus aut quidnam acturus esset, cum repente hominem proripi atque in foro

1 of 21 [1728]

Both Liberal and Mechanical, And the several Sciences, Human and Divine: The Figures, Kinds, Properties, Productions, Preparations, and Uses, of Things Natural and Artificial; The Rise, Progress, and State of Things Ecclesiastical, Civil, Military, and Commercial: With the several Systems, Sects, Opinions, & amp;c. among Philosophers, Divines, Mathematicians, Physicians, Antiquaries, Criticks, & amp.c. The Whole intended as a Course of Antient and Modern Learning. Compiled from the best Authors, Dictionaries, Journals, Memoirs, Transactions, Ephemerides, medio nudari ac deligari et virgas expediri iubet. Clamabat ille miser se civem esse Romanum, &c. in several Languages. In two volumes. By E. Chambers Gent. Volume the First. [Volume municipem Consanum; meruisse cum L. Raecio, splendidissimo equite Romano, qui Panhormi 1 of 21 [1728] a Figure whereby a Thing is so livelily defcrib'd or painted, that it does not seem to b" read or heard, but atually seen, or presented before the Eyes. SecDEscRIPTION. Such is that elegant one of Cicero, wherein he paints the Barbarity of Verres: Jipe Inpfammatus fcelere filrore ils forum venit, Ardebant Oculi ; toto ex ore crudeliras emana, bat, Expeftabant omnes quo

tandem pregref'irus, ait quid nam attarss effet; cum repente Hominem corriPi, atque iM foro medio nudari ac deligari, 1? Virgas expedire jubet. Clarabat ille miferfe Civem eDoe Romanum, &c. The Ilypotypofis is frequently used by the Poets, and particularly Firgil, who abounds in Paintings. The Word is Greek, JTonr7tis, form'd of the Verb v\*7cs;i'u per fgurram demomflro, I lhew, reprefent, or make any

LATER USE

Chambers, Ephraim, Cyclopædia: or, an universal dictionary of arts and sciences; Containing The Definitions of the Terms, And Accounts of The Things signify'd thereby, In the several Arts,

Both Liberal and Mechanical, And the several Sciences, Human and Divine: The Figures, Kinds, Properties, Productions, Preparations, and Uses, of Things Natural and Artificial; The Rise,

Progress, and State of Things Ecclesiastical, Civil, Military, and Commercial: With the several

Systems, Sects, Opinions, & amp;c. among Philosophers, Divines, Mathematicians, Physicians,

Antiquaries, Criticks, & amp.c. The Whole intended as a Course of Antient and Modern Learning.

Compiled from the best Authors, Dictionaries, Journals, Memoirs, Transactions, Ephemerides, &c. in several Languages. In two volumes. By E. Chambers Gent. Volume the First. [Volume

left in it to bear the Stress. And, la1st the Cleft is cover'd over with Clay: Or rather, as 1 Gentil advises, with Moss, or the frelh Bark of a Ti bound on with Ofler. The Reader, who would have this in more elegant Tern may be furnilh'd from Virgil. Aut urfiinm Einodes irunci refecantur,

View similar passages in timeline

Cicero (M. Tullius Cicero), In Verrem [-1]

negotiaretur, ex quo haec Verres scire posset. Tum iste, se comperisse

Vergilius (P. Vergilius Maro), Georgica [-1]

imponere simplex, nam qua se medio trudunt de cortice gemmae et tenuis rumpunt tunicas, angustus in ipso fit nodo sinus; huc aliena ex arbore germen includunt udoque docent inolescere libro, aut rursum enodes trunci resecantur, et alte finditur in solidum cuneis uia, deinde feraces plantae immittuntur: nec longum tempus, et ingens exiit ad caelum ramis

EARLIER USE

felicibus arbos, miratastque nouas frondes et non sua poma. Praeterea genus haud unum nec fortibus ulmis nec salici lotoque neque Idaeis cyparissis, nec pingues unam in faciem nascuntur oliuae, orchades et radii et

> & alte Finditur in folidum Cuneis via; deinde seraces !Plante Irmmittunttr ; nec loigsnm l'epius, g Inge2. Exiit ad Caluwi ramis felicibus Arbos , Aliraturque novas frondeis, q noz ftla

> pomna. GAAFTINC in the Rind, or Sottulder-GRAVTING, ca led also Slicing and Packing; is pracfifed in the latt End of jqpril, or Beginning of May. The Method is follows: The Top of the Stock is cut off in a smooth, firaigl Place: Then the Cyon, or

View similar passages in timeline

EARLIER USE

Gellius (A. Gellius), Noctes Atticae 1-20 [2]

uerberum et uocum et eiulationum circumplectitur; uelut sunt ista, quae de C. Verre dicit, quae nos, ut in praesens potuimus, quantum memoria subpeditabat, adscripsimus: 'Ipse

inflammatus scelere et furore in forum uenit. Ardebant oculi, toto ex ore crudelitas eminebat. Exspectabant omnes, quo tandem progressurus aut quidnam acturus esset, cum repente LATER USE

Chambers, Ephraim, Cyclopædia: or, an universal dictionary of arts and sciences; Containing The Definitions of the Terms, And Accounts of The Things signify'd thereby, In the several Arts, Both Liberal and Mechanical, And the several Sciences, Human and Divine: The Figures, Kinds, Properties, Productions, Preparations, and Uses, of Things Natural and Artificial; The Rise, Progress, and State of Things Ecclesiastical, Civil, Military, and Commercial: With the several Systems, Sects, Opinions, & amp;c. among Philosophers, Divines, Mathematicians, Physicians, Antiquaries, Criticks, & amp:c. The Whole intended as a Course of Antient and Modern Learning.

Cox, Nicholas

BROWSE BY FACET	~

Top 100 results

Blount, Thomas	402
NA	321
Harris, John	317
Locke, John	198
Locke, John <fs></fs> ynne, John	92
Stone, Edmund	67
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Jacob, Giles	30
Danet, Pierre	28
Moxon, Joseph	24
Newton, Isaac, Sir	24
Chomel, Noel	23
Malcolm, Alexander	22
De Laune, Thomas	19

19

## Our navigational tool

#### **Current features:**

- Full exploration of all text alignments with metadata search (author, title, date...)
- Faceted browsing for all available metadata
- Timeline view to explore any single text reuse across time

"Legislative cannot transfer the Power of making Laws to any other hands, for it being but a dele gated Power from the People, they who have it cannot pass it over to others. The People alone can appoint the Form of the Commonwealth, which is by Constituting the Legislative, and appointing in whose hands that shall be. And when the People have said, We will submit, and be govern'd by Laws made by such Men, and in such Forms; no Body else"

Locke, John



#### Future work...

Database viewable at <a href="http://commonplacecultures.uchicago.edu/">http://commonplacecultures.uchicago.edu/</a>

- Release a new version of the current web application with an increased focus on tracing the genealogy of text reuses:
  - => Improved performance
  - => Increase visibility of commonplaces
- Introduce non-English datasets for comparison in order to find instances of multi-lingual commonplace practices

# **Textual Optics**

The work we have done in textual optics allows to move from exploring texts at various levels to exploring cultural systems of textual production

### Return to our origins: France, OBVIL

- Currently involved in a major collaboration with OBVIL (Observatoire de la vie littéraire, a DH project involving the Université Paris-Sorbonne and the Université Pierre et Marie Curie)
- Together we have obtained a Mellon Foundation grant to pursue, expand, and develop the work in textual optics in which we have been engaged.
- In particular, we are working closely with the Bibliothèque Nationale which is working to build a very large corpus of over 100,000 texts to be used in the context of this project.
- Once this corpus is in place, for the first time, we will be able to begin comparing practices of textual reuse at work in two different cultural systems