

Body language: investigating trends in the use of body-related terms in 17th century pro-woman treatises

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Abstract

Hello and welcome! This notebook is a project report submitted to the makers of the Distant Reading Early Modernity database (Matthew Milner, Stefan Sinclair, and Stephen Wittek).

The aim of this project is to study the use of physiological and body-related terminology in Renaissance England controversies over women, and in particular to answer the question of how the use of body terminology varies between well-attested rhetorical 'skirmishes' (e.g. the Swetnam Controversy) and the wider corpus of writings on women's place in society. To that end, this project:

- 1) traces the relative frequencies of a set of body-related terms in a 'seed corpus' consisting of the four texts which make up the so-called Swetnam controversy);
- 2) expands the corpus by locating additional pro-woman treatises written by women in English after the Swetnam Controversy;
- 3) compares the relative frequencies of body terminology between the seed corpus and the wider corpus.

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Introduction

Aim and motivation

The main ambition of this project is to determine whether the Swetnam controversy (c. 1615) set the thematic agenda for later pro-woman treatises written in English.

The existing literature suggests that the answer to this questions should be yes: Henderson and McManus (1985, 11), for example, claim that "the proportion of defenses [of women]" coincided with "the wider dissemination of attacks on women" and also that "these treatises provided a formal framework for the debate about women and a reservoir of examples and arguments upon which writers of ballads and other types of poetry, popular drama, conduct books, and sermons could draw." Similarly, Malcolmson and Suzuki (2002, 1) argue that the English debate over women "found its particular flowering in Jacobean England in [...] the Swetnam controversy."

If these claims are true, one would expect the vocabulary of pro-woman treatises to retain more or less the same proportion of terms particular to the actual arguments used in the controversy. In particular, one would expect that an absence or presence of body-specific arguments be born out by the relative rarity of body-related terms, and that relative scarcity (or plenty) of such terms should continue into the rest of the 17th century.

What is at stake here is not only the Swetnam controversy as such, but also the extent to which polemical encounters such as the Swetnam controversy form an instructive historiographical framework for what is now termed the early modern *querelle des femmes*-- a protracted literary and philosophical exchange on the role and nature of women. Recent articles (e.g. Pelegrin 2013) in the area have challenged the notion that the *querelle des femmes* was indeed a *querelle*, suggesting that high-profile public debates such as the Swetnam controversy provide a misleading framework for academic research of early modern texts about women. This project sketches out a procedure for using the digital humanities methods to arbitrate such questions of thematic influence by tracing a particular set of body-related arguments in post-Swetnam pro-woman texts.

Methods

This project uses the DREaM database in conjunction with Voyant Tools 2.0 and IPython. I use IPython's NLTK module to filter through DREaM metadata in order to identify female authors. I then use the resulting list of names to build a corpus in DREaM which may be further searched for relevance to the gender controversy. In order to locate pro-woman treatises, I search for documents with exceptionally high relative frequencies of the words "woman" and "women", which feature prominently in earlier pro- and anti-woman treatises. A quick look at a wordclouds of Thomas Elyot's "Defense of Good Women" and William Bercher's "The Nobility of Women" illustrates this

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Which body words?

My choice of body-related terminology is informed by three treatises which prefigure the Swetnam controversy. In addition to Elyot (1543) and Bercher (1491), I will also use John Knox's "The First Blast of the Trumpet Against the Monstriferous Regiment of Women" (1558). These texts present us with a cluster of arguments which seem to have been popular in Continental gender debates of the time: firstly, they claim that certain differences in the relative heat of men's and women's bodies produce intellectual disparities between the sexes; second, each of them use women's physical beauty to derive certain conclusions regarding women's character; and finally, they claim that the material of which men's and women's bodies are made differ, and they derive conclusions regarding the superiority of either men or women therefrom (the Genesis-inspired rib debate falls into this last category).

The keywords used, therefore, will be those roughly corresponding to those three arguments, namely:

Heat and cold:

bod*, temper*, heat|heate, hot*, cold*, blod|bloud|blood

The four humours:

bod*, complexion*, phlegm*, bile, choler|coler|coller, dry|drie, moist*

Beauty and strength:

bod*, beaut*, fair*, strength*|strong*, face*
|visage*|vissage*

The Heat and Cold cluster is designed to capture the kind of Aristotelian argument (women are colder and therefore less perfect than men). We see these sorts of arguments come up in Renaissance and early modern treatises, including the three cited above.

The Four Humours cluster does the same thing for the kind of Galenic terminology that tends to accompany arguments from physiology.

Finally, the beauty and strength terms are just what they look like: the one perhaps odd addition is 'face' and 'visage': these words come up in discussions of beauty in Elyot (where it is claimed, for example, that men's facial hair and baldness are signs of either beauty or ugliness).

Note also that, since the Corpus Trends tool I intend to use limits the user to some five terms, it may

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be necessary to search for one argument cluster at a time. Now let's move to the Swetnam controversy and see what DREaM can tell us about 17th century body language.

A note on DREaM query syntax

You may have noticed a lot of strange punctuation in my search terms -- these are DREaM's versions of Boolean operators AND, OR, NOT that are often used by, say, search engines and library databases. Their purposes are as follows:

* (asterisk) - wildcard: *bod will return 'body' and 'bodies', as well as perhaps some variant spellings still kicking around, for example 'bodye' or 'bodie'; it is of course important not to make the wildcard too general: searching 'heat', for example, returns 'heathen' and 'heathens', and we don't need that;*

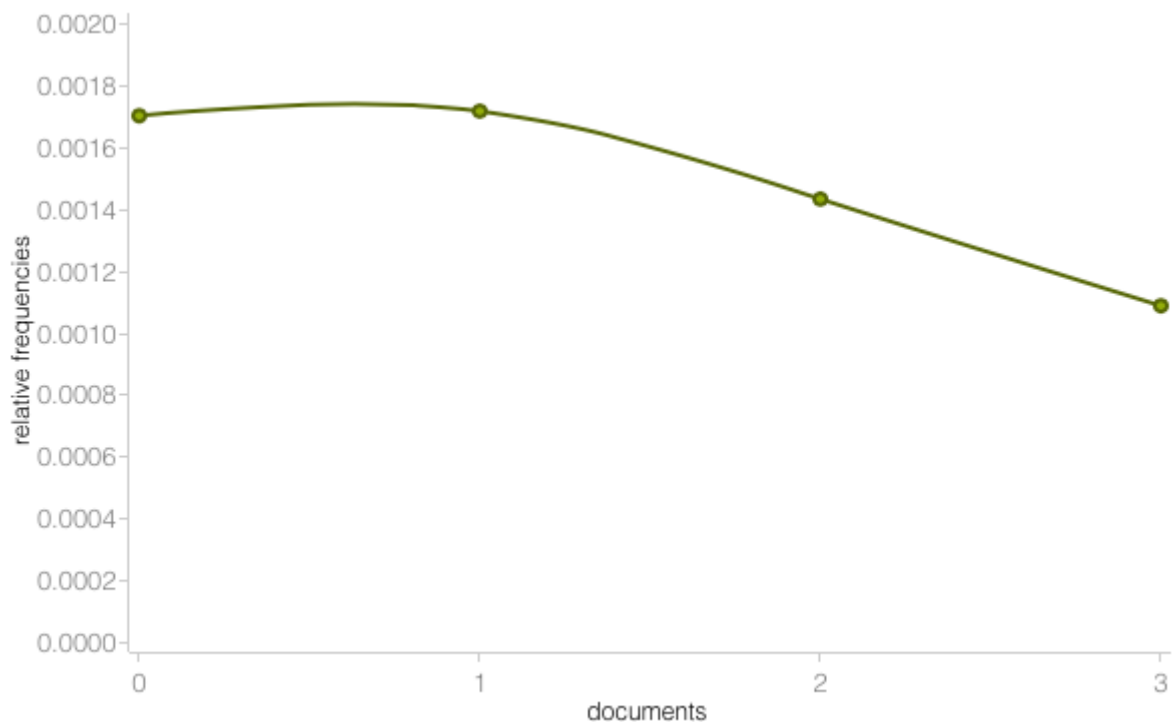
| (pipe) - combine search: 'heat|heate' will find both 'heat' and 'heate'; this is a good way of dealing with a limited number of spelling variations or synonyms, but it will of course not catch anything except the terms that it is explicitly given;

DREaM has further operators, including '-' (minus) which excludes terms from the search, and '~' which searches for two words within a given proximity (so that 'blood, hot'~5 will find all passages in which the words 'blood' and 'hot' occur within five words) -- these are very neat, but I will not have occasion to use them here.

Exploring the Swetnam controversy in DREaM

Heat and cold

The argument that women are inferior to men owing to the relative coldness of their blood goes back to Aristotle, and it is very much alive and well in Continental (esp. French and Italian) gender controversies of the 15th and 16th century. Given the longevity of such arguments and supposing even a modest circulation of the Continental treatises, one might very well expect an English misogynist writing in the 17th century to show some awareness of it. Let's see if this is the case.



We'll keep this range of relative frequencies in mind when we go on to study the wider pro-woman corpus. For now, let's move on to the remaining search terms.

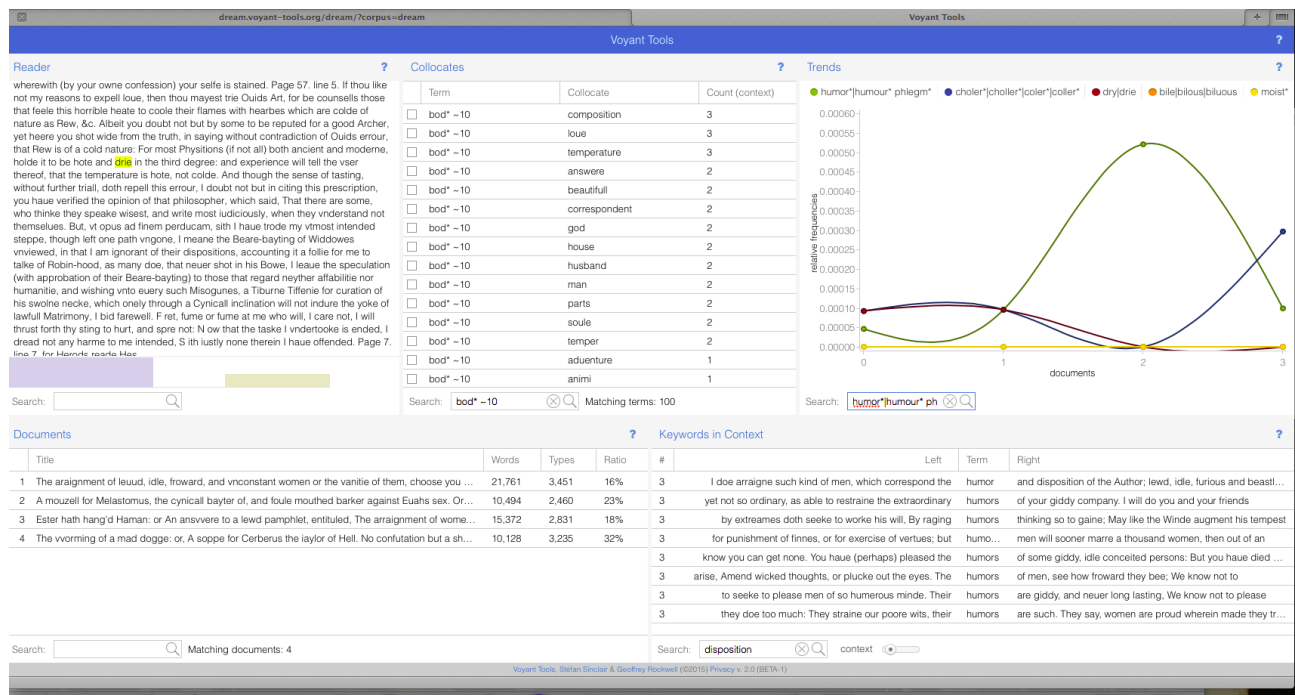
The four humours

The argument from the four humours can be considered a variant of the heat-cold argument. Each of the humours falls within a conceptual schema described by the two pairs of hot and cold and wet and dry, so that blood is traditionally hot and wet, choler hot and dry, bile cold and dry, and phlegm cold and wet. The humours feature in the gender debates mainly by being associated with one or the other sex: Bercher, for instance, turns men's sanguine complexion against them by claiming that "it makes them fools and prone to laughter." These arguments are also of very great vintage: let's see how well we do by searching for them in our seed corpus.

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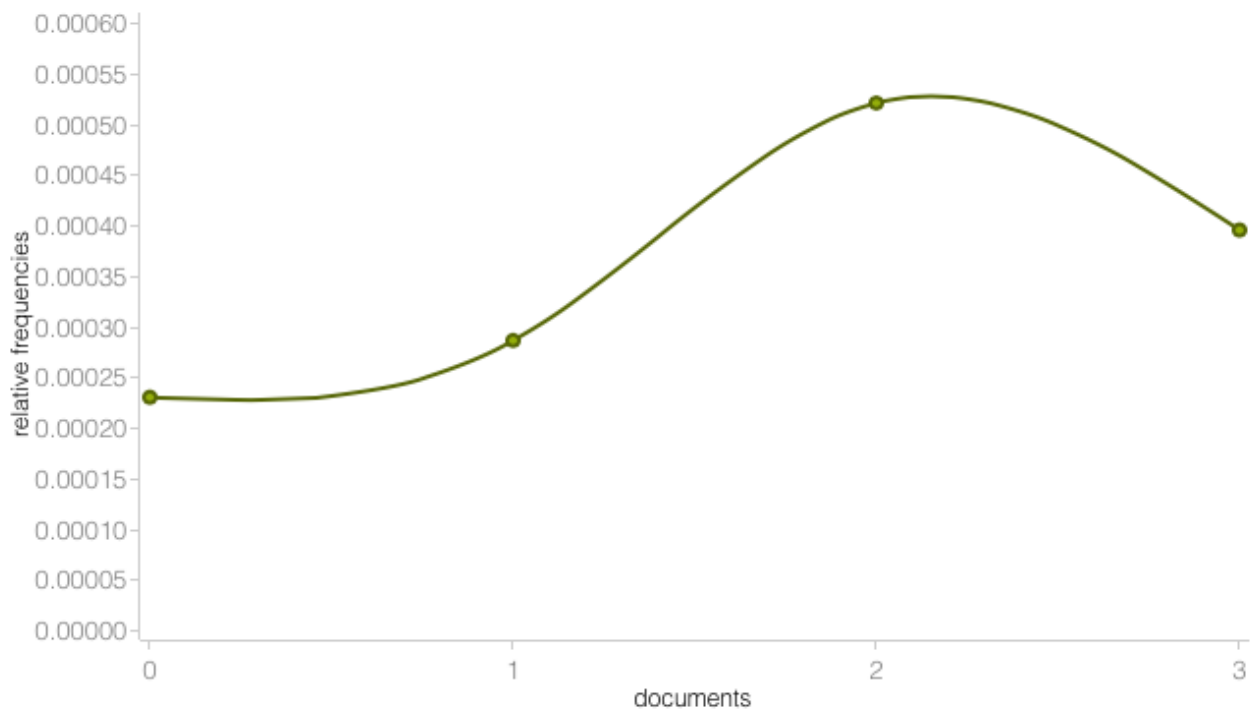
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Not a very good turn out! The general notion of humours features in one of the pro-woman treatises, but there is little to no mention of their particular names: phlegm and bile are completely absent, and choler only gets a few references (and even there it seems to simply mean 'anger'). We note the surprising absence, combine the terms, and move on.

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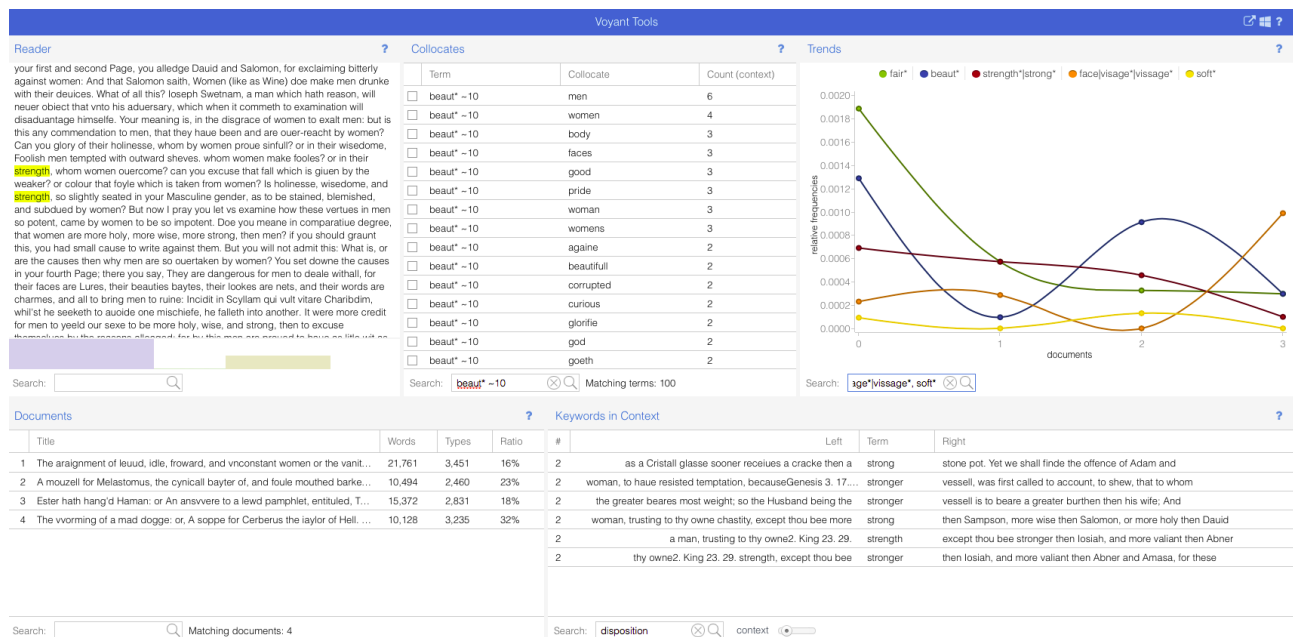
Strength and beauty

In many Continental pro- and anti-woman treatises, strength and beauty act as distinctive virtues (or vices) of men and women respectively. While both are clearly bodily attributes, they are also taken to signify what we might call personality traits: according to Bercher, "beauty is a sign of bounty." Furthermore, claims to strength and beauty work both ways, in the sense that they are sometimes used to reinforce claims of inner strength or inner beauty, and sometimes to indicate an inner lack. This perhaps helps explain why beauty appears so much more in Joseph Swetnam's text than in the responses of his feminist critics:

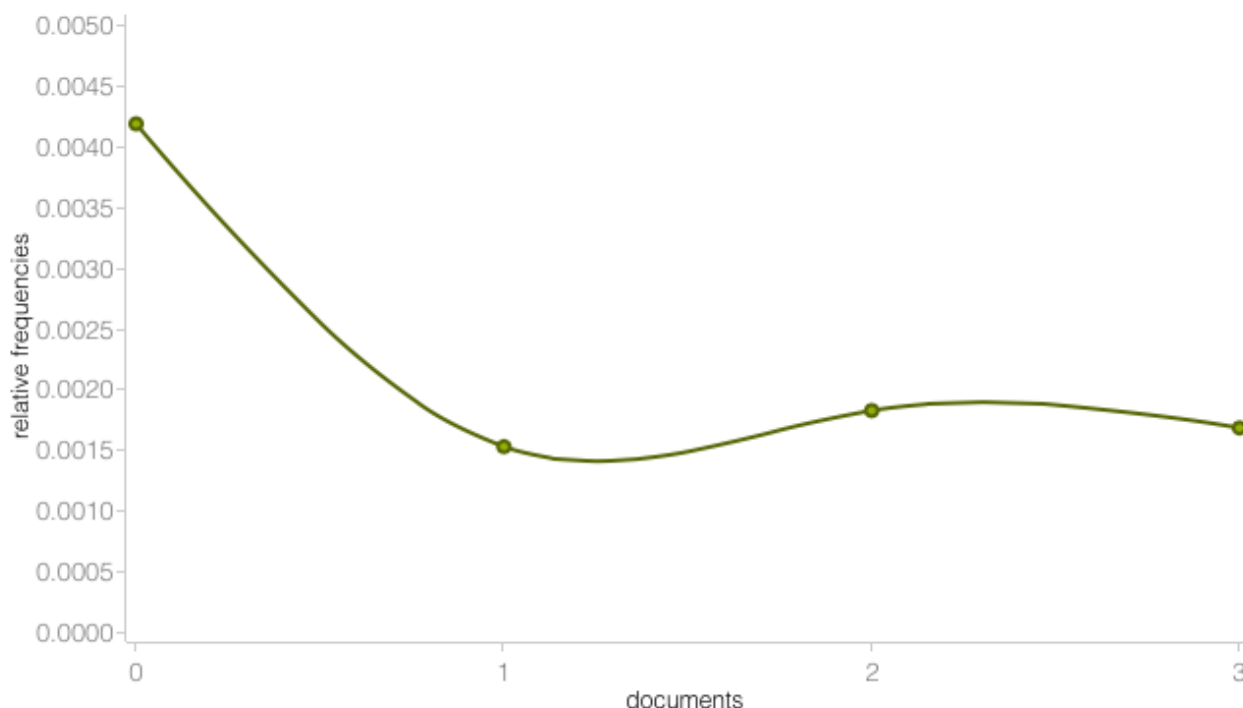
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Interestingly enough, beauty seems to be used against women (that is to say, as proof of their promiscuity) and strength against men: a quick look at the Reader tool shows that Rachel Speght is happy to make fun of men's claims to being the stronger sex -- at least in light of Swetnam's overly-defensive attacks on women, that is. For our purposes, we note that fairness peaks much higher than any of our prior terms, comprising 0.2% of Swetnam's text and about 0.1% of Sowerham's and Speght's texts. Combined, the terms give us the following range:



Filtering the Metadata for Female Authors

With these glimpses of the Swetnam controversy in hand, we are ready to assess its influence, or lack thereof, on the more general gender debates in English. But first, we need a wider corpus of pro-woman texts. In order to control for (apparent) authorship, we need to sift through the authors list for female authors. Since DREaM does not come pre-packaged with such a feature, we will do this using IPython's NLTK module. In preparation for this, I acquired the metadata for TCP phase I, which comprises about 22,000 texts in the DREaM corpus (the metadata for the remaining portion is yet to be released to the public).

My *modus operandi* is simple: first, locate the author field in every header (i.e. metadata) file; since the header files are XML encoded, they should all contain their author information in the author node, which should in turn be a child of the TITLESTMT, which itself is the child of FILEDESC (these are of course not guesses: I had a look in one of the files before beginning the process).

Importing the Natural Language Text Kit and acquiring list of female first names

First let us import some of the tools we will need to search through DREaM: the list of female first names that comes standard with NLTK, as well as NLTK's `word_tokenize` function (we will need

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this to strip the punctuation and break the author field down into individual words).

In [3]:

```
import nltk
```

In [4]:

```
from nltk.corpus import names
```

In [5]:

```
len(names.words('female.txt'))
```

Out[5]:

```
5001
```

Five thousand names! Excellent. This should help us find at least a few early modern woman writers.

In [6]:

```
from nltk.tokenize import word_tokenize
```

A test run using a pretend dataset

Now that we have our names and the files to be filtered, we still do not have the means to go through them. Let's see if we can build a simple for-if loop that will go through a list of names and pull out every entry that is present in NLTK's list of female first names. Just to make things simple, let's make it an easy pretend list.

In [7]:

```
pretendTCPfemaleauthors = []
pretendTCP = ['Clara', 'Suzanne', 'Laura', 'Constantia']
for name in pretendTCP:
    if name in names.words('female.txt'):
        pretendTCPfemaleauthors.append(name)
pretendTCPfemaleauthors
```

Out[7]:

```
['Clara', 'Suzanne', 'Laura', 'Constantia']
```

Good! Thankfully, female.txt seems to include even such odd names as 'Constantia'. Now let's throw in some male names and make sure that those don't get picked up as well.

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In [8]:

```
pretendTCPfemaleauthors = []
pretendTCP = ['Clara', 'Micheal', 'Suzanne', 'Laura', 'John', 'Constantia']
for name in pretendTCP:
    if name in names.words('female.txt'):
        pretendTCPfemaleauthors.append(name)
pretendTCPfemaleauthors
```

Out[8]:

```
['Clara', 'Suzanne', 'Laura', 'Constantia']
```

Excellent! Looks like we're ready to go through the real header files.

Parsing the XML file using etree

In [9]:

```
from lxml import etree
parser = etree.XMLParser(recover=True)
```

In [10]:

```
import glob
headerFiles = glob.glob("data\headers\header_temp\*hdr")
```

Let's use etree to snoop through one of the header files and see the underlying XML structure.

In [11]:

```
f = open('data\headers\header_temp\A00002.hdr', 'r')

tree = etree.parse(f)
root=tree.getroot()
root[:]
```

Out[11]:

```
[<Element FILEDESC at 0x77f0fc8>,
 <Element ENCODINGDESC at 0x7987548>,
 <Element PROFILEDESC at 0x7987048>,
 <Element REVISIONDESC at 0x7987088>]
```

Looking back at the print-out of our header file, we can tell that the AUTHOR field lives in the FILEDESC node. Let's unpack it.

In [57]:

```
root[0][:]
```

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Out[57]:

```
[<Element TITLESTMT at 0x81af888>,  
<Element EXTENT at 0x81af848>,  
<Element PUBLICATIONSTMT at 0x81af148>,  
<Element SERIESSTMT at 0x81af648>,  
<Element NOTESSTMT at 0x81af048>,  
<Element SOURCEDESC at 0x81af808>]
```

Getting closer!

In [12]:

```
root[0][0][:]
```

Out[12]:

```
[<Element TITLE at 0x7987788>, <Element AUTHOR at 0x79877c8>]
```

In [13]:

```
root[0][0][1]
```

Out[13]:

```
<Element AUTHOR at 0x79877c8>
```

We have the node! Now to get the text...

In [14]:

```
root[0][0][1].text
```

Out[14]:

```
'Aylett, Robert, 1583-1655?'
```

...and break it up into individual words.

In [15]:

```
tokenized_author = [word_tokenize(root[0][0][1].text)]  
tokenized_author
```

Out[15]:

```
[['Aylett', ',', 'Robert', ',', '1583-1655', '?']]
```

In [16]:

```
tokenized_author = word_tokenize(root[0][0][1].text)
```

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```
tokenized_author
```

Out[16]:

```
['Aylett', ',', 'Robert', ',', '1583-1655', '?']
```

So far so good, but we don't actually need the years in there. Let's get rid of them.

In [17]:

```
AuthorNameOnly = []

for word in tokenized_author:
    for char in word:
        if char.isalpha():
            AuthorNameOnly.append(word)
set(AuthorNameOnly)
```

Out[17]:

```
{'Aylett', 'Robert'}
```

An inelegant solution, but it works! Now we just need to turn the set back into a string and we are good to go.

In [18]:

```
authorString = ' '.join(set(AuthorNameOnly))

print (authorString)

Robert Aylett
```

Good! Using the set() function is clearly an ad hoc way of fixing problems in the loop, but it will do. Now, as it happens, we can't count on the author info to always be located at root[0][0][1].text, so we best automate the search. Thankfully etree can do that for us.

Searching through the author field

So far so good, but it seems like our search method leaves something to be desired -- after all, what happens if the author information happens to live somewhere other than root[0][0][1]? Let's see if we can use an iterated search instead of relying on the header files to be consistently structured.

In [45]:

```
f = open('data\headers\header_temp\A62648.hdr', 'r')

tree = etree.parse(f)
```

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```
author_nodes = tree.iterfind("//AUTHOR")
for node in author_nodes:
    print(node.text)
```

```
Tillotson, John, 1630-1694.
Tillotson, John, 1630-1694.
```

First shot at a search

We might now be ready to search through the header files and pull out all the authors whose names include a female first name. Let's see how well that works.

In [26]:

```
TCPfemaleauthors = []

for headerFile in headerFiles:
    f = open(headerFile, encoding = 'UTF-8')
    tree = etree.parse(f)
    root=tree.getroot()
    author_nodes = tree.iterfind("//AUTHOR")

    for node in author_nodes:

        tokenizedAuthor = [word_tokenize(node.text)]
        for line in tokenizedAuthor:
            for word in line:
                if word in names.words('female.txt') and word not in
names.words('male.txt'):
                    TCPfemaleauthors.append(node.text)
```

In [39]:

```
TCPfemaleauthors[:10]

# I'm only showing the first ten entries here
```

Out[39]:

```
['England and Wales. Sovereign (1558-1603 : Elizabeth I)',
 'England and Wales. Sovereign (1558-1603 : Elizabeth I)',
 'England and Wales. Sovereign (1558-1603 : Elizabeth I)',
 'Elizabeth I, Queen of England, 1533-1603.',
 'Church of England. Diocese of Norwich. Bishop (1635-1638 : Wren)',
 'Church of England. Diocese of Norwich. Bishop (1635-1638 : Wren)',
 'Wren, Matthew, 1585-1667.',
 'Church of England. Diocese of Salisbury. Bishop (1559-1571 : Jewel)',
 'Church of England. Diocese of Salisbury. Bishop (1559-1571 : Jewel)',
 'Jewel, John, 1522-1571.']
```


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In [29]:

```
len(TCPfemaleauthors)
```

Out[29]:

```
2492
```

Over 2000 documents! Let's get rid of the duplicates and see how many unique authors we are dealing with.

In [32]:

```
len(set(TCPfemaleauthors))
```

Out[32]:

```
600
```

Six hundred authors! Of course, it seems that we *still* have some men kicking around in the list, including Clovis, King of the Franks and William Congreve. This is something we need to deal with, but at least now we have a list that's short enough to sort through by hand if necessary.

Using the results

The latest version of our list is decent enough, but it still requires some filtering, both for the male authors (Clovis King of Franks and the gang) and for the odd non-name text that seems to have made it into the author field (for example, the entry on Elisabeth Coleman also includes the phrase "Harlots vail rent and her impudency rebuked." Thankfully, the list is short enough that this can be done by hand. All there is to do then, is enter the manually cleaned list, remove punctuation and dates, and join all the entries up. [Cut to me doing this by hand...]

In [33]:

```
FilteredAuthors = [  
    'Abergavenny, Frances Nevill, Lady, d. 1576.',  
    'Alcoforado, Mariana, 1640-1723.',  
    'Alleine, Theodosia.',  
    'Anderdon, Mary.',  
    'Anne, Queen of Great Britain, 1665-1714.',  
    'Anne, Queen, consort of James I, King of England, 1574-1619, attributed  
name.',  
    'Arch, Susannah.',  
    'Ariadne.',  
    'Ascham, Margaret.',  
    'Askew, Anne, 1521-1546.',  
    'Askew, Anne, 1521-1546.',
```

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```
'Astell, Mary, 1668-1731.',  
'Atkinson, Elizabeth.',  
'Atkinson, Elizabeth.',  
'Austin, Anne,',  
'Avery, Elizabeth',  
'Avril, Philippe, 1654-1698.',  
'Bacon, Anne Cooke, 1528?-1610.',  
'Baker, Mary.',  
'Bancroft, Margaret.',  
'Barker, Jane.',  
'Bateman, Susanna.',  
'Bathurst, Anne.',  
'Bathurst, Elizabeth, 1691.',  
'Beaufort, Margaret 1443-1509.',  
'Beck, Margaret.',  
'Beck, Sarah, 1679.' [...]
```

Now to see how many entries that took out.

In [34]:

```
len(FilteredAuthors)
```

Out[34]:

```
207
```

Very many indeed! Next, let's remove the punctuation and the dates for each of the authors.

In [35]:

```
AuthorNamesOnly = []  
AuthorNameOnly = ""  
  
for author in set(FilteredAuthors):  
    tokenized_author = word_tokenize(author)  
    for word in tokenized_author:  
        if word.isalpha():  
            AuthorNameOnly += ' '  
            AuthorNameOnly += word  
    AuthorNameOnly += ','  
AuthorNamesOnly.append(AuthorNameOnly)
```

Let's see what we have.

In [36]:

```
AuthorNamesOnly
```

Out[36]:

```
[' Booth Mary, Gwyn Nell, Whitrowe Joan, Dale Elizabeth, Roper Margaret,
```

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Catharine Parr, Ward Mary, Dyer Mary, Pix Mary, Wentworth Anne, Bracegirdle Anne, Campbel Agnes, Harris Katherine, Barker Jane, Scaife Isabel, Woolley Hannah, Glencorse Jane, Stone Katherine, Virginia, Elestone Sarah, Gray Alexia, Whitehead Ann, Newcastle Margaret Cavendish, Fenton Elizabeth, Took Elizabeth, Pettus Katherine, Hume Anna, Ellis Sarah, Walwyn Mary, Bradstreet Anne, Fox Margaret Askew Fell, Alicia, Darcie, Marguerite Queen consort of Henry, Bacon Anne Cooke, Simard Marie Ange, Mancini Maria, Boursier Louise Bourgeois, Beck Margaret, Cellier Elizabeth, Henrietta Maria, Clayton Anne, Trembles, Labadie Mary Anne, Margaret of Austria, Tremoille Charlotte Brabantina, Wearing Agnes, Ascham Margaret, Somerset Frances Howard Carr, Biddle Ester, White Dorothy, Arch Susannah, Coleman Elisabeth, Behn Aphra Agnes de Castro, Grey Jane Lady, Eleanor Lady, Fatouville Anne Mauduit, Kempe Margery, Modena Leone, Wells Mary, Anderdon Mary, Jocelin Elizabeth, Cary Mary, Alcoforado Mariana, Leigh Dorothy, Flower Margaret Mary, Rich Penelope Lady, Bernard Catherine, Conway Anne, Alleine Theodosia, Bourignon Antoinette, Clark Margaret, Everard Margaret, Berners Juliana, Musket Anne, Carey Elizabeth Lady, Wroth Mary, Blackborow Sarah, Quested Elizabeth, Centlivre Susanna, Rowe Elizabeth Singer, Christine de Pisan, Marguerite Queen consort of Henry IV, Bathurst Anne, Staesmore Sabine, Berners Juliana, Evelinge Elizabeth, MacDonnell Florence, Baker Mary, Country shepherdess, Moore Mary fl, Beswick Ann, Evelyn Mary, Perier Madame Gilberte, Burne Nicol, Kent Elizabeth Grey, Carleton Mary, Lincoln Elizabeth Clinton, Travers Rebecca, Bridget of Sweden aut, Pembroke Mary Sidney Herbert, Egerton Sarah Fyge, Whitney Isabella, Powis Elizabeth Somerset Herbert, Gilman Anne, Henshaw Ann, Florence of Worcester, Saltmarsh Mary, Fletcher Elizabeth, Wandesford Mary, Bateman Susanna, Madeleine de, Edwards Susanna, Lindsey Mary, Travers Rebecca, Masham Damaris, Strong Damaris, Bradmore Sarah, Fairman Lydia, Askew Anne, Rone Elizabeth, Austin, Lead Jane, Cary Elizabeth or, Trotter Catharine, Atkinson Elizabeth, Weamys Anna, Pakington Dorothy Coventry, Blaugdone Barbara or, Bathurst Elizabeth, Ariadne, Ivy Theadosia Stepkins or, Curtis Jane, Simmonds Martha, Hall, Evans Katharine, Mary I Queen of England, Mary of Modena Queen consort of James II, Chidley Katherine, Lisle Alice, Queen Elizabeth Protestant, Culpeper Alice, Cheevers Sarah, Lilburne Elizabeth, Boothby Frances, Elizabeth I, Beck Sarah, Hatton Elizabeth, Lye Sarah, Stirling Mary Vanlore Alexander, Eyre Elizabeth, York Anne Hyde, Bentley Catharine, Boemus Joannes, Dowriche Anne, Morton Anne Douglas, Astell Mary, Colville Elizabeth Melvill, More Gertrude, Anne Queen of Great Britain, Tyrwhit Elizabeth, Hooton Elizabeth, Dole Dorcas, Cotton Priscilla, Martel Margaret, Ellson Mary or, Benoist Elie, Norfolk Mary Howard, Grymeston Elizabeth, Wharton Anne, Berkeley Elizabeth Lady, Mary, Avery Elizabeth, Chudleigh Mary Lee, Killigrew Anne, Bancroft Margaret, Martin Ann, Avril Philippe, Anne Queen consort of James I King of England attributed name, Fisher Abigail, Nicholas Jane, Gaunt Elizabeth, Shipton Ursula, Douglas Eleanor, Gargill Anne, Beaufort Margaret, Teresa of Avila, Docwra Anne, Brathwait Frances, Abergavenny Frances Nevill Lady, Jones Sarah, Travers Anne, Binnington Isabel, Montenay Georgette de, Fell Lydia, Freeman, Forster Mary, Ragueneau Denys, Millner Elizabeth, Pope Mary fl, Worcester Margaret Somerset, Camm Anne aut, Speght Rachel, Mary II Queen of England, Greenbury Catharine,']

That is a great many names to enter! Unfortunately, it turns out that the current version of DREaM has a couple of issues with author searches (i.e. it seems that it will be necessary to enter them one at a time); in order to minimize the labour, let's simply take the first names and use those. Looking at the list, it looks like the sheer number of Elizabeths and Marys should make for a shorter first-name-only list!

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NB: this is static version of the full report, which is available in HTML [here](#).

In [37]:

```
AuthorFirstNamesOnly = []

for entry in AuthorNamesOnly:
    author = word_tokenize(entry)
    for word in author:
        if word in names.words('female.txt'):
            AuthorFirstNamesOnly.append(word)

AuthorFirstNamesOnly[:10]
```

Out[37]:

```
['Mary',
 'Gwyn',
 'Nell',
 'Joan',
 'Dale',
 'Elizabeth',
 'Margaret',
 'Catharine',
 'Mary',
 'Mary']
```

Remove duplicates:

In [44]:

```
set(AuthorFirstNamesOnly)
```

Out[44]:

```
{'Abigail',
 'Agnes',
 'Alexia',
 'Alice',
 'Alicia',
 'Ange',
 'Ann',
 'Anna',
 'Anne',
 'Antoinette',
 'Ariadne',
 'Austin',
 'Avril',
 'Barbara',
 'Bridget',
 'Carey',
 'Cary',
 'Catharine',
 'Catherine',
 'Charlotte',
```

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```
'Christine',  
'Dale',  
'Damaris',  
'Darcie',  
'Denys',  
'Dorcas',  
'Dorothy' [...]
```

Excellent! Now let's see how many search terms we are dealing with.

In [41]:

```
len(set(AuthorFirstNamesOnly))
```

Out[41]:

```
85
```

Much more manageable! And while we are at this, we might as well join them all into a string and get rid of the quotes. I am also lower-casing the resulting string because DREaM currently has some case-sensitivity issues.

In [42]:

```
AuthorFirstNamesString = ', '.join(set(AuthorFirstNamesOnly))  
print(AuthorFirstNamesString.lower())
```

```
evelyn, marie, dorothy, flower, penelope, susanna, elie, lee, alicia, catharine,  
marguerite, jane, frances, gray, margery, rowe, anna, mariana, virginia, leigh,  
sabine, mary, katherine, ariadne, damaris, ivy, alexia, georgette, barbara,  
florence, rachel, nicol, agnes, anne, elisabeth, catherine, isabella, gertrude,  
katharine, cary, ann, alice, sarah, susannah, priscilla, madeleine, jocelin,  
rebecca, abigail, lindsey, lydia, leone, elizabeth, philippe, gwyn, bridget,  
theodosia, margaret, joannes, ester, darcie, maria, martha, antoinette, dorcas,  
denys, carey, teresa, hannah, gilberte, henrietta, austin, ange, charlotte,  
isabel, dale, nell, louise, avril, joan, juliana, ursula, eleanor, whitney,  
christine
```

Looking good! This looks like something we might be able to copy and paste into DREaM's author search field and get ourselves a nice little corpus. Onward to DREaM!

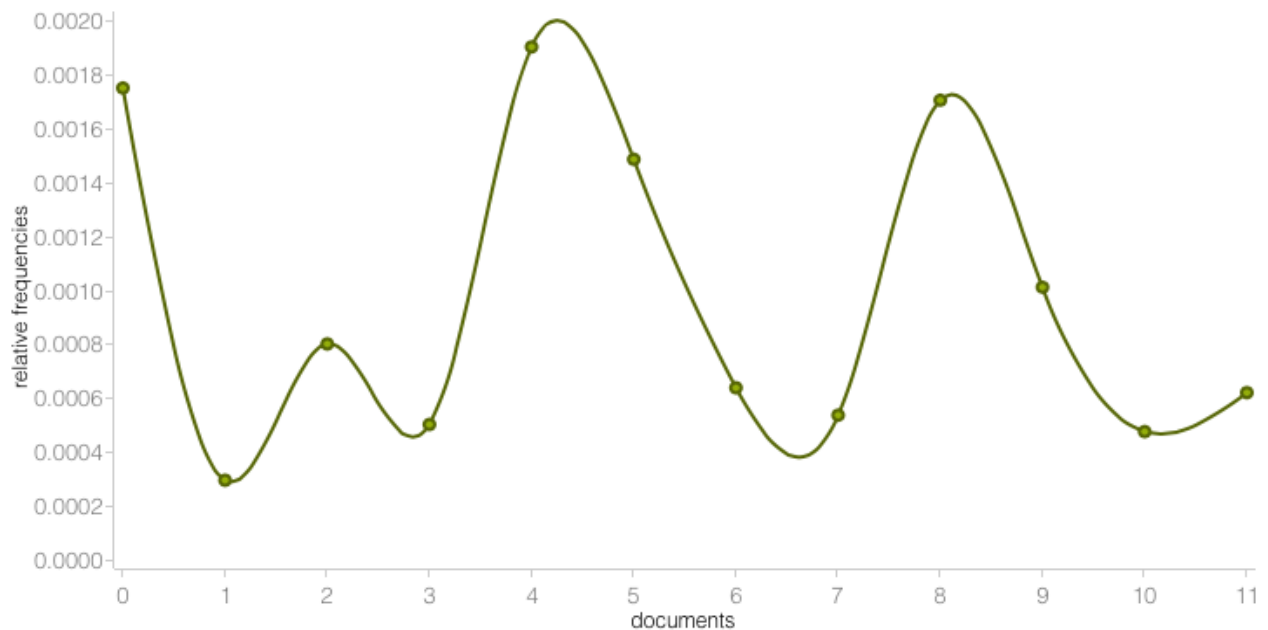
Exploring the Wider Controversy in DREaM

After some searching and additional filtering of the corpus (much of which consisted of inputting the names, searching for high relative frequencies of 'woman' and 'women', and selecting the spikes), I have located 12 pro-woman texts of various genres. They include: seven essays, one

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Margaret Askew's "Women's speaking justified" (number 2 in Trends) and Mary Astell's "A serious proposal to the ladies, for the advancement of their true and greatest interest" (number 4 in Trends).

Interestingly, the heaviest hitters when it comes to temperature are Mary Astell (number 4) and Mary Chudleigh's "The female advocate" (number 9) -- indicating perhaps that these texts have most by way of physiological arguments, rather than mere body-talk. When we look back at our range of relative frequencies for the Swetnam controversy, however, we see that our wider corpus exhibits much greater variation in relative occurrence of body terms, with their combined frequency for some texts falling to 0.04%. (Let it be observed, however, that these dips also happen to be the genre outliers: 3 and 11 are plays, 1 is a rhetorical exercise, and 10 is a kind of compendium of illustrious women. Oddly, 6 is a discourse against unjust marriages (written by a man), while 6 is Mary Tattle-well's satirical response to the misogynistic Juniper lectures.

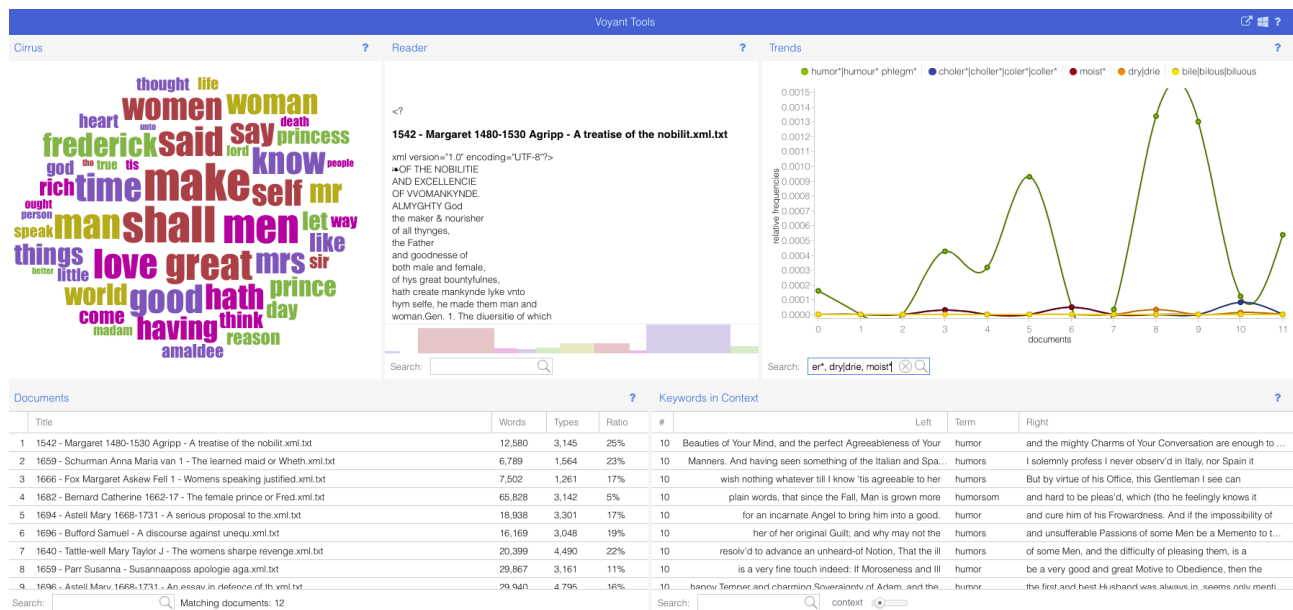


The four humours

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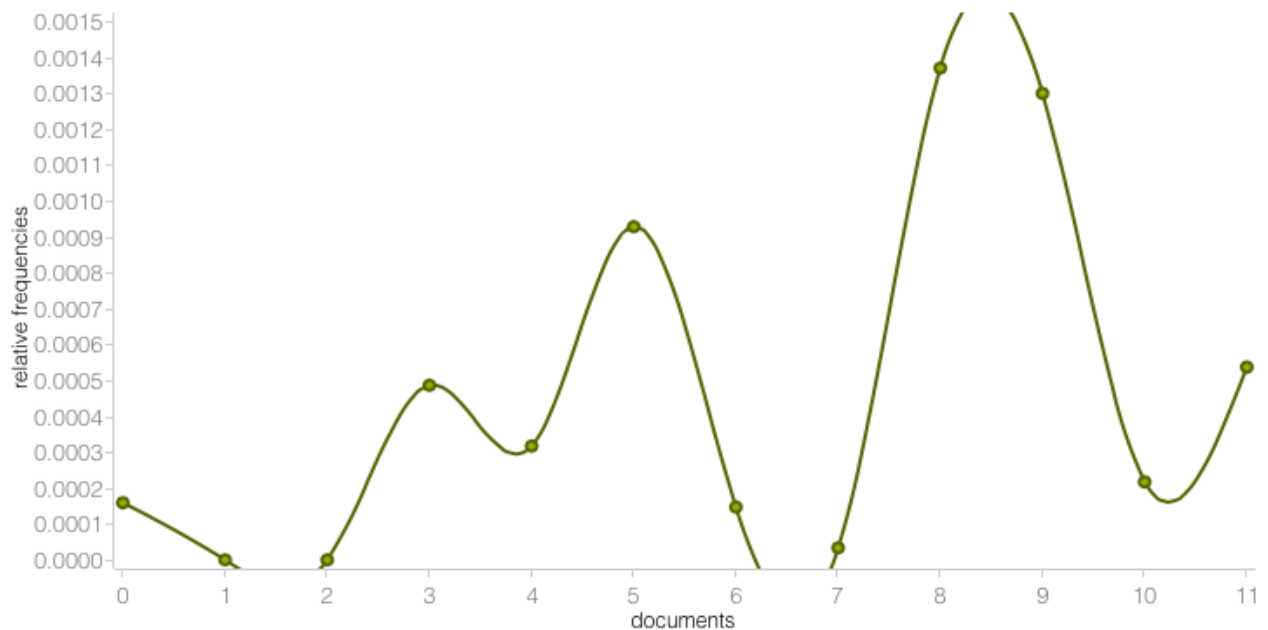
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Unlike in the seed corpus, four humour terminology is in fact quite present in at least four texts on hand: again, Mary Astell's "The defence of the female sex" and Mary Chudleigh's "The female advocate" lead the way. Samuel Budford's treatise on marriage (which perhaps should not be in the corpus after all) follows at a close third, and two of the plays -- Mary Pix's "The beau defeated" (11) and Catharine Bernard's "The female prince" (3) are evenly matched.

Overall, however, the humours seem far more present in the wider corpus than they are in the seed corpus: in the seed corpus, the top hit scored at a low relative frequency of 0.055% compared to 0.14% in the wider corpus.



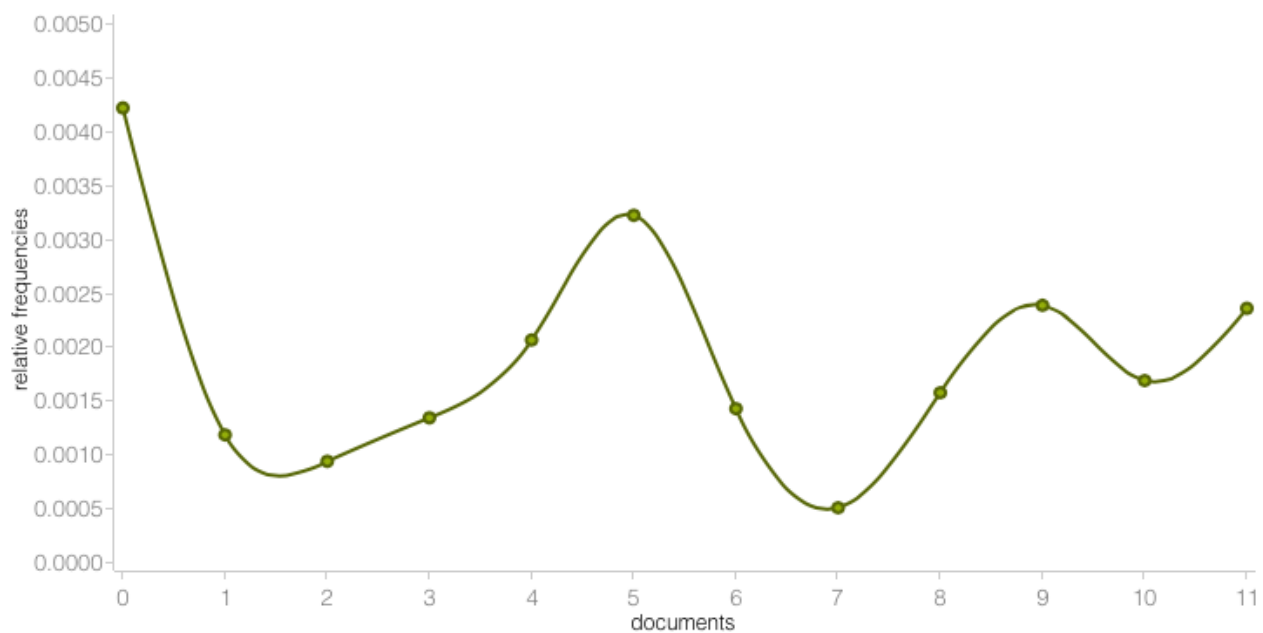
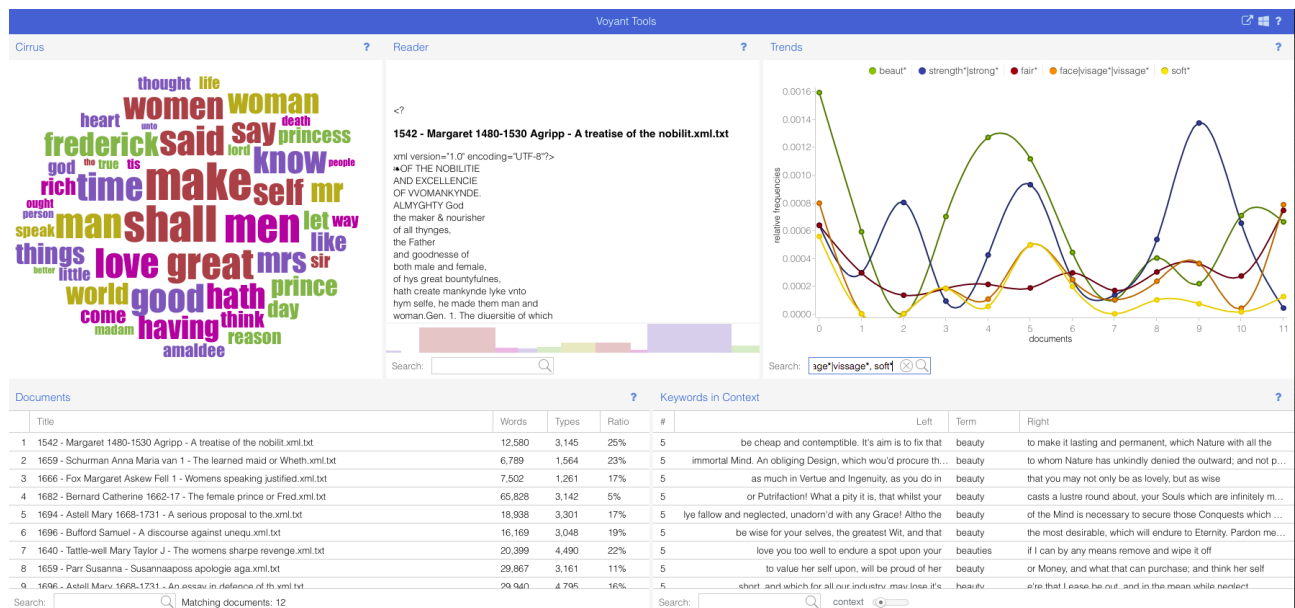
Strength and beauty

Finally, our strength and beauty search cluster seems to return quite an interesting set of results: for one, beauty is by far the most common in the translation of Agrippa (0) and in Mary Astell's "A serious proposal" (4). Strength, on the other hand, features prominently only in Mary Chudleigh's work (9), where it seems to have some argumentative significance: "If the Scripture tells us," she tell us, "that tho the Beasts/ are made for Man, yet a good Man is merciful/ to his Beast; much more regard is/ there to be had of a nobler Creature, which/ tho inferior in Brutal Strength of Body,/ yet in Strength and Beauty of Reason (when/ cultivated) equals the superior Sex."

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Another interesting observation is that the pro-woman treatises in the wider corpus -- with the exception of Agrippa -- seem to be comparably occupied with strength and beauty, with the range of most texts varying between 0.10% and 0.15%. Furthermore, of the three texts which ranked lowest in this category (2, 3, 7), two are genre outliers, with 3 being a play and 7 a kind of open letter against the author's excommunication.

Further steps

By looking at the wider corpus, we have found that the best candidates for pro-woman writings have similar relative frequencies of words we associated with hot and cold on the one hand and strength and beauty on the other. Interestingly enough, it seems to be the texts that fall within the general genre of 'defense of women' that tend to have higher proportions of such words, reflecting perhaps the circulation of and reuse of common tropes and arguments. However, since the majority of our wider corpus is published three decades after the Swetnam controversy, we cannot infer that these thematic similarities are a result of the controversy's direct influence.

We can, however, observe that higher relative frequencies of heat and cold, strength and beauty do seem to be fairly good indicators that a particular text in a woman-themed corpus will be a defense of women. Accordingly, the preliminary findings issuing from this project could be used in a wider study of early modern pro-woman treatises by:

1. populating the decades between the seed corpus and the wider corpus (1620 to 1660), possibly by including works written by men;
2. tracing the relative frequencies of body-related terms diachronically from the Swetnam controversy through the missing decades;
3. building a corpus of pro-woman treatises published in English before the beginning of the controversy (1615), and investigating them for thematic differences from post-controversy texts.

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A diachronic view of the relative presence of body-related arguments in pro-woman treatises would provide important insights into the pre-history of feminism. Data on body-related arguments could then be used to test theses in the history of feminist thought such as that of Erica Harth, who holds that innovations in early modern philosophy, and particularly the mind-body dualism of Descartes, had a decisive influence in moving the gender debates away from the differences in men's and women's bodies to the similarity of their immaterial souls (1992, 8). Once again, if this is true, the corpus of pro-woman treatises should see a steady, or perhaps even an abrupt, fall in the use of body-related terms over the course of the 17th century.

Bibliography

Campbell, Julie D. 2006. *Literary circles and gender in early modern Europe a cross-cultural approach*. Aldershot, England: Ashgate. <http://site.ebrary.com/id/10211209>.

Campbell, Julie D., and Maria Galli Stampino. 2011. *In dialogue with the other voice in sixteenth-century Italy: literary and social contexts for women's writing*. Toronto: Iter Inc.

Henderson, Katherine U., and Barbara F. McManus. 1985. *Half humankind: contexts and texts of the controversy about women in England, 1540-1640*. Urbana: University of Illinois Press.

Kelly, Joan. "Early Feminist Theory and the 'Querelle Des Femmes', 1400-1789." *Signs* 8, no. 1 (October 1, 1982): 4–28.

Maclean, Ian. 2013. "La querelle des femmes en France et en Angleterre de 1615 à 1632 : conjoncture et structures." *Littératures classiques* 81: pp. 147-171.

URL : www.cairn.info/revue-litteratures-classiques-2013-2-page-147.htm.

Campbell, Julie D. 2006. *Literary circles and gender in early modern Europe a cross-cultural approach*. Aldershot, England: Ashgate. <http://site.ebrary.com/id/10211209>.

Campbell, Julie D., and Maria Galli Stampino. 2011. *In dialogue with the other voice in sixteenth-century Italy: literary and social contexts for women's writing*. Toronto: Iter Inc.

Henderson, Katherine U., and Barbara F. McManus. 1985. *Half humankind: contexts and texts of the controversy about women in England, 1540-1640*. Urbana: University of Illinois Press.

Kelly, Joan. "Early Feminist Theory and the 'Querelle Des Femmes', 1400-1789." *Signs* 8, no. 1 (October 1, 1982): 4–28.

Maclean, Ian. 2013. "La querelle des femmes en France et en Angleterre de 1615 à 1632 : conjoncture et structures." *Littérature classiques* 81: pp. 147-171.

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Malcolmson, Cristina, and Mihoko Suzuki. 2002. Debating gender in early modern England, 1500-1700. New York: Palgrave Macmillan.

Tadié, Alexis. “La querelle des femmes dans le monde de l’imprimerie en France.” Banque de données AGON, April 10, 2015. <http://base-agon.paris-sorbonne.fr/querelles/la-querelle-des-femmes-dans-le-monde-de-l-imprimerie-en-france#>.

Contact

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