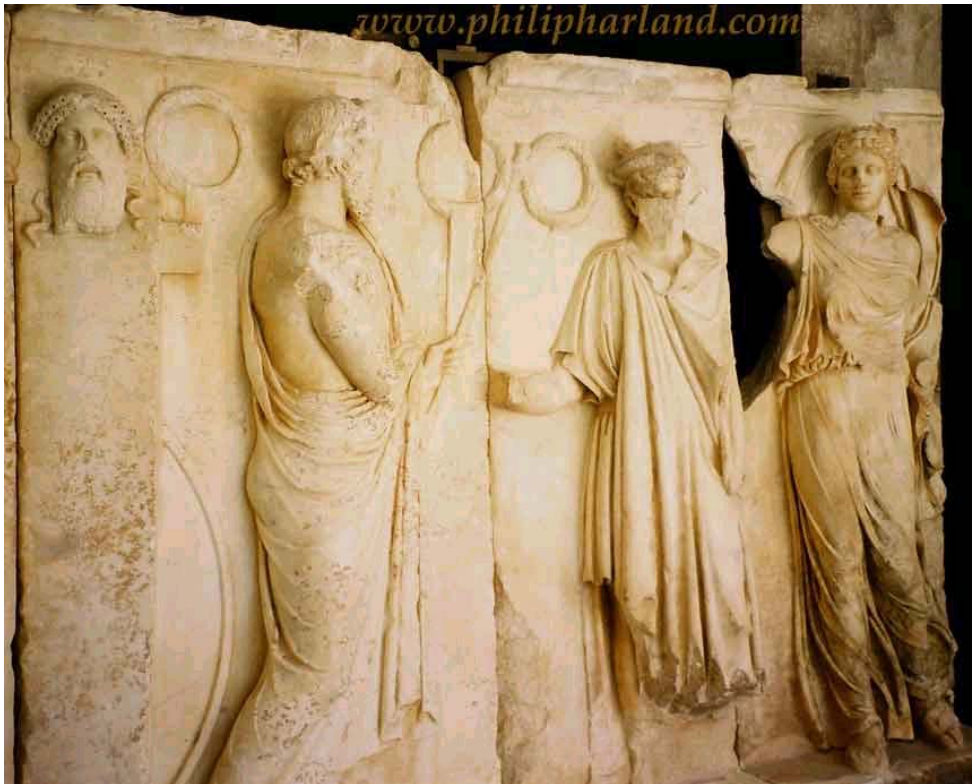# Managing Momus:

Following the fortunà and frequency

of a trope in *Early English Books Online.*

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Zoilus (centre right)
meets Demos (centre left)
and is crowned by Polis.

From: History….

(innocently)

…..To: Historical Text Mining (??)

The historian starts with:

- •Open-ended research problems (more or less)

- •*Sources for interpretation*

Does s/he have to move towards the text miner's

- •*Data for rule-bound analysis*

- •Pre-structured tools and assumptions

An exemplary story from my AHRC project "Science and Patronage in England, 1558-1625".

Question: how did elite patronage affect the production of Elizabethan and Jacobean works of "science"/natural philosophy/knowledge of nature?
[N.B. problem of "Whiggish" syntactic tagging!]

Principal primary source evidence: dedicatory epistles to patrons
    700+ printed works (mainly a subset of EEBO)
    30+ manuscript treatises

Principal corpus: Early English Books Online (EEBO)
109,405 "records" (imaged works?)
11,546 with keyed full text (as of 20/7/06 – and rising)

<u>Discovery:</u>

The genre of dedicatory epistle obliges the client to seek to place his [sic] book under the protection of his patron's "honour".

"With your protection, my book and I shall be in good hope…"

"…if your Lordship sees fit to grant my request, that this my first-born bears your honour's name, conceived as it was under your care…"

<u>Question:</u> what is the function of the patron's honour?

Answer: apparently, to enrol the patron's honourable status
positively, as a source of authority
negatively, as defence against critics.

(Patron's honour analogous to the "quality" of a refereed journal?)

*I doubt not that finding, if your Lordship sees fit to grant my request, that this my first-born bears your honour's name, conceived as it was under your care, **my detractors will have their mouths stopped.***

*With your protection, my book and I shall be in good hope **to be freed both from the venomous tooth of Momus, and from the malevolent aspect of Zoilus. For vipers have put about false reports of my studies.***

Who on Earth (or on Mount Olympus) are Momus and Zoilus?

Few of my audiences, even Oxonians, know!
Lemprière's Classical Dictionary:
"the carping critics of antiquity".

Momus: the Greek god of backbiting criticism, revived in the context of Renaissance courtly backbiting in Leon Battista Alberti's satire, *Momus*, of c. 1450, first printed 1523. Momus responsible for creating wasps, fleas, snakes and other "nasty, biting creatures" [such as modern academic historians?].

Zoilus: Plato's C4 BCE
 contemporary and "first literary critic":
 he said that Homer wrote bad poetry.

LEON BATT: ALBERTI

The trope of Momus, Zoilus and their carping, biting associates is remarkably frequent in the dedicatory epistles of the project's "science" texts (I.e. between1558-1625).

Question:

Are Momus and Zoilus:

a) Just a conventional trope in many dedications?

b) A necessary co-presence with the patron's honour?

c) Possibly indicative of an especially critical / competitive culture in the period when they feature in dedications on EEBO?

Which raised questions of (what I now know as) frequency analysis, corpus linguistics and historical data mining…

But which I did not (and still don't) know how to answer rigorously.

How my amateur research developed:

Question: do Momus and Zoilus occur frequently?

Used Advanced EEBO search for:

keyed texts with:

Keywords: "Momus OR Zoilus" (Booleian search)
Subject: Science
Limit by Date:1473-1700

Intriguing result:
Most of the c.60 results (I.e books) were published in the period of my project: 1558-1625.

Question: were references to Momus and Zoilus (as potential signifiers of a critical, competitive culture) especially frequent in the Elizabethan and Jacobean periods?

Problems I realised (then or now) I encountered:
(Experts: please tell me how to overcome them properly).

1. The "keyed full text" works on EEBO form a fantastic "corpus", but they do not form a ready-made corpus for historical linguistics.

2. Variants: I found the very basic Booleian query box inadequate for finding (e.g.), Momes, Momusses, Momish, Zoylus, Zoylites.

3. Language: as classical terms, the names appear in English, Latinate and Greek forms, and even in ***ancient*** (N.B.) Greek characters. The Renaissance texts themselves are in English, Latin, French, Scots, etc..

4. Building my own database of occurrences was tedious: opening, cutting-and-pasting occurrences from web-pages limited to 50 occurrences per page (and often infinitely slowly loading).

Neophyte's problems with frequency and interpretation of its significance.

(Remember: I am your ideal historian – ignorant and teachable, interested and enthusiastic – who might stumble into historical text mining.

1. No occurrences before 1540: But few books, especially vernacular ones, printed in England between 1473 and 1540.

2. The genres of printed books evolve rapidly, e.g. from Latin to English, from theology and religious controversy to more secular works.

3. Elite patronage (and hence [??] mention of patronly honour, modern Momuses) increases after 1558); forms and formulae of patronage discourse spread and develop.

4. Printing does not proceed uniformly (Laudian censorship of some genres (especially religious) from 1620s, breakdown of censorship in English Civil War and Interregnum and reimposition in 1660s, attacks on nobility, economic problems of publication in 1640s and 50s.

My and a pseudo-expert's suggestions.

1. Search for ["Momu*" OR "Zoil* or "Zoyl*"], for these stems capture most language forms (but not Momos, Momes), and do not capture rogues (as "Mom*" would do). But it excludes semantically linked clusters such as "brood of vipers", "venomous wasps".

2. Correlate occurrences of the above terms with signifiers of patronage culture (such as "patron*") – but these do not work for the many Latin texts, whereas Momu* and Zoil* work for English AND Latin. [I.e. did patronage culture continue to grow, but with a lessened concern for the "carping critics"?]

3. Correlate search results for Momish terms with a basket of unconnected words, assumed to be invariant with respect to the period and the Momus problem. But which? How? [I chose "God AND country AND sword"]. And these do not capture occurences in Latin texts, etc.?

Further annoyances, arising from EEBO's only partial suitability to this kind of analysis.

1. The results are returned slowly, and hits require opening each link to confirm their suitability.

2. IMPORTANT: As a historian I am interested in change over time.
   I had to use pen and paper to record a table of occurrences plotted against time.

And so to the results.

I got some, which satisfy me (just), and impress other historians and academics ignorant of rigorous historical linguistics.

But *I know* they are amateurish and flaky. How well can you miners improve them without suppressing my historian's questions and concerns?

1473-1539	0	29	2	0	0
1540-49	6	8	3	2	200
1550-59	3	8	14	0.214286	21.42857
1560-69	14	24	27	0.518519	51.85185
1570-79	24	31	66	0.363636	36.36364
1580-89	33	52	105	0.314286	31.42857
1590-99	46	74	177	0.259887	25.9887
1600-09	37	130	249	0.148594	14.85944
1610-19	39	147	256	0.152344	15.23438
1620-29	29	137	209	0.138756	13.8756
1630-39	32	159	240	0.133333	13.33333
1640-49	30	167	325	0.092308	9.230769
1650-59	42	213	406	0.103448	10.34483
1660-69	34	213	404	0.084158	8.415842
1670-79	24	231	442	0.054299	5.429864
1680-89	30	296	543	0.055249	5.524862
1690-99	30	312	536	0.05597	5.597015

		patron	cd
1473-1539	0		
1540-49	19.85		
1550-59	21.42857		
1560-69	51.85185		
1570-79	36.36364		
1580-89	31.42857		
1590-99	25.9887		
1600-09	14.85944		
1610-19	15.23438		
1620-29	13.8756		
1630-39	13.33333		
1640-49	9.230769		
1650-59	10.34483		
1660-69	8.415842		
1670-79	5.429864		
1680-89	5.524862		
1690-99	5.597015		

The Rise of Momus and Zoilus
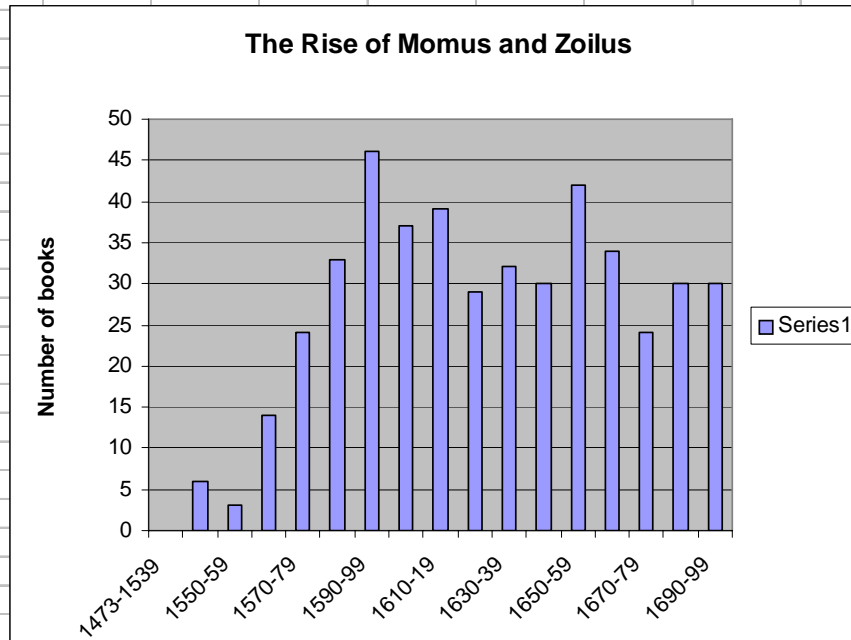
The Rise and Fall of Momus and Zoilus
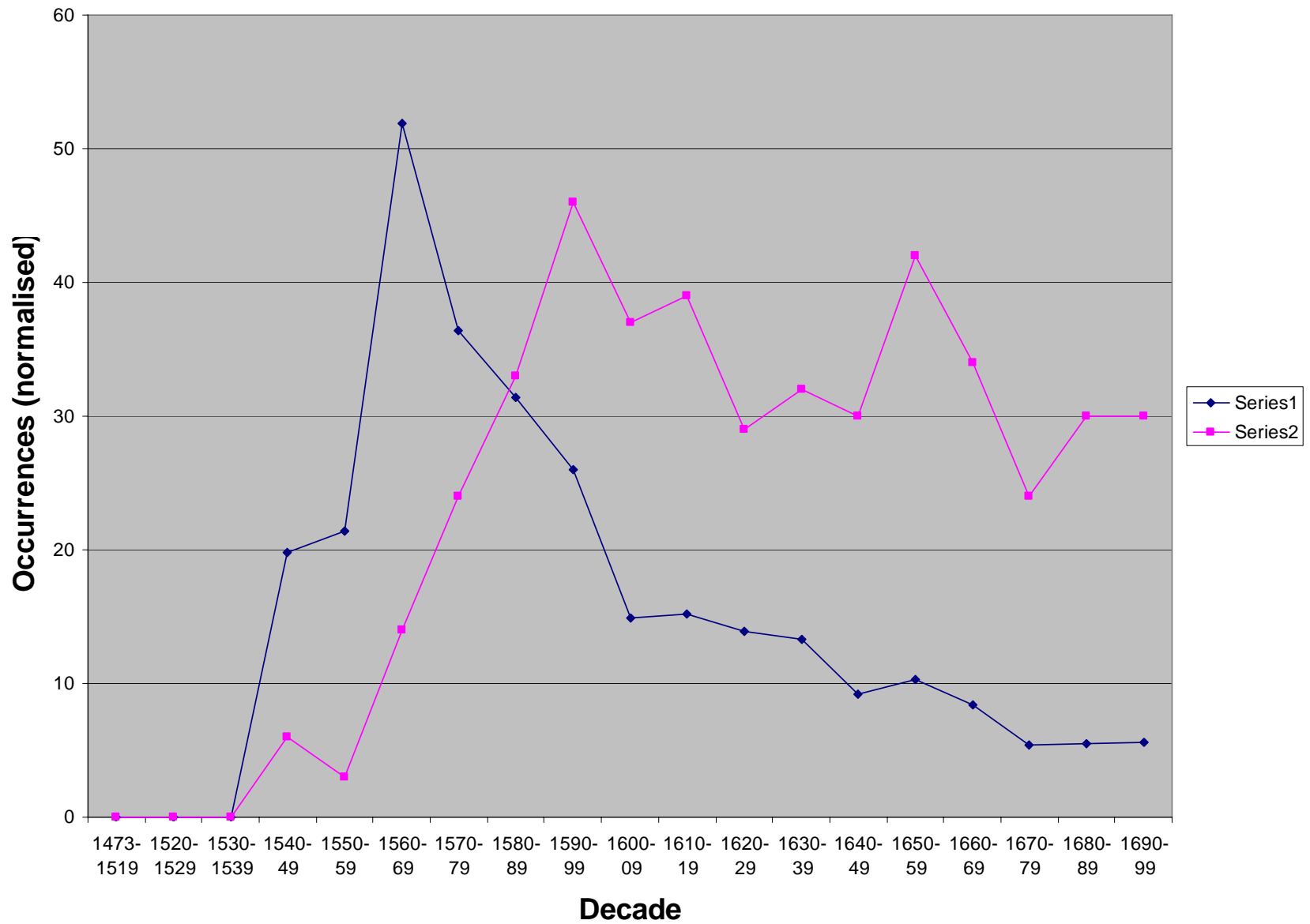
Concluding impressions – 1.   positive.

1. Historians can generate valuable HTM-style results: e.g. the trope of Momus (and, putatively, concern about cynical critics as subverters of textual authority) was historically limited in England to the period 1540-1610.

2. With the increase in searchable "historical linguistic corpora" of a kind (as EEBO is- of a kind only), practising historians will increasingly formulate research questions like mine.

3. It is clear that the data-mining community can help we historians to employ rigorous analyses (all suggestions gratefully received!)

4. We can help you by presenting real historical problems that will widen application to and awareness of your methods in the BIG, POPULAR field of history proper.

Concluding impressions – negative: "the past is another country".

1. Historians treat texts as problematic sources (for hermeneutic consideration), not "data [I.e. givens] for analysis". [E.g. how do text miners one deal with the historical emergence of print, changing print cultures, political and economic constraints on the production of texts?]

2. My impression of " 'historical text' mining" [HTM], as practiced by computational linguisticians, is that it severely underestimates the problems of applying directly contemporary/ "synchronic" methods to historical texts [e.g. positivisitic syntactical tagging, automatic, versus expert generated and interpreted rules.]

3. Historians will formulate problems that may intersect with HTM interests [e.g. POS tagging], but should not driven by them. You must reach out to the research questions we will pose.

4. HISTORIANS ARE CONCERNED WITH CHANGE OVER TIME. HTM seems best able to treat corpora as a vanished but synchronic block. Historians want tools for DYNAMIC, TEMPORAL ANALYSIS.