



*Encyclopaedia of
Shakespeare's
Language*

Lancaster
University

Encyclopaedia of Shakespeare's Language AHRC- funded Project: Panel Meeting

27th July 2016
FASS Building
@ShakespeareLang



Arts & Humanities
Research Council



THE QUEEN'S
ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2015



Welcome!

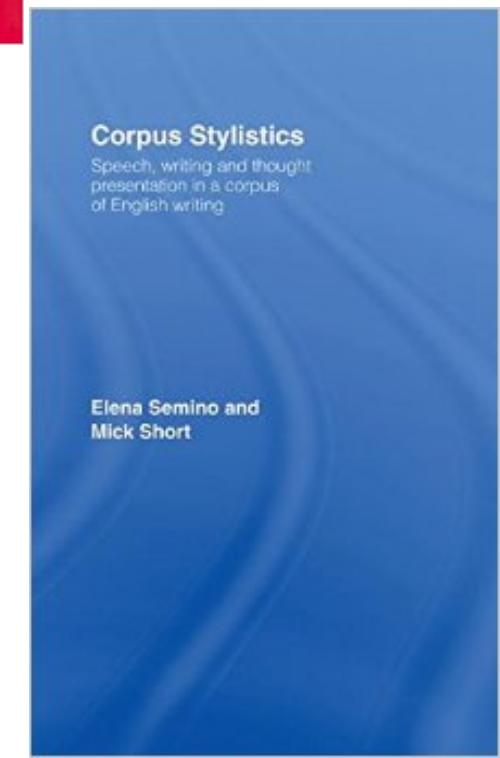
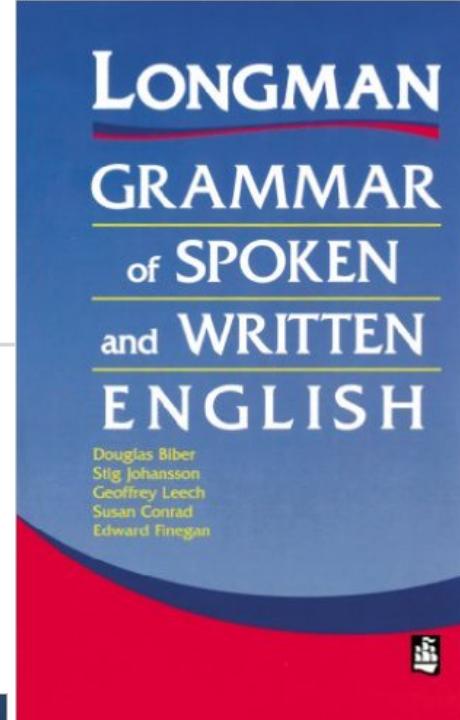
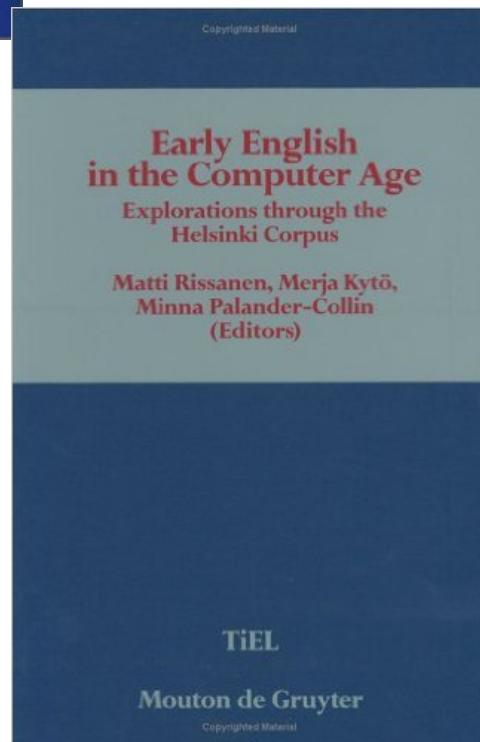
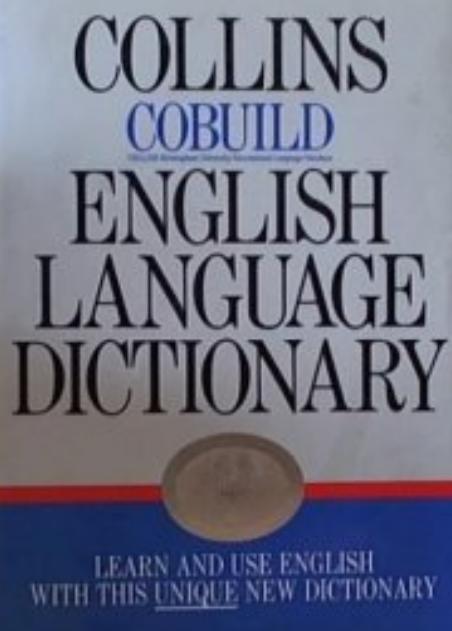
Who we all are:

- The project team
- The Advisor-Ambassador panel

Our plan for today

What the project aims to do

- Produce the first comprehensive account of Shakespeare's language using methods derived from corpus linguistics – an approach that uses computers in large-scale language analysis.





'LEADING THE WAY
IN CORPUS-BASED
NLP RESEARCH'

UCREL is a
research centre of
Lancaster
University.



specialize in the automatic or computer-aided analysis of large bodies of naturally-occurring language ('corpora'). We have a record of achievement of more than forty years as pioneers in this field. We remain at the leading edge of computer corpus construction and analysis. Our work focusses on modern English, early modern English, modern foreign languages, minority, endangered, and ancient languages.



ESRC Centre for Corpus Approaches to Social Science (CASS)

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CASS is a Centre designed to bring a new method in the study of language – the **corpus approach** – to a range of social sciences. In doing so it provides an insight into the use and manipulation of language in society in a host of areas of pressing concern, including climate change, hate crime and education. By providing fresh perspectives on such problems, we are helping to develop new approaches to challenging practices such as hate speech both in terms of raising awareness and of informing policy makers and other stakeholders of how such language may be used to wound and offend.



Latest News



Events

 Search

LATEST NEWS

- [40th Anniversary of the Language and Computation Group](#) (July 19 2016)

RECENT RESEARCH

- [Tracking terrorists who leave a technological trail.](#)

UPCOMING EVENTS

no event

[List all events](#)

CASS ON TWITTER



by @UCREL_Lancaster

IELResearchCentre @UCREL_Lancaster

now the end has arrived #LancsSS16 Thanks to all enterers, helpers and attendees at all the summer tools!!



15 Jul

ELResearchCentre Retweeted

I Rayson @perayson

de range of stuff going on in #LancsSS16 labs right : #NLProc shared task coding, @al586 on regular sessions & @ianNGregory on GIS



15 Jul

ELResearchCentre Retweeted

iS @CorpusSocialSci

: more on statistics - @vaclavbrezina final session on stics #LancsSS16



What are the project's research objectives?

To reveal in unprecedented detail:

- Shakespeare's actual use of language in context;
- The patterns of language that constitute 'varieties' or 'themes' in Shakespeare's works;
- Detailed similarities and differences between Shakespeare's linguistic usage and that of his contemporaries; and
- The understandings that contemporary audiences had of Shakespeare's language.

What will the project produce?

The encyclopedia

- An encyclopedia of two volumes, to be published by Bloomsbury in paper and electronically.
- An app delivering a “lite” version of volume 1.

Electronic “editions”

- Shakespeare's work uniquely enriched with multiple annotation schemes;
- A matching corpus of contemporary playwrights enriched with multiple annotation schemes;
- 321 million words, drawn from Early English Books Online (TCP version), which we will enhance and use for comparisons with Shakespeare's language.

What will the project produce?

Other academic outputs

- At least six major conference presentations, and at least six academic papers.

Engagement and impact activities

- See later presentation

What will be in the encyclopedia?

Volume 1 (a kind of dictionary)

Focuses on the use and meanings of each of Shakespeare's words, both in the context of what he wrote and in the context in which he wrote. Every word is, for example, compared with a 321 million word corpus comprising the work of Shakespeare's contemporaries. The volume establishes both what is unique about Shakespeare's language and what Shakespeare's language meant to his contemporaries.

What will be in the encyclopedia?

Volume 2 (a kind of compendium of semantic patterns)

Focuses on patterns of words in Shakespeare's writings. It describes how these patterns create the 'linguistic thumbprints' of characters, different genders, themes, plays and dramatic genres. It also considers concepts such as *love* and *death*.

Volume 3 (a kind of grammar)

Focuses on grammatical words and patterns.

What do you mean by “Shakespeare’s language”?

Constraints

- We need one stable body of data at the heart of our project (partly for methodological reasons).
- We do not have the resources to engage in author attribution work or textual editing (though the project may have spin-offs for these areas).

So use an edited edition of repute ... the Arden?

- Modern editions are a mish-mash of writings attributed to Shakespeare, and contain various modernizations.

What do you mean by “Shakespeare’s language”?

Our solution?

- Take as core data the plays generally agreed to be part of the Shakespeare canon.
- Use the largest near-contemporary body of work attributed to Shakespeare, i.e. the First Folio (1623), plus *Pericles* and *The Two Noble Kinsmen*.
- But don’t ignore the Quartos. They constitute a secondary dataset.

Lexical items: *Scottish, Irish and Welsh*

Jonathan Culpeper and Alison Findlay

Lexical items: *Scottish, Irish and Welsh*

Henry V : Fluellen, Macmorris and Jamy



Globe Education

- How did contemporaries of Shakespeare view the Scots, Welsh and Irish?
- How did people write about them at the time?

Lexical items: *Scottish, Irish and Welsh*

Focus: words that frequently co-occur with Scottish, Irish or Welsh, i.e. collocates

- **Data:** *Early English Books Online* – approx. 1.2 billion words (?)
- **Period:** 1580-1599 – 82,180,304 words (around *Henry V*)
- **Tool:** cqweb (Andrew Hardie)

Lexical items: *Scots/Scottish*



Thematic groups (amongst the top 50 collocates)

Associated groups (*confederates, ioine*): *Picts, Irish, Britains, Frenchmen, Danes*, etc.

Scottish kings/queens and nobles: *Malcolm, Ferguse, Kenneth, Donald, Bruce, Galled*, etc.

Hostile: *iuadeth, discomfited, borders, invaded, chased*

Scottish histories: *chronicles, writers, yere*

Political power: *nation, nobility, ambassadors*, etc.

Religion: *communion, supper*, etc.

Lexical items: *Irish*



Strongest collocate: *Irish rug*

“Show me a fair scarlet, a vvelch frise, a good Irish rug” (Eliot, 1595)

Lexical items: *Irish*

Thematic groups (top 50 collocates)



Negative connotations (items below are relatively frequent and well dispersed)

Uncivilised: *savage, wild*

Hostile: *wars, enemies, against*

Ungovernable: *rebels*

Associated groups: *Scottish, Scots, (English)*

Insignificant??: *mere*

Political power: *nation, lords*

Language: *tongue, language, speak*

Low frequency means that a number of strong patterns emerging is unlikely.

Thematic groups (top 50 collocates)

Welsh language: *English, tongue, called*

William Allen, *A Conference About the Next Succession* (1595)

“... in the **welsh** also towards the English, who are a different people and of different language, and yet are they governed peaceably by the English, & the English again do account them for their country men ...”



Grammatical items: *Yes, yea and ay*

Jonathan Culpeper

Ways of saying “yes”: Affirmatives

Affirmatives

- Yes
- Yea
- Ay(e)
- Use an auxiliary or modal expression, e.g. “I do”, “I will”
- Important ways of responding to particular types of question

And earlier this year...

Emily: Didn't you take my costume out of the washing machine? (=negative question)

Jonathan: Yes.

Emily: What?

Interpretation 1: Yes, I confirm what you say that I did **not** take your costume out of the washing machine (=negative response)

Interpretation 2: Yes, I confirm what you suspect that I **did** take your costume out of the washing machine (=positive response)

In late Old and Middle English ...

Emily: Didn't you take my costume out of the washing machine? (=negative question)

Jonathan: Yes.

Emily: Ok.

Interpretation 2: Yes, I confirm what you suspect that I **did** take your costume out of the washing machine (=positive response)

The Germanic pattern:

- Use *yes* for a positive response to a negative question
- Use *yea* for a positive response to a positive question, “Did you take my costume? *Yea*, ...”

The situation in Shakespeare's time

What scholars think:

- The Germanic pattern can be detected in Early Modern English (Salmon 1965: 133)
- (1) Pattern was breaking down around 1600, with *yes* taking over all functions, and (2) *yea* being relegated to emphatic usage and regional dialect (Crystal and Crystal 2002: 373)

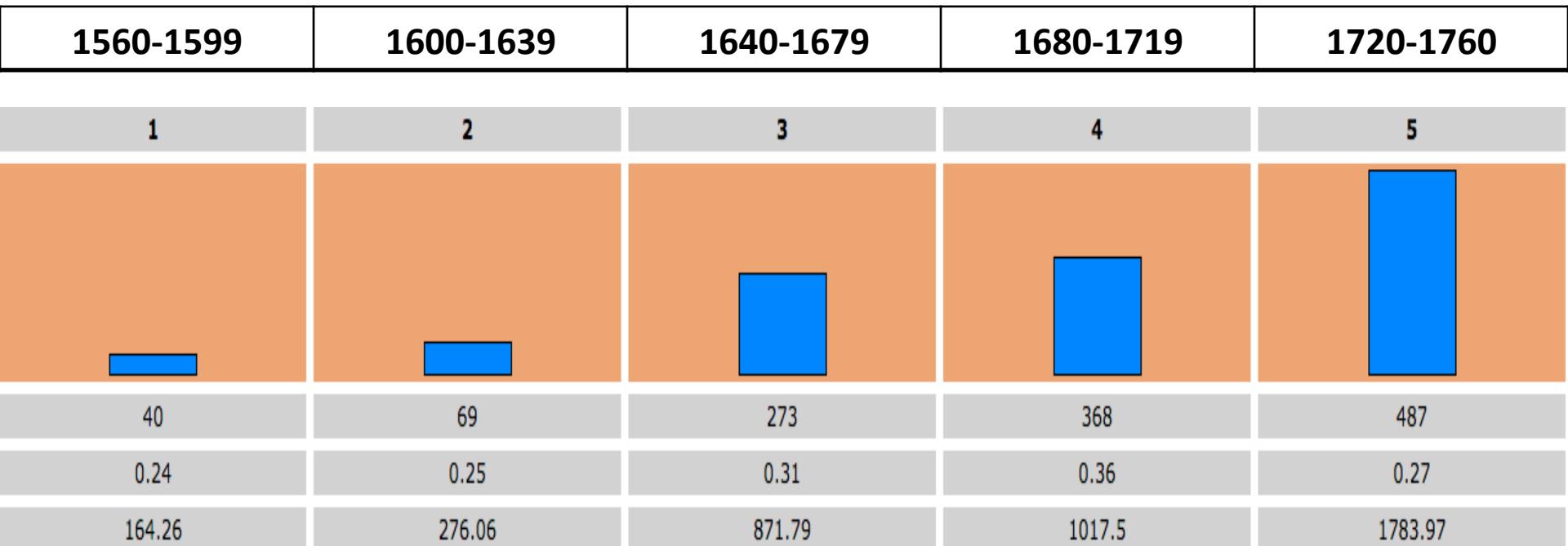
Comedies: Use of *Yes* and *Yea*

100 randomized instances of *Yes*

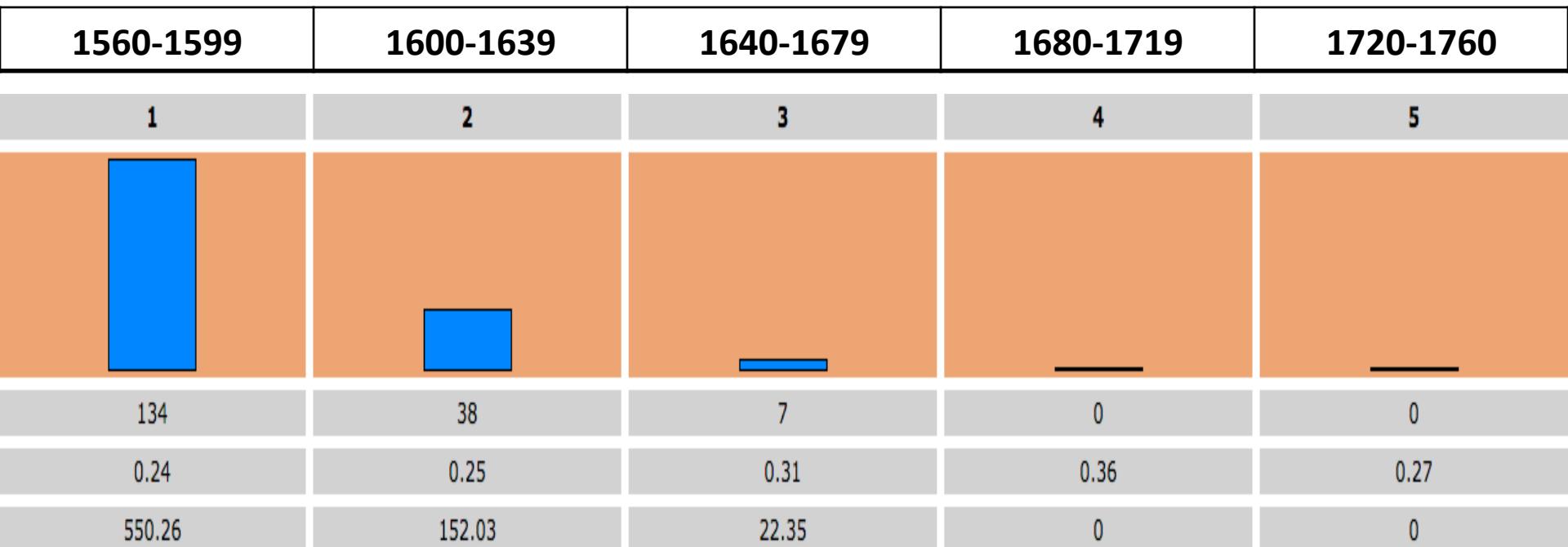
All 45 instances of *Yea*

	<i>Yes</i>	<i>Yea</i>
Preceding Negative questions	13% (13)	0% (0)
Preceding Questions	51% (51)	53% (24)

Distribution over time in the Corpus of English Dialogues: Yes



Distribution over time in the Corpus of English Dialogues: Yea



Was *yea* relegated to emphatic uses?

Yes, there is a tendency:

Mess. Why then bid me be free: will you?

Men. Yea surelie, be free, for my part.

Warner, Menaecmi, 1595

Was *yea* relegated to regional dialect?

Difficult to say:

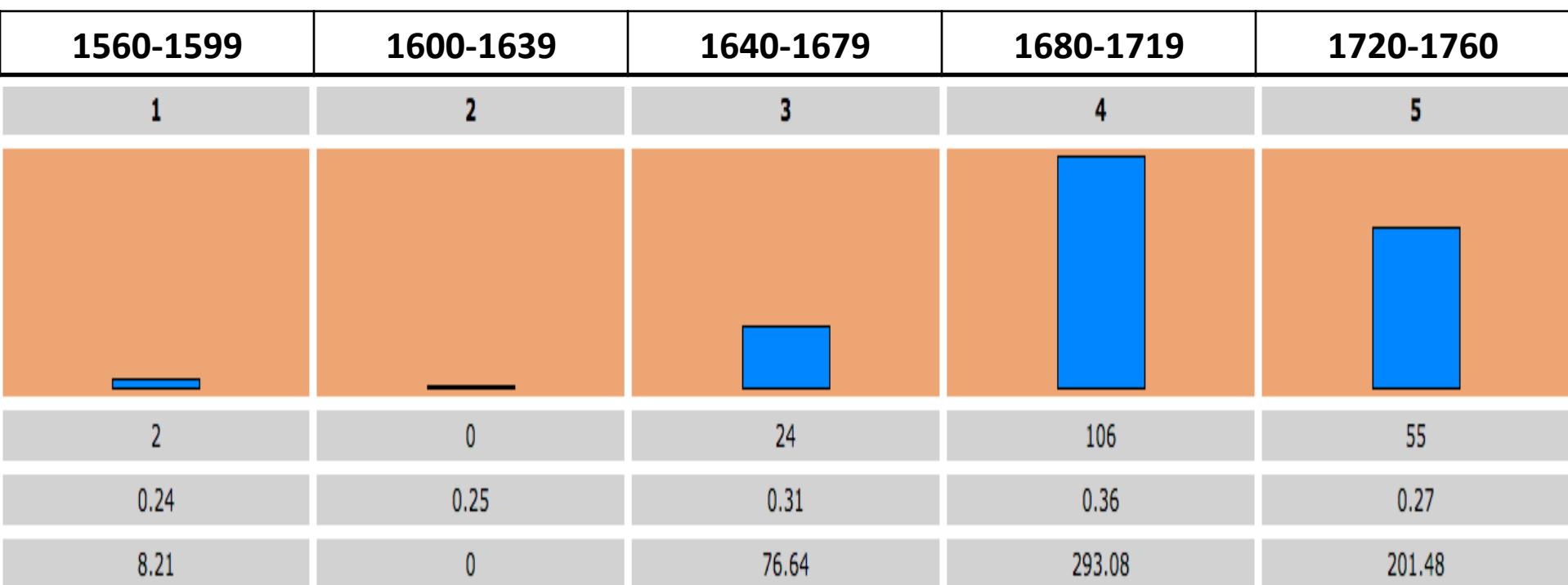
- It is not confined to middling or low status speakers;
- It appears in high-prestige genres;
- One contemporary English language teaching book for French refugees has it as the default form.

What about ay(e)?

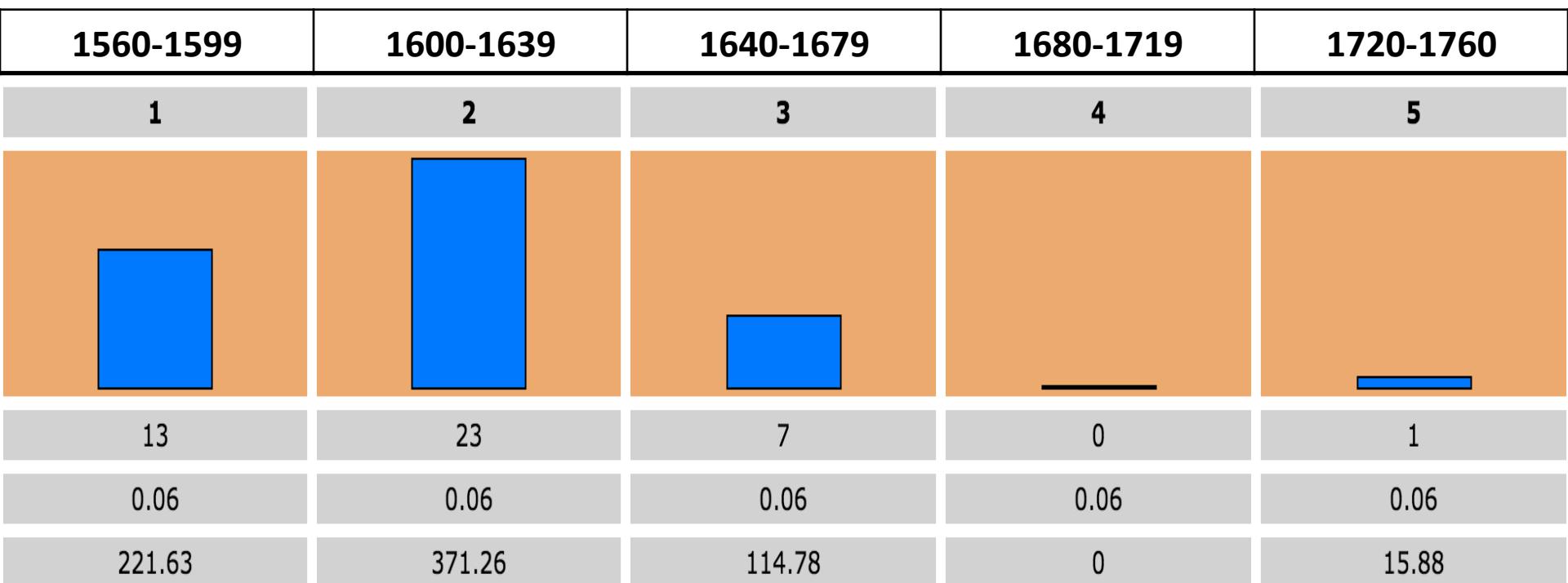
What scholars think:

- Oxford English Dictionary: Aye “appears suddenly about 1575, and is exceedingly common about 1600”
- Aye follows yea (Salmon 1965: 133)

Distribution over time in the CED: Ay(e)



Distribution over time in the CED: $I (=Ay)$



Aye follows yea?

- Ay occurs twice as densely in comedy plays compared with yea; it's more colloquial.
- Ay and yea tend to co-occur with different words.
- But there is one thing they have in common: both are quite often followed by *but* (which is not the case with yes)
- No evidence that it is dialectal.

Character profiles: *Romeo and Juliet*

Jonathan Culpeper

Character profiles: *Romeo and Juliet*



Lily James
and Richard
Madden.

(Photo: Johan Perrson)

- What language characterizes Romeo and what language, Juliet? What are their linguistic styles, their idiolects?

Character profiles: *Romeo and Juliet*

- Studies of linguistic style normally involve the analyst spotting linguistic features that might be diagnostic of that style, and then offering analysis/discussion of those.
- Limited to human spotting abilities. As John F. Burrows (1987: 1) put it, 'It is a truth not generally acknowledged that, in most discussions of works of English fiction, we proceed as if a third, two-fifths, a half of our material were not really there.'
- The solution is to identify statistically key words, i.e. get a computer to compare the frequencies of words in one body of data against another and identify which are unusual relative to the other. And then analyze/discuss those.

Character profiles: *Romeo and Juliet*

Rank-ordered keywords for Romeo and Juliet (raw frequencies in brackets)

Romeo	Juliet
beauty (10), love (46), blessed (5), eyes (14), more (26), mine (14), dear (13), rich (7), me (73), yonder (5), farewell (11), sick (6), lips (9), stars (5), fair (15), hand (11), thine (7), banished (9), goose (5), that (84)	if (31), be (59), or (25), I (138), sweet (16), my (92), news (9), thou (71), night (27), would (20), yet (18), that (82), nurse (20), name (11), words (5), Tybalt's (6), send (7), husband (7), swear (5), where (16), again (10)

Character profiles: *Romeo and Juliet*

Romeo:

- She hath, and in that sparing makes huge waste; For beauty, starv'd with her severity, Cuts beauty off from all posterity. She is too fair, too wise, wisely too fair, To merit bliss by making me despair: She hath forsworn to love, and in that vow Do I live dead that live to tell it now. (I.i)
- If I profane with our unworthiest hand This holy shrine, the gentle sin is this; Our lips, two blushing pilgrims, ready stand To smooth that rough touch with a tender kiss. (I.v)

Character profiles: *Romeo and Juliet*

Juliet:

- If he be married, / Our grave is like to **be our** wedding-bed (I.v.)
- If they do see thee, they will murder thee (II.ii.)
- But if thou meanest not well (II.ii.)
- Is thy news good, or bad? answer to that; Say either, and I'll stay the circumstance: Let me be satisfied, is 't good or bad? (II.ii)
- Tis almost morning; I would have thee gone; And yet no further than a wanton's bird [...] (II.ii.)

Play genre: Tragedy vs. comedy

Dawn Archer

Love is a common theme in Shakespeare's works

In Archer et al (2009), we explored the *love* theme within:

- 3 “love” tragedies (*Othello, Anthony & Cleopatra, Romeo & Juliet*)
- 3 “love” comedies (*A Midsummer Night's Dream, Two Gentlemen of Verona, As You Like It*)

... to determine how the 3-Cs/3-Ts compare in their usage

LOVE OVERUSED IN “LOVE” COMEDIES

(relative to the three “love” tragedies)

PARTICIPANTS ...

Twosomes – ‘couples’, ‘lovers’

Males – ‘lover’, ‘suitor’

Females – ‘virgin’, ‘wanton’

**A DIFFERENT GENDER BIAS:
PARTICULARLY IN RELATION
TO AGENCY ...?**

“intimate/sexual relationship”
material divides into ...

Male agents – ‘kiss’, ‘kissing’, ‘kissed’, ‘kisses’

Female patients – ‘seduced’, ‘deflowered’

Both ‘fall in love’, ‘falling in love’, ‘fell in love’

... **PROCESSES**

Collocate information (at the domain level)

EYES and **HEART** most frequent items ... but **TEARS** also worthy of investigation ...

Connection seems to be:

Relationship between physical beauty and love (e.g. **EYES**, **LIPS**)

Metaphorical expressions relating to love (e.g. **HEART**)

(Lack of) reaction to love (e.g. **TEARS**)

IN THE COMEDIES ... “intimate relationship” collocates with ...	
objects	“I kiss the <u>instrument</u> of their pleasures”
general actions	“Think true love <u>acted</u> simple modesty”
anatomy & physiology	“... a fire sparkling in lovers <u>eyes</u> ”
pronouns (male)	“if thou Can cuckold <u>him</u> , thou do thyself a pleasure, me a sport”

Collocate information (at the domain level)

EYES tend to occur in *Midsummer Night's Dream* (Puck putting love potion in Titania's eyes).

Worth relating to idea that a woman's eyes = an aspect of her beauty that could capture men?

TEARS – closely tied to unrequited love:

Phebe God shepherd, tell this youth what it is to love

Silvius It is to be all made of sighs and **tears**; And so am I for Phebe (*As You Like It*)

IN THE COMEDIES ... “intimate relationship” collocates with ...

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general actions	“Think true love <u>acted</u> simple modesty”
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Other “overused” categories in 3 comedies

Living
creatures

Negative – bears, serpent, snail, monster, adder, snake, claws, chameleon, worm, monkey, ape, weasel, toad, rat

Neutral – cattle, horse, goats, creature, capon, nest

Positive – deer, dove, nightingale

(Not)
sensible

V. interesting connection with love ...

“We that are true lovers run into strange capers; but as all is mortal in nature, so is all nature in love mortal in folly” ... AYLI

Sensory:
taste

**Sweet/-er/-est – representative of “sweet talk” used in courtship
bitter/-ness, sour/-est, taste/-s – often relate to the troubles of love
(e.g. unrequited love)**

Love “underused” in tragedies (relative to 3 comedies)

- The “love” tragedies focus, instead, on ‘war’, ‘lack of life/living things’, ‘anger’, ‘religion and supernatural’, ‘lack of power’, ‘movement’, etc.
- Also a difference in their representation of *love*:
Much ***darker*** in the “love” tragedies (according to our analysis ...)

“Overused” categories in the three tragedies

War	Lack of life	Religion / supernatural
Not calm / angry	Lack of power	Movement

Not calm/
angry

Captures violent conflicts characterising tragedies ... esp. in *R&J* and *Othello*. **Rage, fury** - fairly evenly distributed in our 3 “love” plays but ... **revenge** > all but one from *Othello* ... **abused, abuse** > Othello reflecting on Desdemona’s treatment of him ... **whipped** > all but one from *A&C* **slew** > all but one relating to deaths of Tybalt or Mercutio in *R&J*

Lack of
power

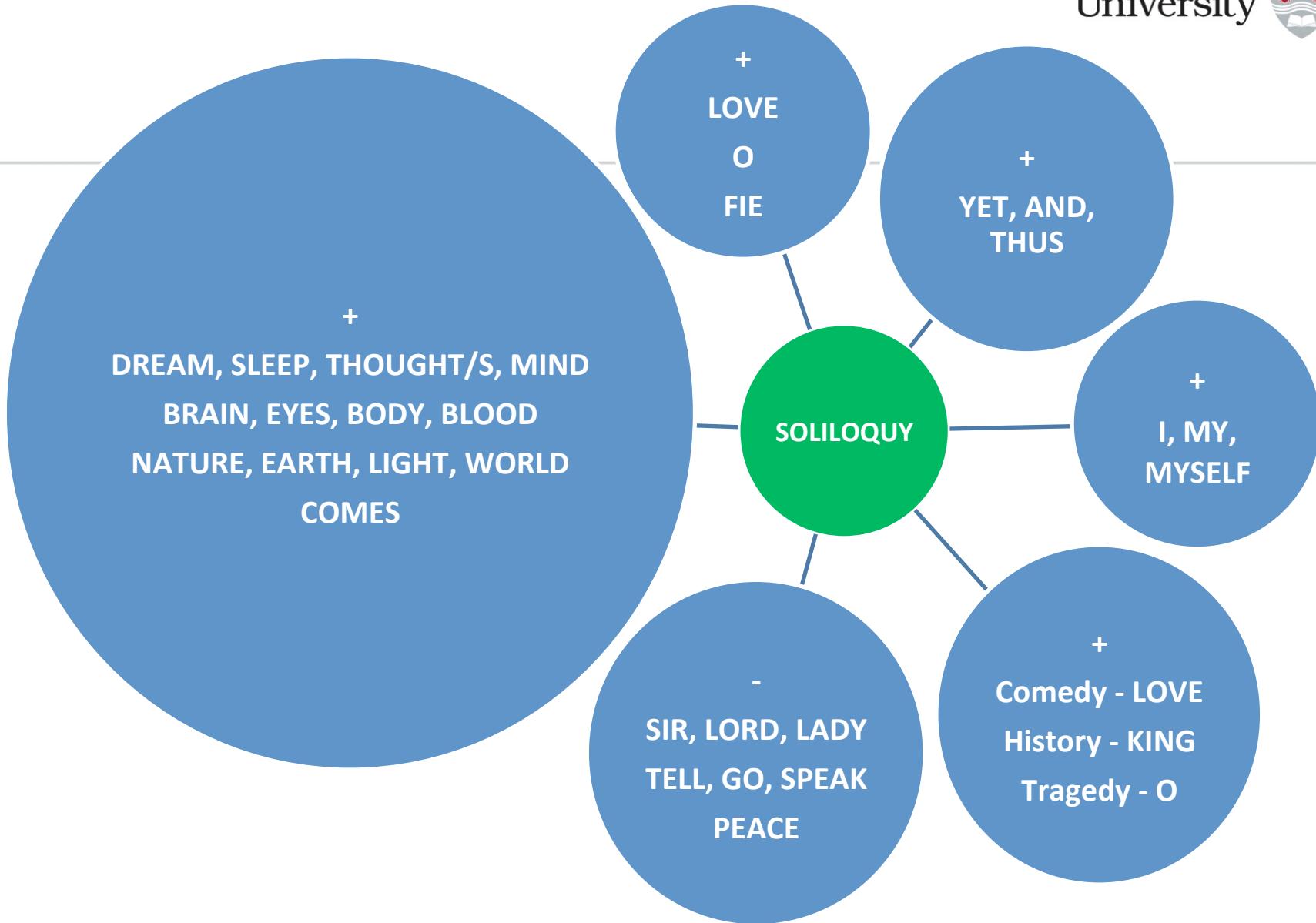
Hierarchies differ in terms of freq. and type:
more ‘domestic’ in comedies – more ‘military’ here.
Knave, sirrah, minion, etc. – tend to be used abusively

Movement

Military activity in *A&C* and *Othello* ... but also metaphorical usages:
Othello Are not you a strumpet?
Desdemona No, as I am a Christian; If to preserve this **vessel** for my
 lord From any other foul unlawful touch Be not to be a
 strumpet, I am non.

The language of soliloquy

Sean Murphy



Ideas

O sleep! thou
ape of death
Cymbeline II.ii

Within the book
and volume of
my **brain**

Thou, **Nature**,
art my goddess
King Lear I.ii

My **thoughts**
are whirled like a
potter's wheel

Henry VI Part I
II.v

Mine **eyes** are
made the fools
o'the other
senses

Macbeth II.i

O **world**, thy
slippery turns!
Coriolanus IV.iv

Comes

N	L3	L2	L1	Centre	R1
1	AND	HERE	WHO	COMES	HERE
2		BUT	HE		
3			SHE		
4			HERE		



O **here comes** my nurse
But **who comes** here

Romeo and Juliet III.ii
Taming of the Shrew II.i

Emotion

C 5.5

H 3.3

Love looks not with the eyes,
but with the mind

Midsummer Night's Dream I.i

My only **love sprung** from my
only hate

Romeo and Juliet I.v

T 1



O thou blessed moon

Antony and Cleopatra IV. ix

O! that I had my wish

Love's Labour's Lost IV. iii



Fie on ambition! **fie** on myself

Henry VI Part 2 IV. x

Fie, fie, fie, fie!

Timon of Athens II. ii

Connecting words

I have thee not **and yet** I see thee still!

Macbeth II.i

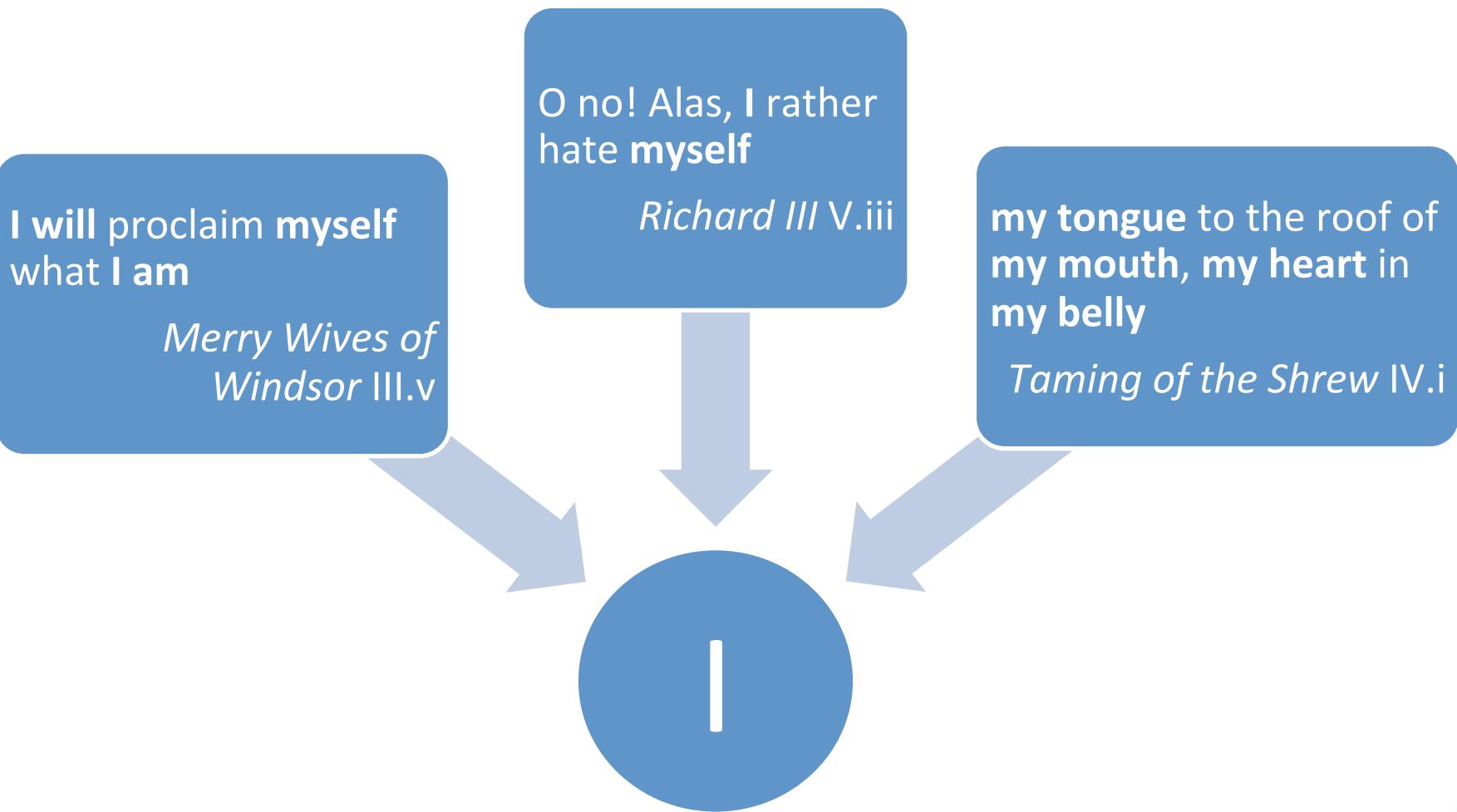
Thus conscience does make cowards of us all,
And thus the native hue of resolution

Hamlet III.i

For who would bear the
whips and scorns of time

Hamlet III.i

The self



Soliloquy by genre



+

love, I, she

+

Henry,
King, many

+

't, gods, O

-

thy, thou

-

love, her

-

love, I



The language of Shakespeare and that of his contemporary playwrights: The weather

Jane Demmen

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Examples

from Shakespeare's plays:

and a **hail** In me at
is **clouded**. How
, drawn by the

ALLSWELL.txt
HENVI3.txt
LEAR.txt

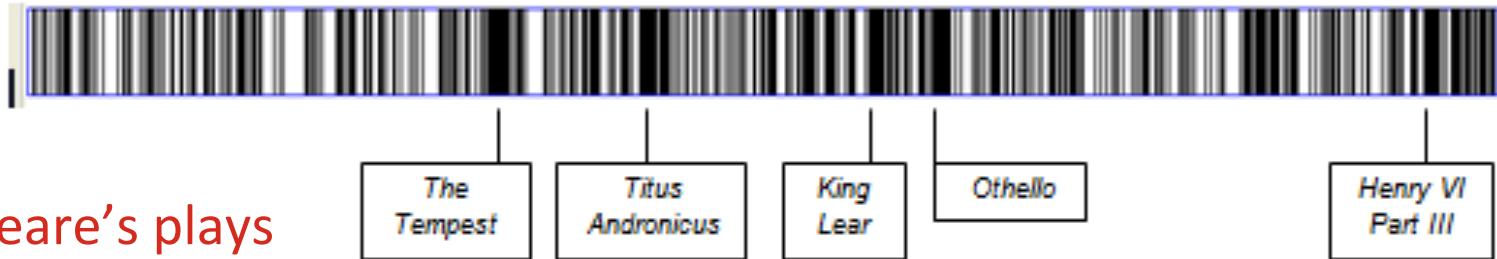
from plays by some of his contemporaries:

may his body lie. Let stormy
a *storm* be raised against a storm,
no curtains, But the bleak Winds

hail and thunder beat BLIND.txt
And tempest be with DEATH.txt
, could Clouds and DUCH.txt

Where's all the weather?

Shakespeare's plays



Other contemporaneous plays



Multiple functions of weather words

- Help construct the environment of the play
- Reflect characters' states of mind
- Cue special effects (stage directions)
- Cue the actors' behaviour on stage (dialogue)



An example from Shakespeare's *King Lear*

1. Weather in stage directions

A Heath.

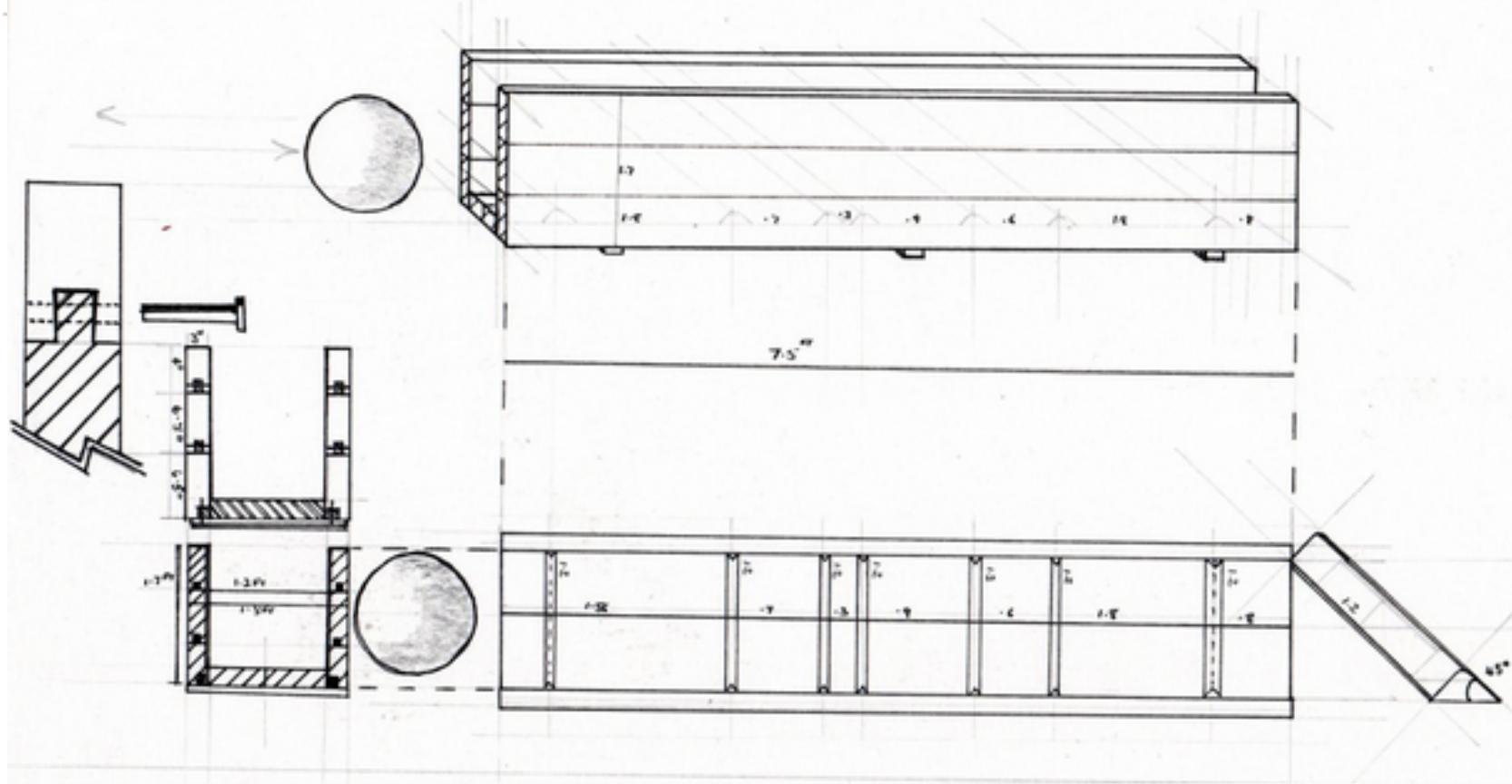
A storm, with **thunder** and **lightning**.

Enter Kent and a Gentleman, meeting.

King Lear, III:i

2. Cue stage mechanics ...

CANNON BALL (THUNDER) ROLLER TRAILER



Creating a storm

(Illustration by Ian Dickinson)

Dollimore (2012) <http://bloggingshakespeare.com/how-did-they-make-a-storm-in-king-lear>

3. Weather in dialogue

KENT

Who's here, beside foul **weather**?

GENTLEMAN

One minded like the **weather**,
most unquietly.

[...]

III:i



LEAR Blow, **winds**, and crack your cheeks!
rage! blow!

[...]

III:ii

Weather talk in other plays of the same era

Lightning and thunder.

PRESENTER OF
DUMB SHOW

Now throw the heavens forth
their **lightning** flames,
And **thunder** over Afric's fatal fields,

The Battle of Alcazar, IV:i (G. Peele, 1594)

DIDO

Kind **clouds** that sent forth such a
courteous **storm**,
Dido, Queen of Carthage, III:i (C. Marlowe, 1594)

Summary

- Weather is a similarly recurrent theme in plays by Shakespeare AND his contemporaries
- Weather language is multi-functional
 - On-stage and off-stage cues
 - Literal and figurative
 - Helps communicate the play to the audience
- We can locate and investigate plays with the most weather talk, and compare its uses by Shakespeare and his peers