The Verb *fear* in the History of English: Its Argument Structure, Complementation and Parenthetical Use

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Outline

Lowering expectations...

- Little time, work in progress, many half-baked ideas
- I promised 3 studied in my abstract, but only 1 is sort of finished. I present ideas and an outlook for the other 2 rather than a complete account.
- Acknowledgments: The research started out as a Directed Reading module. A lot of the data collection and ideas for discussion come from collaboration with 6 MA students.
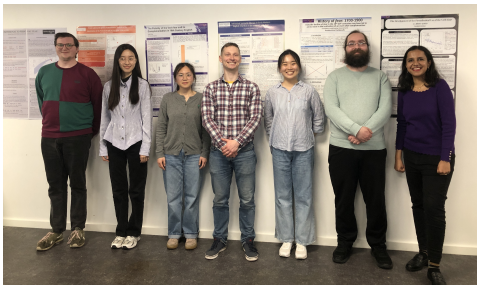
Why study the verb *fear*?

- Three studies on the history of the verb *fear*
  - Change in the argument structure
  - The effect of polarity on complementation
  - The decline in parenthetical uses
- It is often helpful to control for the lexical items that collectively undergo a syntactic change.
  - Many aspects that are unique to a verb (e.g. *like*, Allen (1986))
  - "Every word has its own history" (Hugo Schuchardt)
- Learn from individual items more general principles of change

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Change in the argument structure of *fear*

- The verb *fear* is one of the psych verbs that lost its non-nominative experiencer in late Middle English
- Impersonal *fear*

(1) [$_S$ **THEME**] *fears* [$_O$ **EXPERIENCER**]
     Death fears the king
     'frighten, scare, terrify, cause fear'

- Personal *fear*

(2) [$_S$ **EXPERIENCER**] *fears* [$_O$ **THEME**]
     The king fears death
     'be afraid, feel fear'

- loss of causative, typically telic > atelic (Gelderen 2018, 152-161)

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Impersonal *fear*

(3)   a.   ... þe which tempestes ful mich ʒet **ferid** not þe Kyng , ne myche of his peple (ProseBrut, 1377)

b.   Darius þe kyng of Pers þey chasede and **ferede**, and made him flee. (Polychronicon1, c. 1380)

c.   þe wonderful mervailles **ferede** þe Romayns (Polychronicon3, c. 1383)

d.   Hou anticrist & his clerkis **feren** trewe prestis fro prechynge of cristis gospel (WorksWyclif, c. 1385)

e.   Beleeue me Lords, the obiect **feares** me much. (TRKJ, 1589)

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Reflexive *fear*

(4) a. Men **feeren** hem in al the toun (ConfAmantis, c. 1390)

b. Than Arthur **fered** him selfe gretely (ArthurLilBritain, c. 1535)

c. I **feare** me sore of your agaynecommynge. (Malory5, c. 1469)

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Goal and material

- Goal: Measure and ascertain the precise time course of the argument structure change

- Custom-made corpus of c. 10m words

Period	Texts	Word tokens
1350-1399	16	807,070
1400-1449	17	681,657
1450-1499	30	1,414,727
1500-1549	46	1,508,743
1550-1609	283	6,549,762

Table 1: Size of custom-made corpus by 50-year periods

- Mix of genres, but genre control in the last period (Religious treatises, Dramas, Medical texts, Poetry)

- Sources: Innsbruck Corpus (Markus 2002), CMEPV (Michigan Library DCC 2018), EMED (Brown et al. 2016), EEBO (TCP 2022), EMEMT (Taavitsainen & Pahta 2010), my own text digitisations

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Search queries, correction, coding

- Search for a list of spelling variants targeting the root *fear* in concordancing software: `fear*`, `fer*`, `feir*`, `feyr*`, `feer*`, `ffear*`, `ffer*`, `ffeir*`, `ffeyr*`, `ffeer*`

- Delete false hits. Some cases difficult to decide, most importantly *fere* 'companion,' *feran* 'fare, go,' *fer* 'far.'

(5)   a. He **ferde** as thogh he tok non hiede, (ConfAmantis, c. 1390)

       b. Quhilk was weill knawin sone efterwart as ȝe sall **feir**. Quhat was baith Quene and Chylds part (SeuinSeages, 1560)

- Other false lemmas easy to spot, e.g., *fierce*, *firm*, *fourth*, ...

- False hits are very common.

- Ignore nominal and derived forms.

- Manual coding of each hit for personal, impersonal and reflexive argument structures using context, word order, pronouns.

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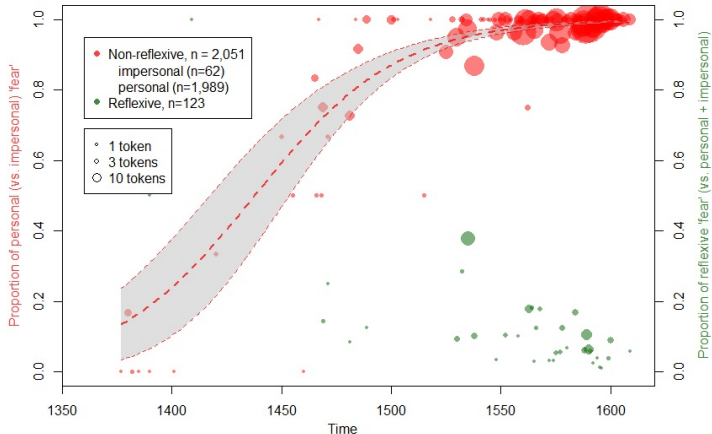Summary

Argument structure change visualisation

Figure 1: Development of the argument structure of 'fear,' logistic regression of personal v. impersonal argument structure (red), frequency of reflexives v. all other argument structures (green). Point size represents the number of tokens per year.

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Argument structure change results

- The impersonal argument structure of *fear* is lost during the late medieval period.
- At a rate of change $\beta = 0.031$ log-odds per year ($p < 0.001$[***]), it would take 302 years [95%CI: 257-367 years] for the new argument structure to rise from 1-99% of use.
- Point estimate for the transitional period: 1286-1588.
    Pace "OE-1480" (Gelderen 2014, 102)
- Reflexive uses rise from the beginning of the 15th to the middle of the 16th century, then decline again and become marginal by the beginning of the 17th century.
- The vast majority of reflexive cases are 1st person singular *I fear me*.

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Relation to other psych-verbs

- Some 100 psych verbs with non-nominative experiencers existed in Early English (Mohlig-Falke 2012), many of which lost impersonal argument structure

(6) *like*
    a. Your companyë **liketh** me ful wel (RegimPrinces, 1409)
    b. In faith, I **lyke** well this question (DamonPithias, 1571)

(7) *list* 'desire'
    a. But of that storie **list** me nat to write. (ChaucerKnightsTale, 1385)
    b. howe they make their gaine, I **lyst** not to descrie (FloorishFancie, 1577)

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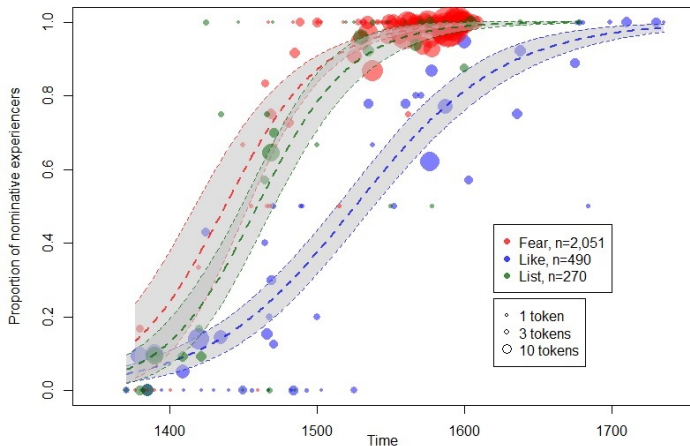## *Fear* compared to *like* and *list*

Figure 2: Data and logistic regression lines for the rise of nominative experiencers with the verbs *fear*, *like* and *list*. Point size represents the number of tokens per year.

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Effect of individual lexical items

- The verbs *fear*, *like* and *list* all lose impersonal argument structure roughly at the same time, at the transition from medieval to modern English.
- This suggests relatedness, a network of verbs, inheritance hierarchy.
- However, there are important differences. *Like* changes more slowly. *List* dies out.
- Transitional periods (1-99%):

  fear: 1286 - 1588
  like: 1295 - 1757
  list: 1315 - 1605

- Lexical diffusion, not all verbs undergo the change at the same rate (Ogura 1993)
- Lexical diffusion should be regarded as the default case for syntactic changes measured with different lexical items.

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Is the change influenced by *frighten*?

- The verb *frighten* exists in Old English, inherited from Proto-Germanic (cf German *fürchten*)

(8) heo mec swa bregdan & **fyrhton**
     they me so   terrified and frightened

     'they thus terrified and frightened me' (Bede5,13.428.12, c. 870)

<small>Edition uses Ms. Ca, but two other mss. exist: O: *fyrhten*, B: *færdon*; highlights synonymy</small>

- Metathesis of *r*: *firght* > *fright* from Old to Middle English
- However, the item was rare (only 10 occurrences, OED)
- If *frighten* becomes common before the emergence of innovative *fear*, it may be causally connected to the change.
- Push chain in grammar; avoidance of duplicates (Kroch 1994)
- Collect all instance of the root 'fright' in the corpus. Calculate its relative frequency.

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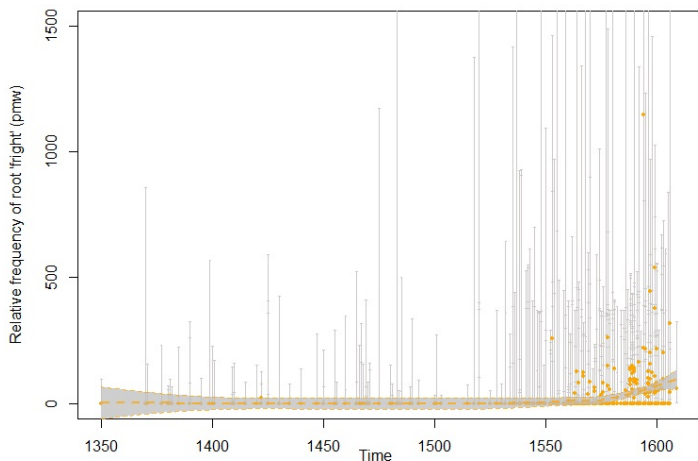Other remarks
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Frequency of *frighten*

Figure 3: Relative frequency of the root *fright* over time. Every dot is a text. Wilson Score CIs as an indication of uncertainty. LOESS regression as guide for the eye.

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Frighten rises after the argument structure change

- The verb *frighten* remains a rare verb throughout Early English.
- Only a handful of attestations before 1550 (MED lists 6 quotations)
- Frequency rises in the second half of the 16th century.
- That means that *frighten* cannot be a reason for the argument structure change in *fear*
- If anything, the inverse is true: after *fear* lost its causative meaning, *frighten* was recruited to fill the gap
- Other items (e.g., *scare, terrify, (a)gasten, dreden*)? Seems unlikely.

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Passive of *fear*

- Impersonal *fear* - passive

(9) [$_S$ **EXPERIENCER**]$_i$ is *feared* t$_i$ (by **THEME**)
      The king was feared by death
      'frightened, scared, terrified, feeling fear'

- Personal *fear* - passive

(10) [$_S$ **THEME**]$_i$ is *feared* t$_i$ (by **EXPERIENCER**)
      Death is feared by the king
      'frightening, terrifying, instilling fear'

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Impersonal *fear* - adjectival passive

(11)   a.   **ferdred** of hire enemys (ProseBrut, 1377)

b.   & be not **feerd** for þe deuel (CloudUnknowing, c. 1390)

c.   for Thoby was **fered** to take hir bycause of þe mescheef þat bifel to hire seuen housbondes (MirrMenWomen, c. 1410)

d.   Guenelete behelde hym, the whiche was full **ferd** and wyst neuer what to answer (KingPontus, c. 1435)

e.   The God of warre with his fiers equipage
Thou doest awake, sleepe neuer he so sownd,
And **feared** nations doest with horrour sterne astownd.
(FaerieQueen, 1590)

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Telic *a*-prefix

- *Fear* could be prefixed with telic *a*- 'completely, entirely'

(12) impersonal

   a. þei weren **afferd** of no man (WorksWyclif, c. 1385)

   b. god walde noght that the saule ware **afferdede** of this vglye syght. (JulianNorwich, c. 1390)

   c. Be not **afeard** (2RH, 1596)

- Historically, *fear* arose from the loss of *a*-

(13) ... þam fyre, þe hi **afærde** forðearle.
       the fyre that them a-feared exceedingly

   'the fire which frightened them exceedingly' (ÆLS
   (Agatha) 227, c. 1000)

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Telic *a*-prefix

- The *a*- prefix can still be found on active verbs (4 examples in my dataset, included in measurement of previous active context)

(14)   a. And bad hym fonde to fighte and **afere** Wanhope.

'and asked him to try to fight and a-fear Despair'
(PiersPlowman, c. 1380)

b. And it **afereth** the fend - for swich is the myghte,
(PiersPlowman, c. 1380)

c. by þe strengþe by þe whiche he hadde ofte **afered** his enemyes. (Polychronicon3, c. 1382)

(15)   personal
And when the moder herde this ansuere she **aferid**
(ProseMerlin, c. 1420)

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Feared changes, *afeared* doesn't

- the adjectival participle *feared* changes ('afraid' > 'dreaded, redoubtable')
- the adjectival participle *afeared* is only attested with the old sense ('afraid')

Argument Structure	feared	afeared
impersonal	66	270
personal	142	0

Table 2: Frequency of innovative and conservative argument structure of the adjectival participle *(a)feared*

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Examples of innovative *feared*

(16) a. Huon was so **feryd** that there was none so hardy durst aproche nere to hym (HuonBordeaux, 1530)

b. what may be **feared** to ensew of so horible and publik a crime, of our persecutours, as the effusion of innocent blood (ADoC, 1595)

c. Ile teach her Ladyship to dare my furie, I will be knowne and **fear'd**, and more truly hated of women then an Eunuch. (WoHa, 1606)

- Often deontic *to be feared* (80 of 142 personal *feared*)

(17) a. he was apusaunte knyght, armed or vnarmed, & gretly **to be fered** (HuonBordeaux, 1530)

b. rulers are **to be fered** (CommonPlacesScripture,1538)

c. God is **to be feared** aboue all things (GOG, 1574)

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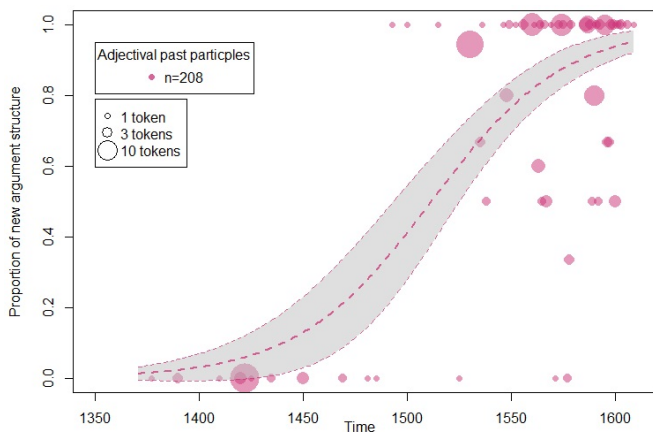# Change with adjectival participles visualisation

Figure 4: Development of the argument structure of adjectival past participle *feared*, logistic regression of personal v. impersonal argument structure. Point size represents the number of tokens per year.

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Active and passive compared

- The new argument structures of the adjectival past participle and active forms of *fear* rise is tandem; adjectival passives are overall slightly more conservative

- Constant rate effect (LRT on the difference in deviance between model with and without a context:year interaction effect $= 0.005$, $p = 0.94$)

- Identical rates of change arise because a grammatical change is measured for the same lexical item in two environments.

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Disappearance of *afeared*

- The English language could have arrived at a state where *afeared* is impersonal and *feared* is personal.

- However, this is not what happened. Instead, *afeared* died out and was replaced by the Old French borrowing *afraid* (cf. French *effrayé*)

- Great phonological similarity between *afeared* and *afraid*. Perhaps there is an advantage in formal dissociation from *feared*.

- Collect all instances of *afraid* (409 *afraid*, 270 *afeared*)

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The active verb *afraien*

- 5 examples of active verb in my dataset *afraien*, none after 1538 (not included in measurement of previous active context)

(18) a. for fendis aperyn to hem opynly and **afrayen** hem (Mandeville, 1371)

  b. So that withinne, his herte **affraied** (ConfAmantis, c. 1390)

  c. þou here him so **afraied** þat he crye (CloudUnknowing, c. 1390)

  d. that was a thinge that moche hem **affraied** (ProseMerlin, c. 1420)

  e. Now Iude bryngeth in the seconde example by the whiche he **afrayeth** synners frō synne by feare of payne & punyshment. (ExpositionChrist, 1538)

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Some examples of *afraid*

(19)   a. I was out of mi swoune **affraied**, (ConfAmantis, 1390)

       b. than a-wooke the Emperour sore **affraied** and pensif (ProseMerlin, 1420)

       c. why are ye so sore **afrayd**? (Ther, 1535)

       d. he is **afraide** of hell (TTuD, 1587)

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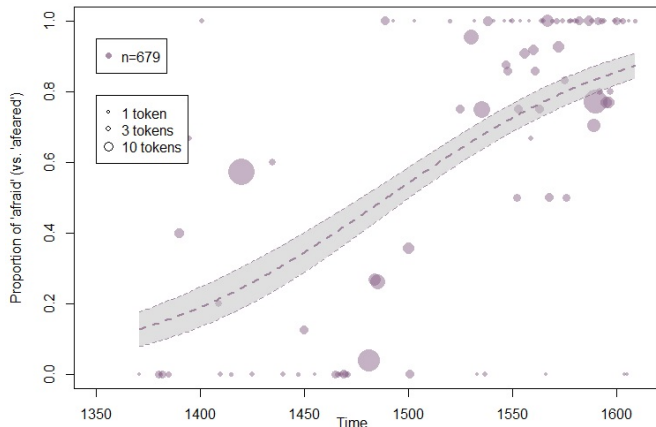**Adjectival passive**
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Rise of *afraid* visualisation

Figure 5: Rise of *afraid* (vs. *afeared*), logistic regression model. Point size represents the number of tokens per year.

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Discussion of the role of *afraid*

- *Afraid* emerges earlier and rises much more slowly than the personal argument structure of *fear*
- At a rate of $\beta = 0.016$ log-odds per year, it would take 568 years [95%CI: 482-688 years] for *afraid* to oust *afeared* (1206-1774)
- Earliest attestation of *afraid* c. 1330 (MED); some non-standard dialects still have *afeared* today

OED | Oxford English Dictionary

1868   I was sore afeard At all the cries and wailing that I heard.
       W. Morris, *Earthly Paradise* 23 ...

1876   Oh, don't be afeard. I don't believe they'll bother us.
       'M. Twain', *Adventures of Tom Sawyer* ix. 83 ...

1946   I ain't afeared one mite.
       L. Lenski, *Blue Ridge Billy* x. 151 ...

2000   He spat again. 'You afeared yet?'
       J. Connolly, *Dark Hollow* iii. xxxi. 431 ...

Figure 6: Youngest citations of *afeared* in the OED

- The emergence of *afraid* may have influenced the argument structural change of *fear*

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Disambiguation

- *Fear* often is used in conjunction with synonyms; perhaps a disambiguating strategy:

(20) impersonal

   a. the priors men of seint Johanes and oon Cayles a mysruly persone toke upon theym to have **fered and distressed** the mair (BalesChronicle, c. 1460)

   b. ... and letteþ hem go **dredeful and ferde** (SpecSacerdotale, c. 1425)

   c. And he was so sore **afraied and aferde**, that he ranne awaie (BookKnightTourLandry, 1484)

(21) personal

   a. wee neuer **feare nor be afrayed** for any synne. (MCouer, 1548)

   b. they were to be **ferd & dredd** (Melusine, c. 1500)

   c. the kynge [...] was so moche **fered and redoubted** that none durst do hym dyspleasure (OliverCastille, c. 1515)

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Word order

- The loss of non-nominative experiencers was once widely regarded as a result of case and word order changes (Gaaf 1904; Jespersen 1927)

- This is no longer generally accepted because the frequency of pre-verbal experiences does not increase prior to argument structure changes (Allen 1995)

- However, there are some examples where V2 allows, at least in principle, for ambiguity between subject and object functions

(22) a. And that schold [$_{O/S}$ every wys man] fere
         (ConfAmantis, c. 1390)
      b. No daunger feares [$_{O/S}$ the wight] (ProCass, 1577)

- There are very few ambiguous word order tokens, unlikely bridge context candidate for reanalysis.

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Complementation - transitivity 1

- Impersonal and personal uses of *fear* have very different complementation patterns
- Cognitive bias to interpret object experiencers as subject experiencers when used without complements

(23) a. The exam worries me.

  b. I worry.

(24) a.   ? I began to frighten.

  b. ?? I scared easily.

  c. ?* I terrified when I saw him.

(25) a. Jean agace Marie.

  b. judge: Marie agace tout le temps.

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Complementation - transitivity 2

- First clear examples of intransitive uses in my dataset from Malory

(26)   a. So Merlyn went unto kynge Arthur and told hym how he had done and badde hym **fere** not, but come oute boldly and speke with hem (Malory1, c. 1465)

   b. Than they **fered** sore whan they sawe a knyght com (Malory1, c. 1465)

   c. the grounde had quaked a lytyll; therewithall he **feared**. (Malory3, c. 1467)

- First instances of intransitive negative imperative early 16th c.

(27)   **Fere not**, quod Philip; he hath brought me into this country (ArthurLilBritain, c. 1535)

- Measure increase in intransitive uses of *fear*

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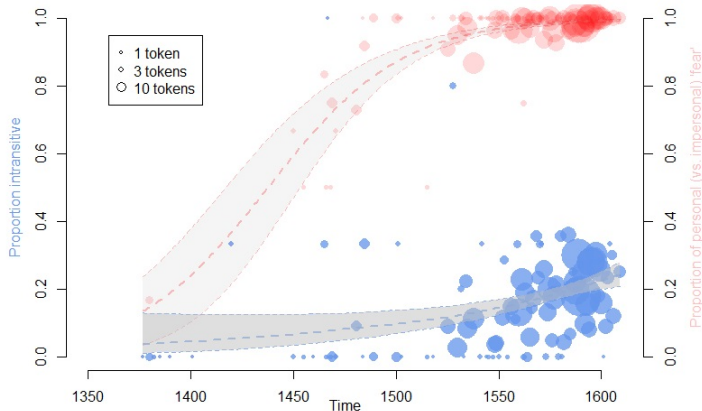Summary

Rise of intransitive *fear* visualisation

Figure 7: Proportion of zero (vs. all other kinds of) complements, active lemma *fear* only and local regression model (blue). Logistic regression model of new argument structure in red for reference. Point size represents the number of tokens per year.

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Complementation - clausal complements

- Increase in null complementation from 0% to c. 25% from 1400-1600 in tandem with the rise of personal argument structure.
- The pattern *fear s.o. from doing something* only exists with the conservative variant
- Clausal themes are only attested with the innovative variant, with one exception:

(28)   moche it **feareth** them also to be hurte (Bulwark, 1562)

- The correlation between the old/new argument structure and typical complementation patterns is specific to *fear*
- Complementation can function as a disambiguating device

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Passive vs. active

- The argument frame of *fear* always seems to have favoured the experiencer over the theme
- Before 1500, most instances of the lemma *fear* were in fact adjectival passives (*I was feared* 'I was afraid')
- After 1500, passives of *fear* are rather uncommon (*It is to be feared* 'one should be afraid of it')

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Passive vs. active *fear* visualisation
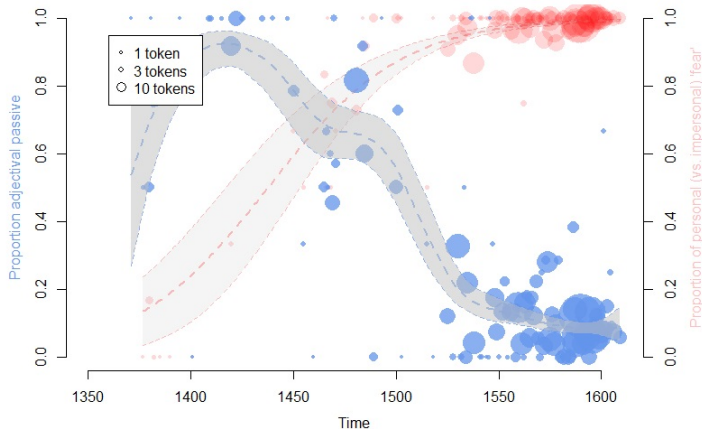
Figure 8: Proportion of passive (vs. active) *(a)fear* and local regression model (blue). Logistic regression model of new argument structure in red for reference. Point size represents the number of tokens per year.

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Semantic approach

- A common approach to the demise of Old English impersonal verbs is semantic.

- '"When the speaker did in fact wish to signal that the Theme should be considered responsible for the emotion, the Theme would become the subject. But increasingly, speakers were reserving [Old English psych verbs] for situations in which no responsibility was to be attributed to the Theme. This naturally resulted in an increase in subject Experiencers" (**?**, 338-9).

- Object experiencer if **THEME** is "responsible", "more involved", "a strong cause", "agent-like"

- Subject experiencer if **THEME** is "not responsible", "just a bystander" "not accountable"

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Relevance

(29) a. ?? Did **a negative response from fans** frighten you?

b. Did you fear **a negative response from fans**?

(30) a. "Sorry if **I** frightened you last night," she told me.

b. ?? "Sorry if you feared **me** last night," she told me.
(Levin and Grafmiller 2013: 24, cited in Gelderen 2018:
156)

- However, the voice asymmetry shows that *fear* always tended
to highlight the experiencer.
- Therefore, the voice asymmetry may challenge the semantic
approach for the verb *fear*.

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- *Fear* changed its argument structure between the 13th century and c. 1600
- Actives and passives same rate; passives overall more conservative
- The change may have been influenced by:
  - Other Old English dative experiencer verbs changing roughly at the same time *like* (top-down network effect)
  - A general tendency for object experiencers to become subject experiencers
  - Distinct complementation, intransitive uses
  - The prior introduction of *afraid*
  - A semantic change in the "responsibility" of the theme.
- *afraid* ousted *afeared* more gradually (middle of 18th century)

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  - metathesis *fyrhtan* > *frighten*, *afear* > *afray*

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- *afraid* ousted *afeared* more gradually (middle of 18th century)
    - metathesis *fyrhtan* > *frighten*, *afear* > *afray*
- Subsequent rise of synonymous experiencer verbs (*frighten, scare, terrify*); consequence rather than cause

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Polarity and complementation

- Iyeiri (2009, 24-5) reports an association between the polarity of *fear*, affirmative vs. negative, and its complementation pattern, finite vs. non-finite clauses
- Affirmative *fear* is said to be typically complemented with finite clauses, negative *fear* with non-finite clauses
- Particularly prevalent in the 16th century.

(31)   a. I feare [that deitie Hath stolne him hence ...]
           (OldFord, 1597)
       b. Since who is feard, still feares [to be so feard] (JDrum, 1598)

(32)   a. I do **not** feare [that you'l forfeit so much for so litle cause] (TLTL, 1580)
       b. That they feare **not** [to doe any kinds of harme] (AfM, 1572)

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Iyeiri's data
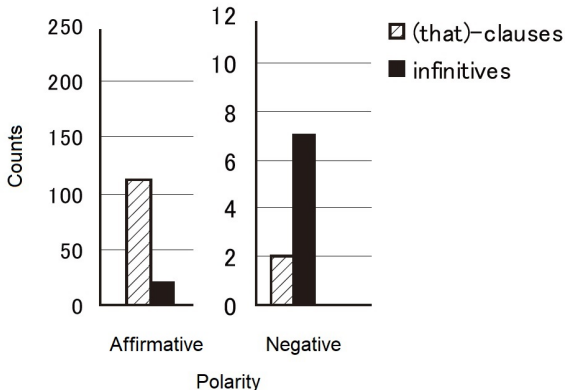
Figure 9: Raw frequencies of affirmative fear vs. negative fear followed by finite complements ((that)-clauses) and non-finite clauses (infinitives); other complement types ignored; based on data from Iyeiri (2009: 24, Figures 2, 3) for the 16th century

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Goal and material

- Goal: Replicate findings with more data, give examples, statistical analyses.
- Material is the last period of custom-made corpus

Period	Texts	Word tokens
1550-1609	283	6,549,762

Table 3: Last period of custom-made corpus

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Manual coding

- Coding for positive vs. negative polarity.

(33) a. Pied ignorance she neither loues.**nor** feares. (CR, 1599)

  b. I will feare **no** euill (EWoG, 1563)

  c. Shepheards **neuer** fear'd a storme (MadCappes, 1602)

  d. hys Concubyne fered **nothing** the serpent (Melusine, 1500)

- Coding for finite vs. non-finite clausal complements

(34) a. I feare me [∅ tis my death] (TMMC, 1609)

  b. why then should we feare, [**That** thou shouldst be lesse famous] (LegHumphrey, 1599)

  c. the king of Portingall did forbid any to bring it, fearing [**least** it might decay the price] (ThreePeppers, 1588)

  d. Yet teares and sighes, I feare will hinder me (ST, 1588)

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Polarity and complementation - results
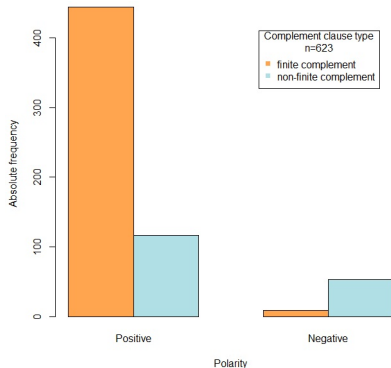
Figure 10: Absolute frequencies of positive vs. negative *fear* followed by finite vs. non-finite complement clauses in the late 16th century

- 79.1% of positive but only 14.5% of negative *fear* are followed by finite complement clauses (χ^2=114.3, df=1, p<0.001***, OR:22.2 [95%CI: 10.5-52.7])

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Polarity and complementation - replication

- Successful replication of Iyeiri's effect
- Quantification of the strong effect
- Roughly quintupling her sample size
- (Effect exists in all genres, drama, poetry, medical texts, religious treatises)

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Rationale for planned study

- Perhaps the string `fear not to` was represented as one unit

(35)   a. Nay **feare not to** discouer what you are (MMeta, 1597)

        b. I **feare not to** dye, bycause we haue a good god (DietHealth, 1542)

        c. they **feare not to** doe any kinds of harme (AfM, 1572)

- If so, the development of *do*-supported negation may have disrupted the string

(36)   I do **not feare that** you'l forfeit so much for so litle cause. (TLTL, 1580)

- EMMA corpus Petré et al. (2019) (1600-1750, 80m), CLMET3 De Smet (2011) (1710-1920, 34m)

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Preview
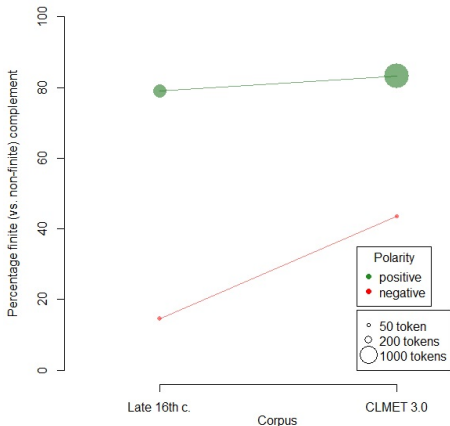
Figure 11: Percentage of finite vs non-finite complements after positive and negative
fear 16th c. vs. CMLET

- Positive: From 79.1% to 83.2%; Negative from 14.5% to 43.6%

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Outlook

- Preliminary finding suggests a weakening but not a disappearance of the polarity effect from early to late Modern English.
- Unclear what that means for the role of *do*-support
- Role of semantics (factivity?, habitual?
- Ideas for alternative explanations for the effect?

(37) a. better: I fear that I will die.

     b. worse: I fear to die.

(38) a. worse: I don't fear that I will die.

     b. better: I don't fear to die.

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Parenthetical *fear*

- The parenthetical use of *fear* does not convey lexical meaning as a "verb of cognition, emotion, and attitude" (Huddleston & Pullum 2002, 170) but a pragmatic stance towards a proposition (cf. *sorry to say*, acknowledgment of undesirable content)

- Discourse marker, epistemic marker, aside, parenthetical

- A form of grammaticalisation (Hopper & Traugott 2003)

- Parenthetical *fear* comes into being with personal argument structure

(39) Early examples
  a. she had neuer no worde from me syth that I was take and broughte here of the sarasyns , Wherby I knowe certeynli , **as I fere me** / that she ys rather ded than a lyue (Blanchardyn, 1489)
  b. There be many worse **I feare me** then Balaam (ExpositionChrist, 1538)
  c. And he (**I feare**) shall go with vs to France (ShoeHol, 1597)

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Measuring parentheticals

- Impossible to know for certain if *fear* is used parenthetically
- However, two typical features: position, 1st person subject

(40)   a.   was obliged to hurry; little Lewie is very ill, **I fear**.
            (COHA, LewieOrThe 1853)

       b.   I crossed and thwarted you all, **I fear**, in wantonness.
            (COHA, LoganAF. 1828)

- Sounds quite stilted, high-brow, archaic
- Goal: Check if parenthetical *fear* has become uncommon

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Materials and coding

- 400m word Corpus of Historical American English (COHA) (Davies 2010) (1800-2009)
- Sample of 5,200 examples with different inflectional forms of the verb *fear*, based on how frequent they are in the corpus
- Deletion of false hits
- Coding for position (initial vs. elsewhere) and 1st person (yes, no) 1st person

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Position - visualisation
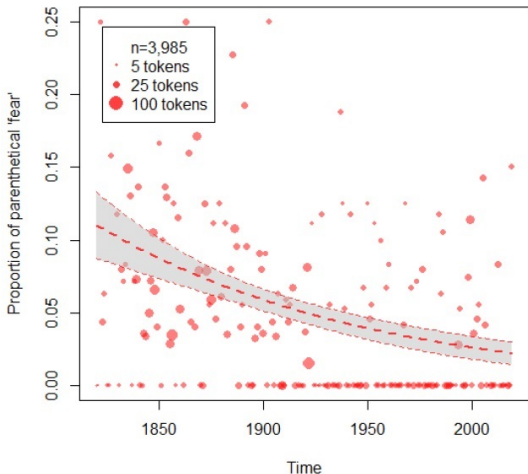
Figure 12: Final or medial position of *fear* over time

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1st person - visualisation
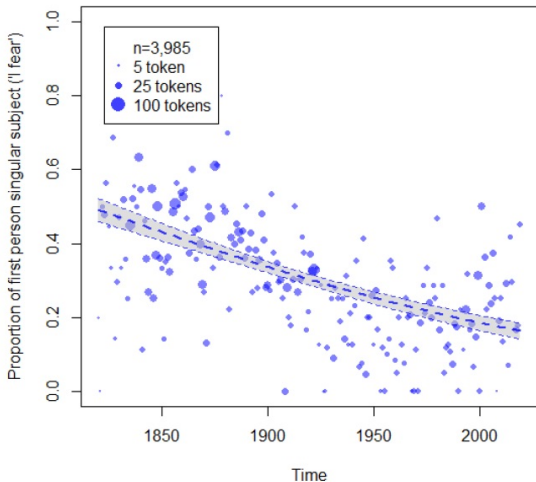
Figure 13: 1st person (vs. other) subjects of *fear* over time

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Results

- There is good evidence to believe that the parenthetical use of *fear* has in decline over the last 200 years.
- Supported by data from both position and 1st person subject proxies
- Iyeiri (2009: 31) reports similar findings, but overall at higher percentages (2009: 31)

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Predicting complementiser drop

- The decline in parenthetical *fear* leads to an overall decrease in *fear*
- The frequency of a matrix verb predicts the prevalence of a complementiser. The more frequent a verb, the less likely a complementiser

  compare the more frequent *fear* 1% with *that* to the less frequent *worry* 75% with *that* (Jäger 2010, 37)
- Therefore, we might expect an increase in the realisation of an overt *that* in finite complement clauses as after *fear* becomes overall less common.

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Materials and coding

- CLMET3 De Smet (2011) (1710-1920, 34m)
- Code every example of a finite complement clause manually for complementiser drop

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Frequency and complementisers - visualisation
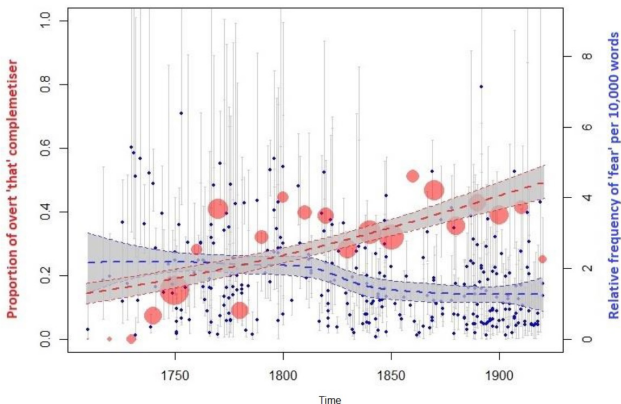
Figure 14: Proportion of overt *that* complementiser over time in red (points are examples aggregated into decades point size reflects number of examples line from logistic regression model) relative frequency of *fear* over time in blue (points are individual texts with Wilson confidence intervals, local regression line as guide for the eye) n=1,703

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Summary and future directions

- Idealised argument:
  - Frequency of parenthetical uses of *fear* decline
  - As a consequence, the overall frequency of *fear* declines (c. 200 to 150pmw 1700-1900)
  - This development in turn can be linked to a simultaneous rise in over complementisers after *fear*
- Numerous open questions:
  - Link between frequency and complementiser drop is too simplistic, other factors, experiment would have to be strengthened with other verbs.
  - The reflexive argument structure could be a precursor to parenthetical *fear*
  - Evidence that it is the decline in parentheticals that leads to reduction in frequency of the verb *fear* still missing (measure overall frequency in COHA, code for parenthetical use in CLMET and EEBO, expect a rise-fall pattern)

Conclusion

Wrapping up . . .

- I sketched 3 studies on the history of the verb *fear*
- Great increase in data size compared to previous studies on *fear* (Iyeiri 2009)
- I hope I could show that it can be beneficial to study the history of a single word:
    - Unexpected links
    - Features of *fear* not shared with other verbs losing impersonal structure (e.g. *like*) (e.g. reflexives, distinct complementation etc.), which makes it impractical to collect data for all of those verbs at the same time.
    - It is important to control for individual lexical items in a change (lexical diffusion)
    - The intricacies of a single verb like *fear* reflect the complexities of language itself.

Thank you very much for your attention!

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Appendix

Search queries

FEAR	AFEAR	AFRAY
fear*	afear*	a*frai*
fer*	afer*	a*frai*
feir*	afeir*	a*fray*
feyr*	afeyr*	af*frei*
feer*	afeer*	a*frey*
ffear*	affear*	a*frai*
ffer*	affer*	a*frad*
ffeir*	affeir*	a*fred*
ffeyr*	affeyr*	
ffeer*	affeer*	

Table 4: Search terms (1350-1600)