



# *HeidelGram*

## **Network analysis of grammarians' references in 19th-century British grammars – a corpus-based study**

**Beatrix Busse**

**Kirsten Gather**

**Heidelberg University**

# 1. Introduction



grammar books: indicators of changing and stable language norms

major changes in British grammar writing during the 19<sup>th</sup> century

- ♦ from the prescriptive tradition to the first modern descriptive grammars
- ♦ emergence of comparative and historical linguistics
- ♦ 'phonetic turn': phonetics/phonology becomes a separate field

vast number of English grammar books in the 19<sup>th</sup> century

surprisingly few studies focussing on 19<sup>th</sup>-century grammar writing

"this area of investigation still constitutes a gap" (Anderwald 2016: 3)

## 2. The *HeidelGram* Project



### The *HeidelGram* Project

- ◆ Compilation and investigation of historical English grammar books from the 16<sup>th</sup> to 19<sup>th</sup> centuries
- ◆ Combination of (historical) corpus-linguistic and network-analytic methods

### This Study

Focus on a **corpus of 19<sup>th</sup>-century grammar books** with the aims

- ◆ to show connections between grammar books as manifested in grammarians' references to other grammars or grammarians
- ◆ to categorise the references in 19<sup>th</sup>-century grammars and examine distributions and developments
- ◆ to check the results against established assumptions

→ design, implementation, and analysis of a **network of grammars and grammarians**

## 2. The *HeidelGram* Project



### The Corpus

corpus of 19<sup>th</sup>-century grammars (40 texts, approx. 2.9 mio. words)

criteria for text selection

(a) popularity and distribution of grammar books

- ♦ bibliographic listings of grammar books (e.g. in Michael 1987, Görlach 1998)
- ♦ numbers of editions
- ♦ book catalogues, advertisements, etc.
- ♦ contemporaries' comments, e.g. in literary genres, private letters
- ♦ curricula of schools, colleges, etc.

(b) variety in function, audience, and text type



## 3. The Network

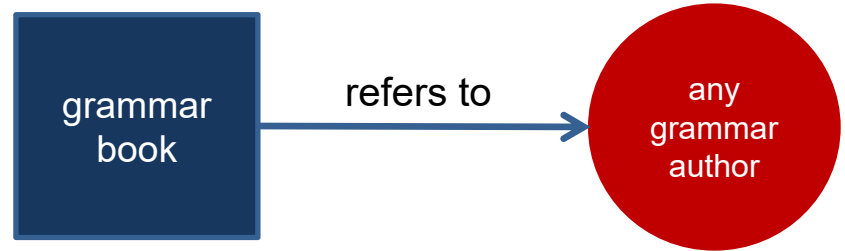
# 3. The Network



network approach

## White (2011):

- ♦ social vs. scholarly networks
- ♦ scholarly networks: cultural ties between authors irrespective of their possible acquaintance
- ♦ author intercitation: "the record of who has cited whom within a fixed set of authors" (2011: 275)



# 3. The Network

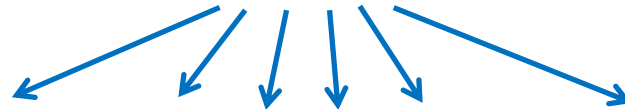


Note: A record (concordance) can carry multiple types of reference.

example:

It is justly observed by Priestley, "that a term, which only implies the idea of persons, and expresses them by some circumstance or epithet, will hardly authorize the use of who." (Crombie 1802 on Priestley 1761)

quotation

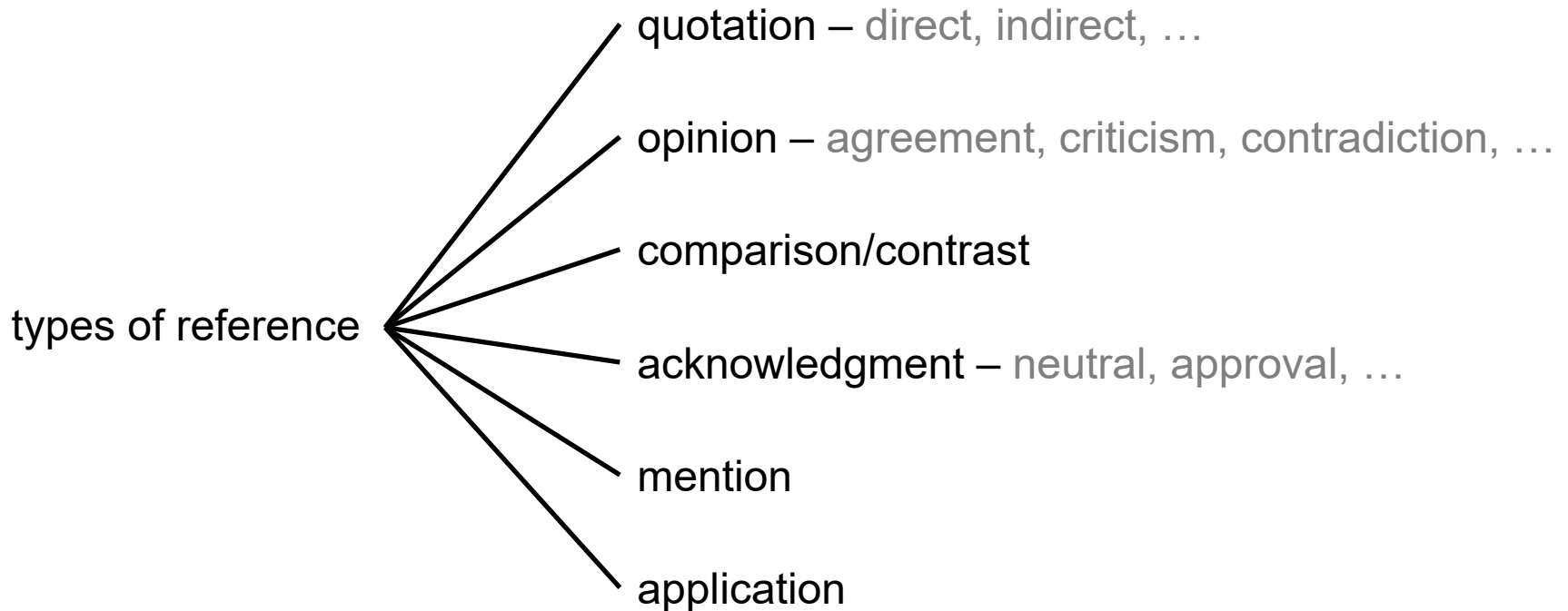


opinion

# 3. The Network



## Types of reference





# 3. The Network



*type of reference:* **quotation**

*description:* citation of text passages from other grammar books

*subtypes:* direct, indirect, direct/indirect, embedded, cross-reference

*example:* " 'We may consider,' says Mr. C.P. **Mason**, 'that the grammatical copula in every sentence consists of the personal inflections of the verb.' " (Bain 1863)  
→ *quotation – direct*

# 3. The Network



*type of reference:* **opinion**

*description:* expression of positive or negative evaluation

*subtypes:* agreement, criticism, etc.

*example:* "**Priestley**, in defending the other phraseology, appears to me to have *greatly erred*." (Crombie 1802)  
→ *opinion – criticism*

# 3. The Network



*type of reference:* **comparison/contrast**

*description:* comparison or grammarians' approaches, terminologies, etc.

*subtypes:* ---

*example:* "Mr. **Harris** and Mr. **Wallis** have each applied a partial principle in a universal sense, [...]." (Doherty 1841)

# 3. The Network



*type of reference:* **acknowledgment**

*description:* reference to grammarians or their works

*subtypes:* praise, approval, disapproval, neutral

*example:* "[...] the author of this Class Book has consulted the works of other grammarians, among whom may be mentioned Lindley **Murray**, Drs. **Latham**, **Beard**, **Angus**, **Morell**, [...]".  
(Duxbury 1886)  
→ *acknowledgment – neutral*

# 3. The Network



*type of reference:* **mention**

*description:* simple mention of a grammarian without context

*subtypes:* ---

*example:* "Give the substance of the quotation from Dr. **Angus**."  
(Exercise in Duxbury 1886)

# 3. The Network



*type of reference:* **application**

*description:* application of a rule or concept introduced by and named after a grammarian

*subtypes:* ---

*example:* "The following table will be sufficient to illustrate **Grimm's** law: [...]" (Abbott 1871)

# 3. The Network



## Procedure

- ♦ manual compilation of list of search terms (last names of grammarians mentioned in the grammar books, supplemented by what secondary literature considers the most famous and influential grammarians)
- ♦ generating concordances (L/R $\pm$  20) based on the search terms
- ♦ problem: untrained OCR due to limited resources leads to corrupted data
- ♦ our solution: automated search in digitised corpus texts with threshold-based pattern matching (gestalt pattern approach)  
(*HGSimpleCorpusNetwork*, available via GitHub)

# 3. The Network



## Procedure

- ♦ matching threshold of 0.8 to cover all misreadings  
e.g. the search for "Cobbett" produces results like *Cobbett* (1.0) and *Cohbett*, *Cobbeit*, *Gobbett*, *obbett* (0.82 to 0.92)
- ♦ manual correction by eliminating false positives

*sweat* / *Sweet*

*Richard Johnson* vs. *Samuel Johnson*  
(Latin Grammar) (English Dictionary)

- ♦ manual classification of all references (categories devised by open coding influenced by *Grounded Theory*; two independent raters)





## 4. Main Results

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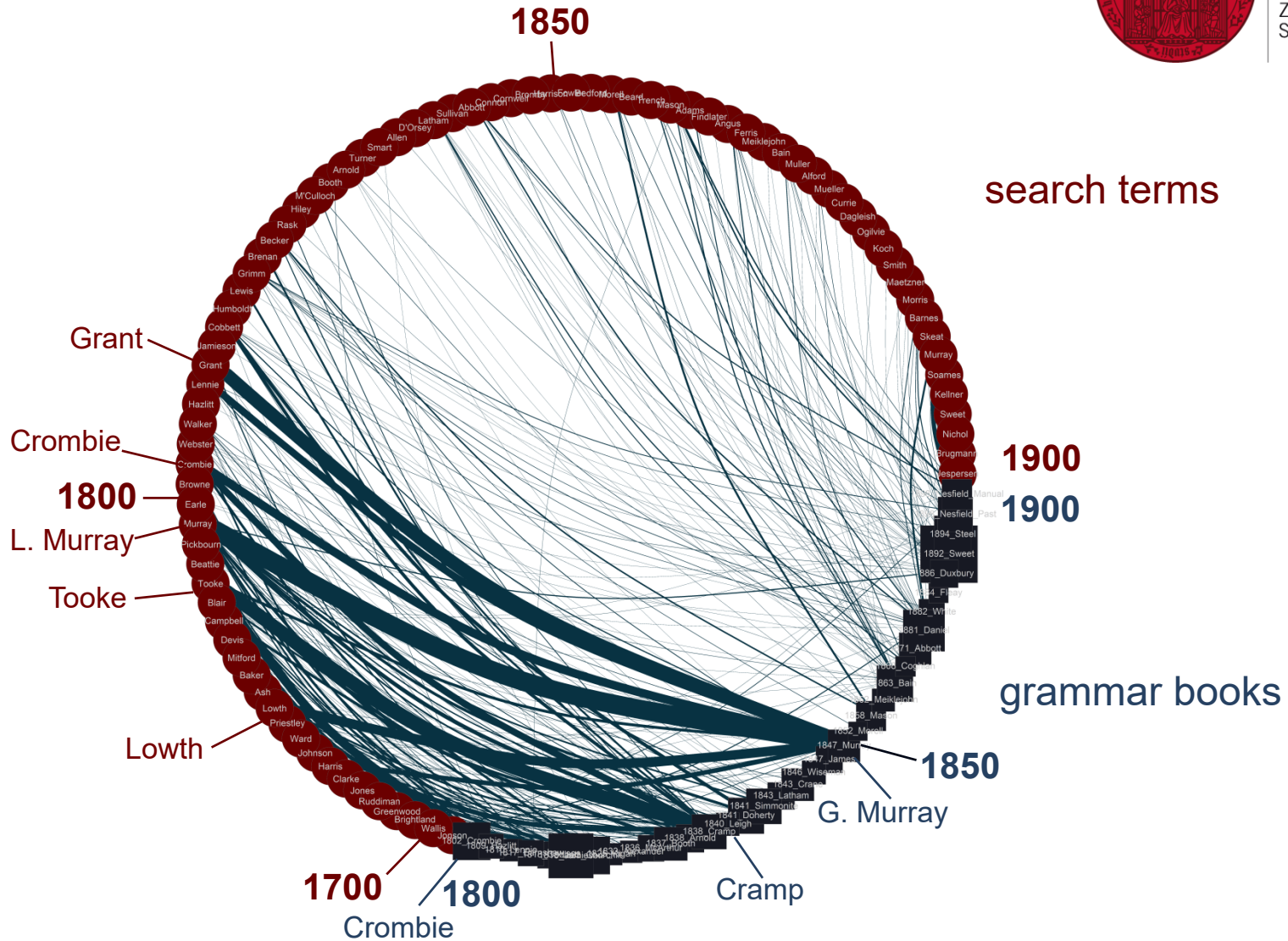
40 grammar books, list of 100 search terms (grammarians)

→ list of 2,029 concordances (after manual elimination of false positives),  
containing 2,797 references of different kinds (quotation, opinion, etc.)

five out of 40 grammars do not refer to other grammarians

83 of the 100 search terms are referenced

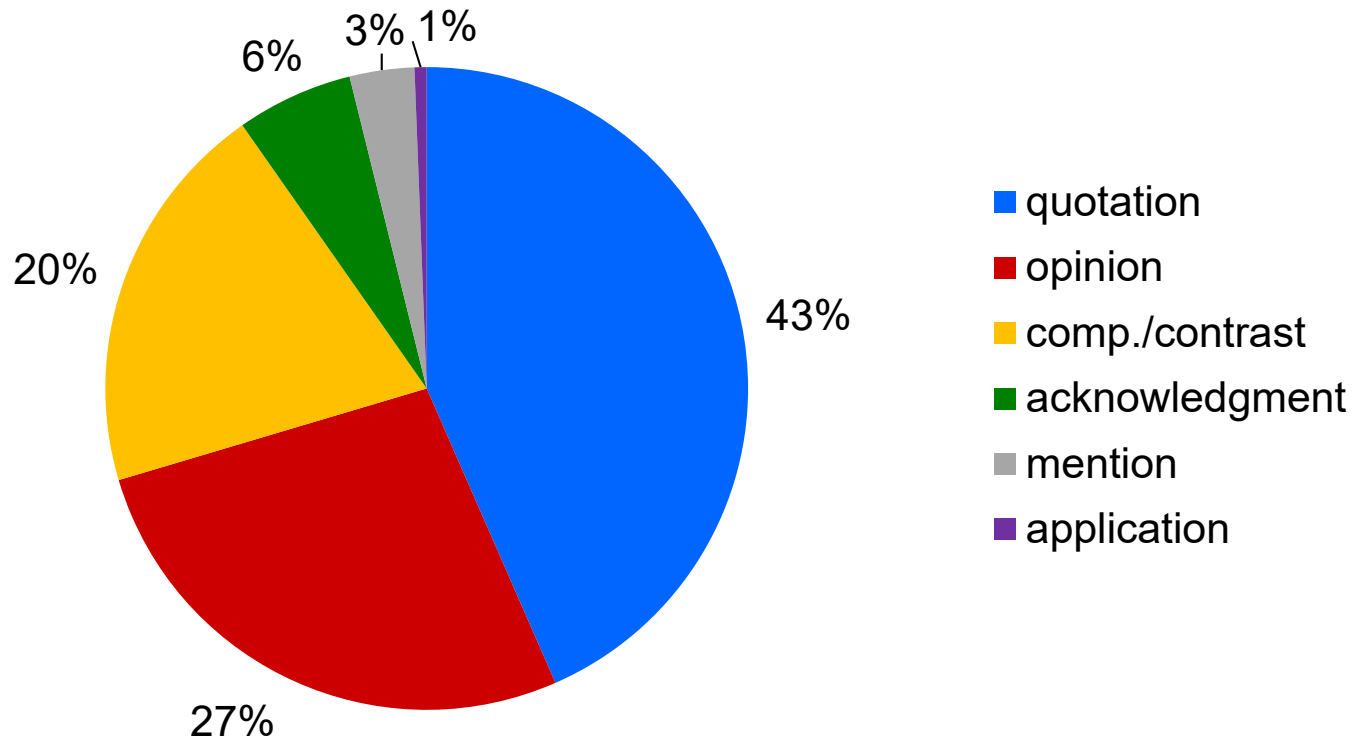
# 4. Main Results



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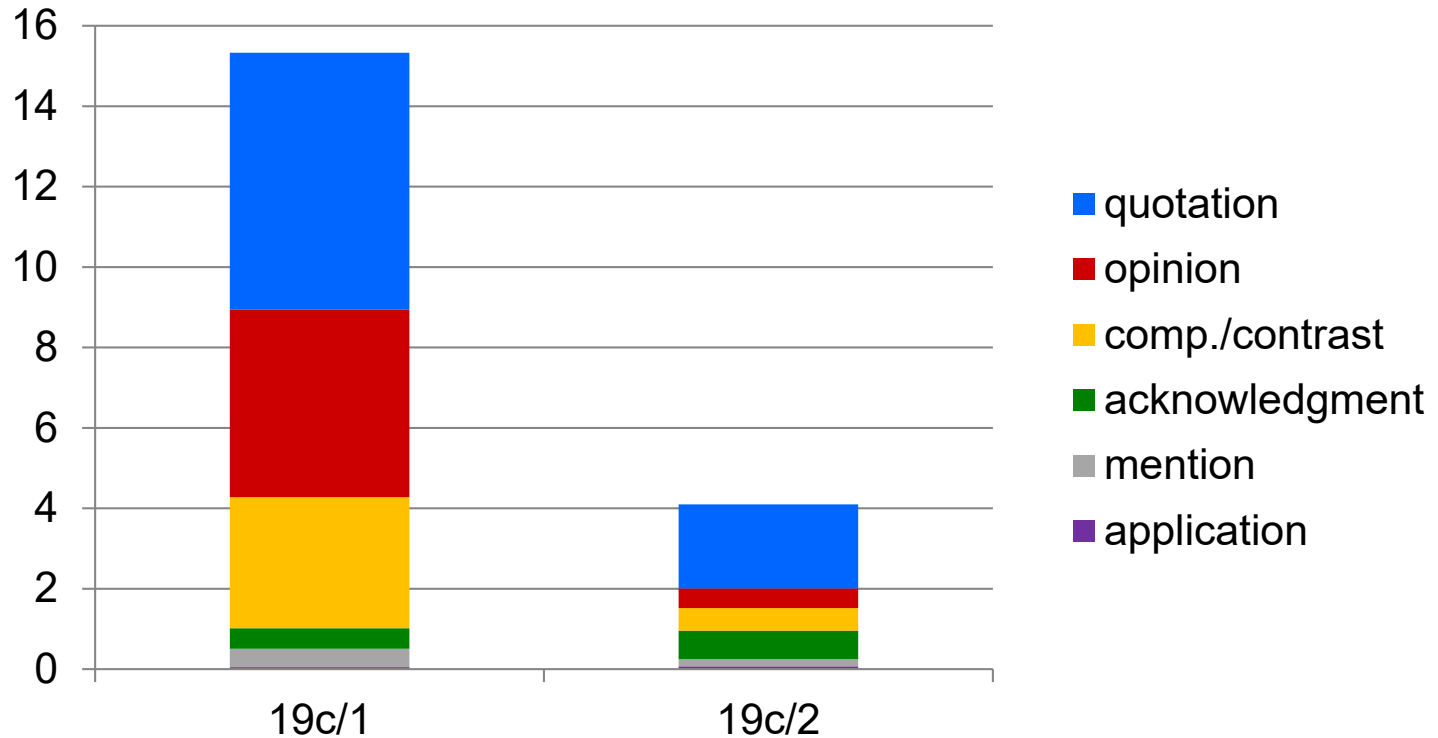
distribution of different **types of references** in 19<sup>th</sup>-century grammars  
(in per cent of all references)



# 4. Main Results



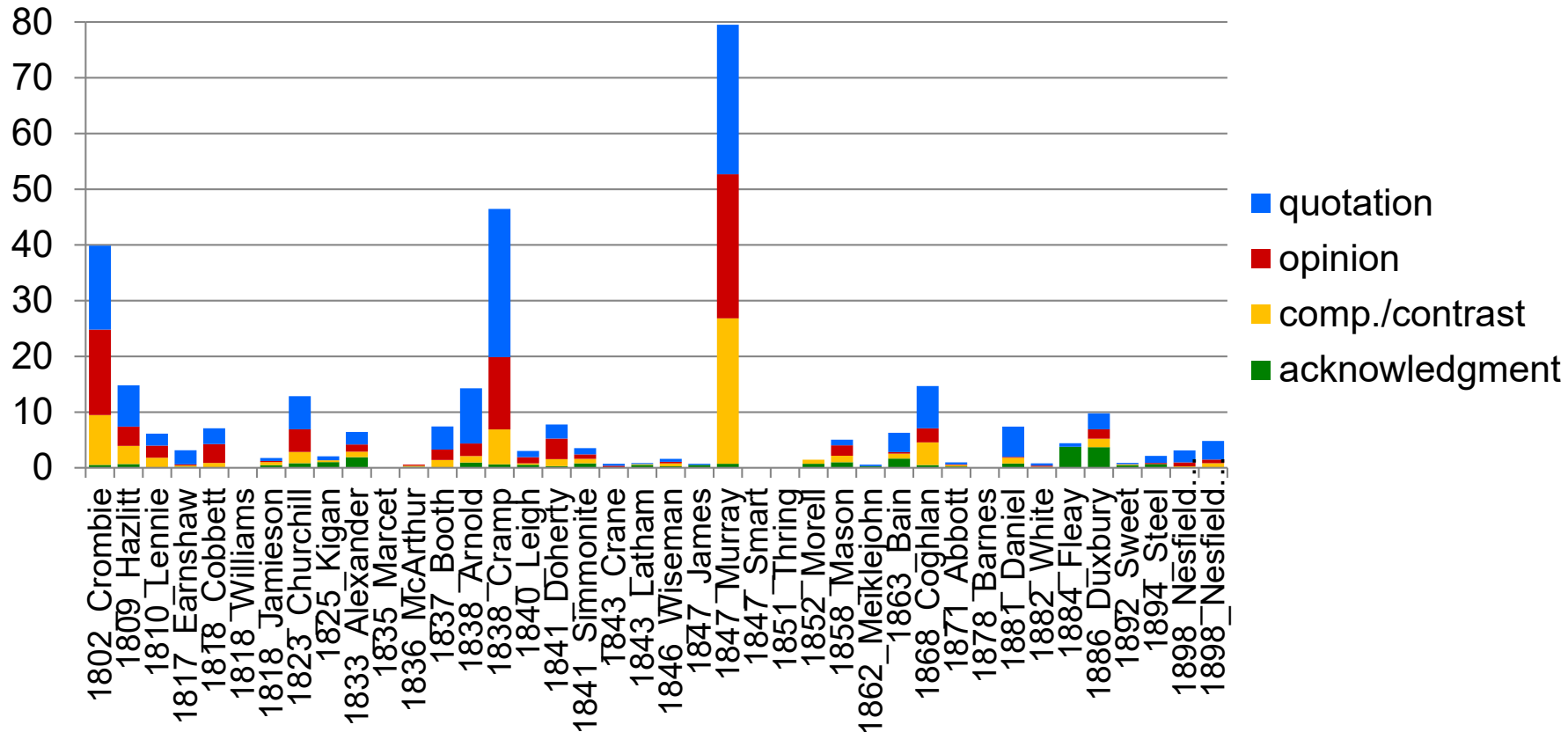
distribution of different types of references **in the first and second half of the 19<sup>th</sup> century** (frequencies per 10,000w)



# 4. Main Results



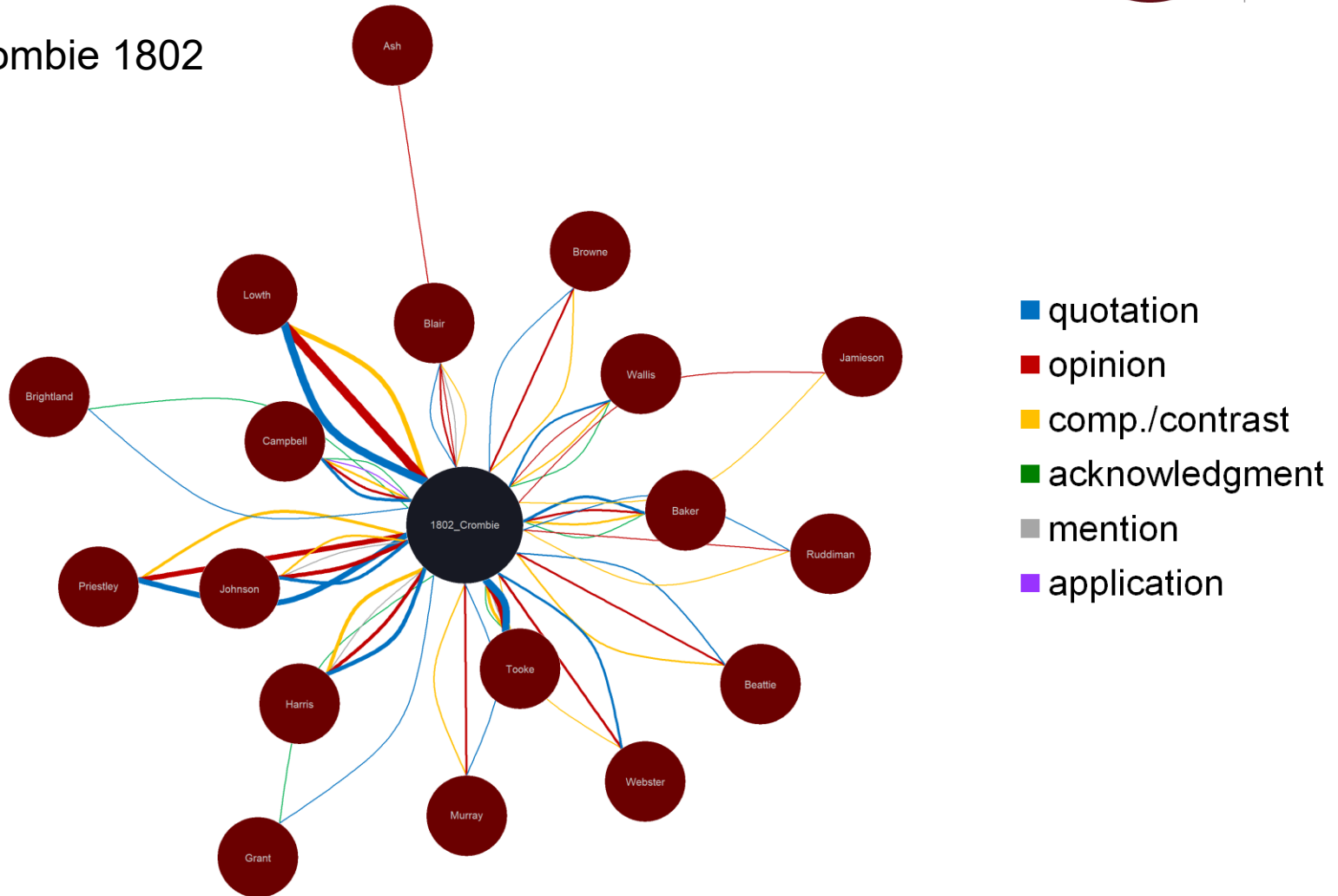
distribution of the major types of references in 19<sup>th</sup>-century grammars  
per author (normalised frequencies per 10,000w)



# 4. Main Results



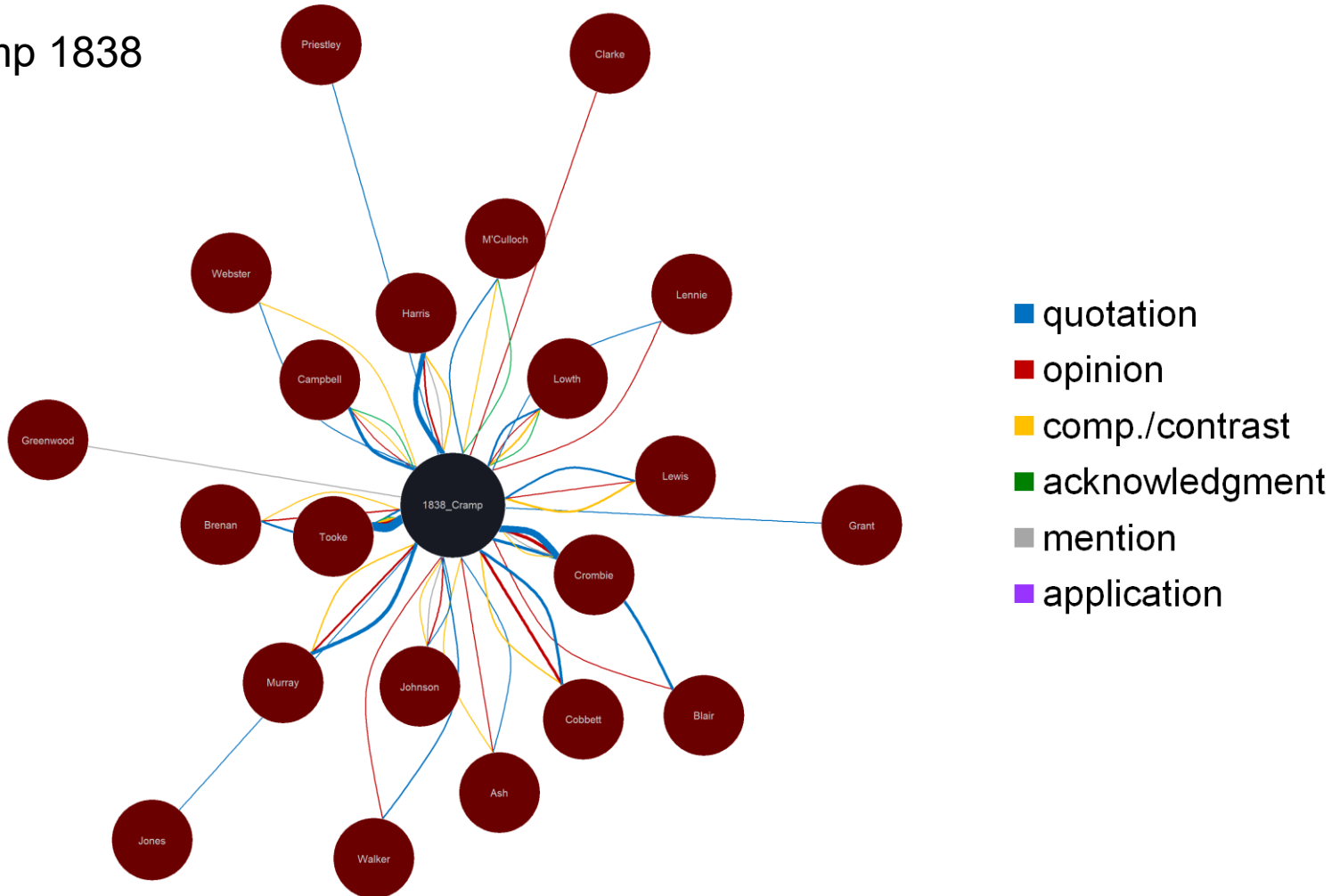
Crombie 1802



# 4. Main Results



## Cramp 1838

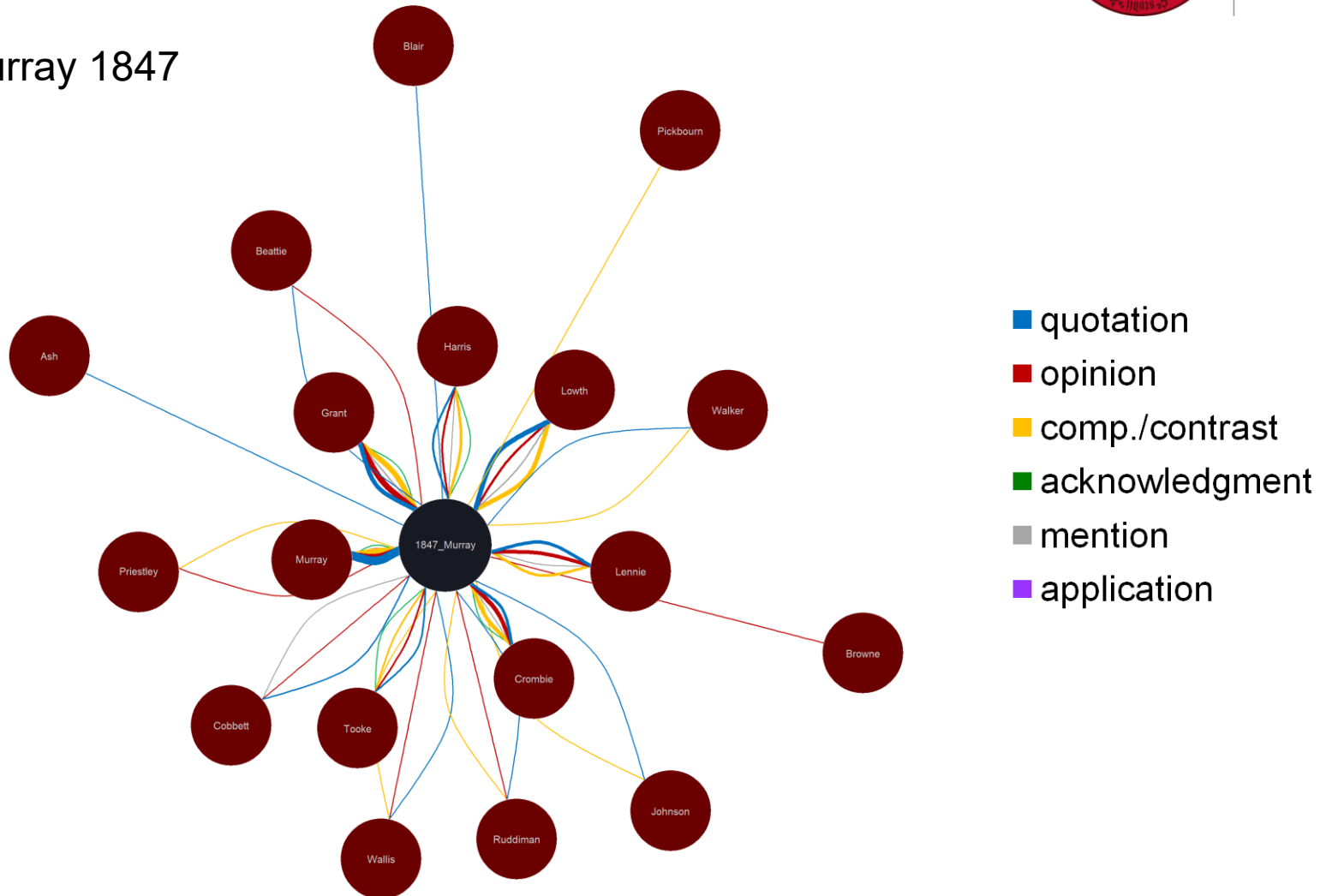




# 4. Main Results



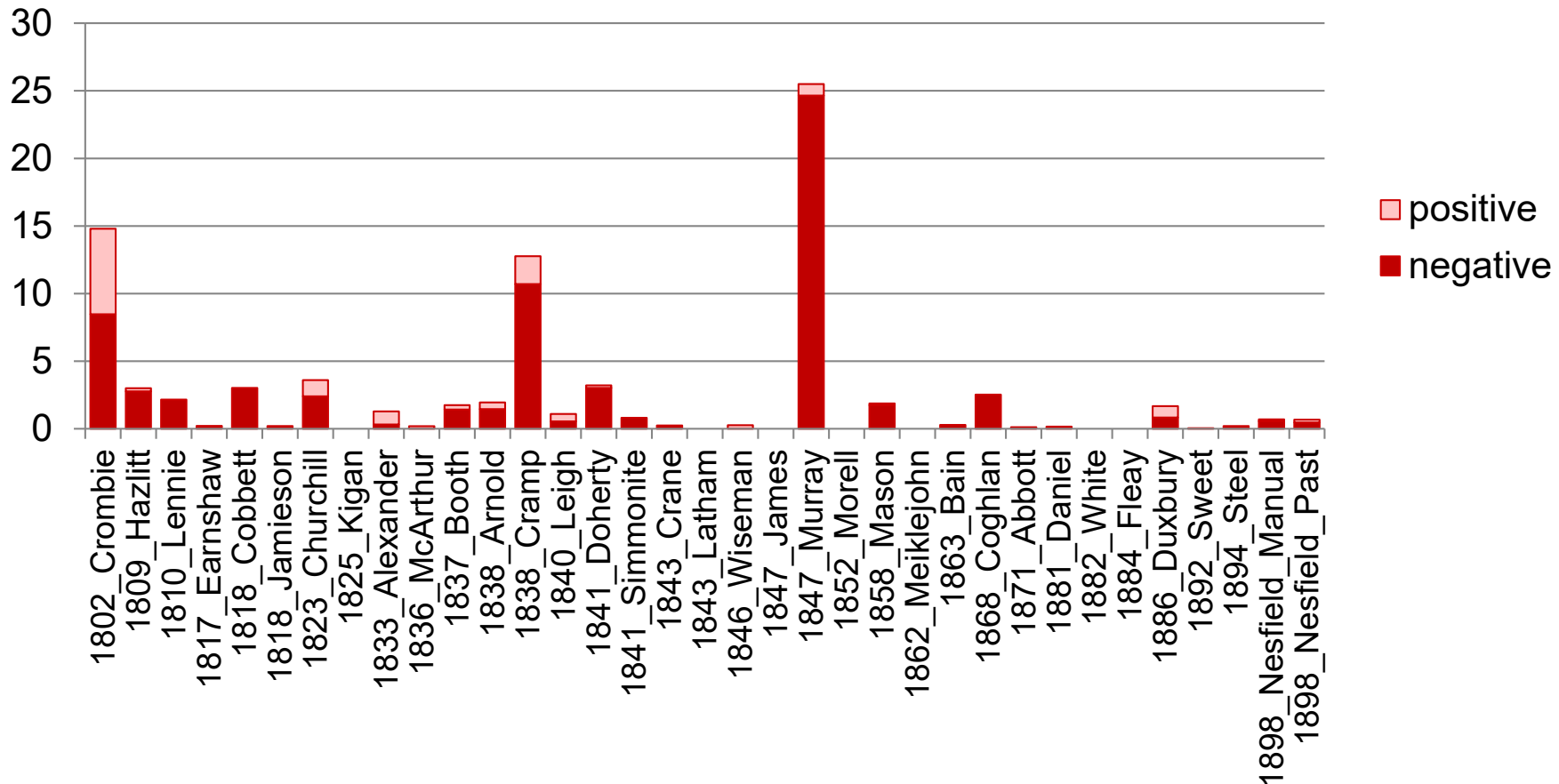
## Murray 1847



# 4. Main Results



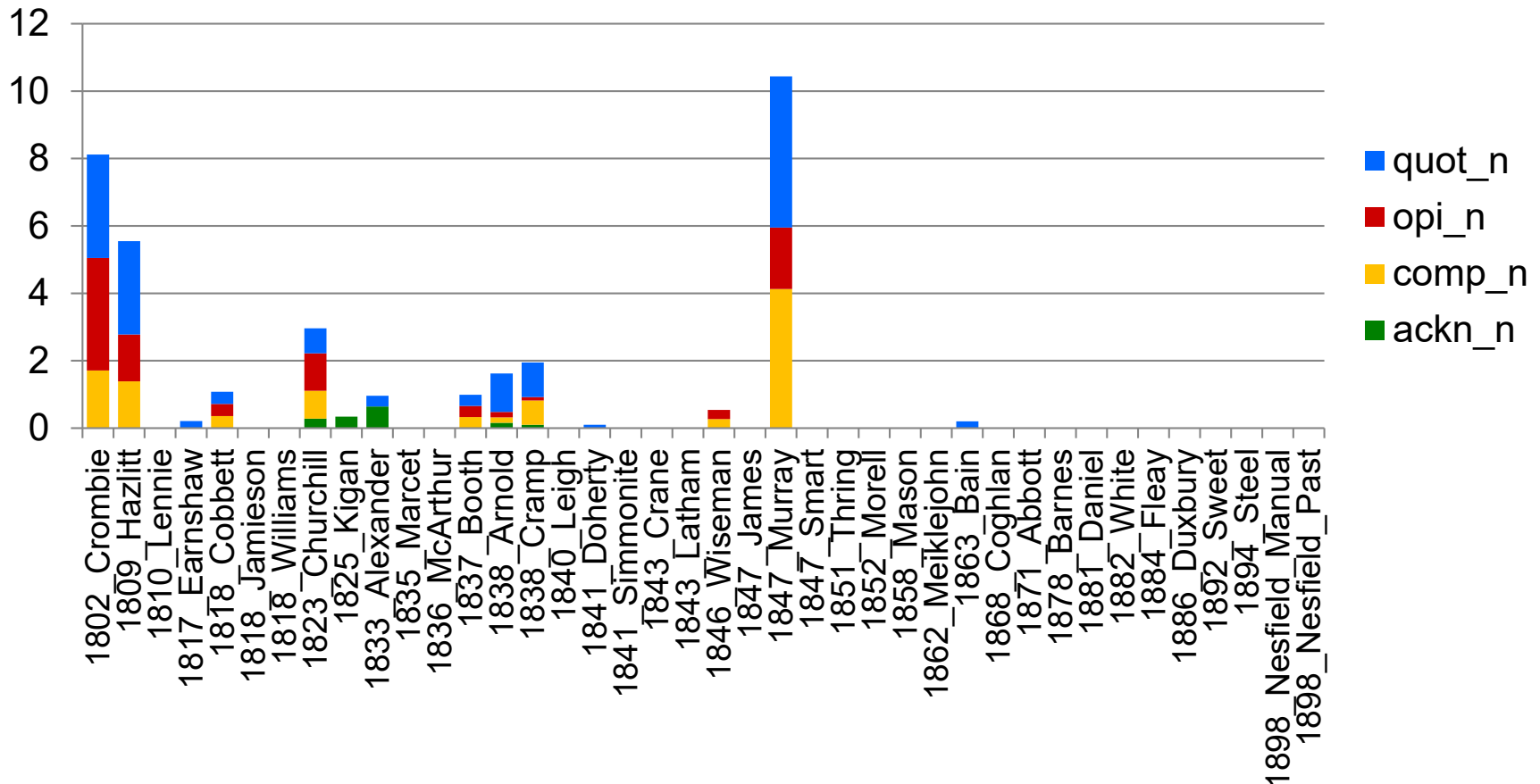
instances of positive and negative opinions (frequencies per 10,000w)



# 4. Main Results



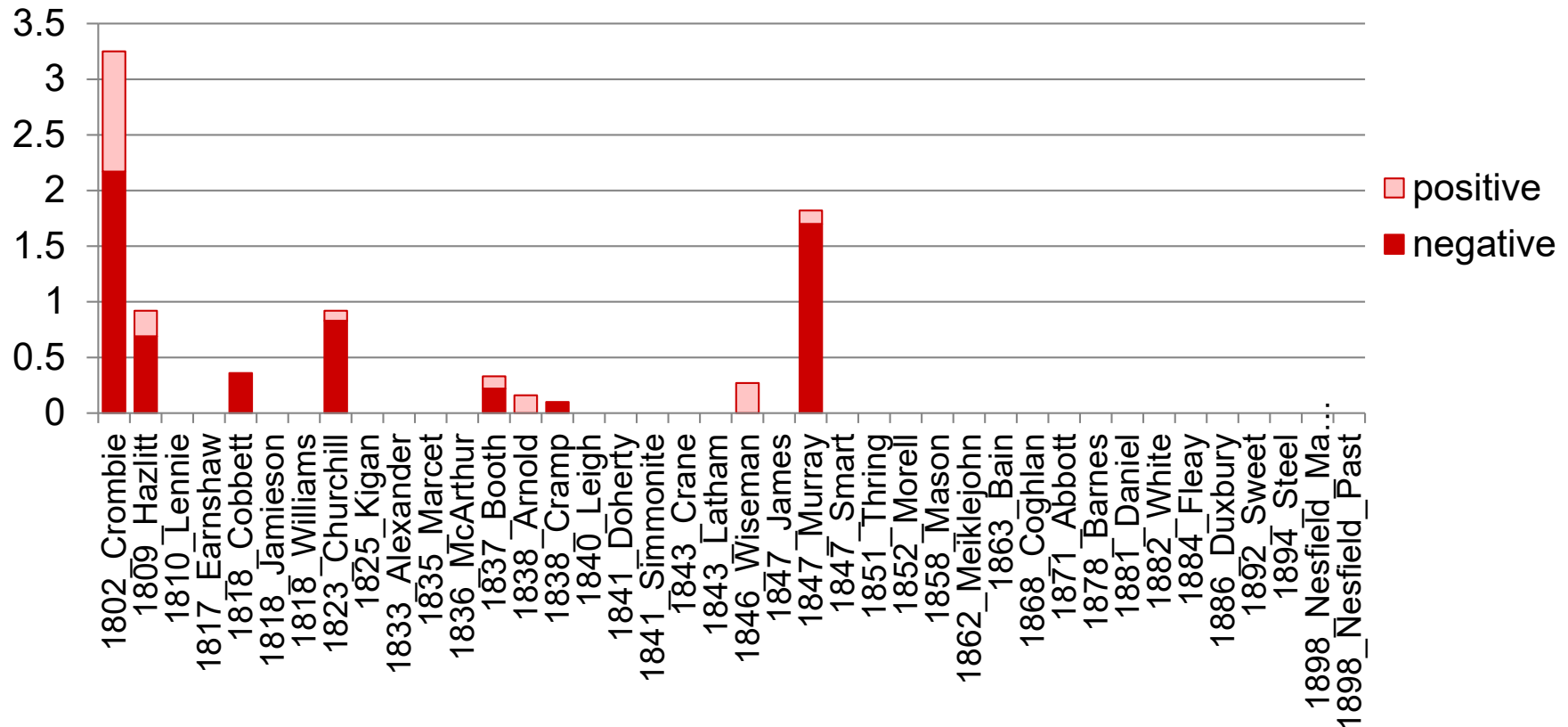
references to **Lowth (1762ff)** (frequencies per 10,000w)



# 4. Main Results



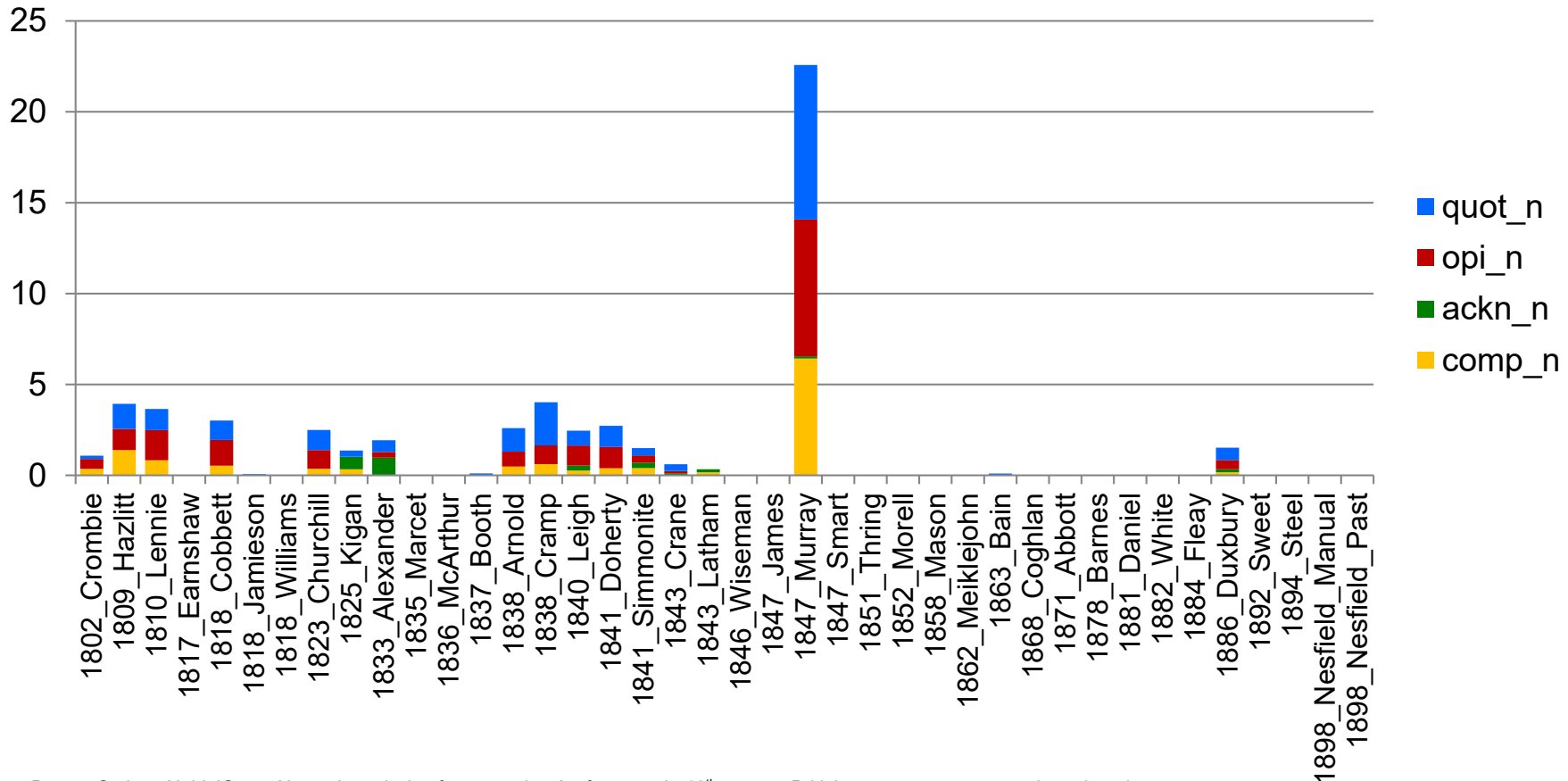
instances of positive/negative opinions with regard to **Lowth (1762ff)**  
(frequencies per 10,000w)



# 4. Main Results



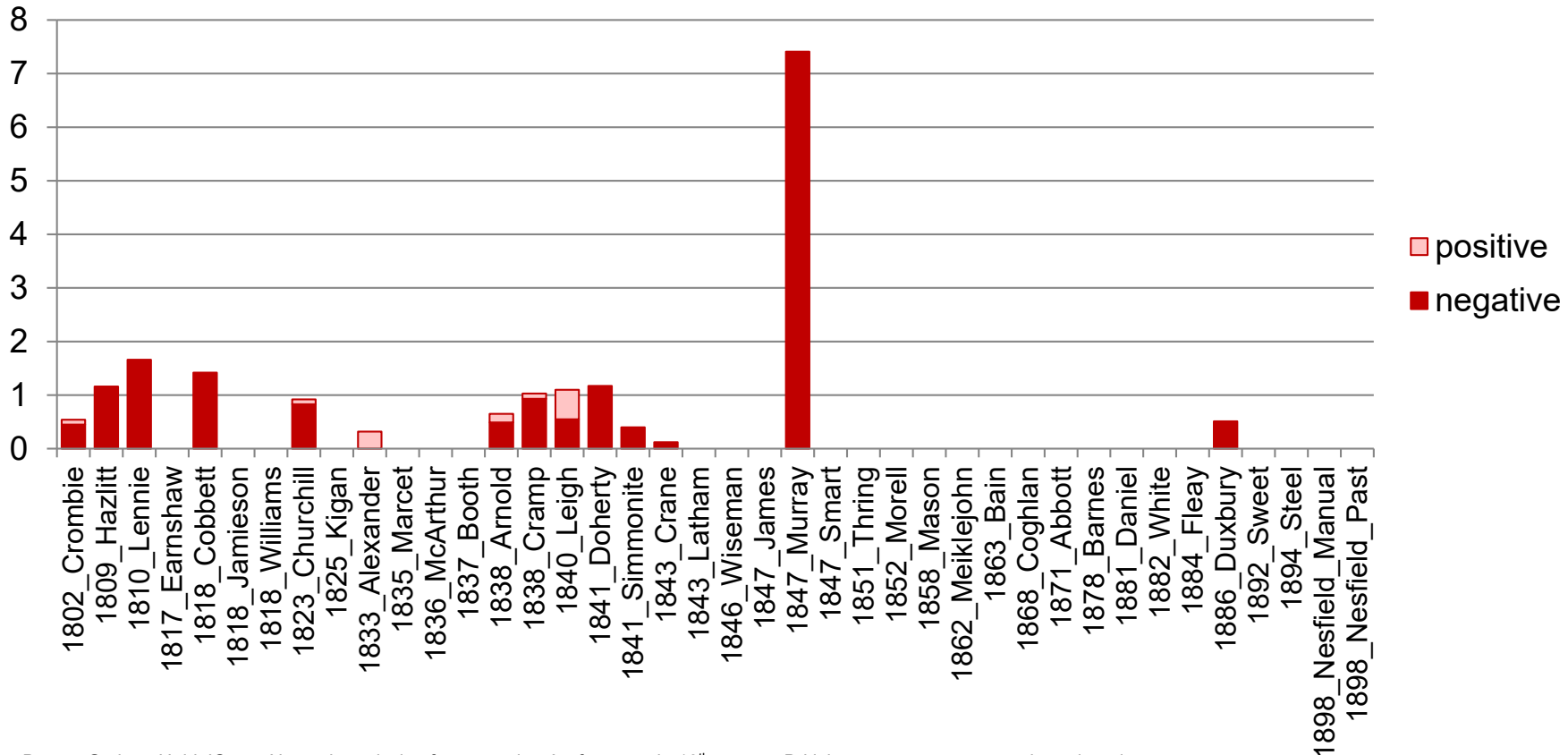
references to **Lindley Murray (1795ff)** (frequencies per 10,000w)



# 4. Main Results



instances of positive/negative opinions with regard to **Lindley Murray (1795ff)** (frequencies per 10,000w)



## 4. Main Results



### Gerald Murray (1847)

"The definitions of the other tenses which we have examined strongly declare that Lindley Murray wrote without critically investigating the truth or accuracy of his own writings or those which he copied; but the definition of the pluperfect tense shows an unpardonable indifference to perspicuity, consistency, and common-sense."

"Doctor Crombie seemed to vie with L. Murray in inconsistency, and was wonderfully successful in his endeavours."



## 5. Summary and Conclusion



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approx. 2,800 reference subtypes in 35 out of 40 grammar books (in approx. 2,000 'references'/concordances)

very few references to grammars written between 1640 and 1750

many references to grammarians that wrote their major works in the second half of the 18<sup>th</sup> century, especially to the prescriptivists Lowth and Lindley Murray, and to the philosophical grammar of Horne Tooke

almost all of these references occur in grammars of the first half of the 19<sup>th</sup> century

# 5. Summary and Conclusion



## break around 1850:

- ♦ turn away from 'traditional' (esp. prescriptivist) grammar writing
- ♦ references generally less frequent
- ♦ occupation with contemporary grammars

most of the references are quotations, followed by opinions, and instances of comparison and contrast

break around 1850 particularly in these three categories, less so in acknowledgments (on the contrary!) → building a 'new discourse'?

# 5. Summary and Conclusion



three out of 40 grammarians (G. Murray, Cramp, Crombie) refer to other grammarians excessively (but for different reasons), but only Crombie's grammar is referenced by later grammarians

→ balance of positive/negative opinions relevant? (more data needed)

references to the two major 'prescriptivists' Lowth and L. Murray:

- ♦ instances of negative opinions by far outweigh positive remarks
- ♦ almost no acknowledgments whatsoever

→ turn away from prescriptive grammar writing not surprising

# 5. Summary and Conclusion



## In general

- ♦ mixed-methods approach (historical corpus linguistics and network analysis) leads to noteworthy results
- ♦ findings of previous study could be confirmed and refined
- ♦ consideration of central problems (e.g. with regard to data quality, inter-rater reliability, network visualisation) necessary in order to obtain valuable results



# Thank you for your attention!

# Project Link and Bibliography



UNIVERSITÄT  
HEIDELBERG  
ZUKUNFT  
SEIT 1386

Link to the *HeidelGram* Project: <https://heidelgram.de>



## Bibliography

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