Grapho-phonological parsing of C15 Scots
A reassessment of the [v]~[f] alternation

Benjamin Molineaux, Rhona Alcorn, Joanna Kopaczyk & Warren Maguire
with Bettelou Los & Vasilis Karaiskos

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Universität Duisburg-Essen
The FITS Project (*From Inglis To Scots*)

- 4-year project at the Angus McIntosh Centre for Historical Linguistics
- Researching the early sound/spelling history of Scots
  - c.1250 Scots ‘local documents’ (c. 400k wds) dated 1380-1500
- Restricted to Germanic root morphemes
- Main RQ: What phonological facts underly the diversity of spelling in Scots (1380-1500) and how did it develop?

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THE UNIVERSITY of EDINBURGH
Grapho-phonological parsing

- Resolves word forms into units of spelling, e.g.
  - `<fisch>` ‘fish’ `<f> | <i> | <sch>`
  - `<houß>` ‘house’ `<h> | <ou> | <ß>`
Grapho-phonological parsing

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- Annotates each token of each spelling unit with:
  - Etymological category, e.g. OSc `<sch>` < OE `[ʃ]`
  - Linguistic context:
    - position in word & neighbouring units: phonotactics, grathotactics & morphotactics
    - word class
  - Extra-linguistic context:
    - date, genre & place of origin of source ms.
    - Reconstructed sound value
How do we reconstruct OSc sound values?

**Triangulate:**

- Scholarly literature
- Data from earlier and later stages
- Spelling Evidence
- Typology of sound change
- Phonological theory
Using the FITS database: examples

• Synchronic 15C Scots
  • Interpretations of <ou>
  • Spellings of [ʃ]

• Diachronic (regressive)
  • Sources of 15C Scots [uː]

• Diachronic (progressive)
  • Reflexes of OE /f/

• For any unit of sound or spelling
  • Contexts in which attested (linguistic & extra-linguistic)
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OE /f/ in 15C Scots: non-final contexts

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**OE**

- *fisch* [f]
- *eftir* [f]
- *sevin* [v]
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Word-final

Original

- **< OE [f]**
- **lif-type**

New

- **< OE [v]**
- **luf/gif-type**

Pre-Inflection

- **< OE [v]**
- **lif-type**

- **< OE [v]**
- **luf/gif-type**
Final Devoicing (FD) in Mediaeval Scots

• Post-Old English apocope led to eME and Pre-Scots having /v/ in word-final position.

• In northern dialects of eME, FD is claimed for fricatives (Mossé 1952: §45, Fisiak 1968: 61)

• Johnston (1997:104) claims that FD is an early “diagnostic of Scots as a whole” and that “even in fourteenth century… final /v/ is almost always represented by <f>”
<f>-type spellings

Word-final context (NEW, i.e. luf-/gif-type)

• Etymologically [v]

<v>-type spellings
• for [f] via FD

<f>-type spellings
• for [f] with ‘residual’ spelling
• or for [v] in cases without FD due to incomplete apocope
Word-final context (ORIGINAL i.e. *lif*-type)

- Etymologically [f]

**<f>-type spellings**
- for [f], as expected

**<v>-type spellings**
- for [f] as back-spellings based on *luf*-type
- for [v] by levelling with inflected forms (liv<livis)
Pre-inflectional context (*lif*-type)

- Etymologically [v]

<v>-type spellings
- for [v] as expected

<f>-type spellings
- [f] spreads from word- to stem-level – via structural analogy (*liffis*<*lif*)
-type spellings

<v>-type spellings

- Etymologically [v]

<v>-type spellings
- for [v] as expected

<f>-type spellings
- Final devoiced [f] (still in variation with [v]) spreads from word- to stem-level – via structural analogy
The diachrony of Final Devoicing (FD)

The proportion of <v> vs. <f> type spellings remains stable
Within the LAOS period:

- $<v>$ is on the rise, pre-inflectionally
- Partial analogical spread of $[f]$ to stem-final position is waning
- The pan-Anglic trend to have pre-inflectional voiced fricatives is (re)instated
- This requires lexical diffusion advancing and then retreating, but aligns with present day data.
The diachrony of Final Devoicing (FD)

FD enters the Phonology of Pre-Scots

FD begins as phonetic and gradient, fed by apocope

- \[v\]~\[\hat{v}\] word-finally

It eventually effects a change in phonological category

- /v/>/f/ word-finally

/f/, however, probably remained in variation with /v/, as a result of FD applying before apocope was complete

- /v/>/f/ word-finally
The diachrony of Final Devoicing (FD)

\(/f/ \text{ spreads to the stem-level in Pre-Scots}\)

By structural analogy, [f] in uninflected forms levels to inflected ones, spreading gradually across the lexicon

• \([v] \Rightarrow [f] \text{ stem-finally}\)

Structural analogy and lexical diffusion are both non-categorical, so the change is not complete

• \([v] \sim [f] \text{ stem-finally}\)

Greater proportion of <v> in luf/gif-type (as opposed to lif-type) stems from [f]~[v] alternation in the uninflected forms
The diachrony of Final Devoicing (FD)

Pre-inflectional [f] is replaced by [v] once again

During the 15c pre-inflectional /f/ is again replaced by /v/ for the luf/gif-type words

• [f] > [v] pre-inflectionally (luf-/gif-type words)

This happens in a general region where pre-inflectional fricatives are voiced (pan-Anglic pressure)

Based on the present day data, lif-type words must have changed back from [f] to [v] pre-inflectionally, as did the luf-/gif-type, word-finally.

• [f] > [v] pre-inflectionally (lif-type words)
• [f] > [v] word-finally (luf-/gif-type words)
Assessing the Final Devoicing account

Pros:
• Is consistent in following a transparent spelling/sound mapping for all positions of the fricatives
• Follows well attested phonological patterns in the spread of changes (FD, analogy, diffusion)

Cons:
• Proposes a change that does not come to completion and actually retracts (after spreading)
• There are no unambiguous reflexes of FD in present-day Scots.
Should we accept Final Devoicing in early Scots?

- Primary evidence is the preponderance of final <f> spellings for words with etymological [v] (e.g. luf, gif)
- Is there another explanation?

luf/gif-type
The alternative to Final Devoicing

• A spelling-only change? I.e. Did <f> come to be used for [v] word-finally and pre-inflectionally?

• Problems:
  - <f> usually represents [f], e.g. *fisch, offer, lif*
  - [v] is spelled <v> elsewhere, e.g. *vicar, sevin*
  - would mean OSc spellings are unreliable
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OE /f/ in Older Scots: conclusions

Case study:
- Shows how we identify and handle problems in our segmental histories
- Demonstrates the value of quantitative and qualitative data in the FITS database
- Illustrates how we can use FITS data to test and refine what others have claimed

FITS database:
- Supports claims of final devoicing of /v/ in pre-Scots
- Offers new insights:
  - FITS data suggests devoicing: was variable; spread into new domains; had begun to recede in C15
THANKS!

Additional thanks to: the rest of our team + Pavel Iosad, Patrick Honeybone, Heinz Geigerich, Keith Williamson, Meg Laing, Roger Lass and Julia Fernández-Cuesta

(Refs on request)
Hybrid version: FD and spelling change

- Final <f> via FD; pre-inflectional <f> via levelling from word-final <f>
- Treats final <f> as the outcome of FD
  - Problem: no unambiguous PD reflexes
- Treats pre-infl. <f> as a spelling development: incipient standardisation?
  - Problem: diachronic trend is a reversal of pre-inflectional <f> in 15C
  - Problem: undermines our confidence in the phonetic faithfulness of OSc spellings