


**AMC** Angus McIntosh Centre  
for Historical Linguistics

## Investigating evidence for final [v] devoicing in Older Scots

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### The FITS Project (*From Inglis to Scots*)

- A four-year project, funded by the AHRC, at the Angus McIntosh Centre for Historical Linguistics
- Researching the early sound/spelling history of Scots
- Data: *A Linguistic Atlas of Older Scots* (LAOS, Williamson, 2008)
  - c.1250 Scots 'local documents' (c. 400k words) dated 1380-1500
- Our analysis is restricted to Germanic root morphemes
- Main research question:
 

**What phonological facts underlie the diversity of spelling  
in Scots (1380-1500) and how did they develop?**

### How do we reconstruct Older Scots (OSc) sound values?

Scholarly literature

↓

Data from earlier and later stages



Spelling evidence

[?]

Phonological theory



↓

Typology of sound change



### Using the FITS database: Examples

- Synchronic 15<sup>th</sup> century Scots
  - e.g. interpretations of <ou>
  - e.g. spellings of [j]
- Diachronic (regressive)
  - e.g. sources of OSc [u:]
- Diachronic (progressive)
  - e.g. reflexes of OE /f/
- For any unit of sound or spelling
  - contexts in which attested (linguistic and extra-linguistic)



### OE /f/ in OSc: non-final contexts

	Initial	Medial	
Exemplar	<i>fisch</i>	<i>eftir</i>	<i>sevin</i>

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ModSc	[f]	[f]	[v]

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ModSc	[f]	[f]	[v]

## OE /f/ in OSc: final contexts

	original	Word-final new	Pre-inflection
Exemplar	<i>lif</i> (< OE <i>lif</i> )	<i>luf, gif</i> (< OE <i>lufu, giefan</i> )	<i>liff+is, giff+in</i> (‘lives’, ‘given’)

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OE	[f]	[v]	[v]
ModSc	[f]	[v] (/∅)	[v] (/∅)

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OE	[f]	[v]	[v]
15C Scots	<f(e, ff(e)> <v(e,u(e,w(e)>	<f(e, ff(e)> <v(e,u(e,w(e)>	<f, ff> <u, v, w>
ModSc	[f]	[v] (/∅)	[v] (/∅)

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15C Scots	<f(e, ff(e)> <v(e,u(e,w(e)>	<f(e, ff(e)> <v(e,u(e,w(e)>	<f, ff> <u, v, w>
ModSc	[f]	[v] (∅)	[v] (∅)

**MISMATCH** (diagonal labels between OE and 15C Scots, and 15C Scots and ModSc)

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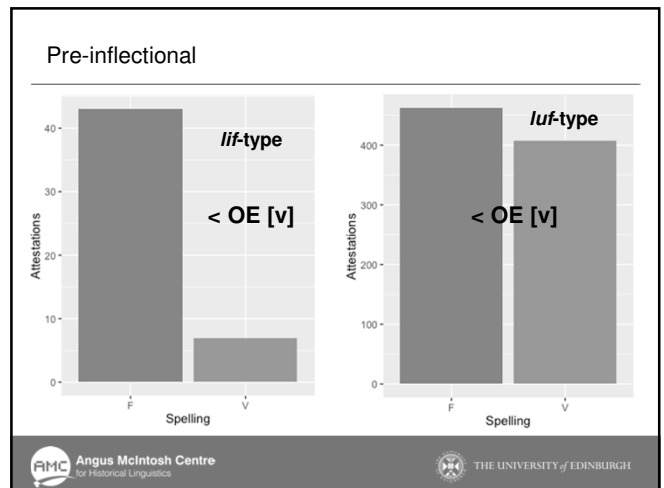
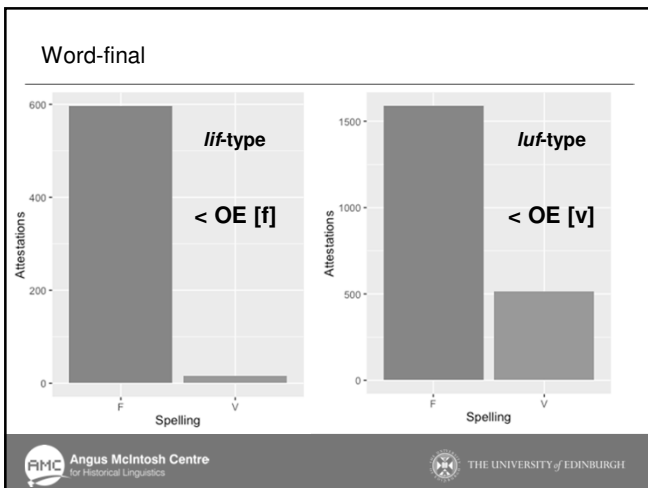
OE /f/ in OSc: final contexts

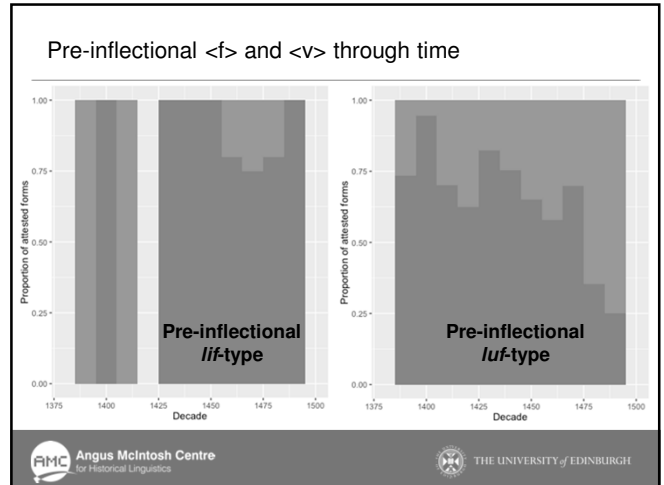
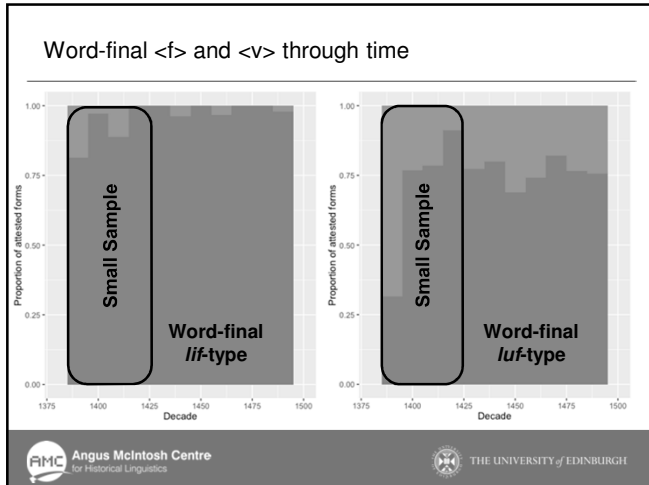
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OE	[f]	[v]	[v]
15C Scots	<f(e, ff(e)> <v(e,u(e,w(e)>	<f(e, ff(e)> <v(e,u(e,w(e)>	<f, ff> <u, v, w>
15C Scots	[?]	[?]	[?]
ModSc	[f]	[v] (∅)	[v] (∅)

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- Explanations
- How might we explain the apparent mismatch between OSc orthography on the one hand, and OE and ModSc phonology on the other?
  - Why *does* <f(f)> appear in OSc for (OE, ModSc) [v]?
    - Final devoicing of [v] (and other voiced fricatives)?
      - the ‘standard’ assumption (Wright & Wright 1928: 108; Jordan 1934: 191; Mossé 1952: 40; Fisiak 1968: 61)
      - Johnston (1997: 104): The devoicing of [v] in final position is “diagnostic of Scots as a whole ... final /v/ is almost always represented by <f>, or the giveaway sign of voicelessness, <ff>”
    - A spelling-only change (Luick 1940: 1008)?
    - Near-merger of [f] and [v] in final position?
  - The FITS data allows us to investigate these possible explanations in close detail
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- The data
- Word groups:
    - Words with OE [f] in final position: *lif*-type (e.g. *life*)
    - Words with OE [v] that ended up in final position due to schwa apocope: *luf*-type (e.g. *love*)
    - Both also occur in pre-inflectional position, both with [v] in OE (e.g. *lives*, *loving*)
  - Number of tokens
    - total = 3635
    - lif*-type word-final = 612
    - luf*-type word-final = 2103
    - lif*-type pre-inflectionally = 50
    - luf*-type pre-inflectionally = 870
  - Spelling categories
    - <f> = <f>, <ff>, <fe>, <ffe>
    - <v> = <u>, <v>, <w>, <ve>, <ue>, <we>
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### Summary of the data

- <f> occurs in final position in *lif* and *luf* at high levels (97.5% and 75.5%), though significantly more so in *lif*
- <v> in final position in *lif* is rare (2.5%), and the few examples that do occur involve words which have potential etymological confusion between adjectival/verbal forms with non-final [v] in OE and nominal forms with final [f] in OE (e.g. *half/halve*, *live/live*)
- <f> also occurs in pre-inflectional position in *lif* (a lot, at 86%) and *luf* (much less, at 53%)
- <f> is maintained at a steady level in final position in both *lif* and *luf* throughout the 15<sup>th</sup> century
- Through the 15<sup>th</sup> century, pre-inflectional <f> declines sharply in *luf* (there are too few *lif* examples to reveal a robust pattern)

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### Final Devoicing

- Final [v] in *luf*-type devoiced to [f] (= pre-existing final [f] in *lif*-type) well before the 15<sup>th</sup> century (Jordan, Luick date <f> spellings in N England to the 13<sup>th</sup> century)
- This [f], as well as pre-existing [f], were written as <f>
- This devoicing appears to have been variable, given the variation between <f> and <v> spellings in final position in *luf* (but not *lif*, which always had [f])
- Final [f] spread, variably, into pre-inflectional position, indicated by <f> spellings, before the 15<sup>th</sup> century; much more so in *lif*-type than *luf*-type
- In *luf*-type, [f] in pre-inflectional position declined through the 15<sup>th</sup> century, but survived strongly in word-final position
- But [f] must have been replaced by [v] (the original sound in the position) here too after the 15<sup>th</sup> century as ModSc has [v] (or  $\emptyset$  < [v]) in this position

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### Final Devoicing pros

- Allows us to take the spellings at face value, i.e. we can assume that Older Scots scribes, like Middle English scribes, "knew what they were doing" (Laing & Lass 2003: 258)
- Assuming variable implementation of final devoicing, the different frequencies of <f> and <v> in *lif*-type (which always had [f]) and *luf*-type (with variation between [f] and [v]) follows
- The variation in final *luf* between [f] and [v], but not in *lif*, also explains the difference between the frequencies of pre-inflectional <f> in *lif*-type and *luf*-type words; there was more [f] (indeed only [f]) in final *lif*, so that is more likely to spread to pre-inflectional position
- It explains the existence of ModSc *neif* for *neive* < ON *hnefi* (i.e. a relic pronunciation from this change)

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### Final Devoicing cons

- The change must have been variable
- It requires spread of [f] into pre-inflectional position in *luf* (as well as *lif*)
- The change must have been reversed, with [v] being restored in final *luf* (only) since we don't get any final [f] in *luf*-type in ModSc (except for *neive/neif*)

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## Spelling change only

- There was no change in the pronunciation of final [v] in the early history of Scots
- Instead, <f> became a possible spelling for [v] in *luf* (as well as [f] in *lif*) in word-final position, and indeed was used at very high levels
  - though <f> for [f] was significantly more frequent than <f> for [v]
- The <f> spelling spread into pre-inflectional position, but was not extended to become a possible spelling for non-final [v] generally
  - morpheme-internal and initial [v] were rigorously spelled as <v>, never <f>

## Spelling change pros

- No need to explain how final [f] disappeared in *luf*-type words, as it was never there in the first place
- The difference in pronunciation ([v] in *luf* vs. [f] in *lif*) explains the difference between the frequencies of <f> and <v> in word-final position

## Spelling change cons

- Scribes used <f> for [v] in final position at very high levels even though they had the means to indicate the difference and not infrequently did (i.e. they did use <v> in final position in *luf*-type words a fair bit)
- Scribes rigorously kept <f> for [f] and <v> for [v] in initial and morpheme-internal position, suggesting they cared about the difference
- The small amount of <v> in final position in *lif*-type can be explained in other ways (e.g. mixing up of etymological adjectival/verbal stems with nominal stems); why did scribes not feel able to use <v> for final [f] if they didn't mind <f> for final <v>?

## Spelling change cons

- <f> must have spread into pre-inflectional position in both *luf*-type and *lif*-type by 'spelling analogy', but at very different levels for each group
  - i.e. scribes were spelling morphographically, and had fixed ways of spelling particular roots (something which is not particularly apparent in their spelling otherwise)
- Scribes weren't just concerned with representing the phonetic substance of OSc, suggesting that we can't trust their orthographic record in ways we'd like to as historical phonologists

## Near-merger

- Final [v] devoiced to [v̥], becoming very similar to pre-existing [f], but remaining distinct from it (at least statistically)
- A situation of 'near-merger' (Labov 1994, Milroy & Harris 1985)
- The two sounds were so close that scribes were happy to use the same symbols for both (<f> or <v> in final position for *luf*-type, only <f> in final position for *lif*-type), and may even not have been able to hear the difference very well (cf. the MEAT-MATE near-merger in Mid-Ulster English)
- But the minor phonetic difference is reflected in the statistically different frequencies of <f> and <v> in the *lif*- and *luf*-types
- After the 15<sup>th</sup> century, the two sounds diverged again (possible, as they had never become identical)

## Near-merger pros

- Explains how the two sounds were written the same most of the time
- But gives a reason for the statistical differences in frequency of <f> and <v> spellings for the two groups
- Provides an explanation for how the two sets were distinguished so precisely after the 15<sup>th</sup> century

## Near-merger cons

- Requires prolonged maintenance of a (by its nature tenuous) near-merger
- Involves devoicing of final [y] in final position (to explain SVLR, some ModSc [v]), followed by devoicing of /v/ to [y] again in many ModSc dialects
- Doesn't explain *neif* (the reversal should have been clean)
- Cannot explain the common pre-inflectional <f> in *luf*-type: the near-merger, being a sub-phonemic, conditioned change, cannot spread by analogy to an environment where the conditions of the devoicing rule are not met (cf. Kiparsky 2003)
- If *lif* and *luf* were so similar in final position that <f> could be used for both, why could <v> not also be used for *lif*?
  - in other words, the scribes DID seem to know which words could have <v> and which couldn't, suggesting they did know the difference...

## Which explanation works best?

- It's clear that all three solutions to the problems have advantages and disadvantages
- However, the problems with the 'Spelling only' and 'Near-merger' accounts are more numerous and fundamental than with the 'Final Devoicing' explanation
- Furthermore, the CONS for 'Final Devoicing' can be explained in linguistically reasonable ways (which are in fact connected with each other)
  - the same can't be said for the CONS for the other approaches

## Variability in Final Devoicing

- The key to understanding how Final Devoicing (a phonetically motivated change) could have applied variably in the history of Scots is its interaction with schwa apocope, a prolonged, variable process
  - Minkova (2014: 231) states that after a long period of variation it was probably complete in English by 1450, though it likely reached this stage earlier in the north
- Thus we get:
  - OE [lʊvʊ], post-OE reduction of unstressed vowels to schwa: [lʊvə]
  - early ME, beginning of apocope (variable): [lʊvə]~[lʊv]
  - Final Devoicing in early Scots (13<sup>th</sup> century): [lʊvə]~[lʊf]
  - completion of apocope in Scots (Final Devoicing having ended, or being brought to an end in this way): [lʊv]~[lʊf]
- I.e. variability in Final Devoicing in OSc falls out from what we know about the phonological history of the language, *even though the change itself was regular*

## Analogical levelling in Final Devoicing

- Variable spread of [f] into pre-inflectional position by analogical levelling (Hock 1986)
- Given [lʊf]~[lʊvə], [lɪf]~[lɪvə], we can expect a (variable) change to:
  - [lʊf]~[lʊfə], [lɪf]~[lɪfə]
  - as evidenced by ModSc (*lif*-type) forms such as *wife*~*wifes*, *house*~*hou[s]es*
- It can also go the other way (e.g. *leaf* [li:v], *calf* (n.) [ka:v] in some modern dialects of English/Scots)
  - which may explain the uncommon word-final spellings of *lif* with <v> if other factors don't

## Analogy in Final Devoicing

- Analogy levelling is a categorical change which can (indeed must initially) happen variably (and slowly)
- The difference in frequency between pre-inflectional <f> (= [f]) in *lif* and *luf* is attributable to the different frequency of [f] in word-final position
  - pre-inflectional [f] in *lif* is much more common because it is more common in word-final position
  - and because *lif* has always had [f] (which *luf* has not), so there has been much more time for the analogy to take effect

## The retreat of Final Devoicing

- Possible as a result of the variability of the phenomenon (i.e. not a merger; cf. Maguire, Clark & Watson 2013)
- Disappeared first, in the 15<sup>th</sup> century, in pre-inflectional position in *luf*, where it was least common and most variable
- Extended to word-final position for *luf* (where it was also variable) but not *lif* (where it was near categorical) after the 15<sup>th</sup> century
  - helped by 'pan-Anglic' pressure (i.e. Scots following the same pattern as varieties south of the border)
  - not to be seen as a sign of Anglicisation or standardisation any more than the shared GVS changes found in Scotland and England
  - *neif*~*neive* is the sole witness to this 'failed' change, perhaps surviving because it is a geographically restricted word
- For pre-inflectional *lif*, cf. *wife*~*wifes*, *house*~*hou[s]es*, etc.

## Conclusions

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- OSc spellings seem to be out of synch with OE and ModSc pronunciations
- Various suggestions considered as to why (Final Devoicing has been favoured in the past)
  - previous scholars have not had access to a large corpora of OSc texts which would allow them to quantify patterns and test hypotheses
  - and the appearance of <f> in pre-inflectional position hasn't really been explained
- The 'Spelling only' and 'Near-merger' accounts don't explain the patterning of the data
- Final Devoicing does fit with the patterns in the data, but there are a number of further points that needed to be explained (apparent variability, extension to pre-inflectional position, apparent reversal of the change)

## Conclusions

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- The first of these can be explained by the interaction of Final Devoicing and schwa apocope
- The second is a result of the common process of analogical levelling
- The last follows from the variability of Final Devoicing in the first place, and of Scots being part of a wider 'Anglic' linguistic area which was mostly not characterised by final fricative devoicing
- Our analysis of Final [v] Devoicing in OSc not only shows the importance of the FITS corpus, but also of applying what we know about language change to data of this kind
- It looks as if the OSc scribes *did* know what they were doing, and were doing it consistently, making their spellings a rich mine for investigating the historical phonology of the language

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(Refs on request)