

# The weakening of strong verbs and the collapse of present- tense inflection-class distinctions in early Middle English

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# Main hypothesis of larger project

Large-scale regularization of originally strong English verbs was a historical event that took place in late Middle and Early Modern English...

NOT a manifestation of a pervasive tendency for irregular items to regularize.

# Overview of this talk

- Part I: Quick crash course in early Middle English verb inflection
- Part II: Proportional/implicative predictions about strong→weak shifts in early Middle English
- Part III: The LAEME corpus and my LAEME verb database
- Part IV: Survival and loss of present-tense inflection class distinctions in early Middle English
- Part V: Strong→weak shifts in early Middle English
- Part VI: Conclusions

**Part I:**  
**Quick crash course in**  
**early Middle English**  
**verb inflection**

# Type 1 and 2 weak verbs: past tense

All dialects of early Middle English (ca. 1150-1350) maintained a pretty consistent distinction in the **past tense** between two types of weak verbs:

Type I: Past tense *-t(e)* or *-d(e)* suffix was attached directly to the end of the verb.

Type II: “connecting” schwa preceded the suffix, yielding *-ed(e)*

# Types 1 and 2 (and strong verbs) in the present tense

**Southern and Southwestern dialects of early Middle English maintained a type-1-vs.-2 distinction in at present tense forms as well, where the forms of class-1 weak verbs were the same as those of strong verbs.**

# The Southern present-tense pattern

Strong:  
*sing***en** (inf.)  
'sing'

sg	
1	sing <b>e</b>
2	sing <b>st</b>
3	sing <b>p</b>
pl	sing <b>ep</b>
imp	sing

Weak 1:  
*hē***ren**  
'hear'

sg	
1	hē <b>e</b>
2	hē <b>rst</b>
3	hē <b>p</b>
pl	hē <b>ep</b>
imp	hē

Weak 2:  
*lov***ien**  
'love'

sg	
1	lov <b>i</b> e
2	lov <b>est</b>
3	lov <b>ep</b>
pl	lov <b>i</b> ep
imp	love

# Type 2 as the “regular” inflection class in early ME

- Most French loan words follow type-2 inflection
- Most new denominal and onomatopoeic coinages follow type-2 inflection

(The type-2 pattern is the most direct ancestor of the modern regular pattern.)



## Part II:

Proportional/implicative  
predictions about  
strong → weak shifts in  
early Middle English

# Paul's proportional/ implicative principle

"one word can be subject to analogical influence from another in its inflection only if it [already] corresponds to the other word in the formation of one or more forms" (1886:95)

The strong and type-2 weak patterns did not match anywhere in the paradigm in Old English or in southern dialects of early Middle English.

Paul's principle – or any implicative word-and-paradigm model of inflection – predicts that strong verbs could not shift to the type-2 weak pattern (“regularize”) under these circumstances.

In traditional proportional terms: There was no “pivot” or anchor” in the paradigm to license this kind of analogical change.

## Part III:

The LAEME corpus and  
my LAEME verb database

# The LAEME corpus

- LAEME = A Linguistic Atlas of Early Middle English (ver. 2.1: 2008-2013, ver. 3.2: 2013-)
- 600,000+ words written between 1150 and 1325, from all parts of England
- fully lemmatized, morphologically analyzed, and morphosyntactically tagged
- freely available in downloadable form



# My LAEME verb database

With simple perl or python scripts, virtually any kind of database can be easily created from the tagged forms in the corpus.

136,931 verb tokens

I added inflection-class information for each lexeme.

LAEME lexel	infl. class	LAEME grammel	LAEME form	LAEME final morpheme	LAEME dates	LAEME text number	Easting	Northing
be	be	vpt13	WAS	WAS	C13b2-C14a1	163	378	159
be	be	vps13	HIS	HIS	C13b2-C14a1	163	378	159
bury	w1g	vps13	BURIIC+TH	+TH	C13b2-C14a1	163	378	159
come	come	vps13	*COM+EZ	+EZ	C13b2-C14a1	163	378	159
woo	w2	vps13K2	WOC+TH	+TH	C13b2-C14a1	163	378	159
drink	s3nk	vps13	DRINK+ET	+ET	C13b2-C14a1	163	378	159
eat	s5	vps13-ct	HET	HET	C13b2-C14a1	163	378	159
sing	s3ng	vps13	SING+EZ	+EZ	C13b2-C14a1	163	378	159
be	be	vps13	HIS	HIS	C13b2-C14a1	163	378	159
rot	w2	vps11K2	ROT+YE	+YE	C13b2-C14a1	163	378	159
be	be	vps13	IS	IS	C13b2-C14a1	163	378	159
ago	go	vSpp{rh}	A+GO	+GO	C13b2-C14a1	163	378	159
have	have	vps13	HAU+ET	+ET	C13b2-C14a1	163	378	159
be	be	vps23-apn	BET	BET	C13b2-C14a1	163	378	159
love	w2	viK2	LOU+IE	+IE	C13b2-C14a1	163	378	159
shall	pret-pres	vpt23{rh}	SSOLD~	SSOLD~	C13b2-C14a1	163	378	159
draw	s6	vps23-apn	DRAH+ET	+ET	C13b2-C14a1	163	378	159



**Part IV:  
Survival and loss of  
present-tense inflection  
class distinctions in  
early Middle English**

## 2/3singular: Heavy-stem type-I weak

Northing	unsynco- pated	con- tracted	synco- pated	% un-sync
<b>≤200</b>	<b>42</b>	<b>62</b>	<b>85</b>	<b>22%</b>
<b>201-250</b>	<b>151</b>	<b>110</b>	<b>57</b>	<b>47%</b>
<b>251-300</b>	<b>396</b>	<b>159</b>	<b>38</b>	<b>67%</b>
<b>&gt;300</b>	<b>212</b>	<b>36</b>	<b>4</b>	<b>84%</b>

## 2/3singular: Strong verbs

Northing	unsynco- pated	con- tracted	synco- pated	% un-sync
<b>≤200</b>	<b>98</b>	<b>194</b>	<b>367</b>	<b>15%</b>
<b>201-250</b>	<b>587</b>	<b>377</b>	<b>406</b>	<b>43%</b>
<b>251-300</b>	<b>1430</b>	<b>601</b>	<b>423</b>	<b>58%</b>
<b>&gt;300</b>	<b>671</b>	<b>101</b>	<b>59</b>	<b>81%</b>

## 2/3singular: Type-2 weak

Northing	unsynco- pated	synco- pated	% un-sync
<b>&lt;=200</b>	<b>252</b>	<b>8</b>	<b>97%</b>
<b>201-250</b>	<b>429</b>	<b>5</b>	<b>99%</b>
<b>251-300</b>	<b>984</b>	<b>15</b>	<b>98%</b>
<b>&gt;300</b>	<b>352</b>	<b>57</b>	<b>86%</b>

# imperative: Type-I weak

Northing	-e	-∅	% -e
≤200	13	42	24%
201-250	20	317	6%
251-300	35	214	14%
>300	28	60	32%

## imperative: Strong verbs

Northing	-e	-∅	% -e
≤200	6	92	6%
201-250	18	225	7%
251-300	16	323	5%
>300	38	102	27%

## imperative: Type-2 weak

Northing	-e	-∅	% -e
≤200	28	4	88%
201-250	90	10	90%
251-300	146	27	84%
>300	24	33	42%

## Part V:

Strong → weak shifts in  
early Middle English



# Strong → type-I weak

- Found everywhere (as predicted), in some cases continuing shifts that began in Old English:
- in verbs with root-final *d* or *t*:
  - systematically in: *dread*, *read* (?), *let*, *shed*, *wield*
  - occasionally in *lūtan* ‘bow’, *bēodan* ‘offer’
  - sporadically in a few others
- in verbs with other root-finals
  - often in *sleep*, *flee*, *drēogan* ‘suffer’
  - occasionally in *weep*, *leap* *step*, *rīpan* ‘reap’, *būgan* ‘bow’, *blōwan* ‘bloom’ *shine*, *sneorcan* ‘grow dark’

# Strong → type-2 weak (I)

- Found almost only in the North (Northings > 300) (as predicted):
- *būgan* ‘bow’ (6 tokens), *weorþan* ‘become’ (3), *lēogan* ‘tell lies’, *drēogan* ‘suffer’, *sūcan* ‘suck’ (1 each)

# Strong → type-2 weak (II)

- A couple of verbs already varied between strong and class-2 weak in OE: *mourn, heave*; type-2 weak forms of these two verbs occur at all latitudes in LAEME
- *līpan*, apparently an archaic verb; occurs mainly in Layamon in strong, type-1 and type-2 weak forms
- *flow* occurs 4 times in type-2 weak forms, as far South as 253.

# Part VI: Conclusions

Proportional/implicative models make correct predictions about the geographical distribution of strong → type-2 weak shifts (as opposed to shifts to type-1 weak) in early Middle English.

They also account for the correlation between the collapse of present-tense inflection-class distinctions and the spread of “regularization” in later Middle English.

This is one small piece of the story of the Great English Verb Regularization – a historical episode

- precipitated by a perfect storm of other changes
- and representing the only period in the history of English where there is any sign of a tendency for strong or irregular verbs to regularize.

## Selected references (1)

Blevins, James P. 2016. *Word and Paradigm Morphology*. Oxford University Press.

Carroll, Ryan, Ragnar Svare, & Joseph Salmons. 2012. Quantifying the evolutionary dynamics of German verbs. *Journal of Historical Linguistics* 2. 153–172.

Cheshire, Jenny. 2002. Standardization and the English irregular verbs. *Towards a Standard English*, ed. by Dieter Stein and Ingrid Tieken-Boon van Ostade, 115–134. Berlin: de Gruyter Mouton.

Cuskley, Christine F., Martina Pugliese, Claudio Castellano, Francesca Colaiori, Vittorio Loreto, Francesca Tria. 2014. Internal and External Dynamics in Language: Evidence from Verb Regularity in a Historical Corpus of English. *PLoS One* 9(8).e102882.

Fertig, David. 2008. The Role of Multiple Cues in Category Formation and the Development of the Weak Verb Classes in Medieval German and English, Presentation at GLAC 14, U. of Wisconsin-Madison, May, 2008.

Fertig, David. 2009. Are strong verbs really dying to fit in? Presentation at GLAC 15, Banff, May 2009.

Fertig, David. 2013. *Analogy and Morphological Change*. Edinburgh University Press.

Gray, Tyler J., Andrew J. Reagan, Peter Sheridan Dodds, & Christopher M. Danforth. 2018. English verb regularization in books and tweets. *arXiv:1803.09745 [cs.CL]*

Hare, Mary and Jeffrey L. Elman. 1995. Learning and Morphological Change. *Cognition* 56.61–98.

## Selected references (2)

Laing, Margaret. 2013—. *A Linguistic Atlas of Early Middle English, 1150–1325*, Version 3.2 [<http://www.lel.ed.ac.uk/ihd/laeme2/laeme2.html>]. Edinburgh: © The University of Edinburgh.

Lass, Roger. 1993. Proliferation and option-cutting: The strong verb in the fifteenth to eighteenth centuries. *Towards a Standard English*, ed. by Dieter Stein and Ingrid Tieken-Boon van Ostade, 81–114. Berlin: de Gruyter Mouton.

Lieberman, Erez, Jean-Baptiste Michel, Joe Jackson, Tina Tang and Martin A. Nowak. 2007. 'Quantifying the evolutionary dynamics of language'. *Nature* 479.713-716.

Lounsbury, Thomas Raynesford. 1908. 'Conflicts of usage'. *Harpers* 1908(10).701–706.

Michelau, Erich. 1910. Der Übertritt starker Verba in die schwache Coniugation im Englischen. Doctoral dissertation, Albertus-Universität zu Königsberg im Preußen.

*Middle English Dictionary*, ed. by Robert E. Lewis, et al. Ann Arbor: University of Michigan Press, 1952-2001. Online edition in *Middle English Compendium*, ed. by Frances McSparran, et al. Ann Arbor: University of Michigan Library, 2000-2018. <<http://quod.lib.umich.edu/m/middle-english-dictionary/>>.

Newberry, Mitchell G., Christopher A. Ahern, Robin Clark, & Joshua B. Plotkin. 2017. Detecting evolutionary forces in language change. *Nature* 551.223–226.

Paul, Hermann. 1886. *Principien der Sprachgeschichte*, 2nd ed. Halle: Niemeyer.