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Are strong verbs really dying to fit in?

1. Some problematic cases for accounts of regularization

1: Mistaken identity: A regular verb is erroneously regarded as a continuation of an earlier strong verb.

Extreme case: At least 19 of the 79 cases of regularization alleged in Lieberman 2007 involve mistaken identity: e.g. *cringe*, *slip, blend, prescribe, redden, rush*, ...

Arguable cases, e.g.: *to lake* 'play' - usually regarded as continuation of OE strong *lācan*; but OED points out: "The word seems in ME. to have been re-adopted in the Scandinavian form. Its currency is almost entirely northern, no forms with o being known. The inflexion has been weak since the 13th c." ON *leika* was also strong, but *ai* diphthong in present does not fit well with any ME strong pattern.

2: Coalescence: An irregular verb and a homophonous or phonologically similar (usually derivationally related) regular verb come to be regarded by speakers as a single lexical item. (Many cases involve more than 2 verbs.) Regular inflection may prevail:

Some recognized cases:
to burn < OE strong *brinnan/beornan/biernan* + OE weak (caus.) *bærnan* [+ ON weak *brenna*]
to bow < OE strong *būgan* + OE weak (caus.) *bīegan*/*bȳgan*
to cleave < OE strong *clīfan* + OE strong *clēofan* + OE weak *clifian*/*cleofian*
to dive < OE strong *dūfan* + OE weak (caus.) *dȳfan*
to fare < OE strong *faran* + OE weak *fēran*
to hele 'hide' < OE strong *helan* + OE weak *helian*
to hang < OE strong *hōn* + OE weak *hangian* + ON weak *hengjan*
to melt < OE strong *meltan* + OE weak (caus.) *meltan/miltan/myltan*
to milk < OE strong *melcan/meolcan* + OE weak *meolcian/mylcian*
to spew < OE strong *spīwan* + OE weak *spēowan*/*spīowan*
to sup 'sip' < OE strong *sūpan* + OE *suppan* + OE weak *supian*
to swike 'cease' < OE strong *swīcan* + OE weak *swician*
to walk < OE strong *wealcan* + OE weak *wealcian*
to wield < OE strong *wealdan* + OE weak *wieldan*
to weigh < OE strong *wegan* + OE weak *wecgan*

Arguable cases:
to bark < OE strong *beorcan* + OE weak *borcian* + ON weak *berkja*
to wall 'boil' < OE strong *weallan* + OE weak (caus.) *wællan/wiellan/wellan*

There are also numerous cases where irregular inflection prevails in coalescence:
to run < OE strong *rinnen/iernan* + OE weak (caus.) *ærnan*/*earnan* + ON strong *rinna* + ON weak *renna*
to wake < OE strong **wacan* (or *wæcnan*?) + OE weak *wacnian*
to sink < OE strong *sincan* + OE weak (caus.) *sencan*
to hang < OE strong *hōn* + OE weak *hangian* + ON weak *hengjan*
to read < OE strong *rǣdan* + OE weak *(ge-)rǣdan*/*redan*
to lose < OE strong *lēosan* + OE weak *losian* + (?) denominal *to loose*

Coalescence can also occur between two or more irregular verbs:
to bid < OE *biddan* 'command' + *bēotan* 'offer'

Case 3: Double conversion: A new regular verb is coined through zero-derivation from a noun which is itself zero-derived from an irregular verb (Pinker et al.'s "regularization through derivation": e.g. "The batter flied/*flew out to center field."). The denominal verb may show considerable semantic overlap with the original verb from the beginning. Eventually, the denominal may completely take over:

to yelp: OE gielpan 'boast' -OE meaning last attested 1425; all attested strong forms are associated with this meaning; deverbal noun *yelp* last attested meaning 'boast' in 1400; new meaning "A cry characteristic of dogs and some other animals, resembling a bark but distinguished from it by being sharp and shrill." (OED) 1st attested 1500; corresponding meaning of verb 1st attested 1553.

Case 3b: Derivational reanalysis (may sometimes be difficult or impossible to distinguish from double conversion in practice): Speakers/learners reanalyze the direction of derivation between a basic verb and a deverbal noun, so that the take the verb to be denominal and thus assume that it is regular:

to braid < OE strong *bregdan* reanalyzed as denominal < braid (n.) ?
to shape < OE scieppan/scyppan reanalyzed as denominal < shape (n.) [OED: "The verb has been influenced in sense-development by SHAPE n.1, of which it is apprehended as a derivative."]

Combined factors: Some alleged regularizations probably involve combinations of two or more of the above factors:
Mistaken identity + double conversion (?): *to ban* < OE strong *bannan* 'summon' AND/OR < ON weak *banna* 'prohibit, curse' AND/OR denominal < OE deverbal *(ge-)ban*/ON *bann* 'edict, prohibition, curse'

2. Fates of 293 OE strong verbs:

70 are unattested after OE

32 disappeared from the language sometime between the 13th and the 18th c. with no sign of regularization
65 are still (more or less) entirely strong today
5 show various degrees of strong-weak variation in both the past and participle (*swell, shear, heave, tread, crow*)
8 are regularized in the past but still have strong participles (no vowel change + -en) that are still regarded as current alongside the regularized ones (*sow, hew, gnaw, lade, shave, wax* 'grow', *grave, mow*)
6 have become irregular weak verbs w/ *-t/-d* suffix + vowel change (*creep, flee, sleep, sweep, weep, leap*)
1 has irregular *-t* suffix with no vowel change (*burn*)
3 are *-t/d*-final stems with vowel shortening in the past and participle (*shoot, read, slide*)
5 are t/d-final stems with no change in the past or participle (*shit, bid, burst, let, shed*)
23 (at least) have coalesced with an originally weak verb, with a regular verb as outcome (*ban, bark, teld* 'cover', *bow, cleave* 'adhere', *cleave* 'separate', *dive, fare, frainen* (MED) 'ask', *gripe* 'grasp', *hele 'hide', melt, milk, shrāpen* (MED) 'scrape', *spew, sup* 'sip', *sweve* '(put to) sleep', *swike* 'cease', *walk, wield, wall* 'boil', *weigh*, *wharve* 'turn, go')
1 verb for which it is unclear to me from the available evidence exactly what has happened to them in terms of regularization (*swink* 'toil')
That leaves **74** verbs which have undergone (more or less) complete regularization since OE, of which **57** are still in the language today and **17** were lost after regularization.

3. Chronology of regularization of English strong verbs:
(These numbers include surviving verbs that are completely or largely regularized today and lost verbs that were completely or largely regularized before they fell out of use):

7 verbs already had weak forms in OE; 2 of these (*mourn*, *dwine* 'dwindle') may have been fully regularized by the end of OE; in

the other cases (*swelt* 'die' *sty* 'ascend', *rine* 'touch', *reek*, *dread*), there is little sign of further substantial regularization until the (late) 14th c. or later. An 8th verb, *heave*, also has weak forms in OE, but is still not fully regularized today!

1 verb: *sike/siche* 'sigh' has both irregular (*sihte*, 1225) and regular (*sikede*, 1225) weak forms occuring alongside the strong past (*seac*, 1230) in the early 13th c. The more common development in earlier ME is to the *sihte* type.

2 verbs (*flow* and *dree* 'endure, suffer, do penance') have weak forms starting in the early 13th c.; the strong past of flow disappears quickly while the partic. lasts longer; the strong forms of *dree* last occur in the late 14th c. [But note: MED regards this verb as a coalescence of the OE strong verb and ON weak (OI) drȳgja.]

2 verbs (*climb* and *grave* 'dig') have weak forms starting in the late 13th c. (1275). The regularization process continues for centuries in both cases.

(Cf. Baugh and Cable 2002:163: "In the thirteenth century the [strong > weak] trend becomes clear in the written literature. Such verbs as *bow, brew, burn, climb, flee, flow, help, mourn, row, step, walk, weep* were then undergoing change.")

51 verbs appear in weak past and/or participle forms for the first time between 1300 and 1400; all but a few first occur in the last 3 decades of the century. In some cases, there are no past or participle attestations at all between OE and the appearance of these weak forms, but in many other cases strong forms do occur until shortly before and overlapping with the new weak forms. Most appear to complete their regularization by the mid 15th c. at the latest.

10 verbs appear in weak forms for the first time in the the first half of the 15th century

1 verb (*lade*) first appears in a weak form in the second half of the 15th century (1481).

6 verbs first appear in weak forms in the 16th century.

1 regularized verb (*glide*) first shows up weak in the 17th century (1632).

4. Chronology of irregularization in English:

4 originally weak or new verbs show their first strong forms between 1200 and 1300 (*show*, *ring*, *strive* < OF, and *ding* 'deal heavy blows, knock' < ON weak verb) [*thrive*, *rive* and simplex *get* are also new strong verbs in 13th c. English but were already strong in ON, as was *take*, attested in English since 1100]

3 more verbs develop strong forms in the 14th c. (*wear*, *quake, fling* [< ON weak verb]) [The denominal verb *snow* also shows strong forms from the 14th c.; ; strong forms of *claw* in the sense 'scratch gently so as to soothe' may also date from this century]

1 verb, *saw*, develops strong forms in the 15th c., with the strong participle *sawn* still in widespread use today.

6 originally weak verbs show their 1st strong forms in the 16th c. (*dig*, *string*, *stick*, *hide*, *chide, strew*); the strong participle *proven* also makes its 1st appearance. [The OED and the MED disagree on the date of the first strong participles of *sew*.]

2 verbs 1st develop strong forms in the 18th century, denominal *stave* 'break up (a cask) into staves' and *reeve* - 'pass (a rope) through a hole, ring, or block'.

2 more, *dive* and *sneak*, start their irregularization in the 19th century.

5. Conventional wisdom and some alternatives

Conventional wisdom: Analogical change shows a pervasive tendency toward regularization - ironing out of anomalies and subregularities in favor of dominant patterns.

Alternative hypothesis: 1) In the absence of major extra-morphological forces (e.g. new contact situations, relevant sound changes), analogical change in an inflectional system is sporadic and shows no particular directional tendency. 2) Disruptions brought on by extra-morphological forces can have many outcomes, one of which is large-scale, relatively rapid regularization.

Fallacies associated with the conventional wisdom:

1) Analogical change is closely related to the forms produced by

children in relatively early stages of acquisition (cf. Bybee and Slobin 1982).
2) Directionality of analogical change is one (direct/straightforward) manifestation of productivity.

6. Proportional and non-proportional analogy in regularization

Conventional wisdom: regularization and irregularization are "proportional" analogical processes. They involve creation of new inflected forms based on analogical models to replace the old form when learners fail to acquire the old form (which plays no role in the change).
Alternative hypothesis: large-scale regularization, in particular, often involves a crucial non-proportional component: it occurs when the saliency of the difference between the regular and irregular inflected forms is diminished to the point where learners hearing the irregular forms can easily mistake them for regular forms.

7. The extra-morphological forces behind the great English verb regularization.

Some preliminary suggestions: As syncope and apocope gradually spread (especially "stylistically" from fast speech to all but the most careful speech), the saliency of the difference between originally bi- or trisyllabic weak past forms and monosyllabic strong past (singular) forms was dramatically diminished. Frequent simplification of final consonant clusters was surely an additional factor (e.g. *-pt*, *-ðd*), as were coarticulation effects that reduced the perceptual salience of stem-vowel differences (cf. *e-a* variation before *rC*).
Mixed forms (e.g. *holped*) occur for a number of verbs in the early stages of regularization (as do present forms with past stem vowels). Learners reanalyzed ("hypercorrectively" in the Ohalian sense) the suffixless past tense forms that they were hearing as having an underlying weak suffix that was deleted in casual speech.

8. Regularization and stem-final consonants:

OE strong verb with stem-final *p*: 25
Number lost: 13
Number now irregular weak: 5 (*weep, sleep, sweep, creep, leap*)
Number now regular: 7
Number still strong: 0

OE strong verbs with stem-final *þ/ð*: 10
Number lost: 7
Number now regular: 3 (*writhe, seethe, bequeath*)
Number still strong: 0

OE strong verbs with stem-final *lC/rC* (other than *ll*): 30
Number lost: 10
Number now irregular weak (no change): 1 (*burst*)
Number now regular: 18
Number still strong: 1 (*hold*)

OE strong verbs with stem-final *NC* (including *nn* and *mm*): 34
Number lost: 13
Number now regular: 1 (*climb*)
Number still strong: 20

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