Complexity in the formation of English comparatives and superlatives

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In Old English, comparatives and superlatives were always formed by suffixation. A change first appeared in the thirteenth century (Mitchell 1985, pp. 84-85). Currently:

- Words of one syllable mainly use the inflectional –*er* and –*est* forms
- Words of three or more syllables now use the periphrastic *more* and *most* construction almost exclusively
- The largest group of variability is with two-syllable words.

The data on which this study is based were extracted from the Québec English Corpus (Poplack & Walker, 2002) housed at the Sociolinguistics Laboratory at the University of Ottawa.

- 183 sociolinguistic interviews comprising some 340 hours (2,814,223 words)
- 68 interviews in Québec City and 96 in Montréal, representing Québec English speakers
- Control group of 19 interviews in the Oshawa/Whitby area of Ontario, where very little French is spoken

Table 1: Distribution of comparatives and superlatives in the QEP corpus

Syllables	-er	-est	Total inflected
1	3968	1004	4972
2	367	108	475
3+	0	0	0
Total	4335	1112	5447
Syllables	more	most	Total periphrastic
1	108	11	119
2	321	63	384
3+	653	135	788
Total	1082	209	1291

Despite the fact that English is moving away from inflections in the long term towards a more analytical structure, the majority of adjectives and adverbs (more than 80% in the QEP corpus) continue to be inflected with –*er* and –*est* (Table 2).

Table 2: Distribution by percentage of inflected and periphrastic forms

Syllables	Inflected	Periphrastic	Total
1	97.6%	2.4%	100.0%
2	55.3%	44.7%	100.0%
3+	0.0%	100.0%	100.0%
Total	80.8%	19.2%	100.0%

Historical overview

A survey of grammars over the last four centuries reveals that constraints have only slowly been introduced into prescriptive advice to the point where the current rules are too simplistic and more restrictive than usage would indicate.

In Johnson's 1640 grammar (1640/1972), no special distinction is made between the inflectional and periphrastic. He cites *wiser*, *more wise*, *wisest*, and *most wise* without any preference. He also gives *learned, learneder, learnedest* as examples. These would not be grammatical for most speakers today, nor would these examples of adverbs formed from adjectives: *wisely, wiselier, wiseliest, justly, justlier, justliest*.

A 1700 grammar by Lane (1700/1969) purports to give the "exactest rules." In a diagnostic for adjectives, he says "I can say in good Sense, *more hard*, *most hard*, *very hard*." In defining a comparative, he says that it "signifies the same as the Positive with the Particle *more* before it; as *harder*, which is the same as *more hard*." Again there is no preference indicated for either form.

Gildon and Brightland (1711/1967) give *-er*, *-est*, *most*, and *very* as options (p.91). They advise that "These are three, which have an irregular manner of being compar'd, as *good*, *better*, *best*, *bad*, or *ill*, *worse*, (and *worser*), *worst*; *little*, *less*, (and *lesser*), *least*; to which add *much*, or *many*, *more*, *most*" (p. 91), so *more worser* seems to be a legitimate possibility from this advice. This seems to be a triple comparison. Multiple comparisons are now considered non-standard.

By 1735, Collyer (1735/1968) was still giving free options to add *er* or *more* or *less* for the comparative and to add *est* or *most*, *very*, or *extraordinary* ("*extraordinary hard*") for the superlative (p. 36). He cites different examples for each, so it is not clear whether he considers some adjectives to be capable of taking both.

Kirkby (1746/1971) talks about adding –*er* and –*est* and gives spelling rules for stems with a final *e* or a final consonant preceded by a short vowel. His next rule says "Otherwise the Comparative is formed by prefixing the Word *more* and Superlative

most, to the Positive" (p. 77). He gives *sweeter* as well as *more sweet* and *most sweet* as examples. There is a slight bias towards the suffixes as the unmarked form, but either form seems to be acceptable to him. He also cites both *worse* and *worser* as possibilities (p. 78).

By 1761, Priestley (1761/1969) is finally giving some reasons for choosing the periphrastic over the suffixes. He says "Some adjectives, and especially *Polysyllables*, to avoid a harshness in the pronunciation, are compared, not by any change of termination, but by particles prefixed; as *benevolent*, *more benevolent*, *most benevolent*" (p. 8). By *polysyllables*, he is apparently referring to words of three or more syllables. In a note on this page, he says that "There are some *Dissyllables* that would not admit the termination [*er*] or [*est*] without a harshness in the pronunciation." Citing "Mr. *Johnson*," he gives -*some*, -*ful*, -*ing*, -*ous*, -*less*, -*ed*, -*fy*, -*ky*, -*my*, -*ny*, -*py*, and -*ry* as terminations of this type.

Murray (1795/1968) allows for some variation among monosyllabic adjectives, stating that "Monosyllables, for the most part, are compared by *er* or *est*; and dissyllables by *more* and *most*" (p. 36). Among dissyllables, he cites those ending in *y*, "in *le* after a mute" [i.e. a consonant], or accented on the last syllable as the ones which "easily admit of *er* and *est*." Interestingly, he gives *abler* and *ablest* as an example of an -*le* word. Peters (2000) found this word to be a "deviant member" of the –*le* group (p. 306), 97% (N=171) of the comparative forms of *able* using *more* and 62% (N=72) of the superlatives using *most*. Finally, Murray notes that "words of more than two syllables hardly ever admit of those terminations [i.e. –*er* and –*est*]" (p. 36).

Sweet (1891/1966) gives the subject the most extensive treatment of grammarians we have considered so far (v.2, pp. 326-327). He says that the periphrastic is used with longer and more unfamiliar adjectives. There is no question that length (measured in syllables) is a significant constraint. As for familiarity, it is not easy to measure, but it may interact with length since short adjectives tend to make up the bulk of the most common ones.

Sweet gives a long list of adjective groups that favour either the inflectional or periphrastic methods of comparison. Favouring the suffixes are

(a) monosyllables
(b) disyllables with final stress (usually). Exceptions include those which end in a "heavy consonant group" (examples include -*pt*, -*ct*, -*nt*), but *pleasant* is not an exception because "its meaning makes it liable to frequent comparison" (p. 327).
(c) many disyllables with initial stress, but not those in –*ish*, -*s*, and –*st*, to avoid repeating sibilants in the superlative suffix

Favouring the periphrastic are

(a) all adjectives of more than two syllables
(b) those in –*ful*
(c) those in –*ed* and –*ing* (verbal forms)

Current constraints on variation

Monosyllabic

Clearly, inflections are favoured. These have been little studied, since the bisyllabic words are more variable and tend to be more interesting to researchers.

Table 3 shows the 119 monosyllabic periphrastic comparisons in the QEP corpus. The word ending that occurs most often is consonant clusters (CC), accounting for 36 tokens (30.3% of the periphrastic monosyllables).

Table 3: Monosyllables in the QEP corpus with using periphrastic comparison

Group	MORE	MOST	Total
CC	33	3	36
VN	16	3	19
V	19		19
VC	19		19
Vs	10	1	11
Vd	6		6
<-Y>	2	1	3
well	1	1	2
Vr	1	1	2
Vl	1		1
bad		1	1
Total	108	11	119

Bisyllabic forms

Quirk et al. (1972, pp. 292-293) say that many can take inflections, but they "have the alternative of periphrastic forms." Numerous considerations separate which bisyllabic adjectives are in which category.

Ending in an unstressed vowel

Quirk et al. (1985, p. 462 cited in Peters 2000, p. 302) say that unstressed final vowels favour inflections. There are several sub-groups.

Ending in -*ly*

This group mostly favours periphrastic, with the notable exceptions of the common words *early* and *likely* which tend to favour inflections (Lindquist 1998, p. 211 cited in Peters 2000, Peters 2000, p. 307). The QEP corpus agrees with these tendencies, as shown in Table 4. Although the overall tendency for –*ly* words is towards the inflectional, this is mainly due to *earliest* and *earlier* alone.

Table 4: Distribution of –*ly* words

Ending	Word	ER	EST	MORE	MOST	Total
-*ly*	!WIDELY-DISTRIBUTED				1	1
	CLEARLY			1		1
	EARLY	93	10			103
	FRIENDLY	2	3	8	1	14
	HIGHLY			2		2
	LIKELY			9	7	16
	LIVELY	1		1		2
	LOVELY		1			1
	MANLY			1		1
	POORLY			1		1
	SILLY		1			1
	SIMPLY			1		1
	SLOWLY			2		2
	STRONGLY			1		1
	UGLY		4			4
Total		96	19	27	9	151

Early is the only one of these words which is not transparently bimorphemic. Although it comes from OE *aer + lige* (Peters 2000, p. 307), most contemporary speakers probably do not analyze it as a bimorphemic word. Bauer (1994, pp. 57-78) also found *costly*, *deadly*, *friendly*, and *kindly* favoured the periphrastic, although none of them clearly did that in Peters' analysis (p. 307). The only one of these which appears in the QEP data is *friendly*, which follows the results of Bauer in that 5 tokens took the suffixes, while 9 used the periphrastic constructions. For Peters, *friendly* favoured periphrastic for comparatives, but inflections for superlatives. My results agree. *Lovely* also behaved this way for Peters, but the QEP has only one token of a comparison using *lovely*.

Ending in −*y*

Kytö and Romaine (2000, p. 181) found that −*y* endings other than −*ly* favour inflections. Peters (2000, p. 307) agrees, with a few exceptions. *Worthy* favours the periphrastic in Peters' data and *risky* favours periphrastic for comparatives only. For superlatives, *angry* may favour periphrastic for Peters, "results are indeterminate" (p. 307).

The data from the QEP corpus, shown in Table 5, agrees with the tendencies found in Peters.

Table 5: Distribution of −*y* words

Ending	Word	ER	EST	MORE	MOST	Total
-*y*	ANGRY		1	1		2
	BLUESY			1		1
	BOSSY				1	1
	BUSY		1	1		2
	CLASSY		1	1		2
	CLOUDY			1		1
	CLUMSY		1			1
	COCKY			1		1
	CRAZY	3	6			9
	DIRTY	5	1			6
	EASY	203	20	4		227
	EMPTY			1		1
	FANCY	2				2
	FOGGY		2			2
	FRUMPY	1				1
	FUNNY	3	29			32
	GEEKY			1		1
	GIDDY		1			1
	GREASY			1		1
	GUILTY				1	1
	HANDY				1	1
	HAPPY	12	5	3		21
	HEALTHY	6				6

Ending	Word	ER	EST	MORE	MOST	Total
-y	HEAVY	11		1		12
	HIPPIE			1		1
	HOMEY	1				1
	HUNGRY	1				1
	LEERY			1		1
	LUCKY	3	2	1		6
	MERRY	1				1
	MESSY	1		1		2
	MUGGY			1		1
	NOISY		1	1		2
	PRETTY	5	1			6
	PUSHY			1		1
	READY			1		1
	SCAREY	1	7			8
	SHITTY		2			2
	SKANKY	1				1
	SLIPPY	1				1
	SLUTTY		1			1
	SMOGGY	1				1
	SNEAKY	1				1
	SNOBBY			1		1
	STUFFY	1				1
	TASTY			1		1
	TIDY		1			1
	TINY	1	1			2
	WEALTHY	2	2	1	1	6
	WINDY		1			1
	YUPPY	1				1
Total		268	87	29	4	388

Endings in syllabic consonants

These include Peters' –*le* group and *V + nasal* and might also include –*er* which could be a syllabic *r* for some speakers.

Ending in –*le* (Cl̩#)

Kytö and Romaine (2000, p. 181) says that this favours inflections. Peters (2000, p. 306) agrees, with the exception of *able* (especially in the comparative). Peters cites a "quasi-modal" meaning as encouraging the periphrastic variant for *able*. Data from the QEP corpus (Table 6) agree with Peters' findings, although there was only one token of a comparison using *able*, so the tendency for this word is inconclusive.

Table 6: Distribution of –*le* words (consonant + /l/)

Ending	Word	ER	EST	MORE	MOST	Total
Cl̩	ABLE			1		1
	LITTLE		1			1
	SIMPLE	8	2	1		11
	SUBTLE			1		1
Total		8	3	3		14

Ending in V + nasal (CN̩#)

Peters has labelled this as vowel plus nasal, but I think it is better considered as a syllabic nasal following another consonant.

Table 6: Distribution of V + nasal words (syllabic nasal)

Ending	Word	ER	EST	MORE	MOST	Total
CN̩	OFTEN	1		29	3	33
	Other	1		28	13	41
Total		1		57	16	74

Ending in –*er* (Cr̩#)

Peters (2000) groups –*ure* and –*ere* words into words that end in vowels, but that may not be a good grouping for those who pronounce final /r/ as a consonant. As far as –*er* words are concerned, my intuition is that a superlative ending in –*erer* would be disfavoured.

Table 7: Distribution of roots ending in -r

Ending	Word	ER	EST	MORE	MOST	Total
Cr				41	3	44

Consonant cluster endings (CC#)

Table 8: Distribution of roots ending in consonant clusters

Ending	Word	ER	EST	MORE	MOST	Total
CC				42	15	57

Miscellaneous phonological shapes of roots

The groups discussed so far account for almost all of the uses of the inflectional paradigm for comparison of bisyllabic roots in the QEP corpus. The few remaining ones will be presented here.

Quiet

It is difficult to say what the reasons are, but *quiet* seems to be in a class of its own. Peters (2000, p. 305) found that 460 of 465 comparisons of *quiet* used the suffixed endings, although Quirk et al. (1985, p. 462 cited in Peters, p. 305) claims that this is one of the words for which the periphrastic form is increasing. In the QEP data, there were 9 examples of *quieter* against 6 *more quiet*. Although the numbers are low, this seems to indicate a much more even distribution that that found by Peters in the British National Corpus.

Verb + *-ing*

It has been claimed, as already mentioned, that verbal forms ending in –*ed* and –*ing* cannot take the suffixes, but there were two examples of *boringest* in the QEP corpus, one of which was *most boringest* against only 6 tokens of *most boring*. The numbers are very low, but the speakers may be consciously flaunting the rule in these cases.

A search on the Internet using Google found about 130 cases of *more boringer* and about 3350 of *most boringest*. Interestingly, at least 9 of the uses of *more boringer* were followed almost immediately by meta-linguistic comments, such as

"'More boringer' is valid grammar at 1:20AM," "if thats a word ... well it is in the emma dictionary," "(<--wtf is that word)," "what a word," "(not even a word)," "[is that even a word???]," "boringer isn't a word," etc.

A scan through the first 130 results for *boringest* found only three such comments, possibly indicating that writers find *boringest* more acceptable that *boringer*. In fact, one of these three comments was "(unfortunately, the majority of the people here consider that a real word)" (http://www.epinions.com/user-batman393).

Stupid (Vd#)

The only other bisyllabic comparative found with the suffixes of comparison was *stupid*, the sole representative in the QEP corpus of Peters' V + *d* category, exemplified by *wicked* and *solid*. There were 5 examples of *stupidest* and 1 of *most stupid* along with one each of *stupider* and *more stupid*. This follows the direction of effect for *wicked* (although Peters only had 20 tokens in total for forms of *wicked*).

Other constraints

There are syntactic and rhetorical constraints hypothesized to affect this variant selection in addition to the morphophonemic ones just discussed.

Mondorf (2003) gives 21 constraints for this variation:

Phonology
- Length
- Final Segment
- Avoidance of Identity Effects I: Stress Clash Avoidance
- Avoidance of Identity Effects II: Haplology
- Avoidance of Identity Effects III: Consonant Clusters

Morphology
- Morphological Complexity

Syntax
- Prepositional Consonants
- Infinitival Complements
- Position

Semantics
- Semantic Complexity
- Concrete vs. Abstract
- Literal vs. Figurative
- Weak Gradability

Lexicon
- Compounds
- Parallel Structures
- Establishment in Discourse

Pragmatics
- Proximity
- End-Weight
- Cumulative Comparatives
- Emphasis
- Gradual Increase

Conclusions

As Peters (2000) says, "the interplay of forces is intricate" (p. 311).

Words of more than 3 syllables categorically use the periphrastic for these speakers and that there seems to be a strong constraint favouring the inflectional endings for roots ending in consonant clusters, whether monosyllabic or bisyllabic. Bimorphemic roots are more likely to use the periphrastic forms, but the phonological form of the root alone cannot account for the variation. Further investigation of prosodic weight in the clause and placement of stress in the overall sentence may help to elucidate the reasons for the selection of either of the two variants.

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