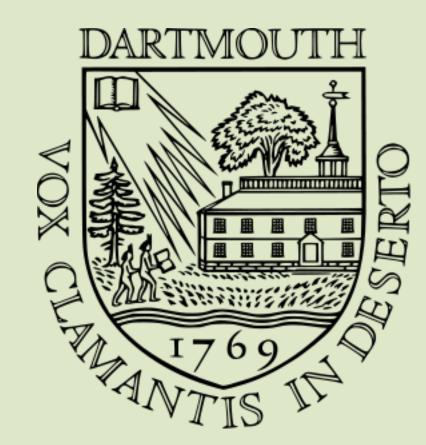
A Frequency-Based Analysis of the Modern -s Register-Marking Suffix

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1. Introduction

1.1 Question

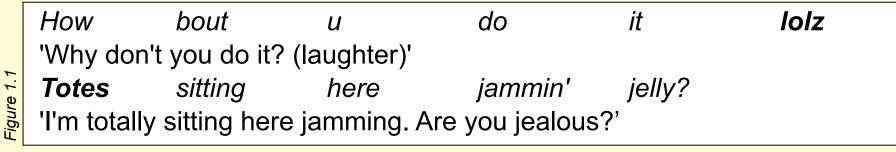
In recent years, an -s suffix has been affixed to a set of neologisms. The forms initially gained prominence in text-based media such as Twitter™ before filtering into oral speech. Given the many other English -s suffixes, what is the origin of this morpheme, and how has the form developed into its present state? Here, frequency effects from Twitter will be used to assess the origins and development of this mysterious, modern morpheme.

1.2 Background of the Form

This morpheme is seen affixed to the following types of neologisms:

- -Clippings, e.g. probably > prob > probs; adorable > adorb > adorbs
- -Acronyms, e.g. by the way > BTW > BTWs > btdubs
- -Contractions, e.g. for real > forreal > forreals, freals

Figure 1.1 gives two examples of these forms in context, from Twitter.



It should be noted that some forms do not contain this morpheme, but a relic plural marker, e.g. delibs (< deliberations) and congrats (< congratulations).

1.3 Allomorphy

While this form often appears in text-based speech, it is phonologically determined. Figure 1.2 below shows how the morpheme is realized. Note the lack of an [əz] allomorph.

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	Allomorph	Environment	Examples
	[s]	/C _{vless}	totes, awks
	[z]	/C _{vd}	adorbs, whatevs, forreals
3.1.2		/V_	oh noes!
Figure	Ø	/C _{sib}	natch (*natches), dece (*deces)
щ.			

2. Previous Literature

2.1 The Novel -s Morpheme

-Munro (2009) notes the forms for reals, totes, and whatevs, but leaves the suffix unanalyzed.

-Few if any other sources even mention the existence of these forms.

2.2 Phonologically Similar Morphemes

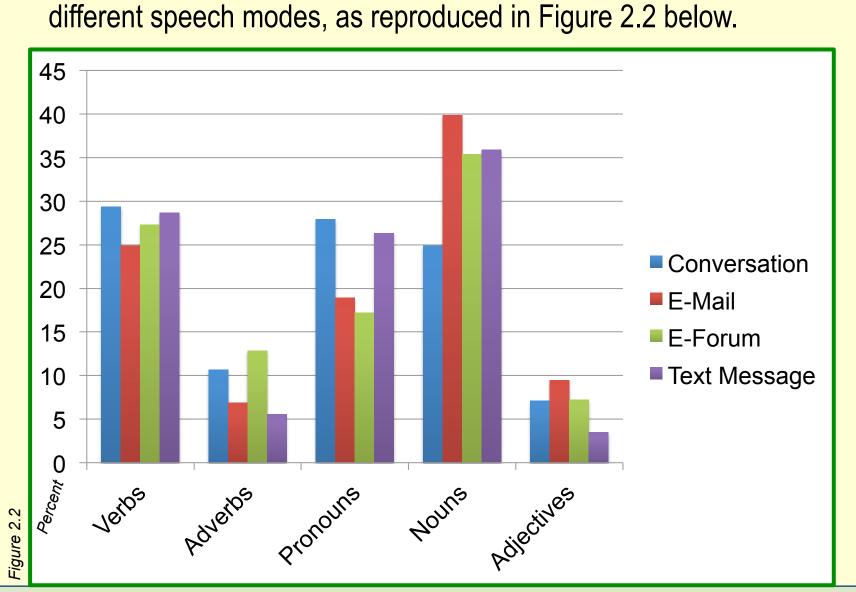
-The suffix -s has numerous uses in present-day English. Figure 2.1 compares these different uses, noting their productivity and if they have the same allomorphy as the form above in Section 1.3.

Morpheme	Origin	Examples	Productive?	[əz]?
Diminutive	Dimsy, -sies	Wills, pops	yes	no
Adverbial	Gen. *-əz	anyways, towards	no	no
Interjectional	Depluralization	gadzooks!, rats!	no	no
Copula	is, was	let's, he's	yes	no
Plural	Pl. *- <i>əz</i>	rocks, guesses	yes	yes
3S Verb Encoding	*-est. *-eth	goes, wishes	ves	ves

2.3 Effects of Written Speech

-Spelling has influenced language change before³, but modern textbased media only recently have begun to involve real-time conversation. Writing a letter to someone far away has now become a text message conversation.

-Several authors have noted the lack of tone of voice (e.g. sarcasm) in text-based media, and Biber (2009) discusses that the lack of nonverbal gesture marking. Biber then compares word class frequencies of



3. Research Methods



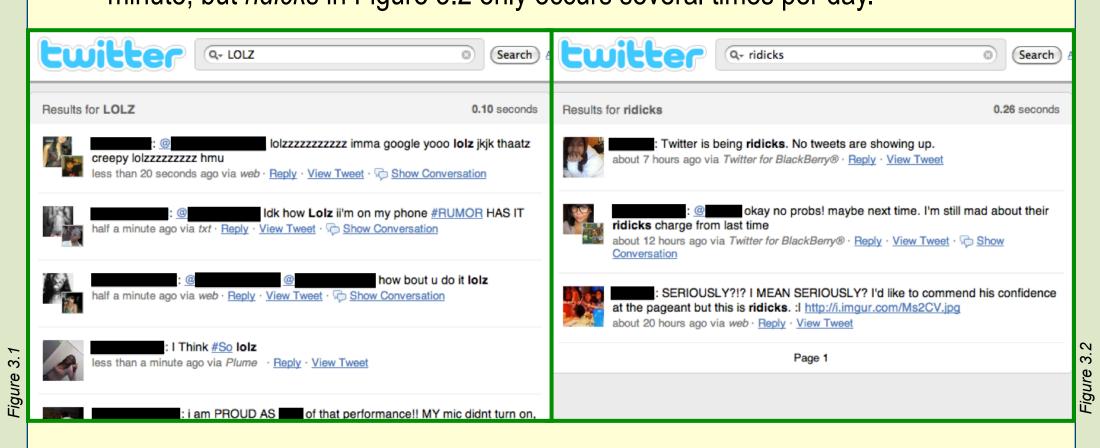
3.1 Twitter and Urban Dictionary

Data for this study was collected using the social-networking website Twitter, which has certain benefits and difficulties:

- -Nearly all posts on Twitter are searchable, especially recent posts within the past day.
- -The website constitutes a large corpus of modern speech. For example, the word *lol* is used several dozen times per minute.
- -Speech on Twitter is limited to 140 characters per post. -Some speaker variables, such as location and gender, are tracked, but
- not reliably or consistently. -Spelling, especially with these new forms, is highly variable. The
- website Urban Dictionary was consulted for pertinent spellings.

3.2 Word Type Corpus

Twitter may be searched by individual term. The term's frequency may be ascertained by the results page. In Figure 3.1, lolz occurs several times per minute, but *ridicks* in Figure 3.2 only occurs several times per day.



3.3 Word Class Corpus

In emulation of Biber's study described in Section 2.3, a separate corpus of the Twitter speech of 40 users was constructed. A second corpus of written, non-conversational text was also constructed. Figure 3.3 shows the general method of marking word classes, with verbs and interjections circled.



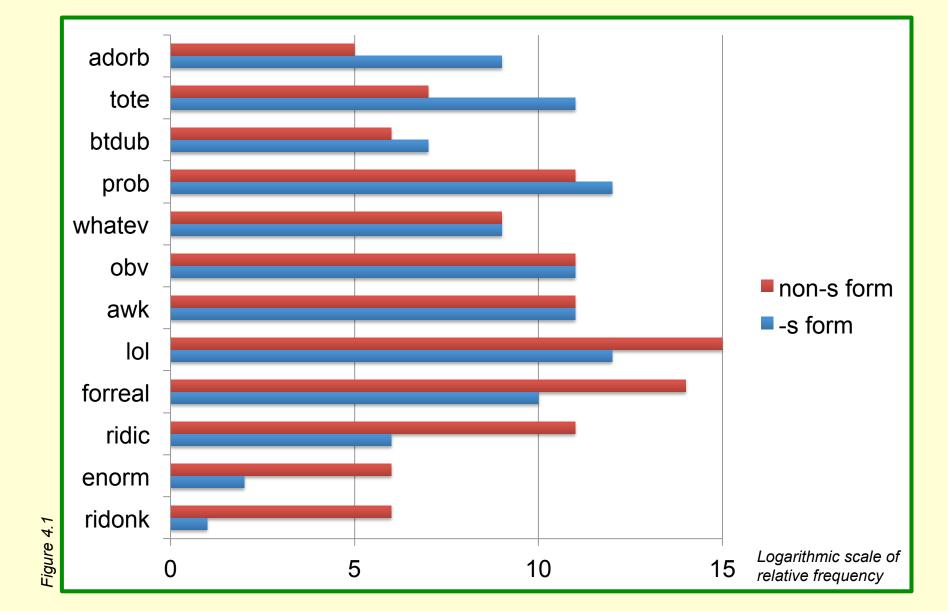
4. Initial Results

4.1 Word Type Frequency

Figure 4.1 shows the frequency of -s-ful and -s-less forms, i.e. comparing probs to prob. Several forms, oh noes! and hells yeah! were omitted, but these forms seem to be the most common examples of this novel morpheme

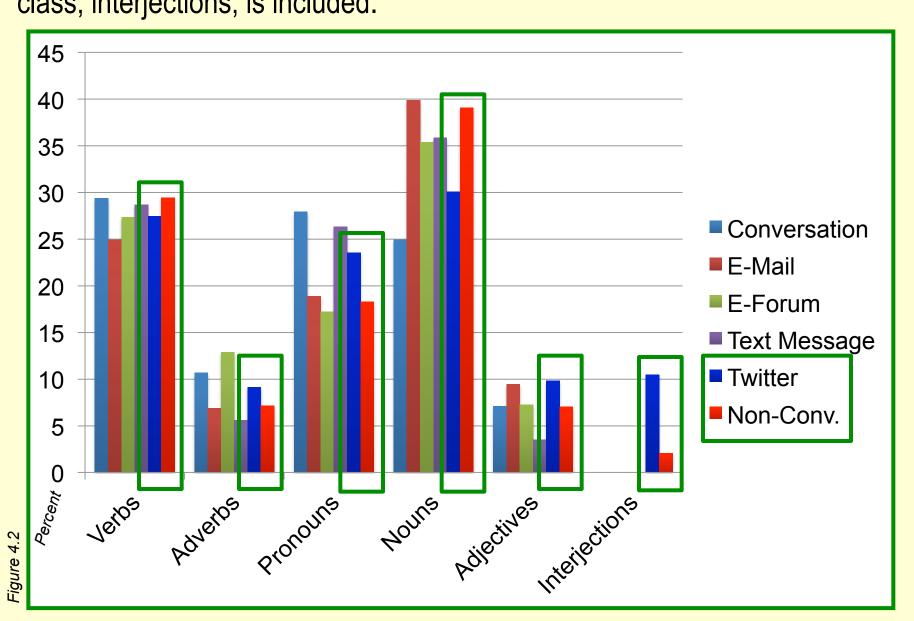
- -Initial results show that no form has transitioned completely to the -s morpheme. This could suggest a change in progress. Alternately, the -s suffix could be semantically distinct from its counterpart. A further possibility is that the -s form is idiolectal.
- -It is worth noting that each of these forms is an adverb, adjective, or otherwise oblique element, such as an interjection.
- -Similarly, each form acts semantically as subject coloration, what a speaker thinks of a noun as opposed to a content noun.

4. Initial Results, cont'd



4.2 Word Class Frequency

In Figure 4.2, word class frequency in Twitter speech is compared with nonconversational written speech along with Biber's original study. Another word class, interjections, is included.



-The Twitter corpus shows a noticeable increase in adjective and adverb usage, and a drastically greater use of interjections. Again, there was a wide range of speaker-based speech styles.

-As the conversation in Figure 4.3 illustrates, some extreme examples of Twitter speech are markedly different from other forms of speech.

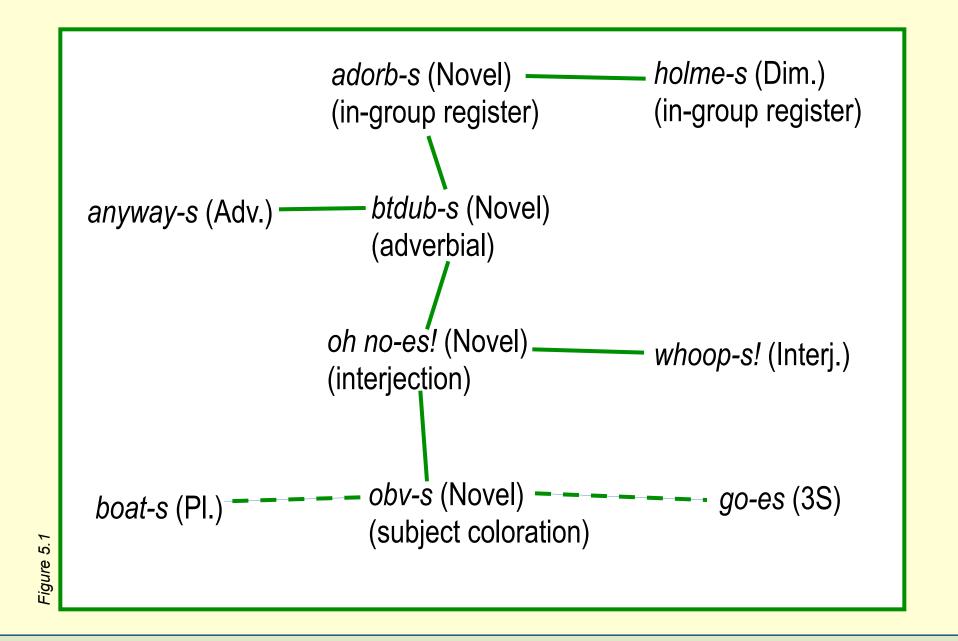
@Jenstwitter totes is wednesdays hun lolz <3 'Jen, it is definitely Wednesday, honey (laughter) (affection).'

@Bobstwitter Haha thought so aww, I love Monty Python haha <3 'Bob, (laughter) I thought so. (affection) I love Monty Python (laughter) (affection).

5. Discussion

5.1 The Origin of -s

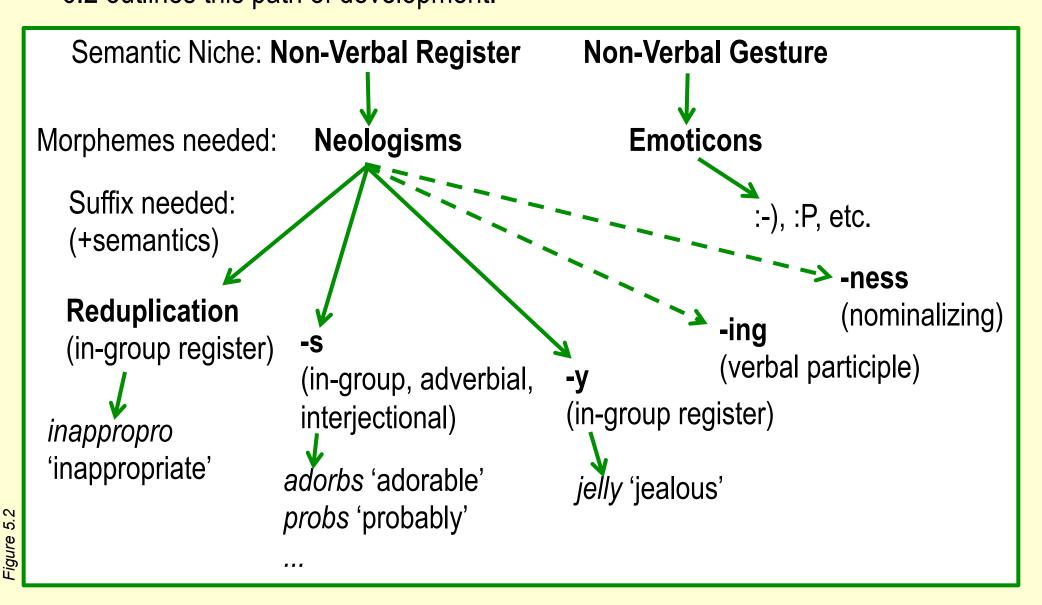
The Diminutive, adverbial, and interjectional -s morphemes all seem to contribute semantics to the novel morpheme, so it is difficult to point to a precise origin. If one assumes an exemplar-based memory, each of these phonologically-similar forms would be thus connected, leading to this confluence of semantics. Figure 5.1 illustrates this concept.



5. Discussion, cont'd

6.2 The Development of -s

Owing to the results in Section 5.2, it seems that a semantic niche of nonverbal was opened. Much like emoticons, which mark gesture or tone, this novel morpheme may have been enlisted to mark a set of subject coloration forms in order to indicate factors such as register. The answer to why -s was chosen may lie in the fact that the morpheme is part of the little morphology to be found in English, along with suffixes like -ing, -ed, and -ness. Figure 6.2 outlines this path of development



6. Conclusion

6.1 Summary

Preliminary frequency effects from Twitter suggest that the novel -s morpheme marks non-verbal register, a semantic niche resulting from the modern transition to text-based conversational media. Additionally, the morpheme appears to have arisen from a conspiracy of -s, the suffix's high frequency and applicable semantics in its other instantiations.

6.2 Further Research

-Especially as the register-marking -s suffix filters into speech, oral speech may also be tracked and compared with Twitter speech.

-This morpheme itself may still be in the process of evolving.

-As text-based conversation gains prominence, similar changes

involving non-verbal communication marking may occur.

7. Notes

Thanks to Dartmouth College, Professor David A. Peterson, and his class on Usage-Based Syntax (Spring, 2011). This research was in part funded by the Leslie Embs Bradford '77 and Charles C. Bradford Fund for Undergraduate Research.

2. For glosses of all the forms cited throughout, see the glossary below:

lolz 'Laugh Out Loud, excl. of laughter' adorbs 'adorable' var. lawlz, lulz, etc. awks 'awkward' natch 'naturally' btdubs 'by the way' obvs 'obviously' cray-cray 'crazy' oh noes! 'oh no!' deece 'decent' pops 'dad, father' enorm 'enormous' forreals 'for real, verily' probs 'probably ridic 'ridiculous' var. furreals, freals, etc. hells yeah! 'exclamation of delight' var. *ridonk* holmes 'home-boy, close friend' totes 'totally'

whatevs 'whatever (as a dismissive, inappropes 'inappropriate' inappropro 'inappropriate' not a frustrative)'

Wills 'William, namely Prince William' jelly 'jealous' 3. E.g. the initial consonant of *throne* and effects such as reading pronunciation in Algeo (2004).

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