Animacy effects in English contraction

An effect of animacy has been demonstrated for certain linguistic variables in English, namely, the dative and genitive alternations (Bresnan and Hay, 2008; Rosenbach, 2005). Recent work has also brought to light animacy effects in several variables in African American English (McLaughlin 2013). The present study investigates animacy effects in contraction of the auxiliaries *is* and *has*, and finds that animacy is a large and significant predictor of contraction. As such, we document a hitherto unattested factor conditioning this variable, and open up a discussion of animacy as a predictor of variable morphosyntactic phenomena more generally.

Our findings are based on a database of 1481 tokens from the Switchboard (Godfrey and Holliman, 1997), Fisher (Cieri, 2004), and Philadelphia Neighborhood (Labov and Rosenfelder, 2011) corpora. The two auxiliaries under study, *is* and *has*, were coded as contracted when they surfaced as a single consonant with no audible vowel; otherwise they were coded as full. Auxiliaries after pronoun subjects were excluded, as they nearly categorically display contraction (MacKenzie 2013).

Animacy was operationalized as human vs. inanimate, following findings that human is at the most animate end of the spectrum, and that inanimates are the least animate in English (Rosenbach 2005). Additional predictors coded were those found significant in prior work on contraction: subject length in words, and, in the case of *is*, preceding segment (consonant vs. vowel) and following constituent type (Labov, 1969; MacKenzie, 2012).

We ran separate mixed-effects models on *is* (N=1102) and *has* (N=379) with the factors listed above as fixed effects, plus random effects of speaker, preceding word, and following word. As expected, subject length and (for *is*) preceding segment and following constituent were all significant effects. The novel finding is that animacy also has a significant and large effect, such that contraction is more likely with animate subjects (Tables 1-2). In fact, animacy is the predictor with the largest effect size. Figure 1 graphs the raw animacy and contraction data for *is*.

These effects are reminiscent of English genitive variation, which is also conditioned by NP weight and animacy. However, NP weight and animacy are highly correlated (Rosenbach 2005), such that animates are more likely to have low weight. Rosenbach teased apart these factors and determined that both are significant effects independently from one another. We test this on our larger dataset, that of *is*, by controlling for number of words and running the same model on only two-word subjects (N=617). The animacy effect remains the largest effect and is highly significant (Table 3), indicating that animacy conditioning is not simply an epiphenomenon of weight.

Our results contribute to a growing body of research demonstrating the pervasiveness of animacy effects on sociolinguistic variables in varieties of English. They also corroborate and provide a potential source for animacy conditioning on AAE copula deletion found in McLaughlin 2013. Accordingly, we conclude with a

discussion of the potential source of animacy effects on morphosyntactic phenomena, including the nature of their representation in the grammar.

Figure 1: Raw proportions of contracted *is* by animacy type.

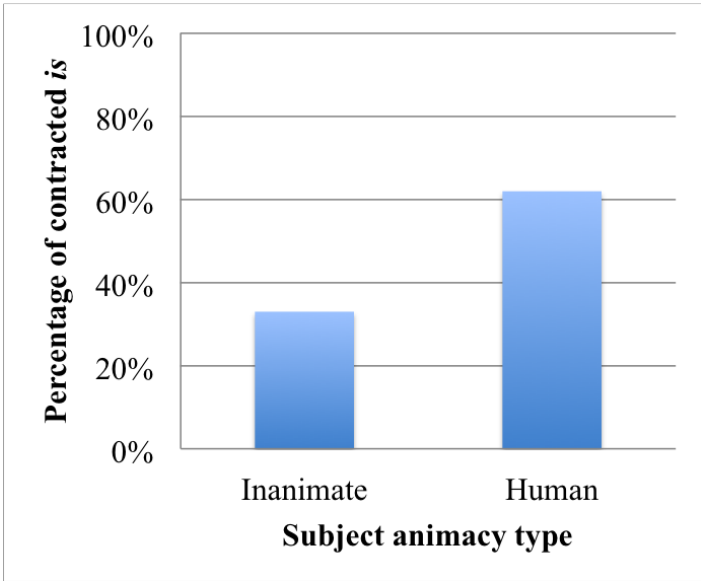

Table 1: Mixed-effects model results for contraction of *has*.

	Estimate	Standard Error	*p* value
(Intercept)	-1.05	0.53	0.045
Animacy = human	1.00	0.31	0.0014
Subject length in words	-0.42	0.12	< 0.001
Preceding segment = consonant	0.43	0.38	0.26

Table 2: Mixed-effects model results for contraction of *is*.

		Estimate		Standard Error	*p* value
(Intercept)		1.48		0.38	< 0.001
Animacy = human		1.36		0.22	< 0.001
Subject length in words	-0.51	0.09		< 0.001	
Preceding segment = consonant	-0.78	0.22		< 0.001	
Following constituent = noun phrase		-1.30		0.33	< 0.001
Following constituent = adjective	-0.63		0.30	0.03	

Table 3: Mixed-effects model results for contraction of *is* with two-word subjects.

	Estimate		Standard Error		*p* value
(Intercept)	0.55		0.43		0.21
Animacy = human	1.61	0.29	< 0.001		
Preceding segment = consonant	-0.93		0.33		0.004
Following constituent = noun phrase	-1.18	0.39		0.003	
Following constituent = adjective	-0.65		0.35		0.065

References

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