

“Linguistic Theory in the Information Age: The Case of Allomorphy”

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CLEAR = Cognitive Linguistics: Empirical Approaches to Russian

Allomorphy: Traditional Definition

- 2 or more morphemes
 - with same meaning
 - in complementary distribution

But: reality is messy

- Even many standard examples of allomorphy fail to conform to the strict definition. Instead we find:
 - the meaning is slightly different
 - the distribution is not perfectly complementary
- And there are examples of form-meaning relationships that are usually overlooked

An example: semelfactive verbs (meaning ‘do X once’) in Russian

- The prefix *-nu* and suffix *s-* serve (approximately) as allomorphs in the formation of semelfactive verbs in Russian
 - NOT etymologically related
 - NOT identical meaning
 - NOT complementary distribution

... but good candidates for non-prototypical allomorphy

-nu database: 296 imperfective verbs that form *-nu* semelfactives

s- database: 105 Imperfective verbs that form *s-* semelfactives

Table 1: Distribution of semelfactive morphemes by verb class

	base verbs that form <i>-nu-</i> semelfactives		base verbs that form <i>s-</i> semelfactives	
	raw frequency	% frequency	raw frequency	% frequency
<i>-aj-</i>	185	62%	6	6%
non-prod I	56	19%	0	0%
*-ě-	21	7%	1	1%
<i>-ova-</i>	17	6%	18	17%
<i>-i-</i>	17	6%	44	42%
*-ěj-	0	0%	36	34%
Totals:	296	100%	105	100%

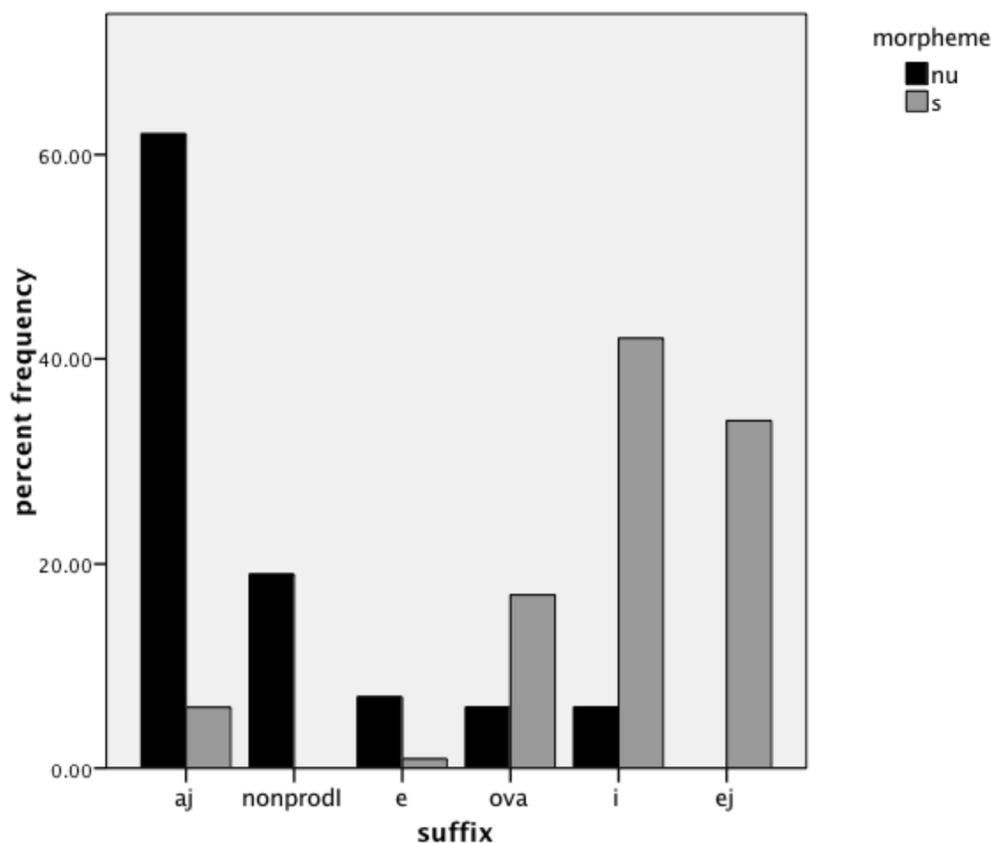


Figure 1: Distribution of semelfactive morphemes by verb class

- the chi-square value is 257.3 with 5 df
- the probability that this distribution is the result of mere chance is $< 2.2e-16$
- Cramer's V (effect size) = 0.8 (very large)

Do *-nu* and *s-* have the same meaning?

- With *-nu* we usually have one cycle from a series of repeated events:
čixat'/čixnut' 'sneeze/sneeze once', *lizat'/liznut'* 'lick/lick once'
- With *s-* we often have something that only happened once
malodušestvovat'/smalodušestvovat' 'act like a coward/act like a coward once'

The traditional definition...

- was proposed long before the advent of electronic corpora and statistical software
- perhaps should be re-evaluated as a prototype rather than as an absolute criterion
- statistical methods make it possible to establish standards for evaluation of gradient phenomena
- similar considerations might be appropriate for other definitions, such as those of allophony, markedness, and neutralization

For references, see: Dickey, Stephen M. and Laura A. Janda. 2009. "Xoxotnul, sxitriľ: The relationship between semelfactives formed with *-nu-* and *s-* in Russian". *Russian Linguistics*, 33: 3, 229-248.