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

<table>
<thead>
<tr>
<th></th>
<th>base verbs that form -nu- semelfactives</th>
<th>base verbs that form s- semelfactives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>raw frequency</td>
<td>% frequency</td>
</tr>
<tr>
<td>-aj-</td>
<td>185</td>
<td>62%</td>
</tr>
<tr>
<td>non-prod I</td>
<td>56</td>
<td>19%</td>
</tr>
<tr>
<td>*-ě-</td>
<td>21</td>
<td>7%</td>
</tr>
<tr>
<td>-ova-</td>
<td>17</td>
<td>6%</td>
</tr>
<tr>
<td>-i-</td>
<td>17</td>
<td>6%</td>
</tr>
<tr>
<td>*-ěj-</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Totals:</td>
<td>296</td>
<td>100%</td>
</tr>
</tbody>
</table>
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 malodušestsvovat’/smalodušestsvovat’ ‘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