A Variationist Approach to Sex: Statistics and the Construction of Social Meaning

Objectives

(1) As others have noted, many quantitative studies of sex differences correlated with the distribution of a linguistic variable (i.e. a correlative approach) show a clear tendency towards AD-HOC and POST-HOC analyses. We examine how those approaches are maintained and reinforced in a comprehensive review of articles that have appeared on sex differences in one of the leading sociolinguistic journals, Language Variation and Change, over the last ten years (2000-2010).

(2) CORRELATIVE statistical testing of sex difference (i.e. coding sex as a factor group and including it in the statistical model with internal factors) relies on three assumptions. First, there is a stability of linguistic constraints across male and female speakers. Second, treating sex and linguistic factors in the same way in the statistical model implies that the social performances accessed by sex behave in the same manner quantitatively as the linguistic constraints. Third, the assumption of sex as binary variable.

(3) The first assumption of (2) is not interrogated quantitatively in any of the studies in our survey. Therefore, we do not know how often this assumption does not hold. The COMPARATIVE method put for by (Poplack and Tagliamonte, 2001) and described in depth (Tagliamonte, 2002) allows us to test this assumption.

LVC ARTICLES PUBLISHED BETWEEN 2001-2010 [N=122]

- Articles that analyze sex as a social factor: 46
  - Statistically significant difference between the sexes: 36
  - No statistically significant sex difference: 10
- Articles that discuss sex initially, but never come back to it: 46
- Articles that don’t mention speaker sex: 30

<table>
<thead>
<tr>
<th>Categories</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act of Identity</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Epiphenomenal</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Not in line with previous research</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>No Comment</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>PLC II *</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>Not statistically significant</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>101</td>
</tr>
</tbody>
</table>

Table 1: Distribution of articles that mention sex as a social factor.
Figure 1: First Wave Approach to Sex

**HAVE**

I *have* a friend whose mother is from Ontario.  
(QEC/021:18191)

**HAVE-GOT**

Tony is married and he *has got* two children.  
(QEC/036:256)

She’s got *such a sense of humour*.  (QEC/050:1150)

**GOT**

I said to Michael, "That’s true, I still *got* my feet, don’t I?"
(QEC/006:1190)

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Table 1: Variants of Stative Possession

1) **Subject Type**: Pronoun – Noun Phrase  
2) **Subject Reference**: Generic – Non-generic  
3) **Object Type**: Abstract – Concrete  
4) **Possession Type**: Permanent – Temporary  
5) **Possession Relation**: Alienable – Inalienable  
6) **Polarity**: Affirmative – Negative

Table 2: Factor Groups from Yoshizumi (2006) for Stative Possession

<table>
<thead>
<tr>
<th>Factor Group</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>.009</td>
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<tr>
<td>Older Men’s Alpha</td>
<td>.74</td>
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<tr>
<td>Older Women’s Alpha</td>
<td>.13</td>
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<tr>
<td>Younger Men’s Alpha</td>
<td>.18</td>
</tr>
<tr>
<td>Younger Women Alpha</td>
<td>.63</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha

Cronbach’s alpha (Cronbach, 1951; Miller, 1995) functions as a statistic used to judge the reliability of tests by quantifying the extent to which they provide the same results on repeated trials. (Sharma and Rickford, 2009: 61).

How reliable is the statistical significance and direction of effects for our factors?

- Overall: .009
- Older Men’s Alpha: .74
- Older Women’s Alpha: .13
- Younger Men’s Alpha: .18
- Younger Women Alpha: .63

Selected References


