

**Informal judgments in formal settings:
Pair-list answers in naïve speakers and professional linguists**

Asya Achimova, Viviane Deprez, Julien Musolino
Rutgers University

Semantics often relies on informal acceptability judgments as a primary source of data. It has been shown that in clear cases, informal judgments correlate well with experimentally obtained data (Sprouse & Almeida 2010). When judgments reported in the literature diverge, obtaining data from a larger pool of speakers becomes a useful tool. A related and still debated question, especially in controversial cases, is which population judgments should be obtained from: naïve speakers or professional linguists (Spencer 1973). In this paper we address those questions by comparing judgments on the availability of pair-list answers – a controversial case – obtained from naïve speakers and professional linguists.

The presence of a subject/object asymmetry in the availability of pair-list answers is known to be a controversial case. May (1985) originally observed that pair-list answers are available for subject quantifier questions, (1), but not for object quantifier questions, (2), and attributed the latter restriction to PCC violations in the object quantifier case (Pesetsky 1982).

- (1) Which boy did every girl kiss?
Mary kissed John, Sue kissed Nick, and Helen kissed Michael.
- (2) Which girl kissed every boy?
*Mary kissed John, Sue kissed Nick, and Helen kissed Michael.

Other factors such as the plurality of a *wh*-phrase (Chierchia 1993), and the distributive force of the interacting quantifier were later claimed to affect the availability of pair-list answers (Szabolsci 1997, Beghelli 1997). Yet a different proposal by Agüero-Bautista (2001) takes into account the presuppositional nature of the *wh*-phrase, limiting the asymmetry to presuppositional *wh*-phrases like *which*. Based on evidence from Spanish, Agüero-Bautista further claims, contra Chierchia, that the plurality of a *wh*-phrase does not affect the availability of pair-list answers. We took the availability of pair-list answers as a case study to experimentally test 1) whether pair-list answers are in fact available for object quantifier questions; 2) whether professional linguists differ in their judgments from naïve speakers.

Professional linguists form a special group of subjects due to their training, level of education, and possible effects of bias (for discussion see Newmeyer 1983, Dabrowska 2010). When judgments reported in the literature are different from those of naïve speakers, some researchers conclude that the judgments of naïve participants should be used (Spencer 1973, Gibson & Fedorenko 2010). Setting aside the dubious logical basis of such conclusions (Sprouse & Almeida 2010), it is unclear whether differences observed between naïve speakers and professional linguists are due to the fact that the former are typically tested in experimental settings while the latter produce informal judgments, or whether such effects result from genuine differences between the two groups. In order to eliminate this potential confound, we compared different groups of speakers in identical experimental settings.

In a rating task speakers had to judge question-answer pairs (1) and rate whether the answer was possible on a 1-7 scale (1 ‘definitely no’, 7 ‘definitely yes’). The training phase contained examples of acceptable answers, unacceptable answers, and cases in-between. The experiment had a 3 x 2 x 2 x 2 design crossing speaker group (naïve undergraduate speakers vs. Ph.D. students in Linguistics vs. professional linguists), answer type (single answers vs. pair-list answers), *wh*-type (*who* vs. *which*), and the structural position of the quantifier (subject vs. object quantifiers). Participants were asked to rate a total of 95 questions (3 trial questions, 32 targets and 60 controls).

The analysis revealed that the subject/object asymmetry was confirmed for all groups of speakers ($p < 0.01$). However, in all three groups, we found speakers who rated pair-list answers to object quantifier questions as high as those for subject quantifier questions, showing no subject/object asymmetry. The type of wh-phrase (*who* vs. *which*) did not affect pair-list answer acceptance rates ($p = 0.18$), contra the predictions of Chierchia (1993) and Agüero-Bautista (2001). We found that even though statistically the groups of speakers did not differ from each other, the asymmetry was sharper among linguists. The mode of the distributions shifts towards the judgments reported in the literature as expertise of the group increases (Figure 1).

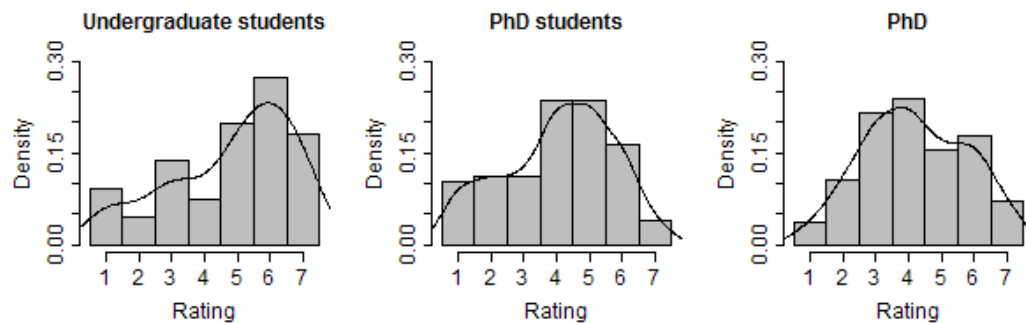


Figure 1. Distribution of ratings for pair-list answers.

The differences observed between groups may be due to several factors. One possibility is that linguists learn to abstract away from such confounding variables as sentence length, complexity, and vocabulary frequency, thereby being able to detect subtle contrasts, such as a contrast between subject and object quantifier questions. However, as experts, linguists may also be biased towards what is reported in the literature. An intriguing question is whether age – as opposed to level of expertise – might be driving the gradual shift observed towards the kinds of judgments reported in the literature. Indeed, as a group, our undergraduates are younger than our PhD students, who are themselves younger than the linguists we tested. There is independent evidence that age may affect metalinguistic judgments (Shademan 2007). In spite of such differences, our results also indicate that variability in judgments is pervasive in our three groups of speakers. We conclude that the controversy over the judgments reported in the literature does not actually present contradictory evidence but is a reflection of variability naturally found among speakers, whether naïve or professionally trained.

Selected references

- Chierchia, G. (1993). Questions with quantifiers. *Natural Language Semantics*, 1, pp. 181-234. Kluwer Academic Publishers.
- Dabrowska, E. (2010). Naïve vs. expert intuitions: An empirical study of acceptability judgments. *The linguistic review*, 27, pp. 1 – 23.
- May, R. (1985). *Logical form: its structure and derivation*. MIT Press, Cambridge, MA.
- Sprouse, J. Almeida, D. (2010). A quantitative defense of linguistic methodology. [lingBuzz/001075](#)
- Szabolsci, A. (1997). Quantifiers in pair-list readings. In A. Szabolsci (ed.), *Ways of scope taking*, 349-408. Kluwer Academic Publishers.