

Linguistic competence as an object of experimental research

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Linguistic competence and the related concepts of introspection and linguistic intuition are often regarded by linguists as the dominant criterion for the verification of their theoretical models (e.g., Chomsky 1965, 1975; Wierzbicka 1985: 19, 69–70, 212, 332–333; 1996: 347). At another level, arguing or illustrating theoretical ideas by referring to “wrong” (*X) or “doubtful” (?X, ??X) constructions has long been a common feature of linguistic research. Importantly, the “incorrectness” or “doubtfulness” of the constructions is usually not substantiated by anything, being considered obvious to any competent native speaker. This practice is based on the postulate of coincidence (or at least the absence of significant differences) of the linguistic intuitions inherent in competent speakers.

That said, strong concerns about this postulate have been raised over last decades (e.g., Schutze 1996: 1–5, 48–53; 2005; Hallan 2001: 91–92; Gibbs 2006; Talmy 2007: XII–XV; Dąbrowska 2010; Janda 2013; Häussler & Juzek 2020; Santana 2020).

The present study continues this criticism by addressing the semantic aspect of linguistic competence. The authors distinguish between semantic area A (correct sentences, e.g., *Masha otkryla dver' i voshla v komnatu* ‘Masha opened the door and entered the room’), area B (incorrect sentences, e.g., *Molodjashhajasja teorema kusala prokazhennyj sinus treugol'nika* ‘The juvenile theorem bit the leper sine of the triangle’), and area C (“doubtful” sentences, e.g., *Na uglu ulicy stojalo lenivoe zdanie* ‘There was a lazy building on the corner of the street’) in Russian and explore area C.

If the postulate of coincidence of linguistic intuitions of native speakers were true, then the most of the subjects would rate the sentences of area C as “doubtful” (?X). A series of nine experiments has been conducted to check this. In these experiments, subjects (a total of 1392 participants of different gender, age, education and occupation) were asked to rate various sentences subsumed into area C on the scale from 1 (incorrect sentence) to 5 (correct sentence). The first experiment (242 participants) was pilot and conducted online, while the remaining eight experiments were carried out in person. The experiments have provided clear evidence that linguistic intuitions of native speakers do not coincide: for almost all sentences used as a material for the experiments (more than 50 sentences), the assessments of the subjects differed markedly. This is true for both non-experts and experts (the discrepancies between experts were smaller than those between non-experts, but they were also significant). No general tendencies in the assessments have been found out, but for some sentences there was a significant difference between men and women, for others – between high school students and university students, for still others – between students of the department of philology and students of other departments (in this case, doubtful collocations were included in the short (e.g., *Ego vstretil gor'kij shum goroda* ‘He was greeted by the bitter noise of the city’) and “literary” (e.g., *On priletel vechernim rejsom, i ego vstretil gor'kij shum goroda* ‘He arrived on an evening flight and was greeted by the bitter noise of the city’) versions of a sentence). Ultimately, the assessment is likely to be a result of the interaction of linguistic and extralinguistic factors. In addition, for special types of sentences built around an interplay of different perceptual channels, there was a significant difference in the assessments when listening and reading them, as well as placing “doubtful” collocation at the beginning and at the end of the sentence (e.g., *Sladkij shelest dozhdja slyshalsja za oknom* и *Za oknom slyshalsja sladkij shelest dozhdja*).

References

- Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
Chomsky, Noam. 1975. *The logical structure of linguistic theory*. New York: Plenum.
Dąbrowska, Ewa. 2010. Native v. expert competence: An empirical study of speaker intuitions. *The Linguistic Review* 27, 1–23.
Gibbs, Raymond W., Jr. 2006. Introspection and cognitive linguistics. *Annual Review of Cognitive Linguistics* 4, 135–151.

- Hallan, Naomi. 2001. Paths to prepositions? A corpus-based study of the acquisition of a lexico-grammatical category. In Joan Bybee & Paul Hopper (eds.), *Frequency and the emergence of linguistic structure*, 91–122. Amsterdam; Philadelphia: John Benjamins.
- Häussler, Jana & Tom S. Juzek. 2020. Linguistic intuitions and the puzzle of gradience. In Samuel Schindler, Anna Drożdżowicz & Karen Brøcker (eds.), *Linguistic intuitions: evidence and method*, 233–254. Oxford: Oxford University Press.
- Janda, Laura. 2013. Quantitative methods in *Cognitive Linguistics*: An introduction. In Laura Janda (ed.), *Cognitive Linguistics: The Quantitative Turn*, 1–32. Berlin: De Gruyter Mouton.
- Santana, Carlos. 2020. How we make good use of linguistic intuitions, even if they are not good evidence. In Samuel Schindler, Anna Drożdżowicz & Karen Brøcker (eds.), *Linguistic intuitions: evidence and method*, 129–148. Oxford: Oxford University Press.
- Schutze, Carson. 1996. *The empirical basis of linguistics: Grammaticality judgements and linguistic methodology*. Chicago: University of Chicago Press.
- Schutze, Carson. 2005. Thinking About What We Are Asking Speakers to Do. In Stephan Kepsar & Marga Reis (eds.), *Linguistic Evidence: Empirical, Theoretical and Computational Perspectives*, 457–485. Studies in Generative Grammar 85. Berlin: Mouton De Gruyter.
- Talmy, Leonard. 2007. Foreword. In Monica Gonzalez-Marquez, Irene Mittelberg, Seana Coulson & Michael J. Spivey (eds.), *Methods in cognitive linguistics*, XI–XXI. Amsterdam; Philadelphia: John Benjamins.
- Wierzbicka, Anna. 1985. *Lexicography and Conceptual Analysis*. Ann Arbor: Karoma.
- Wierzbicka, Anna. 1996. *Semantics: primes and universals*. Oxford, N. Y.: Oxford University Press.