Linguistic complexity: a burden or an asset?

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The assumption that all languages are equally complex is increasingly often being challenged. Solid evidence exists that they are not, and theories that explain why the observed differences in complexity arise are being proposed.

I argue that in complexity studies, it is often important to distinguish between formal complexity (the intricacy of linguistic signals or of the system that allows to produce these signals) and expressive complexity (the number of different communicative goals the system allows to achieve). Similar idea was expressed by Bichakjian (1999), who speaks of the former type as a "burden" and of the latter as an "asset".

While expressive complexity seldom receives explicit attention, the concept of "redundant complexity" is often used, which implies that some existing formal complexity is not necessary for achieving communicative goals. Grammatical gender is often viewed as a redundant feature (Trudgill 2011: 154–167). An example of a non-redundant complex feature is subordination: while increasing the formal complexity of a language, it also is believed to increase its expressive power (Givón 2009).

However, when researchers determine what is redundant and what is not, in other words, what contributes to expressive complexity and what does not, they often rely on indirect evidence (e.g. typological, cf. Dahl's (2004) notion of cross-linguistically dispensable phenomena) or their own intuition. While direct psycholinguistic evidence is extremely important for complexity studies, it is scarce, both for formal complexity (which features are difficult to learn and use?) and expressive one (which features are necessary for successful communication and which are not?).

In the paper, I report the results of an ongoing experiment designed to determine to what extent different morphological and syntactic features contribute to expressive complexity. The participants are asked to perform a certain task that requires communication, and for communication they have to use a version of a natural language (Russian), artificially deprived of one or more "complex" features (such as grammatical gender, nominal cases, verbal aspect, subordination etc.). The rate of success of task performance and the time used to complete the task are measured, attention is also paid to the structure of the language variety used by participants: were they forced to compensate somehow for the lack of a certain feature (e.g. stick to fixed word order when being unable to use cases) or could they easily communicate without it?

The experiment allows to address the question whether some linguistic question are indeed a mere burden, and if yes, what are these. If similar experimental framework is used to investigate various features in different languages, one can hope to create a useful database for complexity studies. Moreover, if enough data are collected, we would be able to see whether the equicomplexity hypothesis should be challenged also with regards to expressive complexity.

References
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