

## **Complexity, difficulty, transparency: three independent notions**

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It has long been assumed in linguistics that all languages are equally complex. This idea has in recent years been challenged by linguists from different subfields, resulting in a new way of looking at the notion of complexity. A distinction is now made between absolute complexity (the complexity of a linguistic (sub-)system, often quantified as the amount of overt formal material and its depth, e.g. McWhorter 2001) and relative complexity (the difficulty of acquiring a linguistic (sub-)system, e.g. Kusters 2003). To assure the independent status of these two concepts and enable the study of their interrelatedness, we propose to reserve the term complexity for the first type, and the term difficulty for the second.

We furthermore argue for the addition of another notion, i.e. transparency: the degree to which a language maintains one-to-one correspondences between units at different levels of linguistic organization (these levels being pragmatics, semantics, morphosyntax and phonology). The inclusion of this notion is necessary, since the complexity of a language is not merely the sum of the complexity of its subparts, but also depends on the way these subparts relate to each other. For example, a fusional language such as Dutch may have short, therefore simple forms expressing many meanings. But to say that such a language is simple because of its short forms, would disregard the complexity of the non-transparent relation between syntax and semantics. By adding the notion of transparency, justice is done to the complexity of interfaces as well. Simplicity and transparency need not always go hand in hand, as shown by a language like Turkish, that has a complex morphology in the sense that it has many obligatory overt forms, but is highly transparent due to its agglutinative nature.

Transparency is defined as a gradual rather than a binary notion: a language has a certain degree of transparency, where a 100% transparent language does most likely not exist. The degree of transparency of a language can be measured by counting the number of non-transparent features that it exhibits. A list of such non-transparent features is proposed in Hengeveld (2011) and elaborated upon in Leufkens (forthcoming, in preparation) and includes features such as fusional morphology, grammatical gender, discontinuity, agreement, negative concord, dummy subjects, and others.

In transparency analyses executed so far, it turns out that even the most transparent languages share specific non-transparent features (notably portmanteau morphemes and various doubling phenomena). Other opaque phenomena are only attested in the most non-transparent languages (notably grammatical gender and dummy subjects). On this basis, we will propose that there is a transparency hierarchy: a non-random pattern in which non-transparent features are distributed over languages. A cross-linguistic comparison of the transparency of typologically diverse languages will reveal this pattern.

### **References**

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