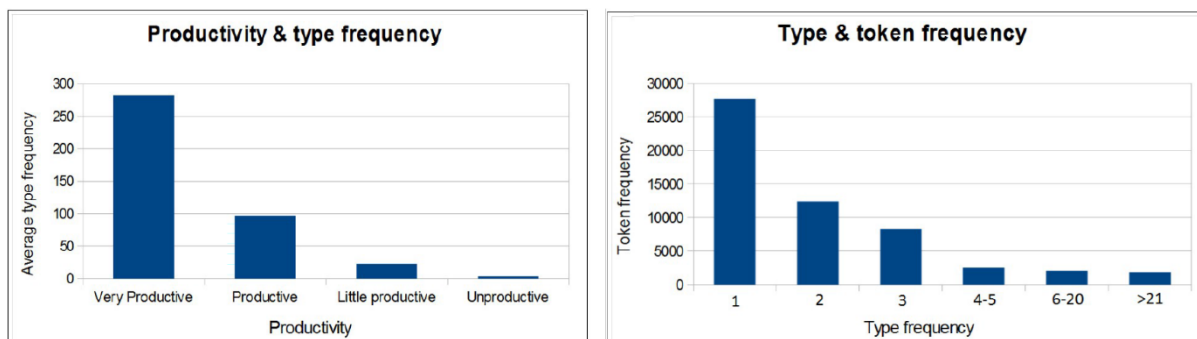# What does (ir)regular mean?

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Regularity and irregularity are among the most widely invoked notions in morphology, in both language description, theoretical discussion and formalization. The terms are backed up by a long and venerable tradition, and yet (or maybe therefore) different disciplines and authors seem to use them for very different phenomena and in very different ways. A detailed analysis of the literature reveals that the most frequent usage conflates or replaces other notions such as type frequency (e.g. Haspelmath 2002: 116), productivity (e.g. Rovai 2012:190-192), (non-concatenative morphology (e.g. Corbett et al. 2009:209), storage vs. computation (e.g. Pinker & Prince 1988), predictability (e.g. Mithun 2012: 39) etc.

Despite some logical dependencies, these are in principle different variables and can indeed appear separately. It is therefore a matter of empirical discovery to find out whether these and other dimensions are generally correlated in language. With this purpose in mind I have analysed the verbal inflection of Icelandic, which provides an ideal testing-ground for the correlation of most of the dimensions underlying (ir)regularity. This is due to the great number of inflection classes involved (over 100) of various sizes, the robust presence of both concatenative and nonconcatenative inflectional strategies, and the availability of tagged corpora (Mörkuð íslensk málheild) and other valuable resources (e.g. Jörg 1989, Stump & Finkel 2013) on the language. The results, based on the analysis of circa 1000 verbs, show that variables like token frequency, type frequency, concatenativity, productivity etc. are, in practice, strongly correlated in Icelandic:

This, however, does not necessarily constitute proof that, as usually assumed, "(ir)regularity is a real grammatical phenomenon" and that, consequently, "[a] central issue in the modeling of inflection is how the notion of (ir)regular inflection is taken into account" (Bonami & Boyé 2006: 326). The logical dependencies of some of these notions (note, for example, that productivity is the source of type frequency), as well as the workings of diachronic change (which most often accrues formerly independent words to form concatenative morphemes) might explain the synchronic correlations observed in Icelandic and most other languages.

I therefore conclude that, empirically, there might not be a single unitary phenomenon which the terms 'regular' and 'irregular' designate. Given their multiple and overlapping senses in the literature, and the existence of separate, unambiguous labels for the relevant underlying notions, I contend that the terms should be abandoned in scientific literature to avoid ambiguity, sloppy reasoning and misunderstandings and to facilitate cross-linguistic comparison and interdisciplinary dialogue.

References

Bonami, Olivier, & Gilles Boyé. 2006. Deriving Inflectional Irregularity. In Stefan Müller (Ed.) Proceedings of the 13th International Conference on Head-Driven Phrase Structure Grammar, Varna: 361–380. Stanford: CSLI Publications.

Corbett, Greville G. 2009. Canonical inflectional classes. In Fabio Montermini, Gilles Boyé & Jesse Tseng (eds.), Selected proceedings of the 6th Décembrettes, 1–11. Somerville, MA: Cascadilla Proceedings Project.

Haspelmath, Martin. 2002. Understanding Morphology. London: Arnold.

Jörg, Christina. 1989. Isländische Konjugationstabellen: Icelandic Conjugation Tables-Tableaux de Conjugaison Islandaise-Beygingatöflur Islenskra Sagna. Hambrg: Buske.

Mithun, Marianne. 2012. The deeper regularities behing irregularities. In Thomas Stolz, Hitomi Otsuka, Aina Urdze & Johan van der Auwera (Eds.). Irregularity in Morphology (and beyond). Berlin: Akademie Verlag.

Mörkuð íslensk málheild. [The Tagged Icelandic Corpus.] (n.d.) Sigrún Helgadóttir (Ed.). The Árni Magnússon Institute for Icelandic Studies. Accessed [January 2017] from malfong.is.

Pinker, Steven & Allan Prince. 1988. On language and connectionism: analysis of a parallel distributed processing model of language acquisition. Cognition, 28, 73–193.

Rovai, Francesco. 2012. On some Latin morphological (ir)regularities. In Thomas Stolz, Hitomi Otsuka, Aina Urdze & Johan van der Auwera (Eds.). Irregularity in Morphology (and beyond). Berlin: Akademie Verlag.

Stump, Gregory & Raphael A. Finkel. 2013. Morphological typology: From word to paradigm. Cambridge: Cambridge University Press.