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## Analogical pressure of regular verbs on irregular ones

Contemporary English distinguishes between two classes of verbs: regular verbs and irregular ones. All regular verbs in contemporary English have two correlated characteristic properties.

- 1. The property of conflation:
  - They conflate the simple past and the past participle.
- 2. The TD property:
  - They are marked in the past and the participle with -ed, the spelling for /t/, /d/ or /ld/.

The number of regular verbs vastly exceeds the number of irregular ones. Hence we expect that regular verbs exert analogical pressure on irregular verbs. More specifically, we expect the following general hypothesis to be true: characteristic properties of regular verbs will appear as significant *tendencies* with irregular verbs as a result of analogical pressure. Thus our general hypothesis is as follows:

## General Hypothesis:

The characteristic properties of regular verbs will appear as significant tendencies of irregular verbs, due to analogical pressure of regular verbs on irregular ones.

The general hypothesis above translates into two specific hypotheses about tendencies observable for irregular verbs:

## 3. The TD hypothesis:

Irregular pasts and participles will tend to display a disproportionately high quantity of TD-endings as compared to other phonemes encountered in final position. (Confirming example: taught taught. Disconfirming example: took taken.)

4. Correlation hypothesis:

Irregular pasts and participles will tend to exhibit a strong correlation between the TD property and the conflation property.

(Confirming example: taught taught. Disconfirming example: flung flung)

We will show these two hypotheses to be correct. Three side results are worth mentioning as well. There is a small subclass of irregular verbs which all exhibit conflation but not the TD-property. This subclass is not numerous enough to disconfirm the Correlation hypothesis, but it is interesting to observe that all members of this subclass (N=15) share a unique phonological marker (to be discussed). There is another subclass of irregular verbs which

have simple pasts in TD but not participles in TD. This class is not numerous enough to disconfirm the Correlation hypothesis, but it is interesting to observe that all members of this subclass (N=23) share a unique phonological marker (to be discussed). Finally we will discuss the nature of verbs exhibiting superconflation, that is, conflation of past, participle and infinitive (N=17), which also share a phonological property. Our findings indicate that irregular verbs are less irregular than the term 'irregular verbs' suggests. In addition, our findings support a psycholinguistic conception of the organisation of the lexicon in which frequency and analogy play a crucial role.

## **Selected references**

- Arndt-Lappe, Sabine. 2014. Analogy in Suffix Rivalry the Case of English -ity and -ness. English Language and Linguistics 18(3). 497-548.
- Bybee, Joan. 2007. Frequency of use and the organization of language. Oxford: Oxford University Press.
- Hofstadter, Douglas & Emmanuel Sander. 2013. Surfaces and essences: Analogy as the fuel and fire of thinking. New York: Basic Books.
- Jescheniak, Jörg, & Willem Levelt 1994. Word frequency effects in speech production.

  Retrieval of syntactic information and of phonological form. Journal of Experimental Psychology: Learning, Memory and Cognition 20(4), 824–843.
- Jespersen, O. (1942) A modern English grammar on historical principles, volume 6: Morphology. Copenhagen: Munksgaard.
- Vitevitch, Michael, Paul Luce, David Pisoni and Edward Auer. 1999. Phonotactics, Neighborhood Activation, and Lexical Access for Spoken Words. Brain and Language 68 (1-2), 306-311.
- Zipf, George. 1935. The Psycho-Biology of Language. An introduction to Dynamic Philology. Boston: Houghton-Mifflin. Reprint 1965. Cambridge (Mass.): MIT Press.
- Zipf, George. 1949. Human Behavior and the Principle of Least Effort. An Introduction to Human Ecology. Cambridge (Mass.): Addison-Wesley. Reprint 1965. New York: Hafner.