SOLAB

Proposing a computational measure for lexical variation and a sequence for continuity in color terms

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Abstract

Color conceptualization, variations, and the analysis of continuity or discreteness in color terms are worth more deeply studying. Hence, Persian speakers and their lexical choices were analyzed in this paper. The researcher has proposed a computational measure for lexical variation (LVM) and a sequence for continuity (CDC) in color terms. The hypotheses are 1) If "variation" was mere "distinction" or "difference", no new term would have been coined for the concept. Hence, studying lexical variation with a cognitive approach is studying "the relationship between the similarities and differences of lexical choices". 2) Lexical variation in color terms can be represented and analyzed by applying quantitative approaches and defining computational measures such as LVM. 3) Continuity or discreteness of color terms can be represented and analyzed by CDC sequence. For this study, a survey test was designed and conducted on 100 individuals, and a 13200-entry corpus of Persian color terms was created. The theoretical framework is Cognitive Semantics and Cognitive Variational Linguistics. Methodologically, the research is partly a survey, library, and descriptive-analytical study. LVM can be used to compute onomasiological or semasiological salience and find each category's prototypes. Furthermore, it is illustrated in the CDC sequence that referents (all possible colors) are continuous, conceptualizations (color terms) are discrete, and the probability that each of the conceptualizations happens (the salience of each color term) is continuous. All three hypotheses have been confirmed.

Keywords: Lexical variation, Lexical choice, Decision-making, Continuity, Cognitive semantics

The 1ˢᵗ International Conference on the Science of Language & the Brain (SOLAB 2023) 3-5 MAY