

Language analysis reveals word popularity oscillates over 14-year period

November 29 2016, by Bob Yirka



Credit: CC0 Public Domain

(Phys.org)—A pair of researchers has found that word use popularity tends to oscillate over 14-year periods. In their paper published in the journal *Palgrave Communications*, Marcelo Montemurro, with The



University of Manchester in the U.K. and Damián Zanette with the National Council for Scientific and Technical Research in Argentina describe how they analyzed data obtained from millions of books publicly available in a Google database and found a cyclical pattern of word popularity.

Most people who live very long come to see that some words fall into popularity and then out again. While some that come into existence during certain periods of time, such as "rad" or "boogie" might disappear never to be heard from again, most common nouns, the researchers found, tend to have a cyclical popularity, and that for a reason they cannot explain, it happens in 14-year periods.

To learn more about word use popularity, the researchers wrote scripts that were used to dig through almost 5 million books that have been digitized and stored in Google's Ngram database. The scripts counted every noun encountered, which allowed the users to rank them by popularity year by year. They then tracked how the rankings changed over time and that was when they found a pattern. English nouns rose in popularity and then sank again in 14-year cycles—though they note that over the past couple of centuries, the cycles have been a year or two longer. They also found that some groups of nouns, such as those that referenced royalty, tended to rise and fall together in synced cycles. And other cycles, they found, tended to be connected with worldwide events such as wars or the Olympics. They noted, too, that the results were approximately the same when analyzing nouns in books written in other languages, which, they claim, suggests a universality to their findings.

The researchers report that they are baffled regarding the cycle and its number of years—after conducting further searches, they acknowledge that they have no idea why the number 14 in particular is important, but suggest more research might be in order to find out.



© 2016 Phys.org

Citation: Language analysis reveals word popularity oscillates over 14-year period (2016, November 29) retrieved 12 May 2024 from <u>https://phys.org/news/2016-11-language-analysis-reveals-word-popularity.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.