



misspelled variations and genuinely new words," the scientists write in their just-published study. "The words that are dying are those words with low relative use. We confirm by visual inspection that the lists of dying words contain mostly misspelled and nonsensical words."

But it is not only "defective" words that die: sometimes words are driven to extinction by aggressive competitors. The word "Roentgenogram", for example, deriving from the discoverer of the x-ray, William Röntgen, was widely used for several decades in the 20th century, but, challenged by "x-ray" and "radiogram", has now fallen out of use entirely. X-ray had beaten off its synonyms by 1980, speculate the academics, owing to its "efficient short word length" and since the English language is generally used for scientific publication. "Each of the words is competing to be a monopoly on who gets to be the name," Tenenbaum told the American Physical Society.

The phrase "the great war", meanwhile, used for a period to describe the first world war, fell out of use around 1939 when another war of equal proportions hit the world.

Language is "drastically" affected by the occurrence of major events such as wars, the scientists discovered, with word growth "significantly" increasing in the English, French, German and Russian languages during the second world war. "This can be understood as manifesting from the unification of public consciousness that creates fertile breeding ground for new topics and ideas," the academics write. "During war, people may be more likely to have their attention drawn to global issues." That increase was not seen in the Spanish language during the same period, they found, which they attributed to the smaller roles played by Spain and Latin America during the war. The Hebrew language, meanwhile, saw a boom shortly after the Balfour declaration of 1917, an event which effectively paved the way for the establishment of the state of Israel. By 1920, the birth rate of Hebrew words increased by a factor of five, as a language previously used mainly for religious writing became a modern spoken language.

"Analogous to recessions and booms in a global economy, the marketplace for words waxes and wanes with a global pulse as historical events unfold," they write. "And in analogy to financial regulations meant to limit risk and market domination, standardisation technologies such as the dictionary and spellcheckers serve as powerful arbiters in determining the characteristic properties of word evolution."