CC/NUMBER 12 MARCH 21, 1983

This Week's Citation Classic

Brown R & McNelll D. The "tip of the tongue" phenomenon. J. Verb. Learn. Verb. Behav. 5:325-37, 1966. [Harvard University, Cambridge, MA]

In a 'tip of the tongue' state (unable to recall a word well known), one can recall much about the word (e.g., length in syllables, first and last letters). The kinds of information recalled provide clues to the mode of organization of the mental lexicon. [The Social Sciences Citation Index® (SSCI®) indicates that this paper has been cited in over 200 publications since 1966.]

Roger Brown Department of Psychology and Social Relations Harvard University Cambridge, MA 02138

November 8, 1982

"This experiment was inspired by a passage from William James¹ in which he considers the seeming paradox that when one cannot recall a word, the gap in memory which, described as a gap, should be empty of content is, nevertheless, singularly definite in its ability to identify words that are almost correct and confident to reject words that are far from being correct. We invented a procedure that would fairly often precipitate 'tip of the tongue' (TOT) states and a way of collecting information from persons in the throes of that state and were able to resolve lames's paradox by showing that the empty gap always has a generic shape.

"We read definitions of fairly uncommon words to large numbers of potential subjects (e.g., 'a navigational in-

strument used in measuring angular distances, especially the altitude of sun, moon, and stars at sea') and when one fell into a TOT seizure (unable to recall sextant but certain he knew the word and, in fact, it was just on the tip...), we asked him to guess the first letter and number of syllables and to report all the candidate words that came to mind (e.g., secant, sexton, astrolabe, compass, sextet, protractor). Prospecting for TOTs in this way, we obtained 360 instances across many subjects and many words. Analysis of the full data showed that a person in a TOT state has guite a lot of information about the missing target word: number of syllables, location of primary stress, and some constituent letters, especially those at the beginning and end of the word (a bowed serial position effect in general). The information recalled, though short of the full target word, was sufficient to reject bad matches and resonate to near-fits. From the very canonical character of this abstract recall, it was possible to formulate hypotheses about both word perception and the organization of what we may call the mental lexicon.

"The basic findings of the TOT experiment have proved to be highly replicable and the method adaptable to the discovery of additional information.² Some of the fascination of the TOT state derives surely from the feeling that in this state the mind is very near the surface. It was an entertaining experiment to do and is, furthermore, an enduring source of pleasure because as one's memory for names grows worse, the loss is compensated by increased opportunity to study the associative structure of memory."

^{1.} James W. The principles of psychology. New York: Holt, 1893. Vol. I.

^{2.} Rubin D C. Within word structure in the tip-of-the-tongue phenomenon.

J. Verb. Learn. Verb. Behav. 14:392-7, 1975.