Syllabic Pseudohomophone Priming in Tip-Of-the-Tongue States Resolution: The Role of Syllabic Position and Number of Syllables

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Tip-Of-the-Tongue (TOT) state: common experience characterized by the incapability of retrieving a familiar word, usually coupled with a frustrating feeling. It is thought that TOTs occur when the semantic and syntactic information of the word is retrieved but not its phonology (e.g., Burke, Mackay, Worthley, & Wade, 1991; Dell, Chang, & Griffin, 1999; Levelt, Roelofs, & Meyer, 1999). This study aims to analyze the role of the phonological syllabic position (first vs. last), and number of syllables (two, three, and four syllable long words), in TOT states resolution.

Hypothesis:
(1) primes phonologically related to the TOT word by the first syllable will improve TOT resolution;
(2) larger number of induced TOTs and higher rate of TOT resolution is expected for words with higher number of syllables.

Participants:
150 EP monolinguals
124 female
M=20.65 years, SD=2.28

Results:
TOT induction
• 13.6% of TOT states;
• Statistically significant differences for number of syllables, F(2, 96)=10.00, p<.001;
• 72.1% of positive TOTs.

TOT resolution:
• Main effect of number of syllables (F(2, 96)=38.30, p<.001);
• Main effect of syllabic position (F(1, 96)=149.60, p<.001);
• Interaction effect (F(2, 96)=9.10, p<.001);
• Interaction effect (F(1, 96)=3.23, p=.074).

Post-analysis:
The ANCOVA considering syllable frequency and neighbourhood density as covariates, showed an effect of number of syllables (F(2, 160)=11.30, p<.001) and a marginally significant effect of syllabic position (F(1, 160)=3.23, p=.074). The effects of each covariate were not statistically significant.

Results showed a significant syllabic pseudohomophone priming effect facilitating TOT resolution. The effect was stronger for four-syllable long words, especially when the last syllable was used as prime. These results seem to reinforce the importance of phonology in TOT states resolution, particularly the role of the syllable as an important sublexical unit in speech processing.