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### **Proceedings of the Annual Meeting of the Cognitive Science Society**

#### **Title**

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#### **Permalink**

<https://escholarship.org/uc/item/81f403n3>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

#### **Authors**

Clark, Thomas  
Tuckute, Greta  
Medina, Bryan  
[et al.](#)

#### **Publication Date**

2023

Peer reviewed

# Context-sensitive features predict sentence memorability in the absence of memorable words

**Thomas Clark**

Massachusetts Institute of Technology, Cambridge, Massachusetts, United States

**Greta Tuckute**

Massachusetts Institute of Technology, Cambridge, Massachusetts, United States

**Bryan Medina**

Massachusetts Institute of Technology, Cambridge, Massachusetts, United States

**Evelina Fedorenko**

Massachusetts Institute of Technology, Cambridge, Massachusetts, United States

## Abstract

What makes some sentences more memorable than others? In this work, we treat the problem of recognizing previously seen sentences as a comparison between a target stimulus and noisy memory representations of previously presented stimuli. Building on past work in image and word memorability, we conduct a large-scale memorability experiment with 500 participants and 2,500 target sentences, eliciting variation in how accurately participants recognize repeated sentences. We predict the memorability of sentences from a) empirically established word-level memorability scores, and b) sentence-level distinctiveness and surprisal features that capture the compositional semantics of sentences. We find that the presence of individually memorable words is highly predictive of sentence memorability, but that sentence-level features also predict sentence memorability – especially in the absence of memorable words. This suggests that otherwise forgettable words can together create memorable compositional meanings that remain in memory and facilitate recognition.