

Carryover effects in free recall reveal how prior experiences influence memory for new experiences

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Abstract

We perceive, interpret, and remember ongoing experiences through the lens of our prior experiences. Inferring that we are one type of situation versus another can lead us to interpret the same physical experience differently. In turn, this can affect how we focus our attention, form expectations of what will happen next, remember what is happening now, draw on our prior related experiences, and so on. To study these phenomena, we asked participants to perform simple word list learning tasks. Across different experimental conditions, we held the set of to-be-learned words constant, but we manipulated the orders in which the words were studied. We found that these order manipulations affected not only how the participants recalled the ordered lists, but also how they recalled later randomly ordered lists. Our work shows how structure in our ongoing experiences can exert influence on how we remember unrelated subsequent experiences.

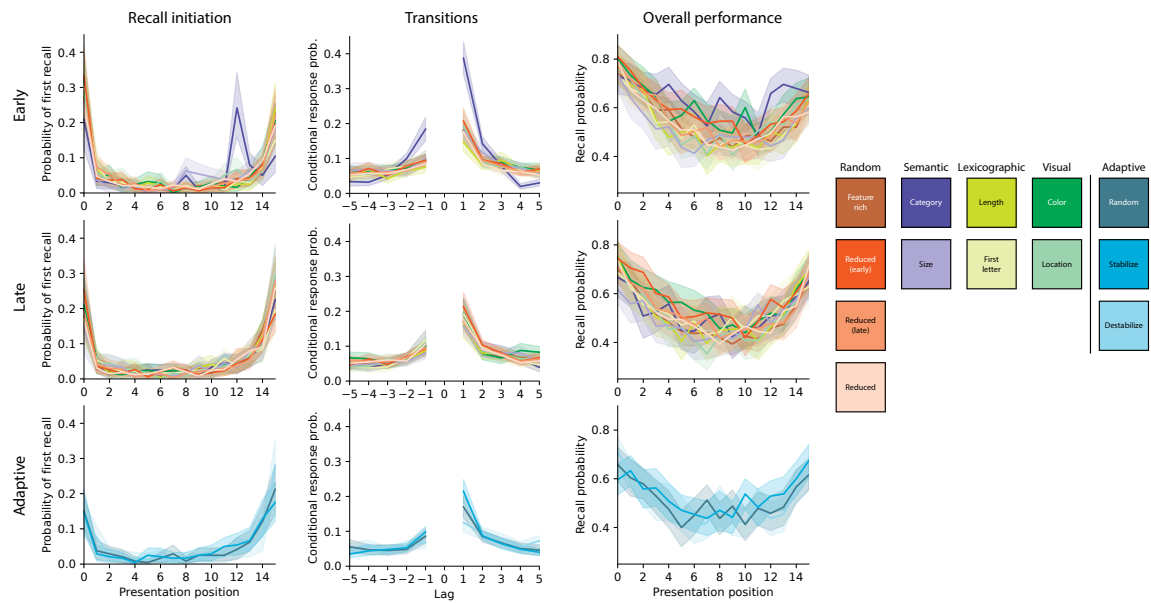


Figure 1: Recall dynamics in free recall.

16 Introduction

17 Results

18 Discussion

19 Materials and methods

20 Participants

21 Experimental design

22 Analysis