EBBINGHAUS IS FLIPPING IN HIS GRAVE:
RECALLING LISTS BACKWARD, CHUNKING, AND THE CASE FOR AN ASSOCIATIVE BASIS OF SERIAL-ORDER MEMORY

Dr. Jeremy B. Caplan

Associate Professor
Department of Psychology

Friday, January 12
3:00 PM - 4:30 PM
BS P - 319 N

How often can you say there is a consensus in theory in psychology? For memory of ordered sequences with the paradigm called "immediate serial recall," there has been a near-consensus that lists are not built from nearest-neighbour associations between items (Ebbinghaus' associative chaining). Rather, positional-coding models have been dominant. These models associate each list-item to a separate representation of order, and prohibit inter-item associations. Further, modellers incorporate the strict assumption that recall proceeds from one item to the next, regardless of the outcome of the prior recall, the antithesis (by design) of associative chaining. Recent findings are demonstrating violations of the independent-cueing assumption, and suggest that inter-item associations may drive certain effects in serial recall. After tracing this recent work, I will present our latest evidence against independent-cueing and in support of associative chaining, from a novel paradigm: backward serial recall of temporally grouped lists (related to one of Miller's notions of "chunking"). SIMPLE, a well vetted positional-coding model, could not reproduce the important features of the data, even after giving it many chances to do so. At a minimum, associative chaining may be necessary to explain certain benchmark phenomena in serial-order memory, and modellers must find a way to incorporate the non-independence of cueing during recall into positional-coding models.

UNIVERSITY OF ALBERTA
DEPARTMENT OF PSYCHOLOGY

COGNITIVE PSYCHOLOGY SEMINAR
www.psych.ualberta.ca/~cogsem/

Cog Sem