Psychology 4325n: Modelling Memory, Spring 2015

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Modelling Memory

> No sooner had the warm liquid mixed with the crumbs touched my palate than a shudder ran through me and I stopped, intent upon the extraordinary thing that was happening to me. An exquisite pleasure had invaded my senses, something isolated, detached, with no suggestion of its origin. And at once the vicissitudes of life had become indifferent to me, its disasters innocuous, its brevity illusory this new sensation having had on me the effect which love has of filling me with a precious essence; or rather this essence was not in me it was me. ... Whence did it come? What did it mean? How could I seize and apprehend it? ... And suddenly the memory revealed itself. The taste was that of the little piece of madeleine which on Sunday mornings at Combray (because on those mornings I did not go out before mass), when I went to say good morning to her in her bedroom, my aunt Lonie used to give me, dipping it first in her own cup of tea or tisane. The sight of the little madeleine had recalled nothing to my mind before I tasted it. And all from my cup of tea.

That quotation of the *episode of the madeleine* as it has come to be known from Marcel Proust's *In Search of Lost Time* is just one of the examples of memory he uses to explore the contrast of involuntary memory with voluntary memory. The cartoonist Saul Steinberg's 1969 New Yorker cover illustration depicts another metaphor of memory—that of a *stream of consciousness*: a visitor in an art gallery is looking at a painting by Georges Braque. Above the visitor is his thought bubble containing the stream of images and ideas that is provoked by seeing the painting.

Psychology 4325n: Modelling Memory is intended as a survey of various historical and current approaches to characterizing human (and, potentially, non-human) memory and cognition. Discussion will range through topics such as what memory might be through potential types of memory (e.g., semantic, episodic) to memory systems (from one through potentially thousands) and memory representations. There are box models, network models (including artificial neural-nets), holographic models, dual-process models, race models, signal detection models, and models called "SAM" and others called "Minerva", and "HAL", and "LSA" of implicit vs. explicit memories, of recall, recognition, action, performance, and perception, and, as ably illustrated by Proust, of feelings of familiarity vs. active recollection.
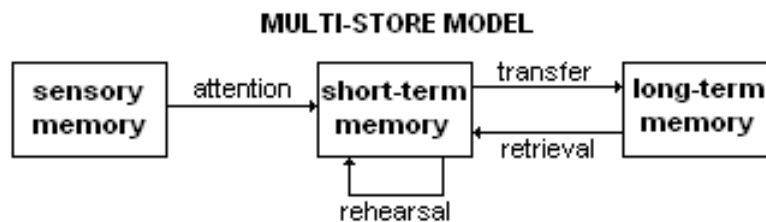
MULTI-STORE MODEL

Table 1: Assignment-exam percentages will be converted to minimum letter-grades using this scale. Minimum letter-grade here refers to the lowest letter-grade that will be assigned on the basis of your objective performance; however, higher letter-grades may be assigned at the discretion of the instructor.

Percentage	Grade	Percentage	Grade
90-100	A+	67-70	C+
85-90	A	63-67	C
80-85	A-	60-63	C-
77-80	B+	55-60	D+
73-77	B	50-55	D
70-73	B-	<50	F

There are no books for the course. Instead, we will explore the topic with a series of readings that will comprise the source of weekly papers you will be asked to write and the topic of the next week's discussion.

Evaluation

Almost every week of the course will have one or more assignments consisting of short "position papers" of the readings assigned for that week, weighted equally.

Assignments

All assignments are to be word processed. All papers must conform to the format specified by the American Psychological Association. Papers failing to do so in nontrivial ways will be assigned a failing grade, as will papers considered poorly-written for other reasons (e.g., significant errors of syntax, orthography, and structure). A large component of the course, and the reason for the weekly papers, is that, through almost weekly feedback, we can learn to produce the clear, concise, expository prose expected in scientific writing.

Assignments are to be done at your convenience, and turned in at designated times (usually one week after the work is assigned). These assignments will involve short essays, comment and opinion regarding a focal reading for that week, often accompanied by supplementary readings. These readings (or links to them, or instructions on how to obtain them) will be available on the Moodle web-site (http://moodle.uleth.ca) for the course.

The work you submit *must be your own.* It is an academic offence to submit someone else's work as your own. Please see section 4 of Academic Offences, Student Discipline Policy—academic offences (p. 78 of the 2015 academic year calendar) for details.

Class Times

Classes are scheduled from January 8, 2014 to April 9, 2015 for 6:00-8:50, Thursdays in UH C640.