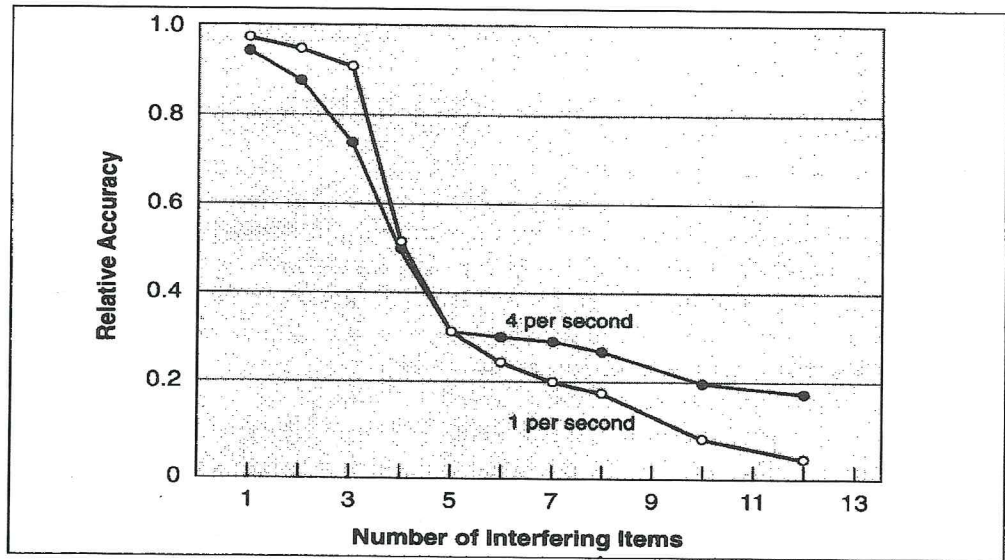
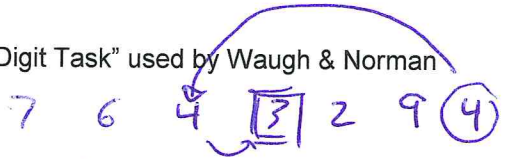


Midterm 2 is 15% of your final grade; 16 points total, graded out of 15 (Kellogg Chapters 3, 4, & 5)

1. Waugh & Norman (1965) performed an experiment in which they varied the rate of presentation of items in a probe-digit task. The presentation rate was either 1 digit per second or 4 digits per second. The data from the subjects is summarized in the graph below.



- a. Describe the "Probe-Digit Task" used by Waugh & Norman



Get a list of #'s presented: ~~the~~ last is a repeat; what # followed initially?

- b. Describe the theoretical interpretation that Waugh & Norman provide to describe the results they obtained when using their probe-digit task. What was the major theoretical alternative? What was the logic of their interpretation?

Interfered (rather than decay)
Time was less important than # of intervals
#s.

2. Consider Craik and Lockhart's LEVELS OF (Depth of) PROCESSING account?
 - (a). Describe the proposal

Deeper = Better memory

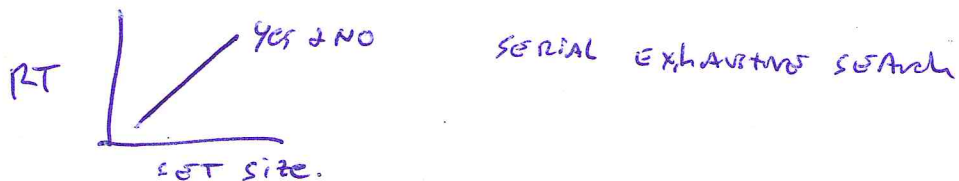
- (b) NAME and DEFINE two problems with this Craik & Lockhart account.

- i. TASK EFFECTS. (study-test match)
- ii. CIRCULARITY of DEFINITION.
 - changes order of how good memory is.
 - Encoding specificity
 - TRANSFER Appropriate PROCESSING

3. Consider the "Sternberg Memory search" task:
(a) DESCRIBE the "Sternberg memory search task"

Memory set into memory
Probe provided
is probe part of set?

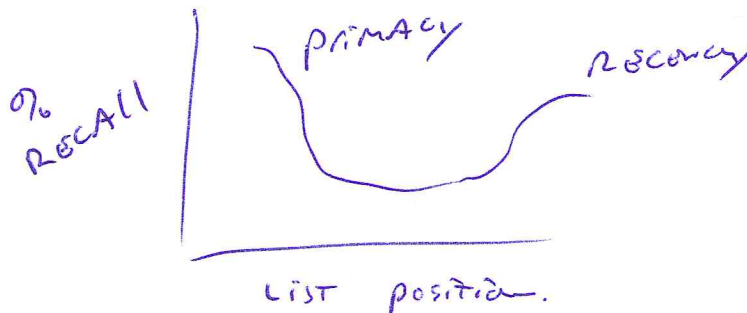
- (b) Draw a **figure (picture)** illustrating the results of the data produced by the "Sternberg memory search task". Label the X and Y axes with appropriate meaningful labels.



- (c) What are the theoretical conclusions one should draw from the observed results from when participants perform the Sternberg memory search task?

SERIAL EXHAUSTIVE SEARCH FOR MEMORY

4. DRAW a "typical" serial position curve. LABEL the axes. LABEL the important features.



5. DEFINE each of:

- (i) The dual-coding hypothesis (dual-coding theory)

VISUAL + VERBAL BOTH INFO SOURCES STORED ← CUES FOR RECALL.

- (ii) Serial self-terminating search

HARD VISUAL SEARCH / END WHEN FIND.

- (iii) Encoding Specificity

- (iv) The "binding problem"
- Things encoded include other elements coded @ SAME TIME. + OPERATION DONE ON INFO HELPS DETERMINE WHAT IS STORED.

Tying together
PROCESSING OF SAME ITEM
ACROSS DIFFERENT BRAIN
REGIONS / ITEM CHARX

6. Answer each MULTIPLE CHOICE question:

What deficit is associated with (bilateral) damage to the hippocampus?

- A. Aphasia
- B. Agnosia
- C. Anterograde Amnesia
- D. Proactive Interference

When new learning interferes with your ability to perform some action that you used to be able to do, this is referred to as:

- A. Retrograde Interference
- B. Anterograde Interference
- C. Retroactive Interference
- D. Proactive Interference

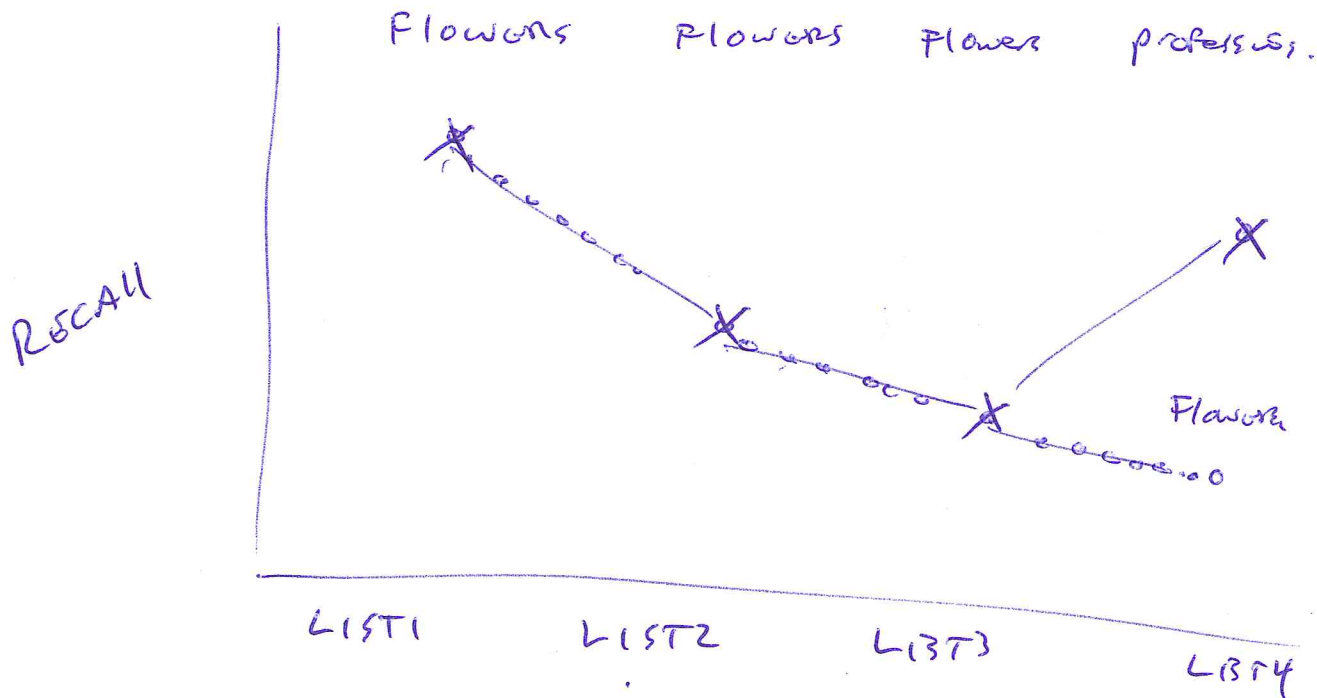
What has been proposed to be the most important aspect of Geiselman's Cognitive Interview?

- A. warning interviewees against bias
- B. recall all
- C. reinstate context
- D. recall in a variety of orders

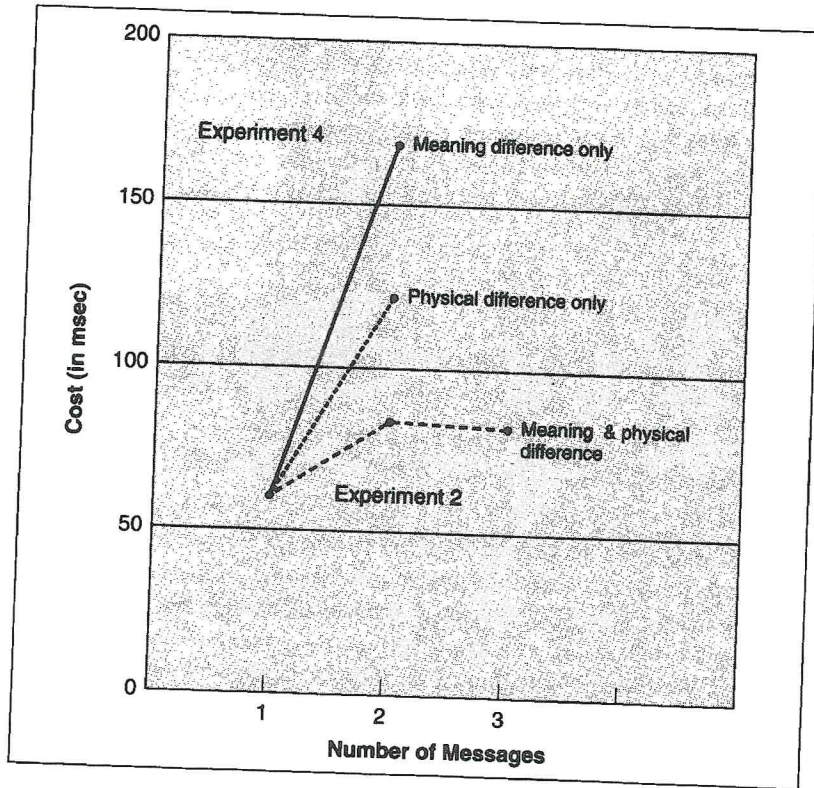
7. Provide an example of "Release from PI"

- include a description, a definition, and an illustration

Change in topic \Rightarrow BETTER RECALL FOR NEXT LIST / ^{EXAMPLE} ~~LIST~~ of items.



8. This graph shows the Johnston & Heinz result.



note: X-axis is cost (ms); y-axis number of messages; top line "meaning difference only"; middle line "physically different only", bottom line "both meaning and physical differences".

a. What was the **methodology** used by Johnston & Heinz (what was the experiment like? What were the conditions? What did the subjects do?)

RT to light; simultaneously listen to 1,2,3 phrases spoken - listen for catch...

b. What are the **theoretical implications** of the Johnston & Heinz results?

Multimodal Model of ATTN = EARLY SOLN EASIER THAN LATE SOLN.

9. In Baddley's model of Working Memory what are the components and their primary functions?



10. SHORT ANSWER:

(b) When participants in a "list memorization test" (free recall) is delayed by another intervening task, what is the most likely result (other than a generally lower total number of items recalled)?

RECENTRY EFFECT DECREASES.

(c) What can we learn for a T-O-T state? (i.e., what does TOT stand for and what does its existence tell us?)

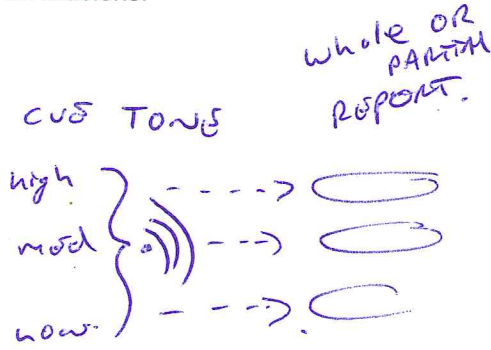
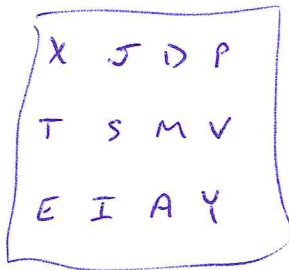
MORE MEMORY ARE THERE THAN EXPLICITLY AVAILABLE.

11. FINISH this list of at least TEN different "TYPES" of memory that have been discussed or mentioned in class....

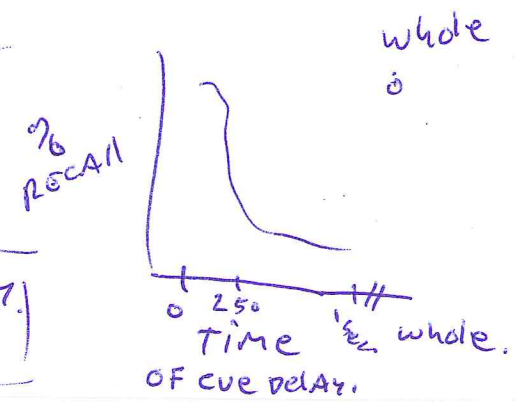
- A. SENSORY (e.g., Echoic, Iconic, Haptic, ...)
- B. SHORT TERM
- C. LONG-TERM
- D. DECLARATIVE
- E. NONDECLARATIVE
- F. WORKING semantic
- G. procedural
- H. EXPLICIT
- I. implicit
- J. UNCONSCIOUS

12. Describe GEORGE SPERLINGS work on ICONIC MEMORY. Describe the methodology, draw the results, and describe the conclusions.

FLASH grid.



ICONIC MEMORY
250 ms DURATION



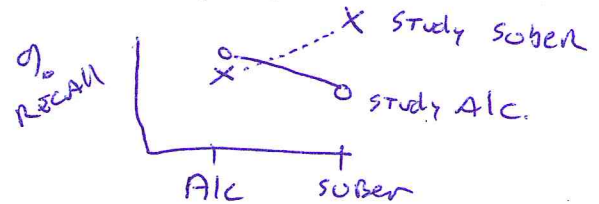
13. (i) If someone were to be intoxicated (BAC .08) during encoding, and then their scores were tested when (1) sober or (2) equivalently intoxicated (BAC .08). Which condition would produce better recall for a list of items?

② Study-Test Match. (Alc-Alc)

- (ii) If someone were to be sober during encoding, and their scores were tested when (1) sober or (2) when intoxicated (BAC .08); which condition would produce better recall for the list of items?

① Study-Test Match

- a. draw a graph of your expected findings. Label the graph appropriately.



STATE-DEPENDENT PROCESSING

- b. What is the term for this pattern of results?

↳ (TRANSFER APPROPRIATE PROCESSING) ⇒ 1/2 POINT TEST CONDITION

14. Discuss two alternative explanations for Childhood Amnesia

① FAILURE AT ENCODING
- NO "SELF" YET

② FAILURE AT RETRIEVAL
- DIFF SYSTEM.

③ INTERFERENCE
- Loss of new info.

15. Describe one piece of evidence for each of:

- a) Early Selection - shadowing little info sep. channel.
b) Late Selection - COCKTAIL PARTY EFFECT.
c) State-dependent learning - SOS # 13

1 BONUS POINT

16. DEFINE

a) Self-reference effect

↑ memory (remembered w/ self-reference)

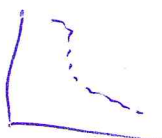
b) Von Restorff effect

↑ memory distinctive

c) Subjective organization

- personal org. of info during recall

d) Brown-Peterson Task



- WXJ

- 273, ... 270, 267... (x time)

- TARGET WAS _____?

← (originally to prevent rehearsal)

THEORY → MEMORY LOSS (STM) FROM? DECAY?