



# Memory

## Early Studies of Cognition

Psychology 390  
Psychology of Learning

Steven E. Meier, Ph.D.

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Psyc 390 – Psychology of Learning

## Studying Memory

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- You can examine memory at several different phases or stages.
  - Encoding Stage
  - Storage Stage
  - Retrieval Stage

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## Encoding Stage

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- Two Phases
  - Acquisition Phase
    - When you first encounter the item.
- Memory Trace
  - The relevant experience leaves some record in the memory system.

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## Storage Stage

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- Memory traces are held in some enduring form for later use.

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## Retrieval Stage

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- One tries to recall a particular memory trace among all other memory traces that are being stored.

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## Retrieval Stage

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All are aspects of the memory process

All three areas of the process are studied.

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### How is Memory Studied?

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- Ebbinghaus developed many methods

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### Serial Learning Task

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- Look at a list of words for a few seconds, then try to recall the words in the order they were listed.

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### Example

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.Pencil  
.Wallet  
.Bookcase  
.Chair  
.Pen  
.Automobile  
.Hanger  
.Elephant  
.Plane  
.Suitcase  
.Hat  
.Bathroom  
.Paper  
.Towel  
.Briefcase  
Ramp

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### Paired Associate Task

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- Here you present two items at once and later try to recall the item when given the other.

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### Paired Associate Task

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1. Book	Light
2. Ice	Chalk
3. Phone	Clip
4. Stapler	Floor
5. Knob	Plant
6. Couch	Moon
7. Button	Carpet
8. Stove	Crass
9. Box	Knife
10. Harbor	Switch
11. Outlet	Spring
12. Horn	Sky
13. Boat	Wall
14. Plane	Paper
15. Concrete	Board

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### Problem

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Words often have meaning.

### Solution

Use nonsense syllables

CCC CVC

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### Memorize in Order

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.XLR  
.PJV  
.RFG  
.MZC  
.DGK  
.FTB  
.NOZ  
.XJG  
.WSL  
.KBN  
.SKD  
.PLD  
.TBC  
.LCH  
.YKC

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### Free Recall Task

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- Try to recall items without hints.
- Is not the same as a serial learning task.
- Is difficult
- e.g.,
  - Name the 50 states.
  - Name every brain structure.
  - Don't worry about the order.

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### Recognition Task

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- Recall information that you have seen before.  
Multiple choice exam.

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