Levels of Processing Approach: Craik & Lockhart (1972)

Atkinson & Shiffrin (1972) departed from their original **'stores metaphor'** used in the multi store model. They argued that the **type of processing** was more important than the store and that memory resulted from a series of analyses of information at deeper levels.

Here, **rote learning** is considered to be much less effective than deeper analysis.

The problem with the previous studies was that it studied **incidental learning** (i.e. they were told how to learning) and were not encourage to learn by **intention.**

Memory is thought as a continuum from shallow, sensory stores to deeper, semantic analyses.

Craik & Tulving (1975) asked groups of participants to either figure "is word upper of lower case", "does word rhyme with mat" or "does it fit at end of sentence?" (orthographic, phonological and intentional judgments). Semantic processing lead to highest probability of recall (due to deeper processing).

Encoding Specificity Principle (Tulving, 1979)
States that to be remembered, an item should be encoded in the same context by which it is retrieved. This adds context dependent modulatory factors such as **cues, internal states and context.**

Internal Context: Tulving et al. (1970 tested this by asking participants to remember pairs of words. Pairs that were **more heavily associated** (white black) were more likely to be recalled than pairs not likely to be associated (train black).

External Context: Diving Study Baddeley et al. (1975) tested members of a diving club. Participants learnt a list of words either on land or 20 feet underwater. Recall was either on land or underwater. Subjects recalled more words when retrieved in the context by which they encoded the words.

Goodwin et al. Alcohol Study (1969) demonstrated this with alcohol. Memory was better if drunk at study and test than if drunk at study and sober at test.

Criticisms of the LPA

Circularity: Better memory is explained by greater depth of processing whilst greater depth of processing is explained by greater depth of processing. There needs to be an independent measure of greater depth of processing

No Emphasis on Retrieval: The strength of a memory is judged on how it was encoded. However, the way it is retrieved is also important to whether it will be recalled.