Memory Introduction Essay, Research Paper

Introduction

Memory is involved in all aspects of our lives and can be thought of as the to retain information and demonstrate retention through behaviour. We have vast amounts of knowledge stored in our memory system which we are able to access quickly and effortlessly, thus implying that stored knowledge must be highly organised to allow us to retrieve the appropriate information for a given situation. This organisation will be determined by the way that information is encoded into memory, and the way knowledge is organised will determine the type of process required to access that information on a future occasion.

Craick and Lockhart(1972) argued that any item entering the memory system is analysed in stages. The early stages analyse perceptual properties of the item, such as visual or acoustic properties. Later stages analyse its meaning, including the categories it fits into and its connections to other items in memory. Each level of processing leaves a trace in memory. The deeper the level of processing, the stronger the trace and the more durable the memory. Conversely, the shallower the level of processing, the more transitory will be the memory.

Rowe(1974) showed that semantic encoding leads to more effective learning than phonemic encoding, which in turn is more effective than visual encoding. The assumption is that semantic processing is somehow a deeper sort of encoding.

Hyde and Jenkins(1973) used five different orienting tasks. Participants were presented with lists of words for three seconds and had to complete one of the following tasks:

1. Rate the word for pleasantness.

2. Estimate the frequency of use of the word.

3. Detect the presence of particular letters in the word.

4. Decide the appropriate part of speech of the word.

5. Make decisions as to weather or not the fits into sentence frames.

Hyde and Jenkins argued that conditions 1 & 2 required semantic processing whereas the others did not.

Craick and Lockhart(1972) devised an incidental learning procedure in which subjects were deliberately not asked to remember items, so that it prevented them from processing everything in the best possible way in order to remember them. According to Craick and Lockhart?s theory, the difference between each level of processing is the amount of cognitive effort we expend on memorising something. This cognitive effort is essentially the effort made in relating new information to old. The better we can organise new material i.e. relate it to existing knowledge, the better it will be retained.

The aim of the present study is to verify (or otherwise) the findings of Craick and Lockhart and also to update and partially replicate their findings about levels of processing. The present study will therefore test the hypothesis that if words are processed acoustically or visually then they will be less likely to be recalled than if they are processed by meaning.

Alternate hypothesis: There will be a significant association between words which are processed acoustically or visually and whether they will be less likely to be recalled than if they are processes by meaning.

Null hypothesis: There will be no significant association between words which are processed acoustically or visually and whether they will be less likely to be recalled than if they are processed by meaning.

These are one-tailed hypotheses.