

How can the way in which we organise our thinking by using mental images, concepts and schemas help us improve our memory?

This essay will look at some of the many ways that we organise our thinking. It will look at mental images, concepts and schemas, and the way that they can be useful aids to the improvement of memory.

Thinking can be done in two ways. This is in words and in images. Semantic thought is the term given to thoughts that are based on words and meanings. Iconic thoughts are those that are based on mental images. Through research and experiments it has been shown that iconic thought can lead to better recall of information.

Mental Images can be described as as iconic mental representations. The process of remembering things by putting the information that is to be remembered, into iconic pictures. It has been found that mental images are most effective if the images are large, colourful and unusual.

As illustrated by Spoons et al. (2007), the use of Mental Images have proved to be valuable when learning a new language. The French word 'poubelle' can be translated into English as bin. In order to remember this, a mental image was formed which linked the two words. For this word the person, could imagine themselves holding their nose, whilst taking the lid of a bell shaped bin. This is known as the Key Word Technique.

An experiment conducted in 1975 by Raugh and Atkinson, the developers of the key word technique, highlights the positive use of mental imagery when learning a new language. In this experiment there was two groups. Both groups were told to learn sixty Spanish words. The only difference between the two groups was that one group were taught about the key word technique, and the other were unaware of it. When the participants were tested, the results showed that the group who were taught about the key word technique scored an average of 88%. The other group, those that had not used it, only scored an average of 28%. As the results show, the group who had used the key word technique to learn the words had more success when it came to remembering. This could be because iconic pictures provide the brain with a cue. The time and effort made to form the mental images will also help the information fix in our memories. The above examples prove that forming mental images can improve the recall of information.

Mneumonics are another way that we can organise our thinking, based on mental images. In Ancient Greece, In 500 BC, Simonides created the 'Method Of Loci'. This was a strategy to improve memory, by linking the information to be remembered with mental images and a familiar logical sequence.

The second idea I will look at is concepts. Concepts are a way of organising thoughts so that they are in groups (categories). These groups will be of things that have similar features. The categorisation of these thoughts is called concept formation. Concepts can also contain sub-concepts. For example, food as a concept can be split into sub-concepts such as hot, cold, fresh, frozen, sweet and savory.

Shopping lists are an example of how concepts can be useful to remember things. This is because the heading of the categories provide cues and makes recalling information easier. Research carried out by Bousfield (1953) illustrates how people tend to remember things in groups. In the experiment participants were shown a list of 60 words, in a random order. These words could be divided into four groups. Results showed that the words tended to be remembered in the groups.

Another experiment which shows how concepts can be used for improved recall, was conducted by Mandler (1967). This involved two groups. Both groups had 100 cards each, and each card had a word printed on it. One group was told just to sort the cards, and the other was told to memorise the words as they sorted them. Both groups were then tested by being asked to write down all the words they could remember. The results of the test showed that the group who were told just to sort the cards remembered as many words as the group told to memorise them. These results suggest that by organising information we learn it, even though a conscious effort is not being made to remember it.

Finally, I will look at Schemas. A schema is a mental structure we use to organize and simplify our knowledge of the world around us. We have schemas about ourselves, other people, places, situations, and in fact almost everything.

Schemas are based around a particular theme. A person's schema will involve all the information they associate with a certain topic. For example, a person's schema of school may include teachers, lessons, blackboard, homework and textbooks.

The information in our schema, is often shared with other people. This is especially the case if people have had similar experiences. People who have had different experiences will have different schemas.

Jean Piaget, a Swiss Psychologist, spent over 50 years investigating the way that children develop their thinking and cognitive skills. Piaget suggested that children do this by developing schemas. Their schemas would be created by the experiences that they have had. He claimed that schemas were how knowledge was structured in the mind.

Memory can be likened to a huge filing cabinet. Each file in the cabinet would contain all the information that makes up our schema. When a person is faced with a new situation, the knowledge already held, which was obtained from previous experience, can help us determine how we should behave.

An experiment done by Bransford and Johnson (1972), illustrates the role of schemas in the understanding and effective recall of information. In this experiment, the participants were asked to read a passage and then recall it as accurately as possible. Half of the participants were given a title for the passage, and the other half wasn't. The majority of the participants found the passage hard to understand and difficult to recall. When tested the group who had been given the title, were found to have had more understanding of what was written, and recalled more information. This was because the title provided the schema.

In conclusion, the way that thoughts are organised by using Mental Images, Concepts and Schemas can help improve recall. Mental Images give us a picture, which we have created to remember information and make recall more efficeint. Concepts and Schemas are similar, they improve memory by putting information into logical and organised groups, with titles providing the cue for prompt recall.

Word Count: 1082 Word