

The Role of Mind Map in Second Language(English) Vocabulary Acquisition——Adopting Morphological Association and Semantic Association

Yutian Zeng

Guangdong Polytechnic of Water Resources and Electric Engineering,Guangdong Guangzhou 510000

Abstract: Vocabulary is a significant portion of second language learning. Words are the foundation of communication and comprehension. Enlarging vocabulary is a fundamental component of the process of pedagogy. The process of vocabulary learning is a process of input and organization of new information in second language acquisition. This paper intends to propose the effectiveness of adopting a mind map to learn English vocabulary, consisting of the current situation of vocabulary learning, the importance of vocabulary learning and the benefits of using a mind map to learning English vocabulary, and the role of a mind map using two types of association strategies: morphological association (word formation association, affix association, similar morphology association, and compound word association), semantic association (identical category association, synonym association, and antonym association). It is concluded that adopting an effective vocabulary acquisition strategy is beneficial to expand vocabulary and extend word memory.

Keywords: Mind map; Vocabulary acquisition; Morphological association; Semantic association

1. Introduction

Pronunciation, grammar, and vocabulary are three components of language. Vocabulary is the foundation of listening, speaking, writing, and reading. No matter for native speakers or non-native speakers, vocabulary is a significant part of language learning. Gass and Selinker(1994) stated that the lexicon is the most significant portion for learners. A shortage of second language vocabulary is an obstacle for various students, resulting in tardiness and difficulty in comprehending textbooks (Nagy,1988). Therefore, mastering an effective strategy to learn vocabulary is crucial in second language vocabulary learning. Tang (2007) said that vocabulary acquisition is crucial in improving learners' language ability in second language acquisition. Also, vocabulary not only influences the quality of the input and output of the language but also influences learners' pragmatics and language communicative ability.

However, various learners cannot acquire scientific and effective strategies for learning vocabulary and correctly using vocabulary obtained in writing and speaking. At the same time, they memorize the words with low efficiency. According to the investigation of senior high school students in China by the Education Bureau in 2006, it showed 86.3% of students felt it difficult to grasp and memorize English words. 91% of students thought poor memory of English words causes poor performance in English learning. 96.3% of students said they did not find an effective way to learn English words (Li,2010:22). From my perspective, poor memory of English words acquisition causes poor performance in English acquisition resulting from the fact that they do not acquire effective strategies to memorize and obtain English words. Currently, English learners learn English words by using a rote memory strategy. It is a kind of boring and low efficient strategy and learners consume too much time on word learning. Therefore, it is urgent for learners to learn words by using effective strategies.

A mind map is a visual instrument representing knowledge and divergent thinking. With the feature of association and imagination, the mind map stimulates learners' creativity and memory potency. A mind map forms a complete information system by linking new knowledge to old knowledge. At the same time, it facilitates learners to cultivate divergent thinking. Students tend to learn those vivid and interesting knowledge. According to the association, a mind map makes knowledge vivid and visual within a stereoscopic framework. By drawing a mind map, learners can make a distinction between words, understand the formation of words, and enlarge their vocabulary. Also, English learners can integrate and construct the knowledge system to grasp knowledge firmer and longer. Therefore, learners make use of mind maps especially morphological and semantic association strategies to obtain vocabulary scientifically, systematically, and effectively.

2. Literature Review

The mind map discovered by Tony Buzan is a kind of graphic instrument expressing divergent thinking. The mind map is based on association strategies. English words are stored and memorized in accordance with associative bonds and the construction of associative bonds are contributed to word learning (Hong, Zhang, Ran, 2003). Initially, Graves (1986) stated that unknown complicated words can be explained by using morphological analysis. Learners can break a complicated word into morphemes (roots, prefixes, and suffixes). Nation (1990) said that there are two skills to master morphological analysis. The first one is dividing a new word into morphological parts. The second one is inducing the meaning of a new word by combining it with its morphological parts. Familiar words can make a contribution to language learning (Carlisle, 2003). Morphological associations promote word reading and spelling (Nunes, Bryant, and Olson 2003, Nunes and Bryant 2006, and Henry 1989. Semantic aspects are a component of vocabulary acquisition. Associative learning (McMurray et al., 2012) is a theoretical model of the significance of semantic association in the process of word learning. Meng (2009) carried out an experiment about the relationship between semantic association strategies and learners' acquisition of English new words. The outcome shows that semantic association strategies improve instant memory and delayed memory in new word learning. Based on scholars' researches, I divide morphological association into four different types of association and classify semantic association into three different kinds of association.

3. The Role of Mind Map

3.1 Morphological Association

3.1.1 Word Formation Association

Word formation comprises conversion, derivation, and composition. The derivation is the dominant way of enlarging learners' vocabulary. The root is the foundation of derivation. Different meanings and parts of speech are formed by the same root plus different affixes. Learners can use a word root or an affix as the center combining with association to draw a map.

Root association

Using root association, learners can enlarge their vocabulary can distinguish different meanings and properties of a word.

Examples:

consider(v.)-considerate(adj.)-considerable(adj.)-considerably(adv.)-consideration(n.).

3.1.2 Affix association

Prefix association

Prefixes express different meanings such as negation, degree, size, number, and so on.

Examples:

Prefixes expressing negation: dis-, in-, im-, counter-, anti-, il-, ir- etc.

I find some rules among the prefixes.

(1) 'Im-' is added before the word whose initial letter is 'm', 'b', and 'p'.

Examples:

impossible; impolite; immoral

(2) 'Ir-' is added before the word whose initial letter is 'r'.

Examples:

irregular; irresolvable

(3) 'Il-' is added before the word whose initial letter is 'l'.

illogical; illiterate; illegal

(4) Differences between 'anti-' and 'counter-'

'Anti-' is added before a word to form a new word meaning against the war, the society, the virus, and the diseases.

Examples:

anti-Japanese; anti-society ;antidote ;anti-cancer

'Counter-' means 'an opposite side' and ' an opposite action'

Examples:

countermeasure; counter example

'Anti-attack' means fight against the enemy, however, 'counter-attack' means against the enemy and fight back.

(5) 'dis-' is only added before a verb.

Examples:

disappear; disconnect

Prefixes expressing together: co-, col-, com-, con-, cor-, etc.

There exist some rules among it.

(1) 'com-' is added before the word whose initial letter is 'b', 'm', 'p', and 'f'.

(2) 'col-' is added before the word whose initial letter is 'l'.

(3) 'co-' is added before a vowel and the word whose initial letter is 'h', 'g' and 'n'.

(4) 'cor-' is added before the word whose initial letter is 'r'.

(5) 'con-' is added before a consonant.

Examples:

cooperate; collocate; combine; contemporary; correlation

Prefixes expressing number: tri-, kilo-, milli-, etc.

Suffix association

Suffixes usually change the word character of the root; However, it does not change the meaning of the root. Learners can judge the word character from suffixes.

Examples:

Noun suffixes: -ment, -tion, -sion, -ness, -ism, -or, etc.

I also find some rules among the noun suffixes.

(1) '-an', '-eer', '-er', '-ese', '-ian', '-man' and '- or' mean 'a person' and '-er' and '- or' represent a kind of occupation.

Examples:

doctor; postman; musician; writer; engineer

(2) '-ism' ...

Examples:

communism; socialism

(3) '-ation' ...

Examples:

industrialization; modernization; civilization; urbanization

(4) '-ess' represents 'female'.

Examples:

Actress; goddess

Verb suffixes: -en, -ize, -ify, etc.

Adverbial suffixes: -ly, -ward, etc.

Adjective suffixes: -able, -ful, -cal, -ous, etc.

3.1.3 Similar Morphology Association

Learners easily mistake the meaning of words with similar morphology. Therefore, Learners can obtain those words together and make a distinction between those words.

Examples: desert vs. dessert, window vs. widow, etc.

3.1.4 Compound Word Association

Learners can induce the meaning and the character of the new words by combining two words with different meanings and characters.

Examples:

earth+quake= earthquake

Learners can induce the meaning of earthquake by dividing it into two parts 'earth' and 'quake'.

Also, there exist some rules in forming compound words.

Taking compound adjectives as an example:

(1) adjective + noun + ed = adjective

warm-hearted; blue-eyed; open-minded

(2) numeral + noun + ed = adjective

five-year-old; five-inch-tall

3.2 Semantic Association

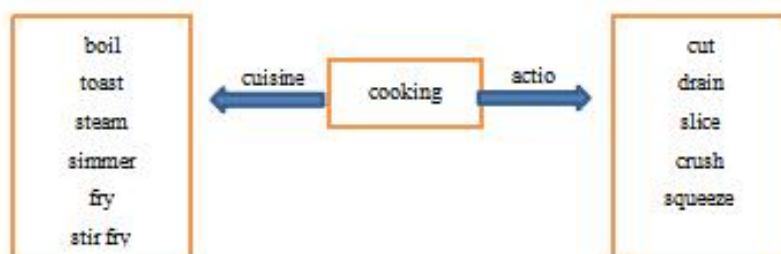
Semantic association based on synonym association, antonym association, and hyponymy association are other kinds of association strategies for learning words.

3.2.1 Identical Category Association

Learners can classify words into categories. However, in order not to cause excessive memory load, learners can narrow word categories, such as narrowing living categories into food categories, clothing categories, etc.

Examples:

Using a mind map to memorize some verbs relative to cooking: boil, toast, steam, simmer, fry, stir fry, cut, drain, slice, crush, squeeze, etc.



Compared with memorizing every word solely, using a mind map to memorize some verbs in attendance with certain topics, learners not only can improve the quality of language output but also master those words firmer.

3.2.2 Synonym Association

Synonym association facilitate learners to understand the distinction and usage of words and the shift of synonym and antonym improving the accuracy of language usage.

Examples:

(1) Identical meaning and usage of phrases: depend on, rely on, count on

(2) Identical meaning and different usage of words: charge and accuse. Both words mean someone has done something morally illegal or wrong. However, the usage of two words is different: “charge” matching “with”, “accuse” matching “of”.

(3) Similar morphology, meaning, and usage of words: huge&vast, conserve&preserve, etc.

3.2.3 Antonym Association

Antonym association is contributed to understanding the meaning of antonyms. Also, it enriches and enlarges vocabulary.

Examples:

possible-impossible

As mentioned above, 'Im-' is added before the word whose initial letter is 'p' expressing negation. Morphological association and semantic association interact with each other. Therefore, learners can easily master the meaning of a new word by combining morphological association with semantic association.

4. Conclusion

In my opinion, the role of mind maps in learning second language vocabulary can arouse learners' interests and enlighten learners' divergent thinking. Also, it enlarges and solidifies vocabulary ensuring the accuracy of language. Limited vocabulary causes poor performance in language learning. Vocabulary memory is not a tedious process anymore. Such a memory process can be designed with enjoyment and high efficiency. Using effective strategies is the key point in learning words such as morphological association and semantic association. According to the research of scholars mentioned above, they proposed that morphological awareness was crucial in literacy results and the knowledge of morphology promotes a positive performance in language learning. Also, Kong carried out research to demonstrate a semantic association strategy is conducive to word learning. The semantic association strategy improves the instant and

delayed memory of word learning. However, according to the rules of the Ebbinghaus curve, vocabulary learning should be a rotative and repetitive process. In order to acquire a second language vocabulary firmer, using a mind map is inadequate. Learners should repeatedly review what they have learned in time. In this way, learners can acquire vocabulary firmly and efficiently.

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- About the author:** Yutian, Zeng(1993), female, Han nationality, Guangzhou, Guangdong Province, English teacher of College of Foreign Languages and Foreign Trade,Guangdong Polytechnic of Water Resources and Electric Engineering, research areas: Second Language Acquisition; Effective learning and teaching; Second Language Instruction; Technology-supported Learning and Instruction.