

On the Application of Etymology to Teaching and Learning the English Vocabulary

Jiping Sun

College of Arts
China University of Petroleum
Qingdao, Shandong, China
philsally@126.com

Xiuli Sun

College of Arts
China University of Petroleum
Qingdao, Shandong, China

Abstract—Cognitivist school holds that learning is a mental process including such aspects as how people build up and draw upon their memories and the ways in which they become involved in the process of learning. The paper attempts to probe into the role of etymology in teaching and learning the English vocabulary from the cognitive perspective, especially meaningful learning theory.

Keywords—cognitivist school; etymology; teaching and learning the English vocabulary

I. INTRODUCTION

Vocabulary is of vital importance in language teaching and learning, which is a key that none of the four language skills (speaking, listening, writing and reading) can be independent of. In the traditional way of vocabulary teaching, vocabulary is mostly taught from the aspects of its spelling, pronunciation and meanings including its base meaning, figurative meaning, collocation meaning, etc., which shows synchronic study of vocabulary is emphasized while diachronic study of vocabulary, the etymological study of words, is overlooked. The paper will study the role that etymology plays in teaching and learning the English vocabulary based on cognitivist school of learning.

II. COGNITIVIST SCHOOL

A. Memory

Cognitivists see learning as an internal process that involves memory, thinking, reflection, abstraction, motivation, and metacognition. Cognitive psychology looks at learning from an information processing point of view, where the learner uses different types of memory during learning, which are sensory store, working memory (short-term memory) and permanent memory (long-term memory) respectively [1]. Sensations are received through the senses into the sensory store before processing occurs. “The information persists in the sensory store for less than one second. The duration in short-term memory is approximately 20 seconds, and if information in short-term memory is not processed efficiently, it is not transferred to long-term memory for storage” [2]. The amount transferred to long-term memory is determined by the quality and depth of processing in short-term memory. The deeper the processing, the more associations the acquired new information forms in memory. Information transferred from short-term memory is either assimilated or accommodated

in long-term memory. During assimilation, the information is changed to fit into existing cognitive structures. Accommodation occurs when an existing cognitive structure is changed to incorporate the new information.

Cognitive psychology postulates that information is stored in long-term memory in the form of nodes which connect to form relationships, i.e. in networks. Meaningful input should be included during the process of teaching and learning the English vocabulary. Etymological knowledge of words belongs to meaningful input which can help learners remember and retrieve it in the process of acquiring and using English vocabulary.

B. Meaningful Learning Theory

David P. Ausubel, the U.S. cognitive psychologist, is the founder of the meaningful learning theory. “He distinguishes learning from two dimensions. In term of a learner’s way of learning, there are reception learning and discovery learning. In terms of the relationship between learning materials and a learner’s cognitive structure, there are meaningful learning and rote learning” [3]. He contends that human learning is a meaningful process of relating new knowledge to already existing cognitive concepts or propositions. According to him, meaning is a “clearly articulated and precisely differentiated conscious experience that emerges when potentially meaningful signs, symbols, concepts or propositions are related to and incorporated within a given individual’s cognitive structure on a non-arbitrary and substantive basis” [4]. Meaning is therefore a process of relating and anchoring new material to relevant established entities in the learner’s cognitive structure. “Ausubel stresses that factual information is learned most easily if it is organized and taught as logical systems rather than randomly or in isolation. This helps the learner see the systematic organization of facts and makes it easier to learn the facts themselves” [5].

The mental mechanism of Ausubel’s meaningful learning is assimilation theory whose basic idea is that whether learners can acquire new knowledge mainly depends on the relevant existing concepts in their cognitive structures; meaningful learning takes place when the new knowledge interacts with the relevant concepts in their cognitive structure, and in this way new knowledge is assimilated into the preexisting one held by the learners. Therefore Ausubel regards that the factors that affect meaningful learning are both internal and external, and in turn he proposes the conditions for meaningful learning.

1) The external condition is that study materials must be logical, i.e. they can be related and incorporated into an individual's cognitive structure on a non-arbitrary and substantive basis.

2) The internal condition includes two aspects: one is that a learner should have a disposition to meaningful learning, i.e. the learner has a disposition to relate the new knowledge to what he has already known; another is that there should be relevant concepts existing in a learner's cognitive structure, which can be related to new knowledge

Therefore, the most important fact influencing learning is prior knowledge.

In the process of meaningful learning, the association between old and new knowledge and assimilation of new knowledge can enhance knowledge retention (i.e. long-term memory) as well achieve good learning effect which can't be reached by rote learning. The rote learning through repetition and mechanical imitation is sure to help students remember new knowledge on the basis of short-term memory. But since it treats new knowledge in isolation and separates it from the knowledge structure held by the students, students will easily forget what they learned just now.

III. MEANINGFUL LEARNING THEORY AND ETYMOLOGY

The feasibility of applying etymology in the teaching and learning English vocabulary is based on cognitivist school of learning, esp. the meaningful learning theory. Providing etymological knowledge of words during vocabulary teaching and learning is in accordance with the meaningful learning theory in the following three aspects:

A. New knowledge can be associated with the existing knowledge. With the traditional English vocabulary teaching method, teachers teach words from the synchronic perspective, i.e. they teach students the words' spelling, pronunciation, parts of speech, meanings, collocations, derivatives, etc. While language is dynamic, so is English. It's common that new words are coined and some outdated words cease being used. Words' meanings also undergo changes with the development of physical world. Hence, words and their meanings both bear some specific historical marks. Any synchronic study of vocabulary cannot cut the connection with words' history. Teaching English vocabulary by offering words' etymological knowledge does not contradict with synchronic way of teaching but can increase students' knowledge of words as well as intensify their understanding about words' meanings.

B. The students' already acquired knowledge, i.e. knowledge existing in their cognitive structures, makes it possible to incorporate new knowledge. Students have obtained abundant knowledge on words' pronunciation, usage and meaning by traditional vocabulary learning method. Under this condition, the existing knowledge is the base for gaining new knowledge, the etymological knowledge of words. To learn the meaning of words from the diachronic perspective, to understand the evolution of words' meanings and to combine the diachronic characteristics of words with the already known synchronic

ones make students have a comprehensive grasp of the meanings of words.

C. Students have disposition to make the above mentioned association and incorporation in study, which is helpful to vocabulary teaching and learning. But etymological study of words has been overlooked for a long time in the practice of teaching and learning English vocabulary in our country, which is reflected in the design of various English teaching syllabuses or the compiling of dictionaries for English learners. A New English-Chinese Dictionary, Longman Dictionary of Contemporary English and Oxford Advanced Learner's Dictionary are popular dictionaries among Chinese English learners; however none of them provide etymological information of words. Only A New Advanced English-Chinese Dictionary and The English-Chinese Dictionary provide little etymological knowledge of words. Teachers often take it for granted that students can't comprehend etymological knowledge and are unwilling to learn it. On the contrary, according to the author's own teaching experience, students like knowing more knowledge about words' history and their origins. What's more, students can remember words easily and retain them for a long time when they have known some etymological knowledge of words. Using etymology in vocabulary teaching and learning can help students become more efficient in memorizing words, and more confident in English learning.

IV. ETYMOLOGY AND THE APPLICATION OF ETYMOLOGY TO THE TEACHING AND LEARNING ENGLISH VOCABULARY

A. *Etymology and the History of English*

In Webster's Online Dictionary, etymology is defined as "Etymology is the study of the origins of words" [6]. The word etymology itself comes from the Greek "etymologia" ("etymos" means true meaning of a word, and "logos" means science).

As a language, English is derived from the Anglo-Saxon, a dialect of West Germanic although its current vocabulary includes words from many language, such as Latin, Greek, French, Spanish, etc. "The development of English undergoes three periods, which are Old English Period (450-1100), Middle English Period (1100-1500) and Modern English Period (1500- present) respectively" [7]. In the Old English Period, the English vocabulary was mainly Germanic and small amounts of Latin and Scandinavian words were borrowed. In the Middle English Period, many French words and Latin words (because of religion) were introduced into England. During the French reign on the British Isles, the ruling class spoke French while the peasants spoke the English of the time. This led to many paired words of French and English origin. For example, pork is from porc, meaning "pig". In the Modern English Period, with the widespread political, economic and cultural association with other countries, English has proven accommodating to words from many languages. At the same time a lot of new words are coined. Up to now there are about 100,000 English words in use.

Because of the large vocabulary, if etymological information is introduced when teaching students English words, it will be easier for students to have deeper understanding of the words and know the cognates of the words, which can result in long-term memory and the enlargement of students vocabulary.

B. The Application of Etymology to the Teaching and Learning English Vocabulary

1) The Study of English Vocabulary

When a teacher is teaching some words from the perspective of etymology, a story or a period of history is likely to be traced back. Telling stories or history about words will arouse students' interests in learning words and enlarge their background knowledge, which is also important for listening and reading. For instance, "spartan" comes from Greek history meaning "marked by simplicity and often strict self-discipline or self-denial" [8]. In ancient times, the Greek city of Sparta had a reputation for enforcing a highly disciplined, severe way of life among its citizens so as to keep them ready for war at any time. The city required physical training for men and women and maintained a common dining hall and communal child care, but provided few physical comforts. The term "spartan" today may sometimes suggest communal life (for example, in the army) but always signifies strictness and frugality. Another case in point is "Promethean", meaning "new or creative in a daring way" [8]. It comes from the Greek mythology. Prometheus was a Titan, a generation older than Zeus. When Zeus overthrew his own father Cronus and seized power, Prometheus fought on the side of the gods and against his fellow Titans. But when Zeus later wanted to destroy the race of humans, Prometheus saved them by stealing fire for them from the gods. He also taught them how to write, farm, build houses, read the stars and weather, cure themselves when sick, and tame animals --- in short, all the arts and skills that make humans unique. So inventive was he that anything that bears the stamp of creativity and originality can still be called Promethean. But for his disobedience Zeus had he chained to a rocky cliff, where for many long centuries an eagle daily tore at his liver. Thus any suffering on a grand scale can also be called Promethean.

The development of the meaning of some words can also be understood from the cognitive angle. Take "Halcyon days" which means "tranquil and happy days" for example. Longman Dictionary of English Idiom gives the explanation like this "referring to the ancient belief that the KINGFISHER (a water bird whose Greek name is halcyon) laid its eggs on the sea during a 14-day period of calm and good weather" [9].

Additionally, many English words are formed by the roots and affixes coming from Greek and Latin. Thus teaching the most commonly used roots and affixes to students can help them memorize words easily and predict the word's meaning by analyzing the formation of it when they encounter a new one in reading. For example, "phon" is a Greek root meaning "sound", "voice", or "speech". The words which use it are "phonetic", "symphony",

"telephone", etc. "acerb" is another frequently used root coming from Latin, which means "sharp" or "sour". The words formed by it include "acerbic", "exacerbate", etc. The prefix "ab/abs" comes to us from Latin, and means "from", "away", or "off". "Abuse" is the use of something in the wrong way. To "abduct" is to "lead away from" or kidnap. "Aberrant" behavior is a behavior that "wanders away from" what is usually acceptable. There are many such cases in English vocabulary building, so knowledge on roots and affixes is a useful tool for students to study English words.

What's more, in English there are some nouns whose plural forms are regular while some are irregular. Knowing the origin of such kind of nouns can help students understand the reasons and they will be less likely to make mistakes. For example, datum --- data, memorandum --- memoranda, index --- indices, the plural forms of these words (the latter one of each group) show the characteristic of Latin rules. Some words borrowed from Greek also remain their original rules, such as crisis --- crises, criterion --- criteria, phenomenon ---phenomena, etc.

From the above mentioned aspects we can find that etymology can help students have a correct attitude toward vocabulary learning, improve their cognitive understanding of words and find their own appropriate vocabulary learning methods.

2) The Use of English Vocabulary

Etymology not only can be useful in helping students memorize new words efficiently but also can help them use words correctly.

As we know, English vocabulary includes words of many origins, and there are synonyms of different origins. The words of different origins with similar meanings may show differences in their usages. If students know the characteristics of the words of different origins, they will use them more freely.

To be specific, Modern English words are mainly from Old English, French and Latin. Each kind of words has its own character in usage epically in register. The words from Old English are usually common words which are used in informal or oral situation in most cases. The words from French are often used in literary works to show the user's social status. The words from Latin are usually formal words used in formal style or business letters. For example, "home/ residence" both mean "the place where one lives". But the two words are not interchangeable. The next sentence can show the different usage of them. "You might invite friends home with you any day of the week, but you would probably not invite them to your residence." In this sentence the word "home" comes from Old English, and the word "residence" is from Latin. From the language used in the sentence and the loose sentence pattern, we may infer that this is a sentence used in oral English. If "home" is substituted by "residence", the reader will feel it is out of line.

Etymological information can also help students remember word collocations. When it comes to explain word collocations, many teachers will tell students they are formed by convention, so students learn them by rote. The

result is that the faster they remember the faster they forget. In the exam time they often feel they have remembered them but don't remember the exact ones, hence confuse one with another. If etymological information is applied in explaining words' collocation properly, many words' usages and collocations can be explained logically, students will understand them and are unlikely to make mistakes. For example, "derive sth. from", in which the word "derive" comes from Latin, and it is formed by de-(from) and "rivus" (a small river) meaning "back to its channel or source". From the explanation of the word formation, it is clear that the preposition after the verb should be from, i.e. derive from or derive sth. from. The similar case is the word "deprive" which is also from Latin. It is formed by de- (a prefix for emphasizing) and "prive" (rob), meaning "take away". And preposition "of" and "off" are cognates, both of them bear the same meaning "away from". Therefore, "deprive" can be collocated with "of" to form the phrase "deprive sth. of sb."

V. SOME CONSIDERATIONS WHEN APPLYING ETYMOLOGY IN THE TEACHING AND LEARNING ENGLISH VOCABULARY

In the development of English, the role of etymology in word meaning cannot be neglected. And the cognitivist school of learning, esp. the meaningful learning theory has proved the feasibility and significance of the application of etymology to the teaching and learning English vocabulary. But everything has two sides. It's undoubting that some etymological information will mislead students, such as the word "nice". The word is from Latin "nescius" meaning "ignorance"; "silly" is of Old English origin "sely/ silly" meaning "happy". The current meanings of the two words are far from their original ones. So it's hard for students to associate their current meaning with the original meaning. In order to put etymology into full play in the teaching and learning English vocabulary, some problems need consideration.

- When should teachers apply etymology in vocabulary teaching so it can work well?
- What aspects of etymology should be involved when using it to explain words in class?
- What strategies of teaching should be adopted when teachers are explaining etymological information of words?

According to the author's understanding, when teaching English vocabulary in classroom, teachers should

understand the students' learning proficiency first, as to the first-year students, some basic knowledge about word roots and affixes should be introduced and repeated when they are met again. When students have grasped them, the teacher can point it out to remind students of using etymological information to remember the word during vocabulary teaching and learning. It depends or optional to tell the history of the word or the mythological stories about it in detail. That means teachers should not spend too much time on it in class since the time in class is quite limit. The function of it is to arouse students' interest to study English. If there are some students who are interested in etymology, they can consult some materials or books after class and the teacher can give them some advice if possible.

Indeed, if etymology is taught as a selected course, it will be good for both English major and non-English major students. However, it will be a great challenge to the teacher because it not only covers Old English but also French, Latin Greek, etc., which requires the teacher have constant self-study and self-improvement. The author believes that the teaching and learning English vocabulary is not a rigid process; using etymological knowledge of words in vocabulary teaching can make the teaching and learning process more rich and varied. And in the course of applying etymology, there must be some interesting discoveries and revelations.

REFERENCES

- [1] Carroll, D.W., *Psychology of Language*. Beijing: Foreign Language Teaching and Research Press, 2000.
- [2] Ally, M., *Foundations of Educational Theory for Online Learning*. http://cde.athabascau.ca/online_book/ch1.html, 2013-5-20.
- [3] Meiyun Le, *Applied Linguistics*. Nanjing: Nanjing Normal University Press, 1999.
- [4] Brown H.D., *Principles of Language Learning and Teaching*. Beijing: Foreign Language Teaching and Research Press, 2002.
- [5] Xiaohui Yao, *The Instruction Design of Meaningful Learning Based on Situated Cognition Theory*. Changchun: Northeast Normal University, 2005:9-14.
- [6] <http://www.websters-online-dictionary.org/definition/etymology>
- [7] Rongpei Wang, *An Advanced Course of English Lexicology*. Shanghai: Shanghai Foreign Language Education Press, 2002.
- [8] Cornog, M.W., *Merriam-Webster's Vocabulary Builder*. Massachusetts: Merriam-Webster Incorporated, 1998.
- [9] Yan Chen, "Acquisition of Etymology: its role in teaching and learning English vocabulary," in *Foreign Languages and Their Teaching*, Vol. 11, pp. 29-30, 2002.