

The Application of Greco-Roman Mythology Learning in English Vocabulary Teaching from the Perspective of Etymology

Jia Fan and Sun Yu

Abstract—Language is the carrier of culture and culture nourishes language. According to statistics, 56% of the commonly used 10,000 English words are adopted from Latin and ancient Greek, which are the carrier languages of Roman civilization and Greek civilization respectively. Greco-Roman mythology, with its rich cultural connotation, permeates all aspects of people's social life in English-speaking countries and becomes a source of vitality for the expansion of English vocabulary. Etymology, the scientific study of the origin of words, is crucial in English vocabulary teaching, as etymological study improves vocabulary learning. This paper adopts the methodology of literature research to gather materials about English vocabulary teaching methods, etymology theory, and Greco-Roman mythological origin of English vocabulary. In order to better explain the cultural connotation of words in English vocabulary teaching, this paper proposes method of applying Greco-Roman mythology learning in English vocabulary teaching, and classifies English vocabulary into four forms according to etymological motivation: direct use, metaphorical use, semantic transfer and derivation from the perspective of Greco-Roman mythological origin, thus stimulating English learners' interest and improving the efficiency of both teaching and learning.

Index Terms—Etymology, English vocabulary teaching, Greco-Roman mythology.

I. INTRODUCTION

A. Research Background

D. A. Wilkins, a well-known linguist, once said: “without grammar, people can express very little; without vocabulary, people cannot express anything” [1]. There is no doubt that vocabulary acquisition plays a crucial role in language learning. However, many students have difficulties in learning vocabulary, which is essentially due to their lack of understanding of the cultural connotation of vocabulary. If teachers ignore the cultural connotation of English vocabulary and only focus on the literal meaning, it will lead to low learning efficiency. According to College English Reference Vocabulary List from *College English Curriculum Requirements* [2], “among the 7676 words included in this list, words derived from Greco-Roman

mythology account for nearly 30% of the total” [3]. As one of the sources of European civilization, in the process of English language development, Greco-Roman mythology greatly enriches English vocabulary, and injects fresh blood into English expression. A large quantity of words and phrases derived from Greco-Roman mythology entered into English vocabulary. Therefore, it is of great practical significance to integrate Greco-Roman mythological learning into English vocabulary learning.

B. Research Objective

This paper aims to classify English vocabulary from Greco-Roman mythology systematically and apply Greco-Roman mythology to English vocabulary teaching from the perspective of etymology, so as to further promote vocabulary teaching and learning.

C. Research Significance

In terms of academic value, this paper takes etymology as the tool, Greco-Roman mythology as the carrier, and deeply explores the hidden cultural connotation of English vocabulary, which can enrich existing English vocabulary teaching methods.

In terms of practical value, this paper takes teaching method as the foothold, and applies etymological theory to the practice of English vocabulary teaching from the cultural dimension, which can enhance the interest and efficiency of both vocabulary teaching and learning.

II. LITERATURE REVIEW

English vocabulary teaching has always captured the widespread attention in the field of English teaching at home and abroad. After reading quantities of documents and materials, generally speaking, English vocabulary teaching methods can be divided into the following five categories:

A. Sensory Teaching Method Based on Psycholinguistics

Information processing theory regards memory as the process of “encoding,” “storing” and “extracting” input messages [4]. Through the coding of sound and vision, the association between vocabulary and its sound, shape and meaning is established, and then the words with the same meaning or grammatical classification are extracted. This teaching method, which is both figurative and direct, can deepen students' sensory experience and help them establish the relationship between words and objects. Its demerit concerns that it is instantaneous to remember vocabulary

Manuscript received June 29, 2020; revised September 1, 2020.

Jia Fan is with School of Foreign Studies, Northwestern Polytechnical University, Xi'an, CO 710129 China (e-mail: 15235195393@163.com).

Sun Yu is with School of Foreign Studies and Art Education Center in Northwestern Polytechnical University, Xi'an, CO 710129 China (e-mail: sunyu@nwpu.edu.cn).

and easy to forget in this way.

B. Associative Teaching Method Based on Cognitive Linguistics

Cao Xiaojiao holds that Prototype Theory and Conceptual Metaphor Theory of Cognitive Linguistics have important implications for English vocabulary teaching. "Prototype Theory is used to enlarge vocabulary, and Conceptual Metaphor Theory is used to expand the depth and breadth of words" [5]. The promises are that it can avoid the learning burden caused by rote memorization and help to understand the deep relationship between the meanings of polysemous words. The flaw is that the associative teaching method is suitable for those with advanced English level, while it is not suitable for the primary learners.

C. Word-Formation Teaching Method Based on Morphology

There are several word-formation methods in English: "conversion, derivation, compounding, clipping, blending, and acronyms" [6]. By learning the roots, prefixes and suffixes of words, and by using word-formation to find the connections between words, this not only cultivates students' logical thinking ability, but also helps them to develop self-study ability. The downside is that because there are a lot of roots, prefixes and suffixes, it is also a heavy task to memorize them without knowing their origin, which cannot relieve the burden of students' memory to a great extent.

D. Context Teaching Method Based on Context Theory

Context includes "linguistic context, situational context, cultural context and pragmatic context" [7]. Teaching vocabulary in a specific context, combining sentences and articles to study the meaning of words, will not only help learners to grasp vocabulary easily, but also cultivate their English thinking ability. The defect is that the current context teaching method pays more attention to verbal context than non-verbal context, which leads to students' failure to fully master these words.

E. Etymological Teaching Method Based on Etymology

Through analyzing the origin of vocabulary, the vivid and interesting story is interspersed in the teaching. The blessings are to stimulate students' interest in learning and at the same time to deepen learners' impression of words, and help them better understand English culture. The weakness is that the quantity of English vocabulary is huge, and the current etymological teaching method has no systematic classification of English vocabulary, which is difficult to be applied in practical teaching. A clear classification method is urgently needed to improve etymology teaching.

To sum up, there are a host of English vocabulary teaching methods based on linguistic knowledge, but it is mostly about passive learning, which cannot fundamentally boost English learners' vocabulary learning ability. Language and culture are inseparable. Only through cultural learning can learners take the initiative to learn and enhance the efficiency of vocabulary learning. Therefore, this paper focuses on the cultural context. From the perspective of

etymology, this paper applies Greco-Roman mythology to English vocabulary teaching, and divides the various vocabularies into four categories according to their lexical characteristics.

III. RESEARCH METHODOLOGY

A. Research Design

This paper adopts the method of literature research, through literature searching to summarize English vocabulary teaching methods at home and abroad, concluding that etymological study is crucial in vocabulary teaching; in addition, it introduces the definition of etymology and the data proportion of the three sources of English words, concluding that the Greek and Latin vocabulary that belong to the Indo-European family are the largest sources of English vocabulary; furthermore, it expounds the system and content of Greco-Roman mythology and its source status in western culture, which justifies that a large quantity of English vocabulary is derived from Greco-Roman mythology. Finally, this paper collects and sorts out the commonly used English words and phrases derived from Greco-Roman mythology, so as to reveal the cultural connotation of these words.

B. Data Collection Procedures

Firstly, this paper finds the English vocabulary derived from Greek and Latin by looking up *Oxford Concise Dictionary of English Etymology* [8], then finds their Greco-Roman mythological origin from *Gods and Heroes of Ancient Greece* [9]. After that, the formation types of English vocabulary derived from Greco-Roman mythology are summarized by induction, that is, mainly in the type of words and phrases. In the term of words type, according to "etymological motivation (the most original reason of language creation and base of words production)," this paper divides the existing vocabulary into four ways including "direct use," "metaphorical use," "semantic transfer" and "derivation" [10]. This classification method is clear and easy to understand, organize and summarize, and basically covers all types of vocabulary derived from Greco-Roman mythology, and enjoys strong operability. In terms of phrases type, this paper focuses on the idioms. Due to the limitation of space, this paper only briefly lists a few examples of these two types for reference, which are commonly used in English through observation.

IV. FINDINGS

A. Definition of Etymology

Etymology is the history of words, their origins, and how their form and meaning have changed over time. By extension, the etymology of a word means the origin of the particular word. It studies the phonetic form and meaning of words, the relationship between new words and old words in the process of word development, and then explains the origin of the names of things and phenomena, and reveals the rules of word meaning evolution and word development.

Every word in English has its own history. For example, “etymology” comes from the Greek word “etumologia”, which means “the true sense of a word” [11].

There are mainly three sources of English vocabulary: “the Germanic (26%), Latin (58%), and ancient Greek (6%), all of which belong to the Indo-European language family” [12]. Latin carries Roman civilization, and ancient Greek carries Greek civilization. Because of the close relationship between English and Greek and Latin, there are many Greek and Latin loanwords entering into English vocabulary through Greco-Roman mythology.

B. Overview of Greco-Roman Mythology

Ancient Greek mythology includes two parts: the story of gods and the legend of heroes. The story of gods mainly tells the origin of the universe and human beings, the production of gods and their genealogy. According to legend, there are Twelve Olympians in ancient Greece: Zeus (King of the gods), Hera (Queen of the gods), Poseidon (King of the sea), Dionysus (God of wine), Athena (Goddess of wisdom and war), Apollo (God of the sun), Artemis (Goddess of the moon), Aphrodite (Goddess of love and beauty), Ares (God of war), Hephaestus (God of fire), Demeter (Goddess of agriculture), and Hermes (Messenger of the gods). In the story of gods, the gods have their own division of labor. It is in charge of all things in heaven and earth, and takes Zeus as the center to form the Olympian system.

Hero legend originated from the worship of ancestors, which is an artistic review of ancient Greek's struggle against primary history and nature. The heroes in hero legends are mostly semi-human and semi-divine heroes. They are the offspring of the combination of man and god, with extraordinary courage and strength. They fought against the nature tenaciously and had the heroic spirit and unyielding spirit to conquer the nature and they are the embodiment of the power and wisdom of the ancient Greek people.

Greek mythology exists earlier than Roman mythology and has a complete system and god hierarchy, while Roman mythology is more like the inheritance and development of Greek mythology. Because the Roman mythology is deeply influenced by the Greek mythology, the plot of the story is similar to the Greek mythology except the names are different, so the Greek mythology is often associated with the Roman mythology, the later generations generally put the two kinds of mythology system together, collectively referred to as “Greco-Roman mythology.”

In a narrow sense of the west, Greco-Roman mythology is the source of the entire western culture. Therefore, a large quantity of English words, idioms and affixes can be traced back to the names of figures and tales in Greco-Roman mythology.

C. Types of English Vocabulary Derived from Greco-Roman Mythology

The Greco-Roman mythology greatly expanded the English vocabulary and produced many beautiful and moving stories, which enhanced the vitality of the English language. According to the related research of Fu Yuping,

the words with the etymology of Greco-Roman mythology mainly exist in English vocabulary in two types, namely, words and phrases. Vocabulary in the type of words is relatively complex, according to its use in English can be divided into four forms: direct use, metaphorical use, semantic transfer and derivation and the vocabulary in the type of phrases is mainly idioms.

1) Vocabulary in the type of words

a) Direct use

As the Greco-Roman mythology exerts a profound influence on western countries, people are familiar with many of its stories and characters. In oral expression and written materials, they often directly use the names of places or figures in the stories, and the lexical form and meaning remain unchanged, which makes the language more vivid. The words often used directly mainly include some proper nouns and technical terms, such as names of figures, places, plants, months, and astronomical names.

(1) Place Names Derived from Greco-Roman Mythology

1. Europe: originating from the Phoenician princess Europa in Greco-Roman mythology who was fascinated by Zeus and abducted by him to Crete. Later, the continent was named after her, which is present Europe.
2. Athens: Athena, the goddess of wisdom, fought with Poseidon over a piece of land. Zeus said that the land would be given to whoever could give mankind something useful. Eventually Athena won, and the place was named after her.
3. Paris: originating from Paris who is the prince of Troy.
4. Atlantic: originating from Atlas who is a Titan compelled to support the sky on his shoulders as punishment for rebelling against Zeus.
5. Egypt: originating from Aegyptus, the king who conquered Egypt.

(2) Month Names Derived from Greco-Roman Mythology

1. January: A patron saint named Janus has two faces, one looking back and the other looking forward. So people chose his name as the first month of the New Year.
2. March: According to the tradition, March is the season for the long war. In order to commemorate Mars, the god of war, people use his Latin name as the name of this month.
3. May: The Roman goddess Maya, is responsible for spring and life. In honor of the goddess, the Romans named the month after her name, and English May was evolved from the goddess's name.
4. June: In Roman mythology, Juno was the wife of Jupiter, the god of fertility. The Romans honored her so much that they named the month after her. English June was evolved from the name of this goddess.

(3) Astronomical Names Derived from Greco-Roman Mythology

1. Mercury comes from the messenger of the gods in Roman mythology.
2. Venus comes from the goddess of love and beauty.
3. Mars comes from the god of war.
4. Jupiter comes from the lord god Jupiter in Roman mythology
5. Saturn comes from the god of agriculture in Roman mythology

6. Neptune comes from the god of sea.
7. Pluto comes from the god of underworld.
- (4) Plant Names Derived from Greco-Roman Mythology
 1. Narcissus: a handsome young man in Greek mythology who fell in love with his own reflection in the water and pined away to death and turned into a narcissus after death.
 2. Hyacinth: Hyacinthus is the handsome son of Spartan king Amylase, whom Apollo loved. One day Apollo accidentally killed him by throwing the discus. From the blood of Hyacinthus grew a flower, the Hyacinth.
 3. Laurel: Cupid shot the arrow of love at Apollo, and the arrow of rejection at Daphne. Apollo fell in love with Daphne when he saw her. But Daphne regarded marriage as a sin and planned to remain single all her life. Driven by love, Apollo pursued Daphne, one after the other, and finally Daphne had no way to escape. She asked her father to change her appearance, and then she became a laurel tree. Apollo said sadly, "since you cannot be my wife, you shall be my crown. I will wear you on my head, and with you I will decorate my harp and quiver". Since Apollo was also in charge of music, poetry, prophecy, etc., some successful poets were later honored as the Poet Laureate.

b) Metaphorical use

Metaphorical use mainly refers to the use of these words with Greco-Roman mythological etymology, instead of directly using the word meaning of the names of figures or other specific things, but using them to describe people or things with similar or related characteristics, that is, converting the exclusive meaning into the universal meaning, so as to make the language more vivid.

1. Argus: A giant with a hundred eyes, which pervade the body and keep two of them alert even when asleep. Argus is now commonly used as a metaphor for an alert guard.
2. Amazon: The female fighter of Amazons. Now it is commonly used as a metaphor for a female warrior or a tall, strong and manly woman.
3. Sphinx: In mythology, sphinxes gave people puzzles to solve, and so a person who is mysterious or puzzling is sometimes referred to as a sphinx.
4. Apollo: The god of the sun, and a young man of beauty. Now Apollo is a metaphor for "handsome man," a symbol of youth and strength.
5. Diana: A virgin goddess of the hunt and the moon in Roman mythology. And she is also the patron saint of virgins. Therefore, Diana is metaphorically "a woman of celibate". To be a Diana means "never marry for life".

c) Semantic transfer

The meaning of words derived from Greco-Roman mythology has changed in modern English, which is different from the original meaning, even completely different. They have been transferred from the exclusive words in Greco-Roman mythology to the synonyms in modern English. There are also some other names of characters or other specific things into common nouns, and the initial letter of a word has changed from upper case to lower case, and their semantics have changed at the same time with no longer a specific meaning, but with a general meaning.

1. Hercules: A hero noted for his great strength, courage, and for the performance of twelve immense labors. Now "Hercules" refers to a man of unusual strength.
2. Atlas: A Titan compelled to support the sky on his shoulders as punishment for rebelling against Zeus. Now "atlas" refers to a collection of maps in book form.
3. Sirens: A group of sea creatures whose beautiful singing made sailors sail towards them into rocks or dangerous waters. Now "siren" refers to a warning device which makes a long, loud noise.
4. Echo: A nymph who was spurned by Narcissus and pined away until only her voice remained. Now "echo" refers to the repetition of a sound resulting from reflection of the sound waves.
5. Sphinx: The Sphinx is a monster with a woman's head and a lion's body. Now it refers to the large ancient statue of a creature that stands near the pyramids in Egypt.

d) Derivation

In modern English, the names of some figures or other specific things in Greco-Roman mythology become stems, suffixes or roots of words. By adding suffixes to these stems or roots through derivation, new nouns, adjectives and verbs can be derived. The meaning of the new words mainly depends on the stem or root of the word from which they are derived. Some of them have transferred meaning on the basis of the original meaning, some of them have expanded the category of the meaning of the word, and have transformed from the specific to the general.

1. Chronos: The almighty god of time. From his name came the prefix chron-, associated with time. For example, "chronic", "chronicle", "chronological", "chronology", "chronometer", "diachronic", and "synchronic".
2. Gaea: The goddess of the earth in Greek mythology. From her name came the prefix gen-, associated with earth. For example, "geography", "geocentric", and "geology".
3. Flora: The Roman goddess of flowers. Therefore, flora refers to the plant community, from which the words like "floral", "flower", "florid", "flourish", "floriculture", and "florist" are derived.
4. Chaos: The most ancient of gods and the personification of the infinity of space preceding creation of the universe. "Chao" is related to disorder, from which "chaotic" is derived.
5. Muse: The general name of the nine goddesses in ancient Greek and Roman stories who encouraged poetry, music and other branches of art and literature. Thus, the words like "music", "amusement", and "museum" are derived.

2) Vocabulary in the type of phrases

There are two kinds of words in the form of phrases originated from Greco-Roman mythology: one is to use the words in the specific storyline of Greco-Roman mythology to form phrases with typical meanings; the second is based on the fairy tales of some words, which are combined with other words in English to form phrases to express some meanings related to tales.

1. Pandora's Box: A box that Zeus gave to Pandora with instructions that she not open it, but she gave in to her

curiosity and opened it. Then all the miseries and evils flew out to afflict mankind. Today the phrase "to open Pandora's box" means to perform an action that may seem small or innocent, but that turns out to have severely detrimental and far-reaching consequences.

2. Apple of Discord: A golden apple inscribed "For the fairest." It was claimed by Hera, Athena, and Aphrodite, to whom Paris awarded it, thus beginning a chain of events that led to the Trojan War. Thus, "apple of discord" is used to signify the core, kernel, or crux of an argument, or a small matter that could lead to a bigger dispute.
3. Helen of Troy: The beautiful daughter of Zeus and Leda who was abducted by Paris, then the Greek army sailed to Troy to get her back which resulted in the Trojan War. Today it refers to the woman who is "the roots of troubles".
4. Achilles' Heel: To prevent Achilles' death, his mother Thetis took Achilles to the River Styx, which was supposed to offer powers of invulnerability, and dipped his body into the water. But as Thetis held Achilles by the heel, his heel was not washed over by the water of the magical river. Achilles grew up to be a man of war who survived many great battles. But one day, a poisonous arrow shot at him was lodged in his heel, killing him shortly after. Today it refers to the only but deadly weakness.
5. Sisyphean Task: Sisyphus is a king in ancient Greece who offended Zeus and whose punishment was to roll a huge boulder to the top of a steep hill; each time the boulder neared the top it rolled back down and Sisyphus was forced to start again. This idiom means endless and fruitless toil.

V. CONCLUSION

A. Major Findings

This paper discusses an available vocabulary teaching method. It is an effective strategy to apply Greco-Roman mythology to English vocabulary teaching from the perspective of etymology. By the previous analyses, this paper summarizes a ton of English vocabulary from Greco-Roman mythology and explains the cultural connotation of these words. It can be found that many English words derived from Greco-Roman mythology are mainly in the form of words or phrases, and these words entered into English vocabulary mainly through direct use, metaphorical use, semantic transfer and derivation. In English, "every word once to be a poem and is originally a picture" [13]. Almost every word in English has a unique story about its emergence and evolution. This kind of etymological information plays a great role in vocabulary acquisition.

B. Implications

Words from Greco-Roman mythology have profound cultural connotations, which exerts great influence on English language. With this paper as a reference, English vocabulary from Greco-Roman mythology can be divided into four categories to guide English learners to systematically learn from the perspective of etymology. It is

imperative to apply etymology in English vocabulary teaching and learning. Only in this way can we improve the overall level of vocabulary teaching and learning.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Jia Fan and Sun Yu conducted the research; Jia Fan wrote the paper; both authors had approved the final version.

ACKNOWLEDGMENT

First of all, I thank my supervisor, Professor Sun Yu. In the process of writing this paper, she gave me plenty of valuable suggestions, and put a lot of efforts and energy into it. Here, I would like to express my deep gratitude and lofty respect to Professor Sun.

In addition, I express my gratitude to my senior sister Hou Yuqiu for her instruction, so that I can successfully complete the paper writing.

This work was financially supported by Northwestern Polytechnical University.

REFERENCES

- [1] D. A. Wilkins, *Linguistics in Language Teaching*, London: Edward Arnold Press, 1978, p. 12.
- [2] Department of Higher Education of Ministry of Education of the People's Republic of China, *College English Curriculum Requirements*, Shanghai: Shanghai Foreign Language Education Press, 2007.
- [3] Y. Han, "On the input of cultural elements in college English teaching—Taking Greco-Roman mythology as a case," *Read and Write Periodical*, vol. 10, no. 1, p. 15, Jan. 2013.
- [4] A. D. Baddeley, "Working memory and language: An overview," *Journal of Communication Disorders*, vol. 36, no. 3, pp. 189-208, 2003.
- [5] X. Cao, "English vocabulary teaching in senior high school based on cognitive linguistics," *Journal of Language and Literature Studies*, no. 11, pp. 175-176, 2015.
- [6] H. Zhang, "Study on the application of word-formation in college English vocabulary teaching," *Journal of Jilin TV & Radio University*, no. 11, pp. 142-143, 2015.
- [7] X. Si, "English vocabulary teaching based on the theory of context," *Science*, no. 3, pp. 39-40, 2013.
- [8] T. F. Hoad, *Oxford Concise Dictionary of English Etymology*, Shanghai: Shanghai Foreign Language Education Press, 2000.
- [9] G. Schwab, *Gods and Heroes of Ancient Greece*, Xi'an: Shaanxi Normal University Press, 2007.
- [10] Y. Fu, "Etymology of English vocabulary from Greek mythology," *Author*, no. 8, pp. 172-173, 2011.
- [11] E. P. Hamp, "On etymology," *Foreign Languages and Their Teaching*, no. 1, p. 10, 1994.
- [12] D. Xin, *Latin and Greek*, Beijing: Foreign Language Teaching and Research Press, 2007.
- [13] F. Wilfred, *Word Origin and Their Romantic Stories*, New York: Grosset & Dunlap, 1978, pp. 46-89.

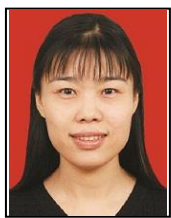
Copyright © 2021 by the authors. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited ([CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)).



Jia Fan was born in Linfen, Shanxi Province, on February 10, 1996. She majored in English at Taiyuan University of Technology from 2015 to 2019, and obtained a bachelor of arts degree in July 2019. Since September 2019, she has been studying English language and literature at Northwestern Polytechnical University to obtain a master's degree.

She worked as an English teaching assistant at New Oriental Education and Technology Group in Taiyuan from February to March 2018 and worked as a homework

correction teacher at Xueersi Online School in Beijing from July to August 2019. Her current research interest concerns ancient Greek mythology and female literature.



Sun Yu was born in Wuhan, Hubei Province, in June 1971. She studied English language and culture at Xi'an International Studies University from 1989 to 1993, gained a bachelor of arts degree. And she studied applied linguistics at Northwestern Polytechnical University from 1997 to 2000, obtained a master of arts degree.

She has been teaching at Northwestern Polytechnical University since July 1993. From May 2006 to July 2015, she worked as deputy director of the International

Cooperation Department of Northwestern Polytechnical University. Since July 2015, she has been working as director of Art Education Center of Northwestern Polytechnical University. She has published more than 20 papers, and as the first author has published several papers in core journals and conferences, including "The Construction of Women's Discourse Power – A Case Study of *A Mercy*" (Xi'an, Shaanxi Province, Social Scientist, 2015). Her current research interest concerns western culture and literature.

Prof. Sun has presided over and participated in a number of provincial-level and university-level teaching, scientific research and fund projects. For example, in 2013, as the project host, she presided over a Shaanxi Social Science Fund project "study on the status quo and strategies of the internationalization of graduate education in Shaanxi based on the theory of constructivism."