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A COMPARATIVE ANALYSIS OF CHINESE AND ENGLISH WORD-FORMATION BASED ON NEOLOGISMS

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ABSTRACT

Language as a necessary tool for human activities is undergoing various changes due to the progress of the modern world and human society. The emergence of neologisms is one of the most intuitive changes by humans. English and Chinese languages constantly renew themselves as the world changes. Therefore, the number of Chinese and English neologisms is growing, bringing certain obstacles to those who need to understand the culture behind the two languages or require cross-cultural communication. In addition, neologisms are very important for language learning. For Chinese and English learners who attempt to learn the target language better, the phenomenon of neologisms is an enormous challenge in language learning. Hence, based on the collection of Chinese and English neologisms from 2018 to 2020, a mixed research method is applied in the study to investigate and compare Chinese and English word-formation tendency and characteristics and find the similarities and differences in each type of neologisms word-formation of the two languages. After the analysis of data, the study found that there are four types of word-formation: affixation, compounding, abbreviation, and blending appearing in both Chinese and English neologisms in recent years, and affixation is the type of word-formation with the highest frequency in English neologisms, while compounding is the most dominant type in Chinese word-formation. In addition, by comparing Chinese and English word-formation found in the study, it is found that there are some same and different characteristics of each type of word-formation. These findings are expected to provide educators with suggestions that word-formation can be added to vocabulary teaching and expect directly to bring learning vocabulary to people who learn Chinese and English.

Keywords: *Comparative analysis, Chinese and English word-formation, neologisms*

INTRODUCTION

Language is the most important tool for human beings to perform various social activities. It is also the reflection of human thoughts and views on today's society and the world. In humans' daily life, communication, business contacts, exchanging ideas, or other behaviours are inseparable from language. Therefore, language is closely related to human life, and social development and the exchange of communication bring various stimuli to language. Nowadays, there is no doubt that the political, economic, and cultural aspects are undergoing rapid development, coupled with various emergencies and major crises that introduce new policies and new inventions in the world. In addition, the development of Internet technology is changing the scope and way of people's communication. The above phenomena have promoted the multi-level changes of existing languages globally.

In essence, language is mainly composed of speech, vocabulary, and grammar. Vocabulary is the most active and sensitive element in the language (Chenyuan, 2000). The languages of all nations globally are experiencing the change that the creativity of

vocabulary is constantly improving. Neologisms refer to new structures or structures with new meanings used to express new things and new ideas. The emergence of neologisms meets human beings' needs to describe the natural and social environment in which they live. Shamne and Rets (2015) believe that English bestows dynamic vocabulary characteristics to meet the explosive expansion of social information and technology. Chinese linguists have the same opinion (Chenyuan, 2000); vocabulary changes much faster and more notably than the other elements of the language, and neologisms, as the main part of everyday language, can help learners to better integrate into the language learning environment and bring many benefits to learners' language learning (Rets, 2016). Hence, learning and understanding neologisms play a vital role in mastering a language.

Both English and Chinese are widely used languages globally, and the number of Chinese and English learners also continues to grow. For example, according to the online Oxford English Dictionary (OED) list, at least 1,000 new entries enter every quarter (Minkova and Stockwel, 2009). On the one hand, mastering more Chinese and English neologisms is one way to understand the society and culture of English-speaking countries and China and a necessary process for understanding the entire world. On the other hand, neologisms are very important for language learning. For learners who want to learn the target language better, the continuous emergence of neologisms is a huge challenge in language acquisition.

The majority of researchers believe that whether in Chinese or English, neologisms divide into three categories, newly created words, the word with new meanings, and borrowed words from other languages. This study focuses on the comparison of the word-formation of Chinese and English neologisms, which belong to the first category, trying to systematically sort out the word-formation of Chinese neologisms and explore the trend of word-formation following the process of generating Chinese and English neologisms, which can help self-learning language learners advance some deep thoughts on vocabulary learning, as well as draw attention of educators to consider applying the content of word-formation and neologisms to the courses of Chinese and English as a second language, so that relevant learners are likely to acquire more vocabulary, improving language learning ability.

Research Problems

In addition to extralinguistic factors, including creating new things, technological development, Internet popularisation, intra-linguistic factors have contributed to neologisms. For example, the needs for the expression of language meaning and the systematisation of the vocabulary are likely to promote the formation of neologisms (Shamne and Rets, 2015). The vocabulary system of languages accelerates the efficiency of new word creation to coordinate with extralinguistic factors and intra-linguistic factors (Shamne and Rets, 2015). For example, due to the outbreak of COVID-19, there are many related Chinese neologisms in 2020 in China. However, many Chinese and English learners have difficulty mastering neologisms, which may affect multi-aspects of their language learning to a certain extent (Rets, 2016). Researchers worldwide launch studies from various angles based on neologisms (Krapivnik, 2020). One of the main directions for studying neologisms is attempting to study the morphological process of neologisms. For example, a study on the morphological processes of neologisms from public figures' words on the Internet is carried out by Shahlee and Ahmad (2020). As for Chinese, the research focusing on the connection between neologisms and translation practice is relatively mature (Yang et al., 2020). At the same time, according to the China National Knowledge Infrastructure (CNKI), one of the world's largest Chinese journal databases, the number of research on word-formation on Chinese new words is minimal.

In addition, since the commonality of Chinese and English vocabulary in morphology has been discovered, some researchers have carried out studies on Chinese word formation and compared Chinese and English word formation. For example, the researcher Xu (2019) found compounding, affixation, abbreviation, and borrowing in Chinese and English by listing suitable Chinese and English vocabulary and comparing the similarities and differences of these four categories in Chinese and English in the study. Wu et al. (2019) also compare the word-formation of Chinese and English by giving examples of Chinese and English words, while although the comparison of Chinese and English

word-formation gradually gains attention in those studies, the research on the word-formation of Chinese and English neologisms is still insufficient, especially the quantitative analysis. Studies are focusing on the comparison of neologisms. For example, Cheng (2018) sorted out the similarities and differences in the three types of compounds, shortenings, and affixations by analysing suitable Chinese and English neologisms.

However, some did not provide a detailed and systematic research method. Hence, the research findings are not comprehensive, and some did not mention the specific criterion of the research samples or any authoritative support in data analysis. In addition, those studies did not pay attention to the changes and tendencies of Chinese and English neologisms in recent years. Therefore, through the analysis of Chinese and English neologisms in 2018, 2019, 2020, respectively from the online Oxford English dictionary and the Chinese Internet, a high-quality study investigating the development and tendency of Chinese and English word-formation and comparing the similarities and differences of each word-formation type existing in Chinese and English neologisms is significant.

Research Purposes

Human language has the characteristics of eternal development, and vocabulary is the most dynamic and fluid part of a language system. The continuous emergence of neologisms brings huge learning burdens and difficulties to those who want to learn and understand the language. According to Rets (2016), only 5% of the English language teaching department students explain 90% of the neologisms frequently used in daily English conversations provided by the researcher. As non-native speakers, when they learn the target language, their learning ability, and cultural background cannot distinguish the correct rules in the actual usage of neologisms, which can cause embarrassing situations to decrease the learning confidence of learners. Therefore, the teaching method of neologism is worthy of continuous experimentation and practice by scholars and educators. Due to the rapid development of Chinese society and the many English-speaking countries, many neologisms have become one of the biggest challenges in learning Chinese and English neologisms. While understanding the morphological process of neologisms can help students memorise and acquire neologisms as much as possible. Galishnikova et al. (2017) elicit teachers of foreign languages who have a deeper understanding of the word-formation of words can positively impact learners' vocabulary and language learning. Tracing from the vocabulary of news English, (Li-na, 2016) believes that no matter how much the word-formation of neologisms changes, it always conforms to the traditional word-formation rules, introducing a direction of teaching English and Chinese neologism.

This study is a morphological exploration that focuses on the internal structure of words and morphemes. The study will summarise the characteristics and tendency of the word-formation of words to provide educators with a method to improve the vocabulary learning of Chinese and English language learners from word-formation, and the analysis of similarities and differences between Chinese and English word-formation types can be beneficial for learners thinking their learning method of neologisms.

Research Objectives

The Chinese and English vocabulary systems supplement with new words at an astonishing speed to keep up with the pace of human life and society. There are various research directions for neologisms (Krapivnik, 2020). However, few studies have tracked the trajectory of neologism creation in recent years. In addition, the majority of relevant studies partly ignore a systematic analysis on the tendency of Chinese and English word-formation. Therefore, the two main research goals of this study are:

1. To compare the overall tendencies and characteristics of Chinese and English neologisms in recent years from the perspective of word-formation
2. Compare the similarities and differences of each type of word-formation between Chinese and English

Research Questions

The research will focus on the data, including Chinese and English neologisms from official documents during 2018-2021, and focus on the tendencies of the neologisms word-formation of modern English and Chinese and commonalities, and differences of each

type of word-formation. Therefore, the researchers intend to answer these two research questions:

1. What are the tendencies and features of the word-formation process of English and Chinese neologisms in recent years?
2. What are the similarities and differences of word-formation types between English and Chinese neologisms?

Research Significance

The study can provide some evidence and support for the research on morphology. Meanwhile, there is also a great significance in encouraging educators to consider applying word-formation to vocabulary and neologisms teaching. Chinese and English are the languages with many users in the world. The learning of Chinese and English neologisms helps to add to the teaching process, which can not only help English and Chinese learners better understand the structure of words and the emergence and development of words but also can help learners understand the social life, cultural values, and ways of thinking behind the language (McDonald, 2005). In addition to Chinese and English teaching, the research results can also educate the public about neologisms and their meaning.

LITERATURE REVIEW

The research analyses the word-formation of Chinese and English based on the Chinese and English neologisms in recent years. There are four parts to the literature review according to the research content. At first, the part mainly introduces the understanding and classification of neologisms in Chinese and English research, the connection between neologisms, word-formation, and the previous studies in Chinese and English word-formation.

The Definition and Classification of Neologisms

The English word 'neologism is composed of two different lexical units, namely 'neo' and 'logos', which mean 'new' and 'word' respectively, so literally, neologism refers to 'new word'. With technological innovation and changes in various aspects of society, such as the new coronavirus sweeping the world, the introduction of economic policies in various countries, new things are constantly emerging. There are many new coinages of lexical structures in the daily lives of human beings. Shahlee and Ahmad (2020) present that the English language derives a dynamic vocabulary system from meeting the requirement of the rapid development of social information and technology. It creates more neologisms as the reaction of people's thinking and perception to social and cultural changes.

Nowadays, as Chinese or English neologisms appear frequently, some studies pay attention to neologisms and propose various same and different classification methods. For example, Newmark (2001) points out that a neologism is a new linguistic structure or an original lexical structure that acquires a new meaning. Some researchers divide neologisms into three categories. The Chinese linguist Zheng (2015) states that Chinese neologisms are newly created words or existing structures with new meanings, and there is another type of usage that refers to words borrowed from other languages. Foreign linguists also categorise English neologism into three categories. Oxford Advanced Learner's English-Chinese Dictionary (7th ed.) agrees with the classification method. In addition, most scholars define neologisms as newly created words. Still, Shuxin (1990) emphasises that the more vital feature is that those new words which must also be accepted and be widely used by the public and have a certain place in the vocabulary system can be called neologisms. Hence, in the study, the researchers define the word neologism as words or combinations of innovative words in form or meaning within a certain time and have relatively wide circulation in public life. The similarity is that both Chinese and English neologisms can be divided into three types: newly coined words, existing words gaining new meanings, and borrowed words, preliminarily proving that the research on comparing Chinese and English word-formation based on their neologisms has certain feasibility.

Neologisms and Word-formation

Neologisms which refer to new words and new expressions play an important role in language learning and teaching. Hu (1997) believes that language is mainly composed of words. Learning words requires attention to the latest changes in vocabulary. Therefore, acquiring neologisms will positively impact language learning (Huang, 2011; Li-na, 2016). For

example, learning neologisms can satisfy language learners' communicative needs, and understanding neologisms can enrich their experience of language and language learning (Awadelkarim, 2016). However, some relevant studies find that language learners have various difficulties learning neologisms. For example, learners have low acceptance of neologisms, and the concept of neologisms is not clear for them (Huang, 2014). Rets (2016) attempts to use word-formation to teach neologisms in English and Chinese and finds participants know the meaning of a linguistic structure of neologisms created by compounding. Chinese researchers also try to use affixes to teach Chinese learners. This finding shows that understanding the internal structure is conducive to neologism learning. Some researchers confirm in the study on the translation of neologisms that understanding word-formation can help students understand them further (Galishnikova et al., 2017).

Chinese and English Word-formation

In the related research on English word-formation, scholars are more consistent with the concept of word-formation, believing that word-formation mainly includes two contents: studying the derived structure of old words and the construction of new words (Babich, 2005). Therefore, English word-formation is the main basis for analysing English vocabulary and one of the main ways to create neologisms. There are many types of English word-formation, and all types of word-formation have the power of creating English neologisms, such as combining free morphemes and bound morphemes or shortening old words in various ways. Researchers categorise the types of word-formation and study each type's frequency by analysing the samples of English neologisms from different channels. Shahlee and Ahmad (2020) collect and classify the speeches of news figures on the Internet and report that the neologisms belonging to the type called blending are the most common in news media, while Babich (2005) presents that affixation and compounding are the most common way of generating English neologisms, and Gontšarova (2013) collects 100 English neologisms through various websites, and after quantitative analysis, finds that the compounding is the most common word-formation in modern English neologisms.

In Chinese studies, scholars have different views on the concept of word-formation. Chinese previous studies (Sun, 1956) emphasise the importance of distinguishing word-formation from word structure, while Ren (1981) believes that word-formation focuses on the combination of morphemes or the internal structure of words. Regarding the specific research direction of word-formation, China National Knowledge Infrastructure (CNKI) finds that the research of word-formation in China mainly focuses on qualitative research word-formation types and components of Chinese words.

Studies on Chinese and English Word-formation

With the enrichment of vocabulary and the improvement of the vocabulary system, analysis from the perspective of word-formation has become an important means of studying vocabulary, especially in English word formation. Many predecessors form a relatively complete classification of word-formation by investigating vocabulary from different channels. Later, the classification of word-formation is applied in various studies to explore English vocabulary's morphological process and development characteristics. Babich (2005) presents that affixation and compounding are the main means of creating literary coinages. Gontsarova (2013) records several word-formation patterns, such as blending (e.g. breakfast + lunch = brunch), shortening (e.g. lab), composition (e.g. patch + writing = patchwriting), affixation (e.g. worker, writer, freedom), acronyms (e.g. NASA, WTO), conversion (e.g. rich and the rich, water and to water), reduplication, clipping, and reports that blending is the most common type of word-formation in English. Research findings also indicate that blending is the most frequent type among the neologisms from the speeches of public figures on the Internet (Shahlee and Ahmad, 2020).

Chinese researchers conduct the studies on English word-formation used in English learning which in China is a subject in compulsory education and many EFL learners. For example, the researcher Xie (2021) is based in the Chinese course called college English, exploring the application of English word-formation in vocabulary teaching to help students learn and remember words. As for Chinese word-formation, the research content and direction enrich year by year according to the China National Knowledge

Infrastructure (CNKI). Chinese teaching, translation practice, and other aspects integrate into the thinking of Chinese word-formation. In addition, various studies by linguists show a variety of structural classifications of Chinese word-formation.

On the one hand, most linguists in China agree that there are similarities and differences between Chinese and English. On the other hand, the researchers investigate the most frequent Chinese neologisms by analysing Chinese vocabulary. According to Hu (2008), derivation, compounding, conversion, and abbreviation are the main forms of word-formation in languages, including Chinese and English. Ju (2016) supports the average percentage of compounding is 73.6% in Chinese neologisms.

As mentioned before, both Chinese and English words are a composition of morphemes, and there are similar types in word formation between the two languages. The quantity and quality of comparative research on Chinese and English word-formation constantly improve. Some researchers, such as Cheng et al. (2018), compare the word-formation patterns between Chinese and English to clarify the similarities and differences in the dynamic process of Chinese and English vocabulary creation. Still, the result cannot provide useful inspiration about the tendency of English and Chinese word-formation (Wu et al., 2019), while Cheng et al. (2018) take neologisms as the research samples, trying to find new trends in Chinese and English word-formation. The research findings indicate that affixation would be a common trend in both Chinese and English. However, the qualification of samples in the study is not clear. This study finds two problems in the studies of Chinese and English word-formation. Firstly, the amount of research on the word-formation of Chinese and English neologisms is still lacking. Secondly, the existing research has limitations in data standards and research methods. Hence, the research results cannot fully reflect Chinese and English word-formation types and characteristics or provide strong support for predicting the future development direction of neologisms in the two languages.

RESEARCH METHODOLOGY

In the course of the study, a mixed research method is used to analyse Chinese and English neologisms collected. The quantitative analysis is conducted for investigating and comparing the tendencies and characteristics of Chinese and English word formation at first, then the qualitative analysis is applied to compare each type of Chinese and English word-formation and summarise the similarities and differences of each type of word-formation existing in Chinese and English neologisms. There are specific details of the research method as follows.

Data Collection

A total of 180 samples are collected in the study, including 90 English neologisms and 90 Chinese neologisms from 2018 to 2020, through the RAND formula in Excel. Whether in Chinese or English, 30 neologisms are from the neologisms released every year. The Chinese neologisms from the Chinese Internet in 2018-2020, and English neologisms were from the online OED new words list in 2018-2020.

Data Criterion

There are no specific demands on types of neologisms. The study uses samples from authoritative institutions (2018 to 2020), which aligns with the timeliness of neologisms. At the same time, all samples are from newly created words, and those neologisms belong to the borrowing words from foreign languages and the old words with new meanings are excluded from the study. In addition, due to the unequal number of Chinese and English neologisms, this study uses random sampling to collect Chinese and English neologisms and a reliable tool Excel for random extraction.

Research Procedure

There are three stages in the research procedure. The first is that after collecting samples, the researchers provide a detailed definition of each neologism for grouping them, and classify English and Chinese neologisms into different word-formation types, respectively, according to Rumšienė's study (2019) and Liu's theory (1990). An abbreviation includes acronyms, initialisms, clippings and shortenings, blending, compound, conversion, and other types of word-formation (Rumšienė, 2019). At the same time, there are mainly affixation, compounding, shortening, conversion, and replication in Liu's (1990) theory.

In the second stage, the researchers adopt a quantitative research method to answer the RQ1. Firstly, numbering each type of word-formation in Chinese and English takes place, marking each neologism. For the analysis process, Excel is used to sort out and calculate the number of neologisms in each type so that the frequency of neologisms' word-formation in Chinese and English in 2018 - 2020. At this stage, according to the frequency of word-formation types in different years, the changes and the characteristics of word-formation in the last three years are revealed. At the same time, comparing the frequency of Chinese and English word-formation types from a general perspective can investigate the similarities and differences in the overall changes of Chinese and English word-formation. The third stage explores the RQ2 using a qualitative research method to examine the similarities and differences of each type of word-formation in Chinese and English. In this stage, the researchers gather the similarities and differences of each word-formation to analyse and discuss by using appropriate examples from 180 English and Chinese neologisms.

FINDINGS AND DISCUSSION

Quantitative Analysis of Neologisms

According to the word-formation types, the researchers take 90 Chinese and 90 English neologisms from 2018, 2019, and 2020 and group them in Excel. The results are in the following charts and tables.

Based on all Chinese and English neologisms from 2018 to 2020, Figure 1 compares the overall frequency of each word-formation type in Chinese and English. There are some similarities in the characteristics of word-formation between Chinese and English neologisms during this period. First, four types of word-formation, namely affixation, compounding, abbreviation, and blending, were found in Chinese and English neologisms. Besides, blending and conversion only occupy a minor part in Chinese and English neologisms. On the other hand, there are different Chinese and English word-formation features. For example, the word-formation type compounding is the most important source of neologisms in Chinese from 2018 to 2020 with 55.56%, while affixation is the most mainstream word-formation type in English neologisms from 2018 to 2020. Furthermore, the conversion proportion is merely 1.11% in English, which is the lowest frequency of word-formation types detected, but the study did not record any neologisms (conversion) in Chinese.

According to Figure 2 and Table 1, it can be found that the frequency (2018-2020) of affixation and compounding with about 40% is much higher than other types of word-formation. Affixation always

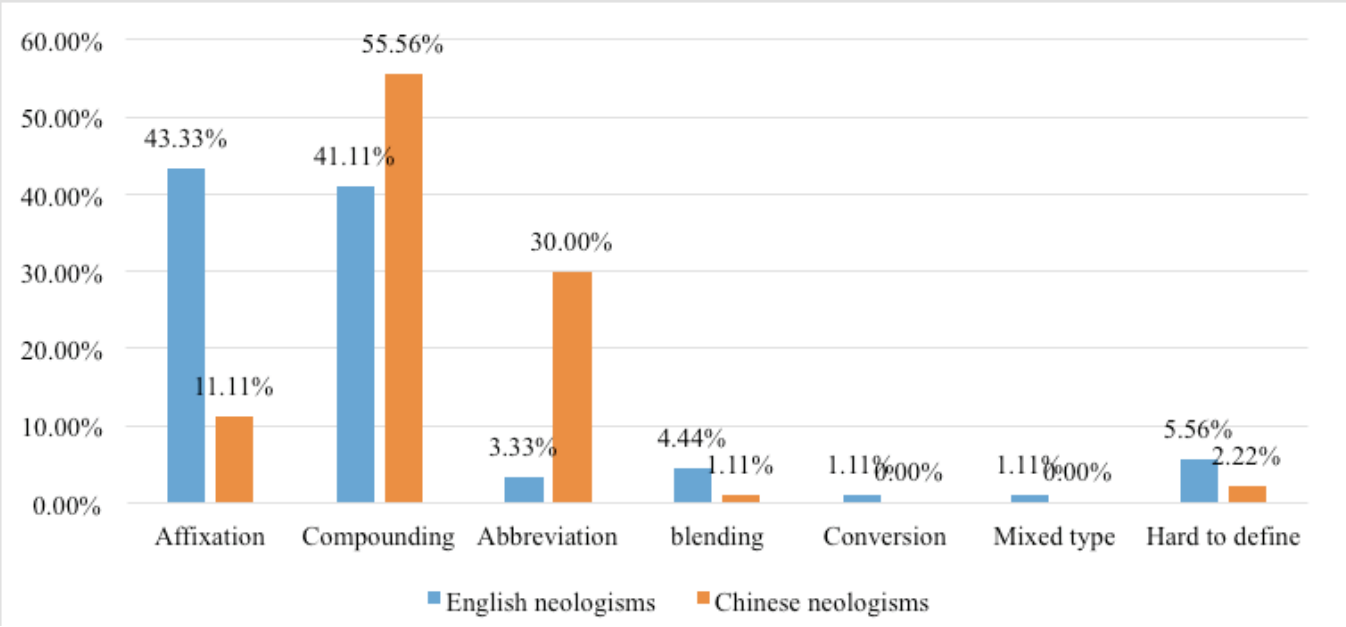

Figure 1 Overall Comparison of the Proportions of Chinese and English Word-formation Types

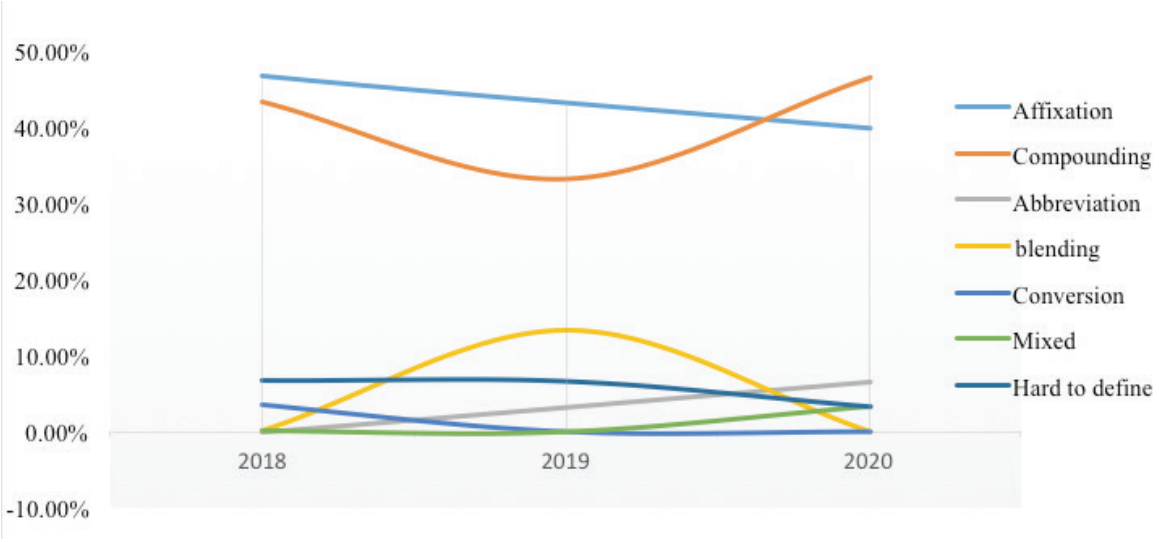

Figure 2 The Changes of English Word-formation based on Neologisms during 2018-2020

has the highest frequency of appearance in these three years. The compounding data is very close to affixation, accounting for a considerable part of the total. However, although affixation with the advantage that the total number of neologisms belonging to this morphology type is two more than that of compounding occupies the first place in the frequency of word-formation, it is experiencing a decrease. Affixation ranks first in 2018 with a 46.67% proportion, but from 2018 to 2020 is faced with a slight annual decline of 3.33%. On the contrary, although the overall frequency of abbreviation is relevantly low, the zero discovery in 2018 has ushered in a breakthrough that refers to the proportion gently increasing to 6.67%. There are two other types: blending and compounding, and their changes during 2018-2020 are both shown as curves. Unlike 2018 and 2020, the year 2019, the figure of blending increases to 13.33%, and the frequency of compounding in 2018 occupies second place with 43.33%; after experiencing the low point in 2019, it rapidly increased to 46.67% in 2020, surpassing the first affixation in previous years. Hence, 2020 is the only year that the neologisms of compounding occur most frequently. In addition, the frequency of conversion is relatively small in three years. In addition to the above content, some words are simultaneously created under the effect of two word-formation types and labelled under the mixed type. Furthermore, the researchers classify those neologisms whose word-formation types are challenging to define as the last category.

Table 1 The Number and Proportion of Word-formation Types of English Neologisms during 2018-2020

Time	2018		2019		2020		The total	
Word-formation types	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Affixation	14	46.67%	13	43.33%	12	40.00%	39	43.33%
Compounding	13	43.33%	10	33.33%	14	46.67%	37	41.11%
Abbreviation	0	0.00%	1	3.33%	2	6.67%	3	3.33%
blending	0	0.00%	4	13.33%	0	0.00%	4	4.44%
Conversion	1	3.33%	0	0.00%	0	0.00%	1	1.11%
Mixed type	0	0.00%	0	0.00%	1	3.33%	1	1.11%
Hard to define	2	6.67%	2	6.67%	1	3.33%	5	5.56%

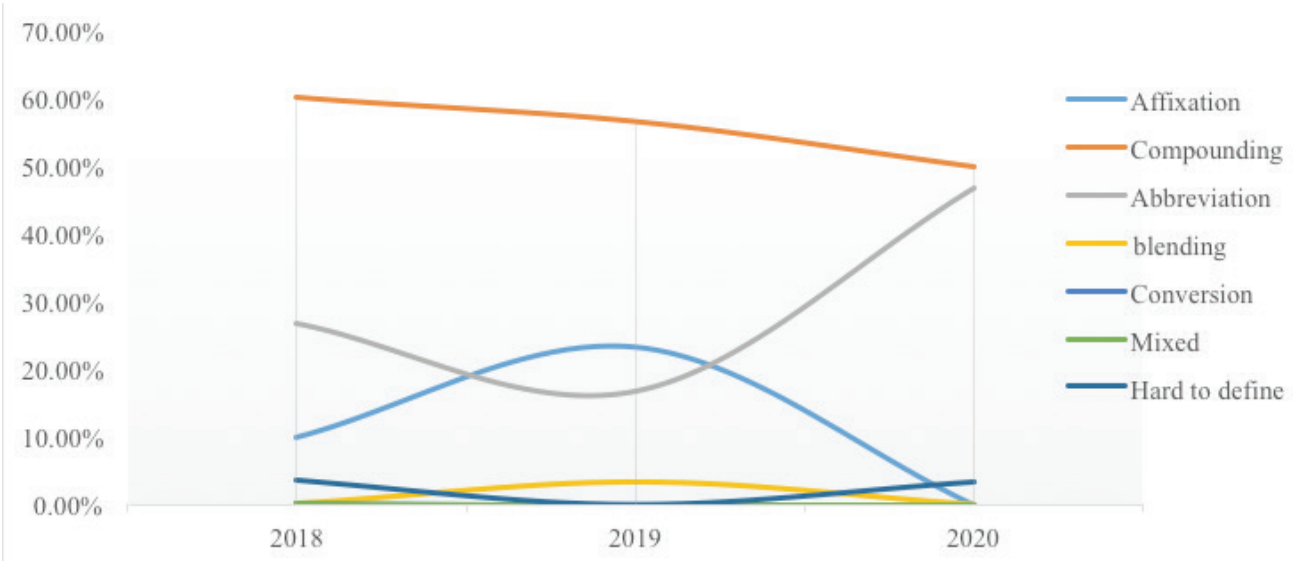

Figure 3 The Changes of Chinese Word-formation Types based on Neologisms during 2018-2020

As shown in the charts, in Chinese, those samples mainly reflect four same word-formation types: compounding, affixation, abbreviation, and blending from 2018-2020. First, based on the analysis of the overall frequency of appearance of neologisms in the three years, Firstly, the word-formation type compounding with 55.56% occupy the majority, followed by abbreviation accounting for 30% of Chinese neologisms, which ranks second in the total types of Chinese word-formation found in the sample. However, there is a huge gap between the abbreviation and the first compounding among Chinese neologisms, close to 26%. In addition, the proportions of affixation and blending are relatively small, at 11.11% and 1.11%, respectively. There is only one neologism (blending) among the samples in 2020. Secondly, from the perspective of the dynamic changes of the various word-formation in the past three years, compounding, which has the highest frequency in the three years, is experiencing a slowly decreasing trend. According to the data of 2018, the compounding accounts for 60% more than the total of other types combined and tends to gradually decline in the following two years. The proportion of this type in 2019 and 2020 is 56.67% and 50.00%, respectively. In addition to the slow decline, it is notable that the rate of decline is also increasing exponentially. The proportion drops by 3.33% from 2018 to 2019, while from 2019 to 2020, it goes through a decrease of 6.67%. Abbreviation (26.67%) occupies the second position of 2018, after the low period in 2019, experiences rapid growth in 2020 share is close to that of compounding. Although

Table 2 The Number and Proportion of Word-formation Types of Chinese Neologisms during 2018-2020

Time	2018		2019		2020		The total	
Word-formation Types	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Affixation	3	10.00%	7	23.33%	0	0.00%	10	11.11%
Compounding	18	60.00%	17	56.67%	15	50.00%	50	55.56%
Abbreviation	8	26.67%	5	16.67%	14	46.67%	27	30.00%
blending	0	0.00%	1	3.33%	0	0.00%	1	1.11%
Conversion	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Mixed type	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Hard to define	1	3.33%	0	0.00%	1	3.33%	2	2.22%

there is a high point in 2019 that exceeds abbreviation, the frequency of affixation is relatively low during the period. There is only one Chinese neologism that labels blending in 2019. Finally, 2 out of 90 samples are difficult to define.

Qualitative Analysis of Neologisms

Various samples from 90 English and 90 Chinese neologisms illustrate the similarities and differences of word-formation between English and Chinese in this section.

Compounding

Table 3 Compounding in Chinese and English Neologisms

Word-formation	Chinese Neologisms	English Neologisms
Compounding	娃娃高管: *wáwá* + *gāoguǎn* *baby* + *executive* 冰屏 *bīng* + *píng* ice + screen 表面亲戚: *biǎomiàn* + *qīnqī* surface + relative	brick top: brick + top bridge-burning glatt kosher

The composition of all English neologisms in the samples is combined with two or more units. Compounding is a combination of two or more units that are themselves words. This definition is relevant in both Chinese and English. Looking at this Table 3, in the Chinese neologism 娃娃高管 *wáwágāoguán*, which is combined by two Chinese words 娃娃 *wáwá* and 高管 *gāoguán*, which denotes as baby and executive respectively refers to a young executive in English. The second neologism '冰屏 *bīngpíng*' from 2018 is produced by 冰*bīng* (ice) and 屏 *píng* (screen) which means a new LED panel. 表面 *biáomiàn* (surface) and 亲戚 *qīnqī* (relatives) also can be placed together to create a new word 表面亲戚 *biáomiànqīnqī*, which refers to those related to you but have no common interests and values. Still, there are also more compounding methods in English neologism, by combining two words directly, or with a hyphen or with space.

Affixation

Table 4 Affixation in Chinese and English Neologisms

Word-formation	Chinese Neologisms	English Neologisms
Affixation	精：河豚精，杠精 *jīng: hétúnjīng, gāngjīng* 佛系：佛系女子，佛系青年 *fúxì*: *fúxìnǚzǐ*, *fúxìqīngnián*	self-: self-abandoning, self-obsession, self-surgery, self-biasing, self-composed, self-seal

According to Table 4, both Chinese and English have affixes regarding affixation. The formation of affixation is by adding affixes to an existing word. There are two types of English affixes: prefixes and suffixes. Generally speaking, the suffix can change the word or words in English, while the prefix only changes the meaning of words, not the word class of words. However, there is no such characteristic in Chinese. According to the example above, Chinese prefixes and suffixes do not have this feature. For instance, 河豚 *hétún* (pufferfish) as a noun is added by the suffix 精 *jīng* to coin a new word 河豚精 *hétúnjīng* which is still a noun. The suffix 精 *jīng* in Chinese mainly refers to people with a certain characteristic, and the neologism 河豚精 *hétúnjīng* means someone who is very irritable but tries to make himself look kind on the surface. 杠精 *gāngjīng* is a new Chinese word formed by adding 杠 *gāng* with the suffix 精 *jīng*. It refers to those people who like to refute others' opinions very much. 杠 *gāng* can be seen as a verb and a noun in Chinese; it is relatively appropriate to be a noun here. There are two other examples, the nouns 佛系女子 *fúxìnǚzǐ*, and 佛系青年 *fúxìqīngnián* derives from the nouns 女子 *nǚzǐ* (woman) and 青年 *qīngnián* (youth) plus the prefix 佛系 *fúxì*. This affix in Chinese refers to those who have no excessive desires and needs and are not easily disturbed by their surroundings. Hence, these two neologisms describe the situation in which some Chinese women or young people maintain a peaceful mind about life. Therefore, from the above Chinese example, it can be found that there is no necessary connection between the addition of prefixes and suffixes and the changes of word class. At the same time, another affixation difference is that the ability of Chinese affixes to create is far inferior to English. Generally, according to the samples collected in the

study, English affixes can create many neologisms, such as 'self', while Chinese cannot. Almost all Chinese affixes in the samples only appear in one or two words.

Abbreviation

Table 5 Abbreviation in Chinese and English Neologisms

Word-formation	Chinese Neologisms	English Neologisms
Abbreviation	中国国际进口博览会 *zhōngguóguójìjìnkǒubólǎnhuì* 进博会: (Import EXpo) *jìnbóhuì* CIIE: China International Import EXpo 三严三实: *sānyánsānshí* Three stricts and three steadies	ESOP: **E**mployee **S**tock **O**wnership **P**lan (acronym) econ: economy (clipping)

In Chinese and English, people are both likely to speak less. However, there are more methods to shorten words in English, such as acronyms, initialisms, clippings, and shortenings (Rumšienė, 2009). In contrast, Chinese neologisms maintain their main semantic meaning after undergoing shortening. For example, there is a language structure 中国国际进口博览会 *zhōngguóguójìjìnkǒubólǎnhuì*, which means China International Import EXpo, then it is abbreviated as this neologism 进博会 *jìnbóhuì* which means Import EXpo, but in English, it becomes CIIE. A standard method of making words short in Chinese is to express multiple policies or other items. The abbreviation combines a certain number used to summarise several items and the main semantic meaning. For example, the Chinese neologism from 2018 三严三实 *sānyánsānshí* is a combination of those words 三 *sān* (three), 严 *yán* (strict), 实 *shí* (steady), and the neologism translates as strict in cultivating one's moral character, strict in preventing abuse of power and strict in disciplining oneself; steady in planning matters, steady in starting undertakings and steady in conducting oneself. The number three and the main meaning 'strict' and 'steady' combine to coin the neologism because there are three 'stricts' and 'steadies'.

Other findings

The researchers adopted a random sampling method to collect data due to the limited number of Chinese and English new words. The findings show only one word belonging to conversion in English, and one word belonging to blending in Chinese. There is no comparison between these two types of word-formation. In addition, some neologisms can go through two morphological processes simultaneously, and some Chinese and English neologisms are challenging to track the development footprint.

DISCUSSION

Neologisms convey the language's typological options and how its speakers use them creatively. The current study considers a representative amount of linguistic material that illustrates ongoing changes in English and Chinese lexicology in recent years (2018 - 2020) to illuminate these various aspects of the subject. The material under consideration is a corpus of contemporary English usage. It has been gathered over the last year, mostly from print (newspapers) sources and internet media (online dictionary). On the one hand, the findings display the characteristics of word-formation. Firstly, in recent years, there have been four types of word-formation appearing both in Chinese and English neologisms: affixation, compounding, abbreviation, and blending, which shows that there are many ways of word-formation in Chinese and English, but these four types in Chinese and English are relatively important word-formation types in the generation of new words. Secondly, affixation is the word-formation with the highest frequency in English neologisms, while compounding is the most dominant way in Chinese word-formation. In addition, the frequency of affixation and compounding in English neologisms is relatively close during 2018 - 2020, but only compounding occupies a very large part of new words in Chinese. Hence, it can be found that in English people mainly rely on adding affixes and combining two or more words to create new lexical structures to express new things and new concepts, while in Chinese, people tend to simply combine two or more words to coin a new word.

Meanwhile, the research results revealed some trends in Chinese and English word-formation from 2018 to 2020. In terms of word-formation of

English neologisms, affixation and compounding have maintained a relatively high proportion in recent years, but affixation shows a continuous downward trend. For example, in 2018, many new English words belonging to affixation (e.g. estimated, homosexualising, self-composed, self-deported) appeared in 2020. However, the neologisms which belong to affixation (e.g. henpecking, mentionitis, codable) are still a lot; the proportion compared with the previous two years has dropped significantly. At the same time, conversion has also shown a declining development trend, from 3.33% in 2018 to zero discovery in 2019 and 1.11% in 2020, which shows that in recent years, the ability of conversion in English to create neologisms is weak, and the method of creating neologisms by changing the part of speech of existing words is being marginalised in English because the number of new words created by the method is limited. Unlike the development of affixation and abbreviation, although the frequency of abbreviation is low every year, it has been continuously increasing, which displays that abbreviation is gradually being used more for people to express new things. In addition, they are compounding and blending present a fluctuation change from 2018 to 2020. Many English neologisms belonging to compounding appeared in 2020, such as Lane cake, send-forth, while the frequency of blending has always been shallow, except for the increase in the proportion of English neologisms in 2019, for example, there have been neologisms such as chillax (chill out + relax), hir (him/his + her) and so on.

From the perspective of the word-formation trend of Chinese neologisms, affixation and abbreviation show complementary trends during this period. After 2019, the number of Chinese new words for affixation is decreasing, while the number of Chinese new words for abbreviation is increasing, such as the Chinese neologism in 2020 新冠 *xīnguān* which is abbreviated from 新型冠状病毒 *xīnxíngguānzhuàngbìngdú* (new coronavirus). Compounding presents a slow downward trend from 2018 to 2020. In 2018, many new words belonged to this category, such as 机构改革 *jīgòugǒigé*, which was created by combining 机构 *jīgòu* (institution) and 改革 *gāigé* (reform), but in 2020 the number of Chinese neologisms of this type was relatively small. It can be found that since the outbreak of the Covid-19 in 2019, compounding, the mainstream word-formation type in Chinese, is losing its main position. The abbreviation is being widely used for new descriptions, and a large number of new words belonging to this word-formation type appeared to describe the events and new inventions which are related to the pandemic in China. Besides, blending and conversion have maintained a very stable trend which is that there are few neologisms in recent years belonging to the two types of word-formation.

As for the similarities and differences of each type of Chinese and English word-formation, the research displays that the ability of compounding and affixation in English is strong. English can create neologisms through compounding in various ways. For example, a neologism can be created by combining two words directly, with a hyphen (e.g., *bridge-burning*) or with space (e.g., *glatt kosher*). At the same time, in Chinese, compounding is a simple combination of words, such as 全民阅读 *quánmínyuèdú*, which combines 全民 *quánmín* (nationwide) and 阅读 *yuèdú* (reading). At the same time, many neologisms derive from an affix in English, such as self-, -er, but in Chinese, an affix produces a small number of neologisms. However, an abbreviation of Chinese neologisms is more flexible than that of English neologisms, and its ability is more vital in Chinese because abbreviation in Chinese generally depends on meaning. Therefore, according to the above research findings, both Chinese and English are tending to create a large number of new words more simply and productively to keep up with the changes in the world.

CONCLUSION

This study proves that Chinese and English are comparable in word-formation, and it is also significant that the research findings provide certain adequate information for other related research in the future and help educators, especially teachers who teach Chinese and English, consider teaching neologisms and additional words by word-formation in language classrooms. However, there are limitations in the study due to inadequate samples, some types of word-formation are not involved, and the data can be affected by specific events. Hence, further studies with more examples from recent years will strengthen the study's generalisation, validity, and reliability.

Educators should view the study results dialectically and reasonably design language teaching by word-formation.

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